

Financial Considerations

PSE requires continuous access to capital markets on reasonable terms, available credit to operate the business, and the ability to execute risk management strategies in order to fulfill our responsibilities. This means financial considerations are central to the resource planning and acquisition process. The econometric model for load growth, discount rate, and inflation assumptions in this IRP are examples. The current financial market crisis and economic slowdown will impact PSE resource strategies and acquisitions in a number of ways. The financial crisis may reduce the number of credit-worthy counterparties in many markets, making it more difficult for us to enter into transactions, customer demand may slow due to the economic downturn. However, there could also be benefits from the 2009 American Recovery and Reinvestment Act and other federal stimulus measures. Many financial and economic issues are not directly modeled in IRP analysis, but will need to be considered when making real-world acquisition decisions.

Impact on Demand

Regional economic and demographic conditions have a significant effect on use-per-customer and customer growth, and the recent downturn in economic conditions will impact PSE loads for at least the next few years. Accurately forecasting the long-term effect of the downturn on customer growth and energy use is difficult at this early stage, since utility load forecasting models and equations have not been developed or previously tested in conditions like these. PSE will work to update forecasting models as additional macroeconomic and demographic data becomes available.

Demand-side Resources

Deteriorating economic conditions may impact PSE's ability to acquire demand-side resources. Lower growth and lower use per customer means less demand-side potential, and lower incomes may reduce the willingness of customers to invest in energy efficiency resources. This could mean that PSE may have to pay significantly higher incentives to achieve energy efficiency goals. Typically, on aggregate, PSE has paid approximately 50% of measure costs. Figure C-1 compares recent energy efficiency costs with the total resource cost estimated through 2015 in this IRP. While PSE does not anticipate having to pay 100% of total resource costs to achieve higher efficiency targets, Figure C-1

Appendix C: Financial Considerations

illustrates there is considerable potential for increased levels of incentive. While the increase in energy savings may reduce costs over the long run, customers will continue to face increased rate pressure combined with the worsening economy in the short run

**Figure C-1
Comparison of Energy Efficiency Expenditures**

Elec	Utility Cost	Customer Cost	Other Contributions	Total
2007	\$ 35,998,202	\$ 28,503,495	\$ 57,654	\$ 64,559,351
2008	\$ 52,147,523	\$ 71,318,638	\$ 56,879	\$ 123,523,040
2009	\$ 64,248,000	\$ 35,370,493	\$ 56,879	\$ 99,675,372
2010 (Bundle D)	\$ 161,372,716			\$ 161,372,716
2011 (Bundle D)	\$ 164,734,859			\$ 164,734,859
2012 (Bundle D)	\$ 168,073,472			\$ 168,073,472
2013 (Bundle D)	\$ 158,997,764			\$ 158,997,764
2014 (Bundle D)	\$ 161,417,354			\$ 161,417,354
2015 (Bundle D)	\$ 166,368,236			\$ 166,368,236

Impact on Ability to Finance

Access to Capital

Financing is a particularly significant topic given the turmoil experienced in capital markets since the latter part of 2008. Long-term and short-term credit markets have endured considerable disruptions. Major banks and financial institutions have been seriously weakened, and many prominent financial institutions – among them Washington Mutual, Bear Stearns, Merrill Lynch, Citibank, Lehman Brothers, and Wachovia – have either failed, shed portions of their business, or been acquired. Such dire conditions have curtailed lending and led to unprecedented government intervention aimed at restoring stability to the banking sector and promoting lending throughout the economic system. While the actions of the federal government appear to have helped stabilize credit markets, major uncertainties remain as to when capital markets will recover and to what degree.

Equity

PSE's ability to raise equity capital in such difficult markets has been greatly aided by its recent transaction with the Macquarie consortium. The settlement agreement approved by the Washington Utilities and Transportation Commission included a commitment to invest at least \$5 billion in capital in the next five years. Absent this transaction, the company's stock price would likely have declined dramatically with the rest of the utility industry, making equity financing much more expensive for our customers. Figure C-2 illustrates the performance of utility stocks since January 2007.

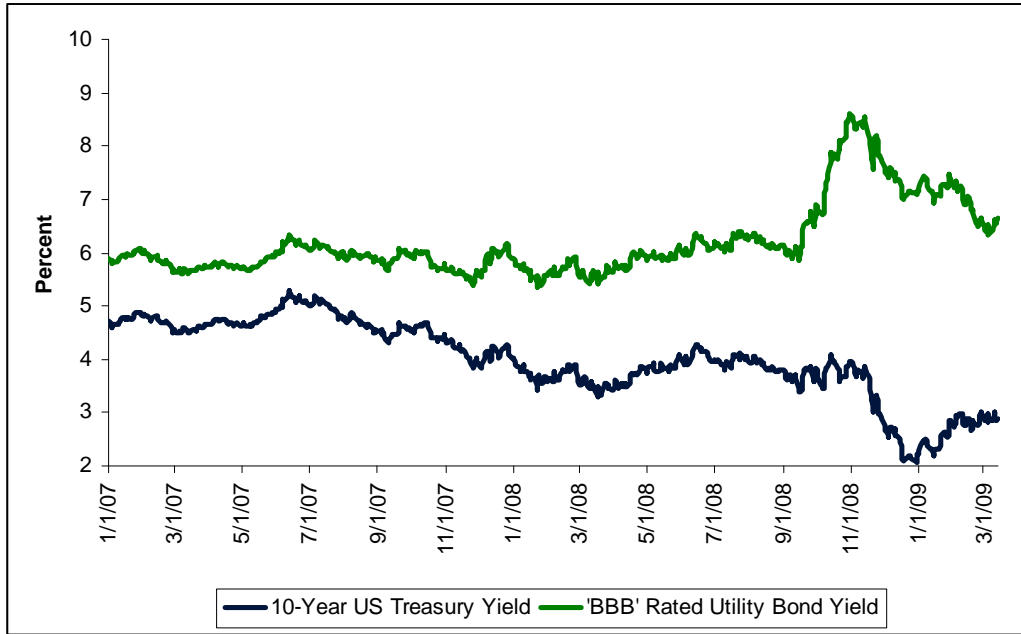
Figure C-2
Utility Stock Price Index/Other Indicator

[To be added soon.]

Debt

Traditionally, utilities have had fairly ready access to capital at reasonable costs, but market difficulties have increased risk premiums and made raising capital of any kind very difficult. Strong credit ratings are more important than ever, since bond spreads have widened dramatically for companies with lower ratings. Companies have also needed to wait for windows of opportunity to enter the capital markets to raise debt. The repricing of risk is evident in Figure C-3, which compares 10-year BBB utility bond rates with 10-year U.S. Treasury yields. During 2007, the credit risk premium (or "spread") averaged about 125 basis points. From mid-September 2008 through March 2009, the spread averaged over 400 basis points. (The spread is the difference between the utility bond rate and the yield on the comparable U.S. Treasury securities.)

Figure C-3
Repricing Risk: BBB-rated Utility Bonds Compared to U.S. Treasuries



Short-term markets have also experienced severe disruptions. Investors have moved toward extremely safe investments like U.S. Treasuries and abandoned riskier options such as corporate commercial paper, a market in which PSE typically engages on a regular basis. Government assurance and other programs have brought some stability back into short-term markets, but risk premiums for lower-rated commercial paper programs, such as Puget Sound Energy’s split rated tier 2/3 paper, have increased significantly from historical levels, as illustrated in Figure C-4. Market disruptions were also evident in inter-bank lending rates; these rose sharply before falling rapidly.

Figure C-4
Risk Premiums from January 2007 – Dec 2008

[To be added soon.]

Puget Sound Energy has relied on its committed credit facilities to raise cash during the credit crisis. While the failure of bankrupt Lehman Brothers to fund their commitments effectively reduced PSE's total amount of committed credit, the company's several pre-negotiated facilities have provided the liquidity needed to fund operations.

Cost of Capital

Overall, the credit market turmoil has placed upward pressure on the cost of new capital and created uncertainty in capital markets in general. The company has some insulation from these market dynamics due to its committed credit facilities and its access to equity capital, both resulting from the merger with the Macquarie consortium in February 2009. The company will continue to need to access debt capital markets at various times to fund capital requirements and refinance maturing long-term debt. To do so at reasonable rates, it will be important to maintain an investment-grade credit rating and to seek out good opportunities to access capital markets.

Impact on Energy Trading and Hedging

The financial crisis and subsequent economic downturn may decrease energy market liquidity, increase credit risk, and tighten credit markets, potentially leading to material credit risk, financial liquidity, and energy hedging challenges. The steep decline in Northwestern energy prices may exacerbate some of these challenges and partially mitigate others. The tightening of financial markets is increasing the risk of over-reliance on energy markets and putting increased pressure on portfolio hedging.

Decreased Energy Market Liquidity

The financial crisis may decrease energy market liquidity in the Northwest. Some market participants have ceased operations, and others have reduced their activity. Figure C-5 illustrates how liquidity in the Northwest has declined. Decreased liquidity could complicate execution of the company's energy hedging strategies and may lead to increased credit risk concentration and costs.

**Figure C-5
Reduction in Liquidity (Table/Chart)**

[To be added soon.]

Increased Credit Default Risk

The relatively poor economic and financial environment may increase the likelihood that one or more of the PSE's energy suppliers may default on their obligations to the company. A counterparty's failure to perform under the terms of an energy supply or service agreement could require the us to replace the lost product at a higher price. In this way, a decrease in the creditworthiness of counterparties could lead to higher costs for the company.

Tighter Credit Markets

The financial crisis may prompt some market participants to decrease the size of the unsecured credit lines they extend to other participants. Reductions in the unsecured credit lines granted to PSE may require that the company post additional collateral to support hedging activities, thereby increasing financial liquidity needs and cost. Obtaining additional financial liquidity may be difficult and expensive given current conditions, and an absence of sufficient financial liquidity could diminish the company's ability to hedge.

Decreased Energy Prices

Wholesale natural gas and power prices in the Northwest have declined substantially since July 2008. This drop in prices allows PSE to obtain additional energy supplies at more favorable prices. However, many energy suppliers now have increased credit exposure with the company because some previously executed hedges are at higher prices than the current market. This increased credit exposure may exacerbate the adverse impact that tighter credit markets have on the company. On the other hand, the decrease in prices has also reduced the PSE's credit risk exposure to other energy suppliers, partially mitigating the aforementioned increase in credit default risk.

V. Impact on Resource Development

The current economic climate is also weakening the resource market. Increases in the cost of capital, decreases in demand for commodities, and declining in power prices may reduce resource costs in the short term, creating attractive opportunities to address long-term needs at favorable prices.

Energy Supply Resources

Generally, the market for new generating projects has softened. Global economic conditions have destroyed asset valuations in nearly all classes, but particularly hard hit are fossil fuel prices; these have dropped nearly 66% from 2008 highs. Lower spot prices for power have followed the trend of lower fuel prices. Figure C-6 illustrates how spot electric prices at different trading hubs have changed. Renewable projects such as solar PV or wind generation must now compete against low-cost wholesale market power, forcing potential customers to pay a premium compared to cheaper, fossil fuel-generated power. In addition, the number of renewable energy tax equity investors and the amount of capital they have to invest, has dropped substantially in the last twelve months, because profitability is a prerequisite.

Figure C-6
Actual Spot Prices for Some WECC Hubs Jan 2007 – Jan 2009

[To be added soon.]

Constrained capital has led to increased return requirements and ultimately the delaying of several new projects. Figure C-7 illustrates the number delays announced for both renewable and fossil fuel power plants. The pace of independent renewable development is likely to slow to the minimum required to meet state renewable portfolio standards, absent legislation that increases the value of renewable power attributes and expands the tax credits market.

Figure C-7
Diagram/Chart Showing Cancellation/Delay Announcements

[To be added soon.]

Weighted Average Cost of Capital (WACC) and Project Economics

The diminished supply of tax equity has led to a 100-200 basis point increase in required return rates for tax equity investors; this has at least two potential impacts on project economics. First, assuming no change to the WACC of utilities such as PSE, utility ownership of renewable projects should start looking more beneficial to customers than purchased power structures. The historically low debt and equity requirements of the last several years allowed independent power producers (IPPs) to access capital at lower rates than utilities. Now that risk has re-priced and capital has become more expensive for IPPs, a consolidation should occur in which utilities and IPPs with strong balance sheets consume weaker development companies. A second change involves diminished returns among project developers and equipment manufacturers. By and large,



Appendix C: Financial Considerations

compensating for an increasing WACC via pass-through of higher power prices will be challenging in the current climate, which means that the shortfall will need to be made up by lower development fees and/or decreased equipment prices, though predicting the magnitude and split is difficult.

Demand for Renewable Resources

While renewable resource supply has generally increased, demand has increased as well. California's aggressive renewable portfolio standard, established in 2002 and accelerated in 2006, mandates that 33% of retail sales be derived from renewables. These ambitious goals have caused California utilities to look beyond the state's borders for resources. The near term goal – 20% by 2010 – will likely establish a price floor on renewable generation projects. In 2009, Washington state also considered increasing RPS requirements, but Senate Bill 5840 was defeated. Most states are grappling with climate change and renewable portfolio standards, and a national RPS is possible. If all utilities are required to meet the same goals in the same timeframe, demand for resources could change drastically.

Transmission

Transmission planning is influenced primarily by reliability criteria and the commercial environment surrounding energy markets. The downturn in the economy has not changed reliability criteria, and in fact, some improvements are being accelerated to take advantage of lower material and labor costs. However, many commercially driven transmission projects are suffering slowdowns. Major projects are experiencing significant delays or accelerations as stimulus capital finds its way to the highest-valued proposals. Utilities continue to respond to RPS requirements and treat transmission projects that support renewable acquisitions on par with reliability based projects. As the economy recovers, slowdowns in discretionary projects should reverse.

Natural Gas Pipelines and Supply

Despite the tremendous potential for unconventional natural gas supply exploration and development that came to light in 2008, primarily in shale formations across North America, the outlook for continued supply growth has become murky. Successful production increases in the U.S. Rockies and Texas, coupled with lower demand, has

Appendix C: Financial Considerations

caused prices to spiral downward across North America. Figure C-8 illustrates the run-up and subsequent crash of natural gas prices that took place between 2005 and January 2008, and shows forward prices for Henry Hub, Sumas, and Rockies through 2012. Current forward prices are not likely to stimulate significant exploration and development activity in British Columbia – which purportedly requires \$6-\$7 per dekatherm (Dth) pricing – and they will also probably curtail capital drilling programs severely in the U.S. Further complicating the situation, especially for U.S. development in the Rockies, is export pipeline capacity constraints. These have pushed Rockies forward prices below \$4 per Dth for the next two years. Finally, even necessary pipeline expansions are struggling to obtain economically viable financing, and producers are reexamining long-term pipeline commitments given capital and cash flow constraints.

Figure C-8
Historic and Forward Natural Gas Prices

[To be added soon.]

Potential Impact of Stimulus Bill

In February, the U.S. Congress adopted the American Recovery and Reinvestment Act of 2009 (ARRA). This legislation provided billions of dollars of new funding for investments in energy efficiency, renewable energy, emerging energy technologies, and a “smart” electrical grid. Many of these new and expanded funding programs will be administered through competitive matching grant programs. Some, like the smart grid program, are designed specifically for utilities. Others, including energy efficiency and renewables programs, will be administered by the states. PSE is currently evaluating opportunities to apply for ARRA funds either directly or through partnerships with other utilities and governmental agencies that could help fund investments in new energy infrastructure and energy efficiency.