

Exhibit ___ (RHS-1T)
Docket U-072375
Witness: Ronald H. Schmidt

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Joint Application of

**PUGET HOLDINGS LLC AND PUGET
SOUND ENERGY, INC.,**

**For an Order Authorizing Proposed
Transaction**

DOCKET U-072375

TESTIMONY OF

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**On Behalf of Staff of the
Washington Utilities and Transportation Commission**

June 18, 2008

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2
3 **Q. Please state your name and business address.**

4 A. My name is Ronald H. Schmidt. My office is located at Two Theatre Square, Suite
5 218, in Orinda, California, 94563
6

7 **Q. By whom are you employed and in what capacity?**

8 A. I am a Principal at Finance Scholars Group, an economics consulting firm
9 specializing in economics and finance issues. I was asked by the staff of the
10 Washington Utility and Transportation Commission (WUTC) to offer my
11 professional opinions regarding certain financial risks that should be considered with
12 respect to the proposed acquisition of Puget Sound Energy, Inc. (PSE), by the
13 Investor Consortium.
14

15 **Q. Have you prepared an exhibit describing your education and relevant
16 experience to formulate such opinions?**

17 A. Yes, it is Exhibit ____ (RHS-2).
18

19 **Q. Can you summarize your qualifications in evaluating financial risks?**

20 A. I have a Ph.D. and M.S. in Economics from the University of Wisconsin, and I have
21 over 25 years of experience as a practicing professional economist. I was a Senior
22 Economist in the Federal Reserve System for 12 years, first at the Federal Reserve
23 Bank of Dallas and then at the Federal Reserve Bank of San Francisco. In those

1 positions, I was charged with the responsibility of advising the Presidents of those
2 banks regarding monetary policy, including participating in briefings and
3 recommendations regarding interest rate policy. I have conducted research regarding
4 banking and finance issues, and I have been involved in litigation analyses regarding
5 banking and financial institutions. I also have performed a study for foreign
6 investors regarding the offering of new mortgage products in the U.S.

7
8 **Q. Can you summarize your qualifications in understanding energy markets?**

9 A. While employed at the Federal Reserve Bank of Dallas, I was one of two energy
10 economists. I published a variety of articles related to energy markets, including
11 research regarding energy markets and electric utility deregulation. After leaving the
12 Federal Reserve Bank, I was employed by LECG, a global economics consulting
13 firm, where I was engaged as an expert on a wide variety of litigation assignments
14 dealing specifically with electric utility companies. In particular, I was involved in
15 research regarding the causes of the California energy crisis, allegations regarding
16 price manipulation by power suppliers, and allegations regarding attempted collusion
17 in natural gas markets between a major California utility company and a natural gas
18 supplier. I also performed analyses regarding PG&E's emergence from bankruptcy,
19 and studied the valuation of a proposed annexation of part of PG&E's service area
20 by a metropolitan utility district.

1 **II. SUMMARY**

2
3 **Q. Please describe the scope of your testimony in this docket.**

4 A. I was asked by the WUTC Staff ("Staff") to provide professional opinions regarding
5 whether PSE's risks are increased as a result of the proposed transaction. I identify
6 trends in global capital markets and energy markets and discuss how these trends
7 affect the utility sector. My colleague, Mr. William Horton, who has extensive
8 experience with structuring transactions as an investment banker, will then discuss
9 how these trends apply to specific terms of this transaction.

10
11 **Q. What is it about the transaction that makes you believe that PSE will be more**
12 **exposed to these global financial and energy market risks compared to the**
13 **status quo?**

14 A. The key differences that I am focusing on are the fact that the transaction depends on
15 financing that involves much more leverage than PSE and its parent company Puget
16 Energy now have, and the markets from which that new capital is to be raised are
17 different.

18
19 **Q. What do you mean by leverage?**

20 A. I use the term leverage to indicate the degree to which the capital structure of the
21 organization is funded by debt rather than equity investments. A higher leveraged
22 firm has a higher proportion of debt financing, rather than equity financing.

1 **Q. How are the sources of new capital different under the transaction compared to**
2 **the status quo?**

3 A. The Investor Consortium plans to raise debt and equity from global capital markets.
4 The critical difference is that the Consortium will be raising equity in the private
5 equity market, and raising debt in global capital markets based on its reputation and
6 portfolio of interests. Under the status quo, PSE would be expected to raise funds in
7 traditional utility finance markets, with the equity share considerably higher than that
8 which is expected under the transaction.

9
10 **Q. Please summarize the primary risks you believe can negatively impact PSE**
11 **compared to the status quo.**

12 A. In comparison to the prospects facing PSE if it remains publicly traded, there are
13 several increased risks because of the implicit increase in the leverage of the new
14 organization. First, the new owners of the utility will depend on financing from the
15 private equity market. As we have seen in the recent sub-prime mortgage debacle,
16 there is the risk that the current appetite of investors for the higher expected returns
17 in the private equity investments could change very rapidly if a market-driven shock
18 causes a major loss of confidence in those investments. Increasing requirements to
19 adopt fair market accounting on all assets has the potential to exacerbate this risk.

20 Second, a higher leveraged entity has greater exposure to interest rate risk
21 than one with a less levered financing structure, because of the increased reliance on
22 debt. Given the current state of financial markets, interest rates are likely to be

1 volatile in the foreseeable future because of factors such as the risks of potential
2 inflation and the value of the U.S. dollar.

3 Third, a higher leveraged entity has greater exposure to energy price
4 fluctuations that one with less leverage. Because a greater amount of the operating
5 income is absorbed by debt payments, the utility would have less financial capacity
6 to withstand the impact of sudden changes in consumer demand for electricity,
7 resulting in large part, from unanticipated fluctuations in oil prices. The extreme
8 uncertainty of oil prices and the fate of initiatives targeting concerns about global
9 warming could cause major changes in the demand for electric power – either
10 increasing or decreasing those needs, as well as the associated revenues.

11 Finally, the specific investors in this consortium, who are highly reputable,
12 currently enjoy enhanced access to global capital markets. Their stellar reputation
13 provides investors with confidence in investing or lending to their projects.
14 However, this reputational advantage can quickly be reversed if any project(s) led by
15 the primary consortium members experiences any type of distress. Moreover, the
16 business model used by the Macquarie Group, in particular, has been reported to be
17 facing challenges in the financial press in recent months that raise concerns about its
18 future access to capital markets on favorable terms.

19
20 **Q. What is the structure of your testimony?**

21 **A.** My testimony addresses each of these concerns sequentially. First, I discuss the
22 fundamental financial principles involved in this matter, and how leverage can
23 increase certain risks. Second, I discuss interest rate risks and the implications for a

1 more highly leveraged firm. Third, I discuss risks in global financial markets today,
2 with specific linkage between the type of phenomenon we observed in the collapse
3 of the sub-prime mortgage markets and the potential for a similar event in the private
4 equity market. Fourth, I discuss risks in energy markets and the implications for
5 utilities. Finally, I address recent concerns about financing risks facing the Investor
6 Consortium specifically.

7
8 **III. LEVERAGE: THE SOURCE OF INCREASED EXPOSURE TO RISK**

9
10 **Q. What is the primary factor that increases the risks you are addressing as a**
11 **result of the transaction?**

12 A. Most importantly, as described in considerable detail by Mr. Elgin and Mr. Horton,
13 the transaction relies upon significant amounts of new debt to finance the sale that
14 will be carried on Puget Energy's books. Moreover, the Investor Consortium plans
15 to raise additional debt to fund the ongoing equity needs of PSE. It is this increased
16 leverage that exacerbates the risks that I am addressing.

17
18 **Q. How does leverage increase risks for the firm?**

19 A. In its simplest form, higher leverage has a significant impact on the riskiness of a
20 given firm. First, it often commits a larger portion of operating profits to interest
21 payments. These interest obligations reduce net profitability of the firm. In the
22 event of a sudden reduction in service demand or an increase in costs, this fixed
23 interest obligation represents a financial burden that diminishes the firm's ability to

1 withstand that downturn. Thus, higher leverage increases non-discretionary interest
2 costs to the firm.

3 Second, because it commits the firm to interest payments and because the
4 debt holders often have priority in the claims on the assets of the firm in the event of
5 bankruptcy or sale, a higher debt burden results in the firm being considered riskier
6 by equity investors. Higher leverage implies that the firm does not have as many
7 financial resources to fall back upon in absorbing adverse events. In simple balance
8 sheet terms, if a firm has higher leverage, other things equal, the difference between
9 the firm's assets and liabilities is smaller. When that difference decreases, there is
10 greater risk that an adverse event can cause the value of assets to drop below the
11 value of its liabilities and potentially render the firm insolvent.

12 This higher riskiness of leveraged firms is easily observed in interest rates in
13 financial markets. Higher leveraged debt issuances are given lower bond ratings by
14 the rating agencies, which subsequently require higher interest rates to attract
15 investors. The higher interest rates, of course, reflect the greater degree of perceived
16 riskiness of the firm's debt, and the higher potential of default.

17 A higher leverage ratio also increases the required rate of return for equity
18 investors. Hence, new issuances of equity securities are likely to require lower share
19 prices to induce investors to purchase the securities, thereby raising the capital cost
20 to the firm.

1 **Q. What risks facing PSE are increased as a result of this leverage?**

2 A. The higher leverage resulting from the transaction accentuates risks from outside
3 forces. Included in these risks are general economic forces that all utilities face,
4 including interest rate risks and risks from volatile energy prices. Also, the source of
5 the leveraged capital raises specific risks tied to those capital markets: the
6 attractiveness of private equity markets to global investors, and the specific
7 perceived financial strength of the Investor Consortium partners to global investors.

8
9 **IV. INCREASED EXPOSURE TO INTEREST RATE RISKS**

10
11 **Q. Does the transaction increase PSE's risk from interest rate movements**
12 **compared to the status quo?**

13 A. Yes. By its very nature, the transaction increases leverage and the requirement for
14 additional debt to finance new capital projects. As Mr. Horton will discuss in more
15 detail, the primary concern this raises is refinancing needs in 5 years. Because the
16 transaction will entail a larger refinancing need in 5 years compared to the current
17 structure, this implies that future interest rate risk is more significant.

18
19 **Q. Why should this be a concern to the Commission in evaluating the transaction?**

20 A. The concern this raises for the transaction is increased risk of adverse interest rate
21 movements, which, given the higher leverage following the transaction, implies a
22 larger impact on the Consortium's debt costs.

1 In the last year, prospects for interest rates have become much more
2 uncertain. After a prolonged series of interest rate increases by the Federal Reserve
3 between 2004 and 2006 as a result of fears concerning increasing inflation, the Fed
4 reversed course in mid-2007 in response to growing fears of a recession. Now, after
5 sharply lowering the Federal Funds rate, there is growing concern about inflation,
6 largely driven by significant increases in fuel and food prices.

7 In the U.S. there is growing fears of inflation, as higher fuel costs ripple
8 through the economic system. The decline in the dollar also has made dollar
9 holdings less attractive to all investors, forcing rates to rise on those issues.
10 Furthermore the historically high federal budget deficits in the U.S. since 2002 has
11 caused some crowding out of private borrowers by the federal government.

12 Overall, therefore, there is reasonable expectation that in five years, when the
13 Consortium may need to refinance its debt, interest rates could be higher, which
14 would impact the Consortium's borrowing costs, particularly as the amount of
15 leverage increases.

17 **V. INCREASED EXPOSURE TO GLOBAL FINANCIAL RISKS**

18
19 **Q. How does the proposed transaction increase exposure to global financial risks**
20 **compared to the status quo?**

21 **A.** The Investor Consortium plans to finance the transaction by relying on global capital
22 markets. In particular, they plan to finance capital investments through tapping into
23 global debt markets. In my opinion, this may raise risks compared to the status quo,

1 because these markets are facing increased uncertainty compared to typical utility
2 financing strategies, where the utility seeks equity and debt from institutions that
3 specialize in utility finance.

4 The Consortium will be accessing credit facilities available to private equity
5 investors. These facilities tap into global liquidity arising from pension funds,
6 government budget surpluses in Asia, private wealth, and other such sources.

7 Consequently, their long-term investment strategy, including refinancing
8 loans after 5 years, assumes that access to those markets will remain favorable at the
9 time that funds are needed to support PSE's capital needs. Thus, the plan inevitably
10 is exposed to risks in the global capital markets.

11
12 **Q. Why should the Commission be concerned about these risks and the**
13 **transaction?**

14 A. The Consortium plans to fund much of the transaction and future capital
15 development by accessing credit facilities – debt financing – in global capital
16 markets. They have already established commitments from some facilities, and can
17 be expected to refinance using those same sources.

18 If conditions change, and the Consortium is no longer able to access credit
19 markets on favorable terms because of a shift in market willingness to lend to these
20 firms, there could be a problem accessing funds to refinance debt on favorable terms.
21 The recent subprime market provides yet another object lesson of the potential for
22 credit markets to suddenly dry up.

1 This potential raises risks for PSE. If the Consortium found credit markets
2 closed to them because investors became averse to lending to private equity in
3 general, or to the Consortium in particular, PSE would have to attempt to raise
4 capital from traditional sources of credit. However, PSE could not raise equity from
5 those markets, PSE could only raise debt. This would increase leverage at the utility
6 level, and likely lead to lower bond ratings. PSE's ability to access debt also is
7 limited due to its commitments to keep its debt to 40% of capital – borrowing in
8 excess of that will put PSE in violation of the transaction agreements.

9
10 **Q. What is the prognosis for risks in credit markets?**

11 A. Credit markets have been extremely volatile over the last year, with one of the major
12 causes being the collapse of the subprime mortgage market. In the period of less
13 than a year, a potential problem bloomed into a major disaster for many financial
14 institutions, causing a chain-reaction of failures and write-downs throughout global
15 capital markets. In reaction to that crisis, liquidity has sharply contracted around the
16 world with even high-quality mortgage loans now being subject to greater scrutiny
17 and reluctance from lenders. There are some lenders that have halted all new lending
18 activity. Throughout global markets, the risks of incurring additional debt, and the
19 difficulty in securing favorable pricing and terms for the debt has increased
20 significantly.

21 This potential for major swings in global capital markets appears to be rising.
22 Nassim Taleb has popularized the discussion of “Black Swans,”¹ which he describes

¹ Nassim Nicholas Taleb, *The Black Swan*, 2007.

1 as large-impact, hard-to-predict, and rare events beyond the realm of normal
2 expectations. Other researchers also focusing on understanding the importance of
3 extreme events – recognizing that our usual assumptions about risks being well-
4 behaved and normally distributed do not account for some of the more important
5 real-world events that hit financial markets, such as the sub-prime mortgage crisis.
6 A recent paper by Chollette,² extending work by Barro,³ discusses some of these
7 issues and points to the fact that extreme events may be endogenous in financial
8 markets. That is, there may be an externality component in financial markets, where
9 a loss of confidence in one sector can cascade into other sectors. This clearly has
10 been evidenced in current debt markets. In such cases, classic risk management tools
11 are ineffective.

12 The recent collapse of Bear Stearns points to another feature of global capital
13 markets: Global market shocks can be large and very sudden. In the case of Bear
14 Stearns, its exposure to collateralized debt obligations (CDOs), risky subprime
15 mortgage portfolios and exotic mortgage derivative instruments led to its demise.
16 Sweeping changes in valuation of the underlying assets caused the value of CDOs to
17 plummet, historically unseen levels of mortgage loan defaults, and the liquidity of
18 mortgage derivatives instruments to nearly disappear. Bear Stearns' mountain of
19 debt totally eroded the historically strong equity of the firm within a very short
20 period of time, leaving it nearly insolvent.

² Loran Chollette, "The Propagation of Financial Extremes: An Application to Subprime Market Spillovers," December 2007.

³ Barro, R, 2006, Rare Disasters and Asset Markets in the Twentieth Century, *Quarterly Journal of Economics*, 121, 823-66.

1 **Q. What lessons does this have for private equity markets?**

2 A. The collapse of the subprime market does not mean that private equity markets will
3 be next in line. But there are enough similarities to give one pause. The private
4 equity investors also are looking to find ways to get higher returns through leverage,
5 and they depend on access to credit markets to provide funds at low rates. These
6 loans, in turn are often packaged and sold to other investors raising the possibility
7 that the ultimate investors may not fully understand the risks of the underlying assets
8 (as has been the case with CDOs) , and may not understand the risks that contagion
9 from problems in related sectors can suddenly affect other sectors. The search for
10 greater returns unknowingly can lead to undeterminable levels of risk.

11 As I will discuss next, in some portions of the private equity market,
12 particularly those exposed to energy markets, the high leverage position of many
13 private equity investments coupled with a move to fair value accounting can force
14 write-downs of equity and further increase leverage. This could hold the seeds of a
15 future tidal wave of funds fleeing the sector. If this were to occur, private equity
16 funds would face a sudden lack of liquidity that is evidenced in today's mortgage
17 debt markets, and that could hamper their ability to refinance debt and continue to
18 reinvest in their holdings.

19
20 **Q. What are the key trends in private equity markets?**

21 A. Private equity funds have been sharply increasing this decade, but there are growing
22 concerns as to the sustainability of that trend. A Morgan Stanley publication in Fall
23 2007 highlights the concerns facing this transaction: "Private Equity: Boom and

1 Bust?"⁴ The authors highlight trends in the sector that show new leveraged buyouts
2 in the U.S. rising from \$10 billion in 1991 to over \$500 billion by the end of 2005,
3 with similar trends in Europe. They note that the boom was fed by the massive
4 increase in available liquidity worldwide from petrodollars, government surpluses in
5 Asia, pensions, foundations, and private wealth. The boom has been made possible
6 by the development of syndicated bank debt – collateralized debt obligations and
7 collateralized loan obligations – which have made it possible for banks to serve as
8 the originators of loans, but to then package those loans in ways intended to diversify
9 and reduce risk and sell the loans as securities to other investors with an appetite for
10 high-yield and perceived low-risk debt. Because the loans are sold and sometimes
11 resold, however, the authors note that the traditional monitoring of loan performance
12 is lessened. Their conclusion is that the rising leverage and reliance on collateralized
13 loan obligations (CLOs) and CDOs has increased the risk of a systemic collapse in
14 private equity markets. And they note that the private equity market is “susceptible
15 to low-probability systemic crises that are triggered by fairly small economic
16 shocks.”

17
18 **Q. How do current accounting trends affect this situation?**

19 **A.** Significant accounting changes are sweeping through the financial system, in part the
20 result of a reaction to the collapse of major companies such as Enron and the
21 resulting legislation culminating in Sarbanes-Oxley. Increasingly, auditors are
22 requiring firms to adopt standards of “fair value” accounting. These requirements,

⁴ Viral V. Acharya, Julian Franks, and Henri Servaes, “Private Equity: Boom and Bust?,” *Journal of Applied Corporate Finance*, Vol. 19, Number 4, Morgan Stanley.

1 spelled out in FAS 157, force companies to estimate the current market value of
2 assets. They no longer can value assets based on historical cost and adjust for
3 depreciation, but must attempt to reflect the current market value of those assets if
4 transferred between a willing buyer and a willing seller.

5 This trend can exacerbate financial swings, as documented in a recent article
6 by Professor Ryan.⁵ When financial markets are in a downswing, market values may
7 understate the value of an asset, because they are forced to reflect the value of
8 impaired assets that are being traded. They do not always reflect the value of the
9 asset to the holder who has no interest in selling into the distressed market. But by
10 requiring this accounting approach, the value of a company's assets can change
11 dramatically in accounting terms even if nothing of substance has actually happened
12 with the company. Professor Ryan generally approves of the move to more market-
13 based accounting, but recognizes that the valuation of assets in distressed markets
14 can in fact worsen the swings.

16 VI. INCREASED EXPOSURE TO ENERGY MARKET RISKS

17
18 **Q. How does the volatility of oil prices affect PSE?**

19 **A.** PSE is not affected significantly by volatility in oil prices directly, but it is affected
20 very significantly in indirect ways. Directly, the impact of a change in oil prices is
21 low because PSE has little generation that is fired by fuel oil. Electric utility
22 generation has largely moved from oil-based generation to natural gas, hydro, and

⁵ Stephen Ryan, "Accounting in and for the Subprime Crisis," Stern School of Business, NYU, March 2008.

1 other sources. Thus, higher oil prices have little impact on PSE's electricity
2 generation costs, particularly relative to other utilities that have more oil-based
3 generation.

4 Indirectly, though, the story is different and the impact of higher oil prices
5 and energy price uncertainty on PSE can be very significant.

6
7 **Q. What are these indirect effects of oil price volatility on utilities including PSE?**

8 A. Oil prices have major indirect impacts on utilities. Oil price increases have an
9 impact on natural gas demand, both in the Northwest and in the U.S. as a whole.
10 Higher oil prices cause consumers using fuel oil for heating to switch to electricity or
11 natural gas, thereby driving up natural gas and electricity rates.

12 And electricity consumption, like oil consumption, is highly inelastic. So
13 increasing prices does not quickly change consumption patterns. If consumers flee
14 higher fuel oil prices to switch to electricity, and if concerns about global warming
15 are realized and cause a reduction in hydropower, electricity demand could force a
16 sharp increase in need for more power plants, which was what has happened in
17 California following the energy crisis in the earlier part of this century and which is
18 expected in the PSE service area. Moreover, rising transportation costs could change
19 the geographic distribution of work, with more telecommuting occurring, which
20 could increase base load electricity consumption.

21 But on the other side of the coin, these possible increases in electricity
22 demand may be temporary. The technology for solar power and the economics of
23 solar – for residential and commercial – could lead to major investments by

1 consumers in these technologies as electricity prices rise. And at some price
2 threshold, a major shift of consumption can occur that takes base load off line, while
3 at the same time leaving peak capacity needs unchanged. We appear to be at such a
4 tipping point in the automobile market with average gas prices exceeding \$4 per
5 gallon; a similar tipping point is likely to exist for electricity where consumers
6 radically shift behavior and make investments to reduce reliance on electricity.

7 Even if electricity prices do not increase and cause this change, the huge
8 surge in investment in “green technologies” that is already underway is likely to
9 encourage the use of new technologies that reduce electricity generation from large
10 power plants. Should this scenario materialize, the utility could face financial stress
11 – with newly built capacity not matched by demand.

12
13 **Q. Why is PSE more exposed to these risks as a result of the transaction compared**
14 **to the status quo?**

15 A. Once again, the increased leverage resulting from this transaction means that PSE
16 and the holding companies it depends on to provide much of its capital will have less
17 of a financial cushion to absorb adverse developments in electricity demand. More
18 of PSE’s revenues will be pre-committed to debt servicing (including dividends sent
19 upstream to pay debt at the holding company level). This gives PSE less latitude to
20 adjust to rising energy market risks. The bottom line in examining these factors is
21 that oil price risks are likely to remain very high in the near term, and these risks will
22 complicate investment decisions at utilities and possibly lead to investments that may
23 prove to be uneconomic on an *ex post* basis.

1

2 **Q. Explain why you believe energy market risks are rising?**

3 A. The answer to this question is easily evidenced by a quick scan of newspapers and a
4 visit to the local gas station. Oil prices have skyrocketed in recent months, and
5 analysts at Goldman Sachs and elsewhere are predicting that prices will exceed \$150
6 per barrel and gas will top \$5 per gallon this summer.

7 The oil price explosion has considerable impact on future price volatility
8 risks and future oil price levels. As economists put it, oil supply is highly inelastic –
9 it does not respond quickly to price movements. And oil demand also is inelastic – it
10 takes a long time for prices to affect demand. Even with a 30% increase in gas
11 prices, a recent report indicates that driving in May 2008 was down only 4% from a
12 year earlier.

13 Demand for oil also is growing as a result of economic growth in India and
14 China. This increase in demand quickly impacts oil prices given the inelasticity of
15 supply and the very slow response of other consumers of oil to higher prices. The
16 implication is that high prices are quite likely to continue.

17 Yet the risks are two-sided. With inelastic supply, changes in consumption
18 patterns can reverse the price increases. Capital investments in energy-saving
19 devices can have long-term impacts on oil demand. Electricity producers can
20 completely switch from using oil to other fuel sources. Consumers can reduce their
21 consumption of gasoline in half by replacing SUVs with hybrids and changing
22 driving habits. The continued economic growth in India and China will be forced to
23 adopt more energy-efficient technologies. While this will not happen overnight, it is

1 starting to happen now, as evidenced by closed SUV plants, increased mass transit
2 ridership, more telecommuting, and increased sales of higher mileage vehicles.

3 Predicting oil prices has bankrupted more than one trader and likely will do
4 so in the future. Oil price forecasts of over \$100 per barrel were seriously discussed
5 in the late 1970s, only to see oil prices fall to the lowest level in modern history in
6 inflation-adjusted terms shortly thereafter. As shown in Exhibit __ (RHS-3), as
7 recently as March 2008, the Energy Information Administration was forecasting an
8 average of \$74 for imported oil over the next 5 years – shortly before prices
9 skyrocketed to their current levels.⁶ According to those projections, oil prices will be
10 half of today's level through 2030.

11 While the high oil price forecasts are in vogue now, oil prices could collapse
12 in response to political events in the Middle East could return us to more moderate
13 prices. Just recently, on June 14, 2008, Saudi Arabia's government indicated that it
14 believes that current oil prices are well above the level they should be, and that it
15 planned to increase production an additional 200,000 barrel per day, presumably to
16 drive prices down. They stated their concern that the very high prices in today's
17 market pose a long term threat to oil demand by stimulating major permanent
18 consumption changes.

19

⁶ This calculation assumes a 3% rate of inflation over the period and is based on nominal prices – i.e., prices not adjusted for inflation.

1 **VII. RISKS SPECIFIC TO THE CONSORTIUM'S INVESTMENT**

2

3 **Q. Do these risks of global markets, interest rate risk, and energy price risk affect**
4 **the PSE differently after the transaction than it does under the status quo?**

5 **A.** Yes. PSE's owners – the Consortium – would have a greater debt burden than PSE
6 has under the status quo. Prominent members of the Consortium also have greater
7 exposure to these global financial market and energy market risks.

8

9 **Q. Does the Consortium currently have an advantage in attracting investment?**

10 **A.** Yes. The Consortium is led by the Macquarie Group investors. While other large
11 investors are part of the Consortium, Macquarie has the largest percentage ownership
12 and is expected to manage the investment. The Macquarie Group has historically
13 done well in infrastructure projects and enjoys a strong reputation for selecting
14 attractive projects and generating high returns for investors.

15

16 **Q. Why does Macquarie's reputation matter?**

17 **A.** One of the observations of academics studying the private equity markets is that
18 positive "reputational" effects can explain materially lower debt rates. As reported
19 by Professors Demiroglu and James,⁷ private equity funds with an established
20 positive reputation have easier access to credit at lower rates. They explain this
21 reputational effect as indicating to lenders that the borrower, (the private equity
22 fund), has shown good managerial experience and judgment in selecting investments

⁷ Cem Deiroglu and Christopher James, "Lender Control and the Role of Private Equity Group Reputation in Buyout Financing," November 2007.

1 in the past, which is viewed as a signal that they will apply that same experience in
2 the new venture for which the funds are being borrowed.

3 There is little doubt that the Macquarie Group enjoys such a reputational
4 effect. Their investments have performed well over the years, and the fund continues
5 to grow. They have shown good judgment in selecting targets to acquire and
6 manage, and thus have earned the respect of many credit sources and investors.

7
8 **Q. What kind of factors could cause this turnaround in the Consortium's ability to**
9 **access funds at attractive rates?**

10 A. The factors that I have discussed earlier – interest rate risk, the willingness of
11 investors to invest in private equity markets, and fluctuating energy prices – all can
12 directly impact the Consortium and impact its access to credit.

13 In fact, there have been recent rumblings that questions are being raised about
14 Macquarie's future prospects for these and other reasons. The publicly traded
15 portion of the company has performed well below market in the last year, with the
16 value of the stock falling sharply. Recent articles, shown in Exhibit __ (RHS-4),
17 have questioned the sustainability of the business model. While this has not
18 impacted their ability to attract funds at this point in time, if these concerns continue
19 to be raised and if forces work to cause stress on one or more projects owned by
20 Macquarie, this reputational effect can be reversed, and they may find it difficult to
21 have access to credit, and may have to pay more for it when they find it.

1 Q. Is there evidence to support this statement that the reputational effect could be
2 reversed?

3 A. Yes. As shown in my Exhibit ___ (RHS-4), I have included two reports off the
4 Internet that are germane. The first, dated June 12, 2008, and entitled "Hedge funds
5 gang up on Babcock and Brown," reports that the shares of Babcock and Brown,
6 "Macquarie Bank's most ardent and successful imitator," plunged as a result of a
7 major hedge fund losing faith in the business. The article points to a series of
8 problems at B&B facilities and write-downs of equity interests that have caused the
9 collapse in share values. Perhaps most disturbing in the report is the suggestion that
10 problems at the holding company level may make it difficult to refinance outstanding
11 loans at its satellite operations.

12 The second article, dated June 11, 2008, and entitled "Directors defend
13 Macquarie valuations," points to a potential problem for Macquarie if it is required
14 to move to fair value accounting. The report notes that the directors' values of net
15 assets in two Macquarie funds are widely different from the value placed on those
16 assets by investors. As the article details, real estate interests held by the various
17 Macquarie interests have suffered major declines in market value, reducing the fair
18 value of its assets significantly. This decline in equity is likely to continue in the
19 near term, with further write-downs of equity expected. Many mutual and hedge
20 funds that have taken significant positions in real estate investments have had to take
21 similar write-downs because of declining market values nationwide.

22 Moreover, the *Wall Street Journal* published an article on June 17, 2008,
23 entitled, "Market Vexes Macquarie, Babcock," which notes that publicly traded

1 Macquarie and Babcock funds – both of which follow the “Macquarie model or the
2 managed infrastructure model” – have fallen sharply in value since the beginning of
3 the year. The *Wall Street Journal* attributes this decline to concerns about stumbling
4 debt markets and Macquarie’s leverage.⁸

5
6 **Q. How is the Consortium more exposed to energy market risks than is the case in
7 the status quo?**

8 A. In response to this question, I will focus on the leading partner of the Consortium,
9 the Macquarie Group investors. Macquarie has built an outstanding reputation as an
10 owner/operator of major infrastructure projects. Key projects include toll roads,
11 airports, and other utilities.

12 All of these projects are exposed to energy price risks. If oil prices stay high,
13 the use of toll roads may decline and air travel could be reduced. Unless fees can be
14 adjusted to cover a shortfall in revenues, these energy market risks can lead to a
15 decline in the values of these investments. Moreover, since the investments are also
16 highly leveraged, further write-downs on asset values will increase the leverage ratio
17 and make it even more difficult to refinance debt.

18
19

⁸ Rebecca Thurlow, “Market Vexes Macquarie, Babcock,” *Wall Street Journal*, June 17, 2008, p. C2.

1
2
3 **VIII. CONCLUSIONS**

4 **Q. In light of this evidence, what is your opinion regarding the impact of the**
5 **transaction on PSE's exposure to risks from global markets, interest rates, and**
6 **energy prices?**

7 A. In conclusion, it is my opinion that the transaction raises risks to PSE from several
8 sources as a result of the increase in leverage used to purchase the utility. Even
9 though the Consortium plans to maintain the current debt equity ratio at the PSE
10 level, the holding company and owners will be highly leveraged. This high leverage
11 can make future capital projects more difficult to undertake if one or more of the
12 risks I have discussed occur – risks that can make it difficult for the Consortium to
13 raise sufficient capital at reasonable rates to fund needed capital projects.
14