Credit Analysis

Portland General Electric Company

A subsidiary of Enron Corp.
September 29, 1999
www.dcrco.com

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Ratings:	Security Class	DCR	Latest Change	Prior	Moody's/S&P
	First Mortgage Bonds/Coll. MTN	**AA-**	08/1999	NR	A2/A
	Senior Unsecured Debt	**A+**	08/1999	NR	A3/A-
	Preferred Stock	**A**	08/1999	NR	"a3"/BBB+
	Commercial Paper	**D-1**	08/1999	NR	P-1/A-1
Rating Watch:		**No**			*/No

Rating Rationale

Portland General Electric Co.'s (PGE) business profile is enhanced by its competitive position, which is characterized by regionally low electric rates and low generating costs. The company's delivery and service costs compare favorably to other utilities in the WSCC region. PGE's asset generation base is well diversified with 30% hydro, 37% natural gas/oil and 33% coal. PGE exhibits a financial risk profile that further supports a solid 'AA-'. EBITDA/Interest coverage, adjusted for purchased power capacity payments, of 4.9X in 1998 is expected to move closer to 6.8X in 1999 and beyond. PGE has a strong balance sheet, with current adjusted debt/ capital ratios in the 55% range and forecasted to moderately improve to near 50%.

- PGE's credit profile considers the regulatory "ring-fence" established by Oregon Public Utility Commission (OPUC) prior to its approval of the acquisition by its parent, Enron Corp. (ENE) (senior unsecured rated 'BBB+'). This "ring-fencing" built around PGE by state regulators requires that PGE maintain a common equity ratio of 48%. Furthermore, the OPUC must be notified in advance of any special dividends or transfers of 5% or more of equity. This effectively limits potential credit degradation by limiting the absolute amount PGE can upstream dividend to ENE and allows PGE to be analyzed on a stand-alone basis.
- ENE's market leading position in energy trading and marketing has had positive crossover effects to PGE's management of its supply requirements. PGE is managing its power needs with an effective market-based procurement strategy that minimizes its exposure to being base-load long in a potentially competitive marketplace.
- PGE has had a past credit overhang associated with the uncertainty of the full recovery of PGE's 67.5% interest in the Trojan Nuclear Power Plant. In 6/99, the governor signed legislation, which specifies, retroactively, that if the OPUC finds that the retirement of an asset is in the public interest, it may allow recovery both of and on the remaining investment. Consumer activist groups are undergoing an effort to negate the legislation and are collecting signatures to place the issue on11/00 ballot.
- PGE benefits from a diversified retail sales territory with a fast growing economic base. Residential and small commercial customers constitute the majority of PGE's customer base. Going forward, retail sales growth is expected to be primarily driven by above-average industrial sales. Historically, a significant component of industrial load was composed of the forest products sector, however, the booming high-tech industry is expected to surpass the pulp and paper business, with forecasted double-digit rates annual growth rates for at least the next decade.
- PGE's strategy to become more like a T&D company is evidenced in its current deployment of certain coal-fired generating assets. PGE expects to close the sale of its 20% interest in Colstrip 3&4 to PP&L Global for $193MM (plus inventory and certain capital expenditures) by either 4Q'99 or 1Q'00. PGE also agreed to sell PP&L its interest in the transmission line from Colstrip to Townsend for $37.5MM. Total proceeds from the sale of Colstrip 3&4 are expected to be used equally toward the repayment of debt, with the other 50% dividend up to ENE. Regulatory approval from the Oregon PUC is expected in 1999. PGE also expects to close the sale on a 2.5% interest in Centralia units by yearend. The prospects of becoming a T&D company provide upside potential in PGE's credit profile (assuming proceeds are used to pay down debt consistent with 'AA' T&D rating targets).

Liquidity/Debt Structure

Liquidity is met through two revolving credit facilities totaling $300MM. These facilities are used primarily as backup for PGE's commercial paper program. In 4/99, PGE filed a $200MM shelf registration with the SEC for the purpose of issuing long-term debt, the proceeds from which will be used to reduce debt and for general corporate purposes. No debt has yet been issued.

Recent Developments

In 7/99, electric industry restructuring legislation was signed by the governor, which will allow non-residential electric customers to have direct access to electricity services no later than 10/1/01. The bill requires a portfolio of options for residential customers including "cost-of-services," "market-based pricing," and "green power." The bill also requires cost unbundling. DCR believes this is a credit neutral event given that residential customers do not have the option to choose a supplier. Although there is some risk that industrial and commercial customers may leave, it is unlikely given PGE's competitive rates and the low prices built into the company's long-term industrial contracts.

Rating Issues

Absence of an energy adjustment clause.

Fundamentals

PGE is a wholly owned subsidiary of ENE that generates, purchases, transmits, distributes and sells electricity in the northwest region of Oregon.

*DCR does not track Moody's review status.

The Company

Portland General Electric Co. (PGE), a wholly owned subsidiary of Enron (ENE) generates, purchases, transmits, distributes and sells electricity in the Northwest region of Oregon. The company serves approximately 704,000 retail customers throughout a 3,170-square-mile area encompassing 54 cities, of which Portland and Salem are the largest. PGE's power supply includes interests in eight hydroelectric and six thermal plants with a combined generating capacity of 2,023 mw. The company is strategically located by the California/Oregon border (COB), the delivery point for the electric futures exchange.

Strategy

Near term, PGE is effectively managing its supply portfolio through the use of an effective market-based procurement strategy which minimizes its exposure to being base-load long in a potentially competitive environment. In 1998, the company purchased nearly two-thirds of its power needs, compared with 84% in 1997, the majority of which were through long-term contracts. PGE's peak load in 1998 was 4,073 mw, 14% of which was met through short-term purchases. The company's low reserve margin will likely result in increasing amounts of power purchases to satisfy increasing peak loads. This should result in a somewhat improved cost structure for PGE, as it purchases relatively lower-cost, market-priced power to supplement its presently efficient-owned generation.

Positively, the company is not burdened with long-dated, above-market NUG contracts; these obligations constituted only 0.3% of contractual sources of power in 1998. Rather, PGE's market-based, short-term purchases are intended to capitalize on the favorable power price conditions that exist in the Pacific Northwest hydro-belt. PGE has four long-term purchased power contracts for hydro generation on the Mid-Colombia River, as well as firm contracts, ranging from one to 30 years, to purchase primarily hydro-generated power from other Pacific Northwest utilities.

Importantly, PGE has installed necessary vigorous risk-management policies, including position monitoring and reporting, counterparty credit analysis and monitoring, and limits on position, trading activity and counterparty exposure. Overall, PGE's risk management policies are considered strong and are incorporated into ENE's corporatewide daily monitoring of its VAR limits.

PGE's long-term strategy is to become more like a transmission and distribution (T&D) company. This is evidenced in its current deployment of certain coal-fired generating assets. PGE expects to close the sale of its 20% interest in Colstrip 3&4 to PP&L Global for $193MM in effect 4Q'99 or 1Q'00. PGE also agreed to sell PP&L its interest in the transmission line from Colstrip to Townsend for an additional $37.5MM. Total expected proceeds from the sale of Colstrip 3&4 are expected to be used equally toward the repayment of debt, with the other 50% dividend up to ENE. Regulatory approval from the Oregon Public Service Commission (OPUC) is expected in 1999 or early 2000. In June 1999, PGE reached an agreement for the sale of its distribution system in Columbia County to West Oregon Electric Cooperative for $7.9MM. The agreement, subject to approval by the OPUC, provides for the transfer of approximately 7,200 PGE customers to the cooperative. PGE also expects to close the sale of its 2.5% interest in Centralia units by yearend. Furthermore, PGE is selling a 10.5% interest in the Kelso-Beaver Pipeline and has agreed with various government agencies to decommission its Bull Run dams. The prospects of becoming a T&D company provide upside potential in PGE's credit profile (assuming proceeds are used to pay down debt in a manner consistent with 'AA' T&D rating targets).

Service Territory

PGE benefits from a diversified retail sales territory with a fast growing economic base. Due to strong economic activity, PGE projects its annual load growth, adjusted for weather, to be 2.6% during the next five years. The population growth rate in PGE's service area for the last five years was 2% annually. Since 1995, the Portland metropolitan area has emerged as "Silicon Valley North" (Intel, LSI Logic, Wacker Siltronics, Fujitsu), and it is now believed that Oregon's high-tech industry has reached the critical mass needed to self-generate and attract supporting upstream and downstream businesses. It has become the state's largest manufacturing industry, and Intel Corp. is now Oregon's largest manufacturing employer. The high-tech boom in the mid-1990s has led to robust gains in investment, jobs and income. However, the Asian financial crisis and eventual recession in 1998 led to a retrenchment in Oregon's exporting industries such as agriculture, lumber and wood, machinery and semiconductors.

Going forward, retail sales growth is expected to be primarily driven by above-average industrial sales. Currently, the 20 industrial customers comprise approximately 22% of total retail demand, but are well diversified, spanning 10 different industrial groups. Historically, a significant component of industrial load was composed of the forest products sector, however, the high-tech industry is expected to surpass the pulp and paper business. Within the past five years, energy deliveries to high-tech customers have grown at 14% annually. As the sector expands, energy sales could grow at double-digit rates annually well into 2000 and beyond.

Operations

1998	Capab. (mw)	% Prod. (Mwh)	Fuel (Cents/Kwh)	Prod. (Cents/Kwh)
Steam	669	16	1.0	1.4
Hydro	613	9	0.0	0.8
Other	741	12	1.4	2.3
Total Owned	2,023	37		
Pur. Power	1,169	63	1.8	na
Total Sources	3,192	100	1.6	1.7

Generation Capability and Energy Mix: PGE continues to benefit from a well-diversified portfolio of power resources. The company's existing hydroelectric, coal-fired and gas-fired plants provide the company with 2,023 mw of generating capability. PGE's asset generation base is well-diversified: 30% hydro, 37% natural gas/oil, and 33% coal. PGE's lowest cost producers are its eight-hydroelectirc

projects, which have a net plant capacity of approximately 613 mw.

PGE's strategic location places it adjacent to two natural gas pipelines with access to three significant producing basins. PGE owns 90% of the Kelso-Beaver Pipeline, which directly connects to Northwest Pipeline, an interstate gas pipeline operating between British Columbia and New Mexico. The Coyote Springs generating station has firm transport capacity on three interconnecting pipelines accessing the gas fields in Alberta, Canada.

The company purchases coal and coal transportation services under a variety of short-term supply agreements that are diversified among three regional suppliers. Low sulfur coal for PGE's largest coal-fired facility, the Boardman plant, is shipped from the Powder River Basin and transported under guaranteed service contracts which extend through December 2003. PGE's use of short-term supply agreements allows it to defer coal acquisitions and then take advantage of above-average hydro conditions. Coal supply for the Centralia and Colstrip plants are met through contracts with PacifiCorp and Western Energy Company, respectively.

Notably, the absence of a fuel/power adjustment clause exposes the company to the risks of procuring fuel and power needs at prices above the fixed levels in its tariff. Given the company's dependence on short-term purchased power and the sometimes extreme hydrological conditions that exist in the Northwest, there is some risk that the company could be exposed to under-recovery on its fuel and power costs. However, this risk is mitigated by PGE's first-rate ability to procure its power and fuel needs and its position to procure fuel with access to three different producing basins and proximity to gas pipelines. In addition, the company can seek immediate relief via deferred accounting for extreme cost measures.

Transmission: PGE owns and has scheduling rights to the largest non-federal share of the Pacific Northwest AC Intertie transmission system linking the Pacific Northwest to California and the Southwest. The company provides the lowest rates for the Intertie and its share is fully subscribed by several entities engaged in the wholesale energy market as well as by PGE's energy transactions.

In May 1999, the Federal Energy Regulatory Commission (FERC) issued a Notice of Proposed Rulemaking (NOPR) on Regional Transmission Organizations (RTO). Under the proposed rule, PGE must file with the FERC by October 15, 2000, either a proposal to participate in an RTO or an alternative filing describing efforts to participate in an RTO, and obstacles to RTO participation. PGE filed comments on the NOPR in August 1999 and the FERC is expected to issue its final rule on RTOs early in 2000.

Distribution: Residential and small commercial customers constitute the majority of PGE's customer base. Strong residential sales are driven by new residents moving into the service area, due to a healthy job market and relatively low mortgage rates. In the next five years, the company expects sales to residential customers to grow about 2.2% annually.

For 1998, the commercial segment accounted for approximately 39% of PGE retail kwh sales and 38% of total retail revenue. For the past 20 years, this market has been the fastest growing and highest margin sector due to population growth and an expanding industrial base. Additionally, as the hub of Oregon's financial and international commerce, Portland can expect to benefit from increased economic and global trade activities. This market is forecast to grow 2.8% annually over the next five years.

Energy deliveries to the industrial sector have grown at an annual rate of 2.9% over the past five years, and industrial customers in 1998 for 20% of PGE's retail kwh sales. Within the manufacturing sector, there has been a market share shift that is representative of the broad transformation of the Portland area economy.

Specifically, there is a shift toward an expanding high technology industry and a reduced dependence on the pulp and paper industry. In 1988, the paper and metals sector collectively held a 59% industrial market share, while technology only comprised 13% of the market. By 1998, the paper and metals sectors' market share had shrunk 11 percentage points, while the high-tech industry had doubled its market share to 26%.

Competition

Electric Company	Avg. Res. Rate	Avg. Indus. Rate	Avg. Comm. Rate
Idaho Power Co.	5.2	2.6	4.0
Portland General	6.1	5.4	3.7
PacifiCorp	6.3	5.4	3.4
Nevada Power Co.	6.6	6.2	5.1
Puget Sound Energy	6.0	6.2	4.6
Arizona Pub. Ser. Co.	9.2	8.0	5.3
San Diego Gas & Elec.	10.1	9.4	7.5
Southern Cal. Edison	11.4	9.8	6.6
WSCC Average	8.0	7.1	4.6

PGE's competitive position is characterized by regionally low electric rates and low generating costs. The company's delivery and service costs compare favorably with other utilities in the Western Systems Coordinating Council (WSCC) region. Furthermore, PGE's asset generation base is well-diversified and well-balanced between hydro, natural gas/oil, and coal-fired generation.

Regulation

PGE's rates are regulated by the OPUC, which is composed of three governor appointed commissioners. Oregon regulation is considered to be reasonably constructive.

In July 1999, electric industry restructuring legislation was signed by the governor, which allows non-residential electric customers to have direct access to electricity services no later than October 1, 2001. On that date, electric utilities are

required to unbundle rates for generation, transmission, distribution, and other retail services. Additionally, utilities are mandated to offer residential customers a portfolio of rate options that included a regulated cost-of-service rate, a new renewable resource rate, and a market-based rate that would fluctuate with wholesale electricity prices. The legislation further specifies that the OPUC is to provide incentives for divestiture of generation assets or structural separation of such assets. Transition charges and credit that would allow recovery on an uneconomic utility investment or a refund of benefits from economic utility investment are also provided for. DCR believes this is a credit neutral even given that residential customers do not have the option to choose a supplier. Although there is some risk that commercial and industrial customers may leave, it is unlikely given PGE's competitive rates and the low prices built into the company's long-term industrial contracts. In the event some customers do elect to choose an alternative supplier, the company has effectively managed its supply portfolio in a manner that will allow it to shed generation to match its changing supply needs.

PGE has had a past credit overhang associated with the uncertainty of the full recovery of PGE's 67.5% interest in the Trojan Nuclear Power Plant. In June 1999, the governor signed legislation which specifies, retroactively, that if the OPUC finds that the retirement of an asset is in the public interest, it may allow recovery both of and on the remaining investment. This legislation effectively overturned an earlier court ruling and allows PGE to receive as much as $304MM over 17 years as a return on its Trojan Plant, which was closed in 1993. PGE has no other nuclear generation assets. In addition, the OPUC has authorized PGE to collect approximately $14MM per year through 2011 for Trojan decommissioning costs. Present estimates for PGE's 67.5% share of decommissioning costs is approximately $316MM.

In July 1999, several consumer activists, including the Utility Reform Board and the Citizens Utility Board, have opposed the legislation pertaining to Trojan and they are launching a referendum to ask voters to overturn the new law. Referendum sponsors have until 90 days after the Legislature ends to collect 44,524 signatures to put the issue on the November 2000 ballot.

Financial Profile

	12 mos ended					AA-
	6/99	6/98	1998	1997	1996	Medians
EBIT/Int. (X)	3.9	3.6	3.7	3.9	4.4	3.8
EBITDA/I Adj. (X)	5.2	5.7	4.9	5.1	5.4	5.1
EBITDA/Debt Adj. (%)	41.7	39.7	39.9	39.3	39.5	39.1
Debt/Cap. Adj. (%)	51.1	54.8	52.2	55.6	57.3	52.4
Int. Cash/Const. (%)	155.0	141.4	144.6	163.3	136.2	125.8

Balance Sheet: PGE has a strong balance sheet, with moderate levels of leverage. Leverage, as measured by both adjusted debt/capitalization (52.2%) and adjusted EBITDA/debt ratio (39.9%), remains manageable and is comparable to the 'AA-' medians. DCR expects the company's leverage to decline as excess cash flow resulting from a reduction in construction expenditures will likely be used to reduce debt over the next few years.

Cash Flow: Cash flow is expected to remain stable reflecting a continued growth in earnings, strong service territory growth and generation asset sales. Between 1994-98, capital expenditures decreased from $243MM to $144MM after the completion of the Coyote Springs plant. With no need for additional base-load capacity, PGE's construction expenditures should be in the range of $150MM-170MM per year for the next few years. In early 1999, PGE exercised its option to purchase the six combustion turbine generators at the Beaver generating plant, previously operated under terms of a 25-year lease, for $37.3MM. DCR expects internal cash to be well in access of the company's capital expenditure program, averaging 144.4% in 1998.

Earnings/Coverages: PGE's coverage ratios are solid for the rating category. EBIT/Interest and adjusted EBITDA/Interest coverage stood at 3.7X and 4.9X respectively, for the year ended 1998. EBITDA/Interest is expected to significantly improve to 5.6X in 1999 and beyond. The company's earned ROE has continued to strengthen and remains above industry averages. DCR expects that solid annual sales growth and strong internal cash generation will help maintain PGE's solid coverage ratios.

The company's credit profile considers the regulatory "ring-fence" established by OPUC prior to its approval of the acquisition by its parent, ENE. This "ring-fencing" built around PGE by state regulators requires that PGE maintains a common equity ratio of 48%. Furthermore, the Commission must be notified in advance of any special dividends or transfers of 5% or more of equity. This effectively limits potential credit degradation by limiting the absolute amount PGE can upstream dividend to ENE and allows PGE to be analyzed on a stand-alone basis.

Summary

DCR's outlook for PGE reflects a stable credit trend. The company is financially solid and supported by strong sales growth, a constructive regulatory environment, and exhibits lower business risk with its asset deployment strategy. Affiliation with ENE positively influences PGE in terms of energy procurement and the associated risk management skill set gained from ENE's expertise as a leading electric and natural wholesaler. The recovery of PGE's ownership interest in the Trojan Nuclear Power Plant and the absence of further nuclear exposure are additional positives, as is a supportive regulatory environment. As long as the company remains vertically integrated, its competitive position is enhanced given its relatively low costs and rates— especially in a service area that has experienced above-average economic growth driven by a booming technology industry, a trend that is expected to continue. Furthermore, PGE's supply management expertise has allowed the company to position itself favorably as the industry moves toward a more competitive environment.

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Portland General Electric Company

($ in Millions Except As Noted)

Financial Ratios	12 Months Ended 6/1999	6/1998	1998	1997	1996	1995	1994
EBIT/Interest (X)	3.9	3.6	3.7	3.9	4.4	3.7	3.4
EBITDA/Interest (X)	5.9	5.7	5.7	6.0	6.4	5.5	5.2
EBITDA/Interest-Adj. (X)	5.2	4.8	4.9	5.1	5.4	4.7	4.4
Internal Cash to Construction (%)	155.0	141.4	144.6	163.3	136.2	102.4	75.7
Deferred Debits/Com. Eq. (%)	71.7	85.4	76.1	92.8	117.1	132.9	152.6
Return on Common Equity (%)	14.5	11.3	14.2	13.5	17.0	9.7	12.1
Common Dividend Payout Ratio (%)	51.8	32.5	37.8	52.4	69.1	72.3	76.6
Average Interest Cost	7.5	6.8	7.7	7.0	6.9	7.1	6.7
Capitalization							
Long-term Debt (%)	48.0	51.0	48.1	51.8	45.0	43.5	40.5
Short-term Debt (%)	0.0	0.0	0.0	0.0	8.9	12.0	11.6
Total Debt (%)	48.0	51.0	48.1	51.8	53.9	55.4	52.1
Debt Adj. for Purch. Power (%)	51.1	54.8	52.2	55.6	57.3	58.8	55.7
EBITDA/Debt (%)	45.8	39.7	45.2	44.3	44.0	36.9	34.0
EBITDA/Debt-Adj. (%)	41.7	35.5	39.9	39.3	39.5	33.5	30.8
Preferred Stock (%)	1.5	1.5	1.5	1.5	1.5	2.0	6.0
Common Equity (%)	50.5	47.5	50.4	46.7	44.7	42.6	41.9
Growth in Invested Capital (%)	1.1	-3.9	1.5	-6.1	1.3	3.0	6.9
Fundamental Financial Information							
Revenues	1,195	1,315	1,176	1,416	1,110	982	959
Revenues Less Energy	748	712	735	741	793	688	612
EBITDA	446	407	430	446	492	419	353
Depreciation & Amortization	155	151	149	155	155	134	124
EBIT	291	256	281	291	337	285	229
AFC & Other Non-Cash	1	-1	0	0	2	11	4
Interest Charges	75	72	75	74	77	77	67
Preferred Dividends	3	2	2	2	3	10	11
Balance for Common	143	109	135	124	153	83	95
Total Invested Capital	2,029	2,007	1,977	1,948	2,075	2,049	1,990
Total Debt	974	1,023	951	1,008	1,118	1,136	1,036
Total Preferred	30	30	30	30	30	40	120
Retained Earnings	385	314	356	270	292	0	0
Cash Flow							
Cash Flow From Operations	291	282	265	359	357	272	242
Dividends (Pref. and Common)	74	35	51	65	106	60	73
Internal Cash	217	247	214	294	252	212	169
Construction Excluding AFC	140	175	148	180	185	207	223
Other Investment Cash Flow (Net)	0	21	0	28	24	37	45
Redemptions	77	227	214	115	118	149	50
Total Capital Requirements	217	422	362	323	327	393	318
Total Financing	20	169	148	8	92	169	135
Total Purchased Power Expense	64	85	85	85	85	83	82
Other Data							
KWH Sales Total (MM)	NA	NA	29,605	45,155	27,747	20,449	19,531
KWH Sales Retail (MM)	NA	NA	17,444	18,219	17,559	16,966	16,730
% Growth in Retail Sales	NA	NA	-4.3	3.8	3.5	1.4	1.7
Net Utility Plant in Service	1,807	1,819	1,819	1,818	1,775	1,714	1,605
CWIP	0	0	0	0	0	0	0
Nonutility Property & Investments	354	358	342	369	262	138	0
Ratings History (FMB/Coll. MTN)							
DCR	NA	NA	NA	NA	NA	NA	NA
Moody's	A2	NA	A2	NA	NA	NA	NA
Standard & Poor's	A	A	A	A	A	NA	NA

Debt Maturities	
1999	102
2000	32
2001	53
2002	23
2003	49

Financing Alternatives	Used	Unused
Principal Bank Facilities ($MM)		
Revolver	0	300
Commercial Paper Authorized	52	298