EXHIBIT NO. _____ (EMM-3HC)
DOCKET NO._____
2003 POWER COST ONLY RATE CASE
WITNESS: ERIC M. MARKELL

BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	Docket No. _____

DIRECT TESTIMONY OF
ERIC M. MARKELL
ON BEHALF OF PUGET SOUND ENERGY, INC.

Presentation to Board of Directors

Update on Electric Resource Strategy and Recommendation for Frederickson 1 Acquisition

Eric Markell
Senior Vice President Energy Resources

October 7, 2003

Agenda

- Summary Recommendation

- **APPENDIX – Background and Documentation**
  - Evolution of PSE Resource Strategy
  - Review Of Merchant Landscape
  - Description Of Multi-track Solicitation Process
  - Evaluation Of Alternatives
  - Due Diligence With Priority Targets
  - Review Of Management/BOD Involvement And Decision Process
  - Comprehensive Assessment And Recommendation To BOD

Presentation Overview

- Status of PSE's Electric Resource Strategy
  - Review of the PSE's Electric Resource Strategy for Acquiring Conservation and Supply Resources
  - Update on Implementation
    - Conservation
    - Renewable Resources
    - Thermal Resources

- Recommendation to Purchase a portion of EPCOR's Frederickson 1 gas-fired power generation project
  - Evaluation of alternatives
  - Factors in analysis
  - Analysis results
  - Description of the terms and conditions of the asset purchase
  - Decisional documents

Foundation of Resource Strategy

- PSE is committed to a vertically integrated utility strategy
- PSE is dedicated to fully meeting customers' energy needs and protecting them from risks associated with over-reliance on volatile short-term wholesale market
- Company has enhanced its organizational structure and capabilities for conducting strategic, long-term resource planning
- 2003 Least Cost Plan provides a sound strategy for a balanced, diversified, and low cost resource portfolio
- Consistent with the Washington State Energy Strategy, PSE's strategy provides for a diverse mix of resources to protect our retail customers against market volatility

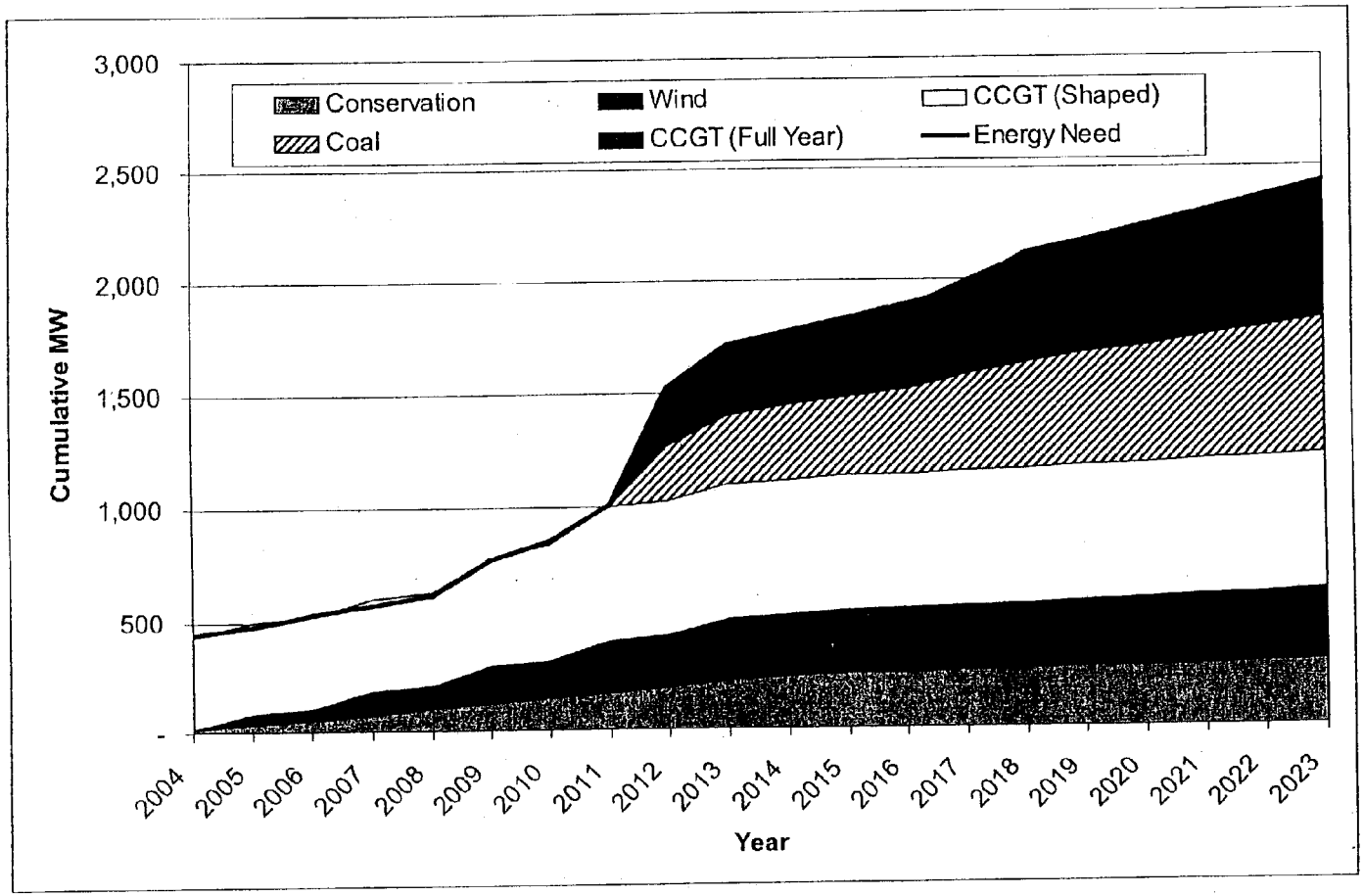
Portfolio Construction: Assumptions and Considerations

- 2003 LCP's planning standard (B2) serves as the basis for constructing PSE portfolio
  - Energy: meet customer needs in highest deficit month of year (January)
  - Capacity: meet customer demand for 16-degree day (at Sea-Tac Airport)
- Through the LCP process, PSE has set ambitious goals for conservation and renewable resources, but additional resources still are required to meet customers' remaining power demands
  - 10-year average incremental conservation of 20.35 aMW, totaling over 273 aMW in 20 years
  - 10% of customer demand served with renewables by 2013 – approximately 270 aMW
  - PSE still needs energy resources: 436 aMW in 2004, 1,219 aMW by 2013, and 1,813 aMW by 2023
- 2003 LCP strategy identifies mix of generation resources as the cost-effective, least-risk way to meet remaining need

Overview of Resource Strategy

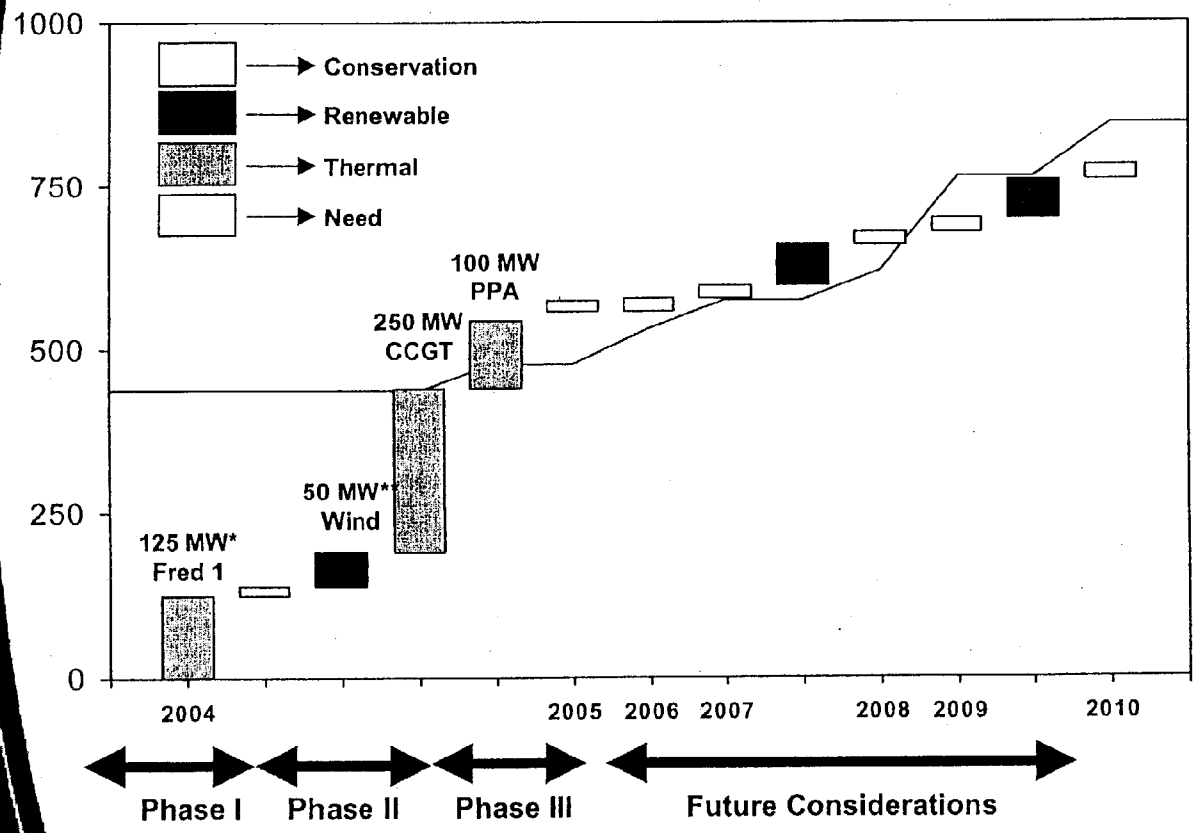
- PSE needs additional electric resources – both near-term and long-term – to satisfy the planning criteria for fully meeting customers' power demands
- Energy crisis / collapse of merchant sector revealed the risk and potential high cost of over-reliance on volatile, short-term wholesale energy markets
- Exhaustive analysis of supply options shows that adding PSE-owned generating assets is economically comparable and has strategic advantages as compared to a strategy the relies exclusively on purchased-power agreements (PPAs). Ownership of resources limits the risk of:
  - Counter-party risk (e.g., contract abrogation, non-performance)
  - Bankruptcy risk
  - Collateral and credit implications
  - Balance sheet impacts of imputed debt
- PSE's strategy is to acquire new resources from a diverse mix of resource technologies and fuel types in a series of acquisitions over time (*see* attached PSE's Resource Acquisition Program (dated August 25, 2003)

PSE's Diversified Resource Strategy (as set forth in LCP Update - August 2003)



Recommended Strategy Entails Multiple Steps to Meet Growing Resource Needs

Effective MW To Meet Energy Needs Under B2 Planning Standard



* Reflects Frederickson I only without 1-A upgrades
** Reflects energy based on 150 MW nameplate capacity

- Resource strategy sets aggressive targets on simultaneous fronts; will need to continually "check and adjust" as environment changes
- Frederickson I represents 1st step of longer-term process

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Execution of Resource Strategy

- The execution of *any* resource strategy presents risk and uncertainty, predicated on volatile market conditions and an ever-changing competitive landscape
- Significant time is required to acquire generation resources
- Only a limited number of new or existing generation projects are actually readily available – time is of the essence
- Effective execution requires ongoing updates to PSE's resource planning and analysis

Update on Implementation: Conservation

- Early in the LCP process, some external parties asserted that PSE could fill all of its near-term resource needs through conservation, increased use of its existing single-cycle gas turbines and power purchases. Through the LCP process, PSE determined that some acceleration of its conservation programs during the next ten years could be cost-effective. However, PSE found - and many external parties came to recognize - that even at accelerated levels conservation, PSE still has a significant remaining need for new generating resources.
- The LCP Update (August 2003) sets forth an accelerated scenario for acquiring cost effective electricity savings within the first 10 years, with a goal of of acquiring 203 aMW during 2004-2013
- Energy efficiency targets and programs for electricity and gas are currently under development for 2004-2005.
  - Current program planning and implementation for electricity savings assume the accelerated scenario.
  - The Conservation Resource Advisory Group continues to have significant and ongoing involvement with PSE in developing savings targets and program planning/implementation strategies.
  - Targets and programs are currently scheduled to be filed with the WUTC on October 31.

Update on Implementation: Renewable Resources

- Filed Draft RFP for Wind Power August 25
  - 60-day public comment period ends October 24
  - 30-day WUTC review period ends November 24
  - Issue Final RFP December 3
  - Proposals due to January 9
  - Execute Letters of Intent March 19
- RFP is for 150 MW of wind capacity
  - provides about 50 aMW of energy
  - meets about one-sixth of Least Cost Plan goal to meet 10 percent of customer loads with renewable resources by 2013
- Other wind opportunities may make sense for acquisition on faster track than RFP process
- Evaluation issues for wind
  - operational and cost impacts of integrating intermittent wind generation
  - evaluation and justification of wind resources that may have higher direct costs but other advantages relative to other types of resources
- RFP for Other Renewable Resources Early 2004

Update on Implementation: Thermal Resources

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Recommendation to the Board Regarding EPCOR's Frederickson 1

- Request authorization from the PSE Board of Directors to purchase a 125 MW to 137.5 MW share (or 49.85 percent ownership) in EPCOR's Frederickson 1 gas-fired power-generation project (contingent on an acceptable WUTC order of soon-to-be-filed Power Cost Only rate filing)

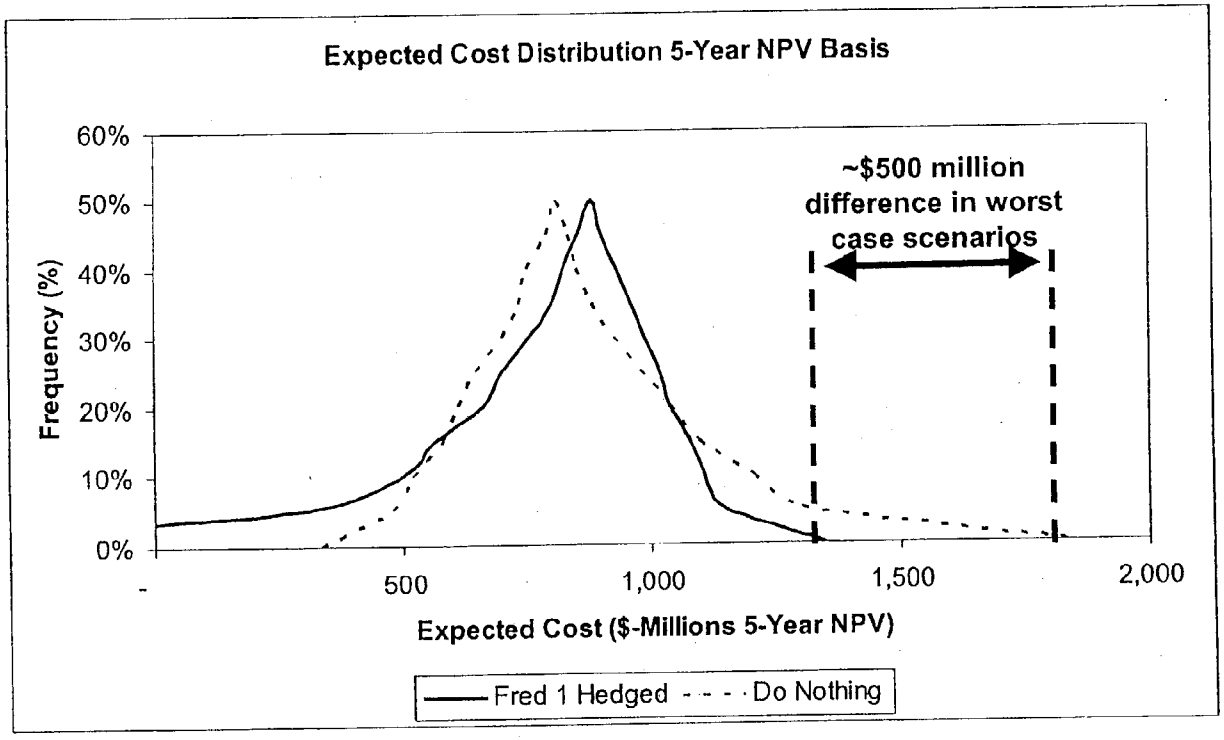
Benefits of Recommendation to Acquire Frederickson 1

- Consistent with the portfolio planning level adopted for the 2003 Least Cost Plan, provides first step toward meeting PSE's power supply needs
- Of 71 assets evaluated, Frederickson 1 was the most attractive
- Frederickson 1 gives PSE's portfolio more fuel diversity and more flexibility within the current energy market
- Frederickson 1 provides a more balanced solution than two high-risk options: doing nothing (i.e. relying on volatile short-term wholesale markets) and betting on a single resource solution

Resource Evaluation Approach

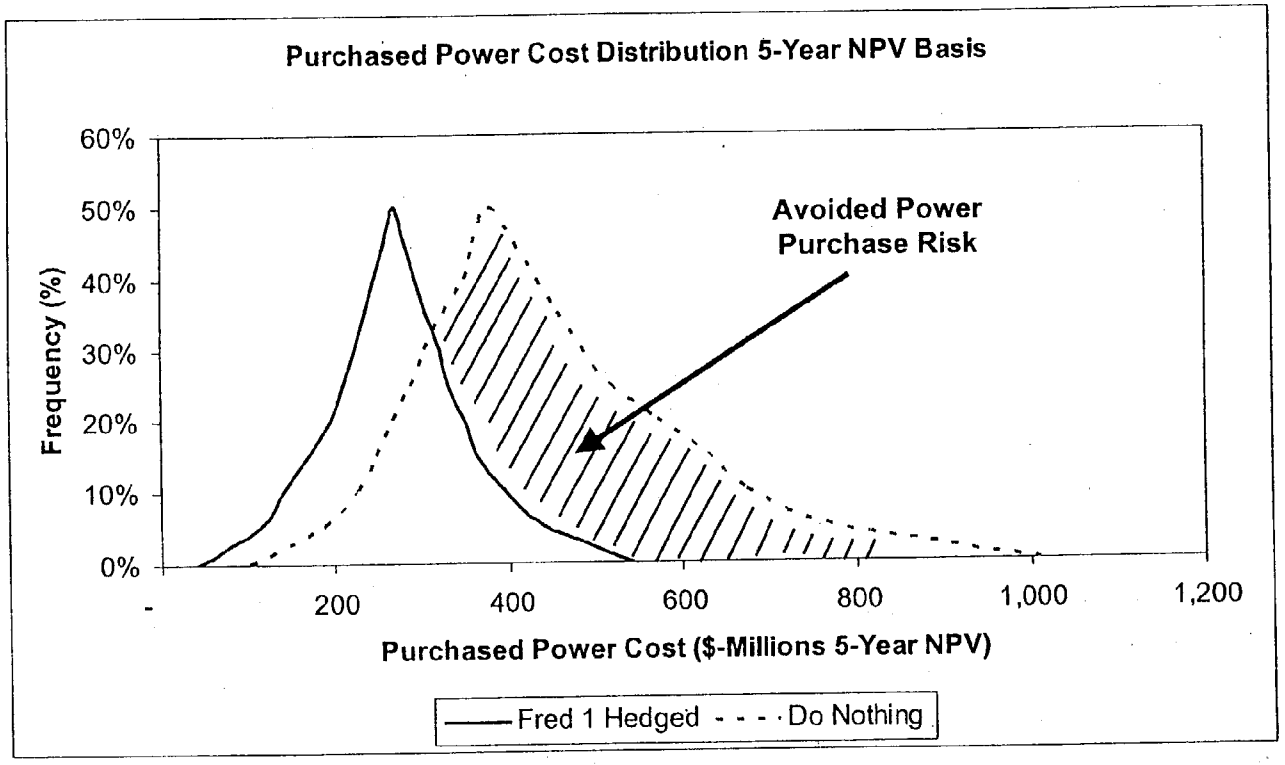
- PSE's resource analysis included:
  - A detailed prioritization 71 possible asset acquisitions of currently operating or development projects, of 75 proposals for PPAs, and a self-build options
  - Identification of five development projects and two PPAs as leading candidates
  - Performed Portfolio modeling, consistent with the LCP, on nine combinations of the seven leading candidates
    - The expected going-forward costs and risks to customers, over 20 years, of each option
    - A detailed Monte Carlo simulation of each portfolio combination, with analysis of variable power prices, gas prices, and hydro-system availability

Evaluation of "Do Nothing" Option Revealed Unacceptable Risks



- Market-reliant, "do nothing" option has lower expected cost than Frederickson 1 but presents unacceptable risk
- In the worst-case scenario analyzed, portfolio costs under a do-nothing strategy could be nearly $500 million more over 5 years than the Frederickson 1 option

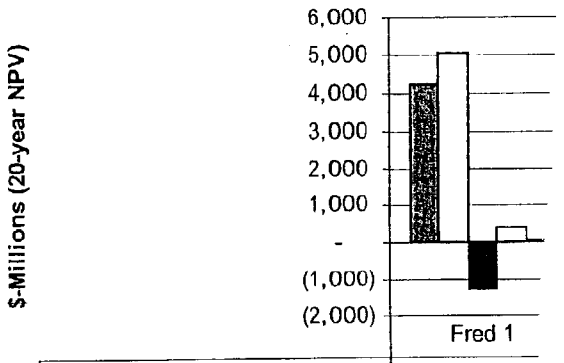
The Do-Nothing Approach's Exposure to Purchased Power Volatility is Unacceptable



- The $500 million, worst-case difference in the do-nothing strategy is attributable to purchased power volatility
- Clearly, the downside in terms of purchased-power risk is unacceptable in the Do Nothing case

Basis for Recommendation - Frederickson 1

20 Year Screening Model Results



	Fred 1
Expected Cost	4,212
Gross Revenue Requirement & Existing Fleet Variable Cost	5,044
Revenue from Sales	(1,267)
Purchase Power Cost	379
End Effects	56

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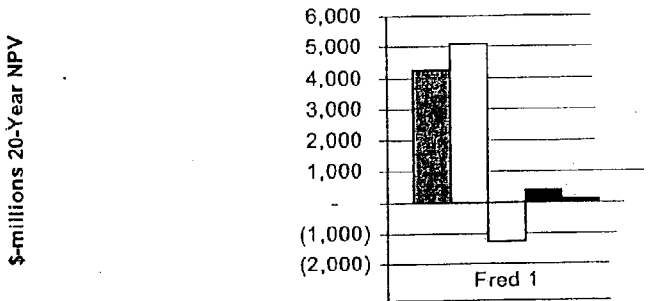
- Frederickson 1 has lowest Expected Cost
- Frederickson 1 purchase price has relatively small effect on PSE customers' rates
- Helps meet PSE's identified 2004 need for new energy resources of 436 aMW

Frederickson is Attractive Relative to PPAs

Frederickson and PPA Results on a 20-Year Static Basis



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Next Decision Steps

- Ask Board to affirm PSE's balanced, diverse, multi-stage electric resource strategy and approve its implementation of the conservation program, renewable resources, and thermal resources.
- Request Board approval of Frederickson 1 asset acquisition
- Upon Board approval, PSE will sign a conditioned purchase contract with EPCOR for Frederickson 1, and soon after Board's action, will file for expedited WUTC review pursuant to the Power Cost Only Rate filing process establishing in the 2001 Rate Case Settlement

Puget Sound Energy
Resource Acquisition Program

August 25, 2003

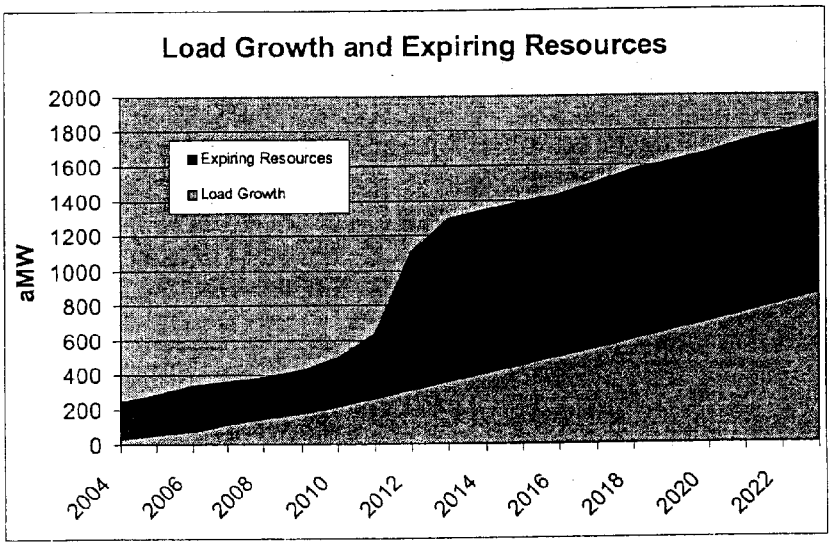
Introduction

This document describes the development of Puget Sound Energy's program to acquire new electric resources during the next several years. The first section summarizes the electric resource strategy developed in PSE's Least Cost Plan. The second section discusses implications for acquisition of new long-term resources by PSE. The third section describes the process and schedule that PSE has developed to implement its program for acquiring new electric resources.

Least Cost Plan

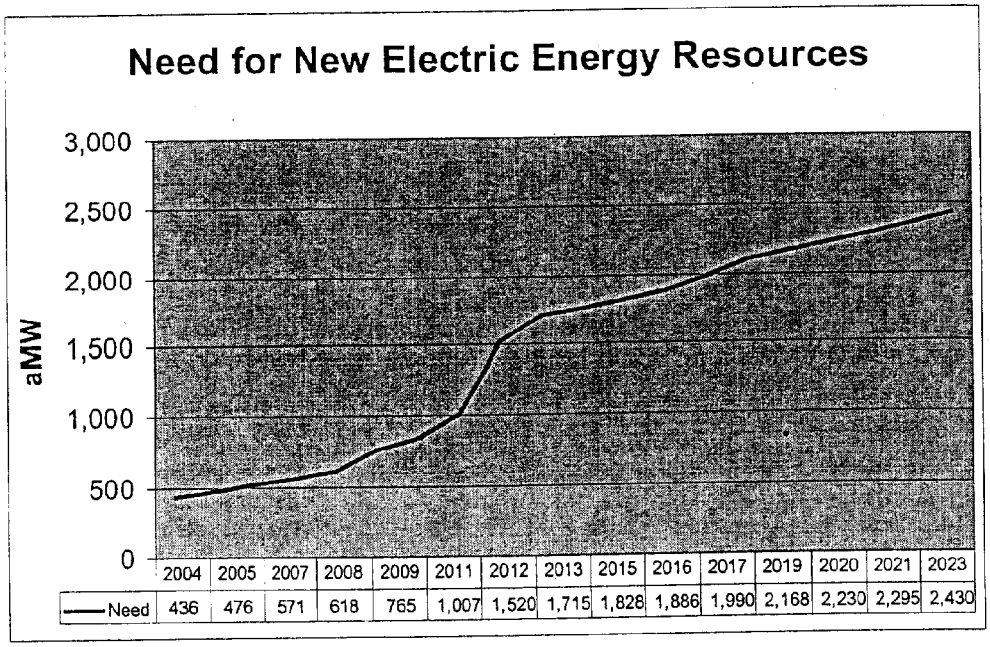
Puget Sound Energy issued its Least Cost Plan on April 30, 2003. The Least Cost Plan sets forth PSE's long-term strategic plan to configure its energy resource portfolio to meet the needs of its retail customers cost-effectively while also protecting against significant sources of risk. The Company will issue a Least Cost Plan Update on August 29, 2003, including a detailed assessment of conservation resources and integration of conservation within its overall resource strategy.

A major input to PSE's Least Cost Plan is the long-term forecast of loads for PSE's retail electric customers. Another important input is reductions in the amount of existing power supplies in the Company's electric resource portfolio, including recent and future expirations of existing long-term power supply contracts. The following chart shows both the long-term forecast of retail electric load growth and expirations of existing long-term firm resources (based on the August 29, 2003 Least Cost Plan Update):



The Least Cost Plan uses this information along with a number of other forecasts, analyses and assumptions to identify PSE's year-by-year need for new electric resources during 2004-2023. To develop the projection of its needs for new resources, PSE simulated the performance of its electric resource portfolio, including expected cost to customers and risk (measured as variability of cost to customers). The portfolio modeling included Monte Carlo simulation of the effects of key sources of risk for the portfolio such as variability in wholesale market prices for electricity and natural gas and variability in hydroelectric generation. These integrated resource portfolio analyses identified costs and risks at a variety of levels of resource adequacy, ranging from no addition of new long-term firm resources to addition of long-term firm resources to meet or exceed the projected needs.

As a result of the portfolio modeling analyses and consideration of qualitative factors, PSE has adopted a balanced resource portfolio adequacy standard for electric energy and capacity. The energy portion of the resource portfolio adequacy standard balances the electric resource portfolio by adding new long-term firm energy resources sufficient to meet projected customer energy loads under average-year hydro conditions (with PSE's single-cycle combustion turbines assumed to be held available to serve energy loads during below-average hydro years). PSE's need for new energy resources under the adopted resource adequacy standard is shown in the following chart:



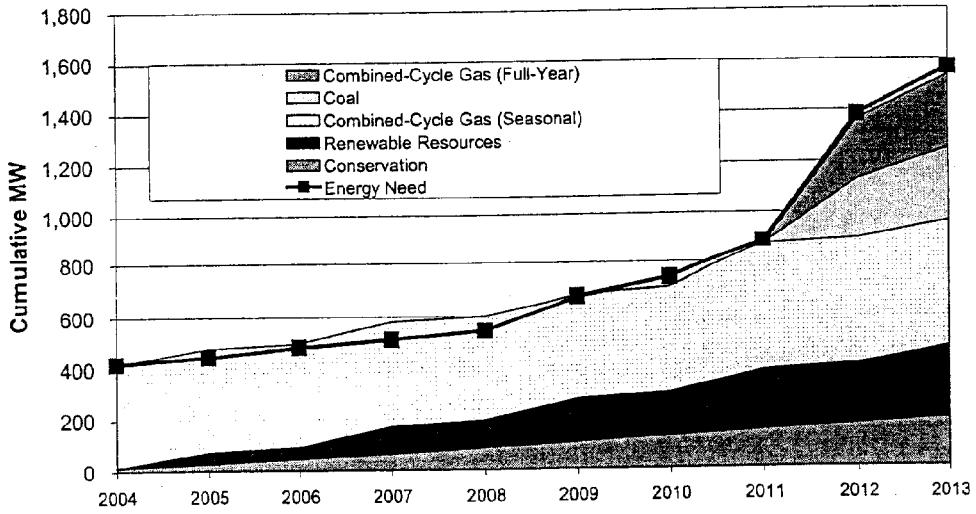
Similarly, the capacity portion of the resource adequacy standard identifies a need for new capacity resources sufficient to enable the portfolio to meet projected peak loads on cold winter days that the minimum-hour temperature at Sea-Tac Airport drops to 16 degrees Fahrenheit. PSE's need for new capacity resources at the adopted resource adequacy standard is approximately 1,000 megawatts in 2004 and grows to about 2,950 megawatts in 2013.

In addition to establishing a resource portfolio adequacy standard, the Least Cost Plan identifies a preferred mix of 'generic' resource technologies planned for addition to the portfolio during 2004-2013. The preferred mix of new electric energy resources includes:

- New electric conservation resources (including a goal to acquire an average of 19 aMW per year of new conservation during 2004-2013, from the August 29, 2003 Least Cost Plan Update)
- Renewable resources (including a goal to meet 10 percent of PSE's annual customer energy loads with renewable resources by 2013)
- Combined-cycle gas-fired turbine generation
- Coal-fired generation
- Seasonal exchanges or other seasonal shaping transactions

The following chart displays the diverse mix of new electric resources identified in the Least Cost Plan:

Strategy to Add a Diverse Mix of New Resources



Implications for Acquisition of New Electric Resources

The resource strategy developed as part of PSE's Least Cost Plan provides a "shopping list" that serves as a guide for acquisition of new electric resources. Some of the major implications from the Least Cost Plan include:

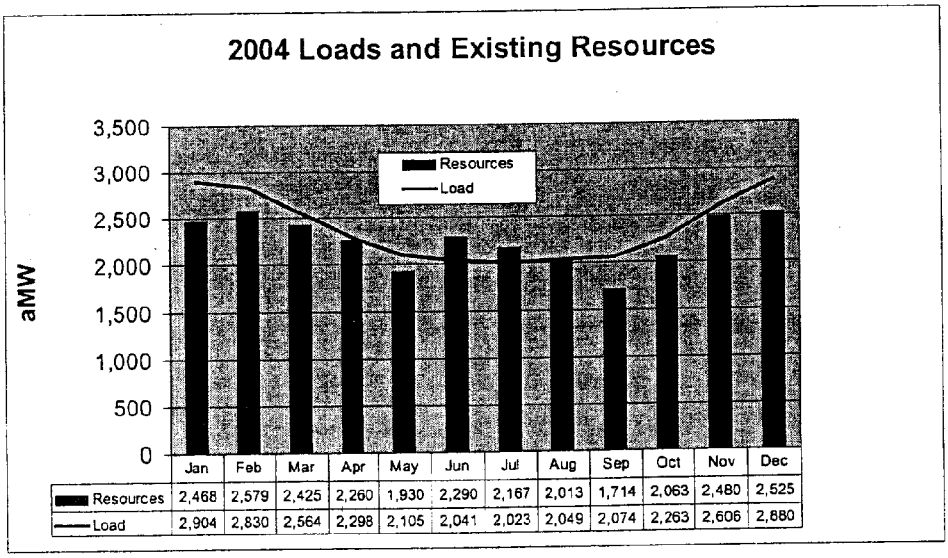
1. PSE has an existing need for new electric resources. The largest near-term driver for this need is the recent and impending expiration of several power supply contracts.

2. PSE's Least Cost Plan resource strategy includes goal to acquire an average of 19 aMW per year of conservation during 2004-2013. This can meet a portion (192 aMW by 2013) of the Company's need for new electric resources. To meet the remaining need, it will be necessary to acquire new electric resources based on generating technologies.

3. PSE's strategy is to seek to acquire new resources from a diverse mix of resource technologies and fuel types. This diversified approach provides an important means to avoid the concentration of risks that could result from relying exclusively on a single resource technology to meet all of the need.

4. As PSE's need for new electric resources grows over time, it will be necessary and beneficial for PSE to make a series of resource acquisitions, rather than all at once. For example, a resource acquisition program that occurs in several stages helps spread risks and allows new information to be factored into the process over time.

5. PSE's need to acquire new electric resources has a seasonal "shape". In other words, PSE's need for new electric resources is largest during the winter months. In contrast, PSE does not have a current need for new resources during the summer months. This is illustrated by the following chart:



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Resources	2,468	2,579	2,425	2,260	1,930	2,290	2,167	2,013	1,714	2,063	2,480	2,525
Load	2,904	2,830	2,564	2,298	2,105	2,041	2,023	2,049	2,074	2,263	2,606	2,880

6. Accordingly, PSE's resource acquisition program should also seek to acquire new electric resources that can be "shaped" to fit the seasonal profile of its need, either directly or through companion transactions.

7. Evaluation of alternative proposals for new resource acquisitions must include analysis and comparison of the net impacts of each proposal on the costs and risks to PSE's retail electric customers. This type of analysis requires integrated modeling of new resource acquisition proposals within PSE's overall resource portfolio, including interactions between loads, existing resources, and new resources.

8. Therefore, a one-dimensional estimate of avoided costs does not provide a sufficient basis for evaluating and comparing new resource acquisition proposals.

9. As noted above, PSE has developed a strategy to acquire a diverse mix of new resource technologies. In addition to evaluating resource acquisition proposals in terms of net impacts on portfolio cost and risk, PSE is obligated to seek specific resource opportunities that have lower costs relative to other proposals for the same or similar types of resources (i.e., competing proposals within a resource technology). Therefore, early-stage evaluation of specific resource proposals that are based on the same resource technology (e.g., wind power, combined-cycle combustion turbines) can be aided by development of 'pro forma' avoided costs that are specific to that generic resource technology.

10. Acquisition of new electric resources to meet PSE's need for energy will also meet a portion of the Company's need for winter peaking capacity. It will be necessary to acquire capacity resources to meet the remaining need for winter peak capacity. Such resources could include winter peak-clipping or other forms of customer demand response, as well as generation-oriented capacity resources.

Resource Acquisition Program

PSE has developed a diversified, multi-stage resource acquisition program to implement the long-term resource strategy developed in the Least Cost Plan. The Company has designed this program to address the implications identified in the previous section of this document. The program is also designed to address various resource acquisition considerations that extend beyond the relatively generic context of resource planning.

PSE has been exploring opportunities to meet its near-term needs to acquire new resources through solicitations (outside the WAC 480-107-060 process) that the Company issued in August 2002 (assets) and November 2002 (power purchase agreements). Any acquisitions that result from those solicitations will only meet a portion of PSE's total need for new resources and may only meet a portion of its need for combined-cycle gas-fired turbine generation as identified in the Least

Cost Plan. PSE will implement its resource acquisition program through a series of requests for proposals pursuant to WAC Chapter 480-107. These RFPs will be coordinated with completion of the resource solicitations that PSE began in 2002 and a screening solicitation for coal resources to be issued in Fall 2003.

The planned schedule for major elements of PSE's resource acquisition program during the next two years includes the following elements:

(a) Completion of the competitive solicitations that PSE issued in August 2002 (assets) and November 2002 (power purchase agreements)

(b) RFP for 150 MW of Wind Power Resources (Fall 2003)

(c) Screening Solicitation for Coal Resources (Fall 2003)

(d) Two or more RFPs for Resources with Stable Variable Costs, Including but not Limited to Coal and Large PURPA projects (Fall 2003/ Winter 2004)

(e) RFP for Other Renewable Resources and Small Thermally-Matched Cogeneration (Early 2004)

(f) Potential RFP(s) and/or Solicitation(s) for Seasonal Shaping (2004)

(g) Possible Second RFP for Wind Power (2004 or 2005)

Summary information about PSE's resource acquisition program:

1. The resource acquisition program is designed to result in acquisition of new resources to meet the needs of PSE and its retail electric customers at least cost and within acceptable risk. The program allows a broad variety of resource technologies to participate in the competitive resource acquisition process and be evaluated on a consistent basis.

2. A specific set of avoided cost estimates will be developed for each RFP. These avoided cost estimates will be based on the type of resource technology(s) being solicited in the RFP. The avoided cost estimates will provide general information to potential respondents regarding the costs of new power supplies based on the generic resource technology requested under each RFP.

3. Where applicable, the RFPs will include requests for proposals under multiple acquisition approaches. One such approach would involve resource development by the respondent, leading to project ownership by PSE. Another example for the acquisition approach would be through a power purchase agreement.

4. PSE's evaluation of proposals submitted in response to each RFP will include analysis of each proposal's net impacts on overall cost and risk in PSE's electric resource portfolio.

5. PSE's evaluation of proposals submitted in response to each RFP will include evaluation of various risks and costs, including project permitting, financing and development risks. The evaluations will also address such topics as counterparty credit, imputed debt and compensating equity costs (for PPAs), security and control costs, resource integration, transmission and environmental considerations.

6. PSE will periodically update its resource acquisition program to reflect ongoing progress, including:
   - Results of each stage of resource acquisition
   - Biennial Least Cost Plans and Updates
   - Other new information and analysis

7. PSE is also evaluating alternatives for meeting its winter peaking capacity needs. Acquisition of capacity resources will be coordinated with acquisition of energy resources (including conservation and generation) and will consider demand response as well as generation-based forms of peaking capacity.

Agenda

- **Summary Recommendation**

- **APPENDIX – Background and Documentation**
  - Evolution of PSE Resource Strategy
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Section Summary

Evolution of PSE Resource Strategy

- *As the utility sector prepared for industry restructuring, PSE was one of a number of utilities that focused on its distribution business based upon the expected development of a competitive wholesale energy market. The company's projected balanced portfolio delayed the need to address construction of acquisition of long-term energy supply resources during this time.*

- *After the energy markets' collapse, PSE became one of many utilities that needed to enhance its capability to analyze what had before been unanticipated levels of risk and price volatility as it returned to a strategy of a vertically integrated, regulated utility. PSE has invested considerable time and resources to regain these capabilities over the past 18 months as it returned to a strategy of securing long-term resources to meet its obligations as a vertically integrated, fully regulated utility*

- *PSE has applied these rebuilt capabilities in an ongoing and continuing effort to better understand the cost and risk trade-offs of its generation alternatives*

The 2000-2001 LCP, filed in December 1999, was based upon a relatively balanced portfolio and focused upon the need for flexibility during a period of uncertainty

"…..Under scenarios assuming the structure of the industry remains similar to current practice (the Low, Medium, and High scenarios) PSE's existing resource portfolio will meet loads at least through the year 2006."

Source: *PSE 2001-2001 Gas & Electric Least Cost Plan Dated December 1999*

After the collapse of the wholesale markets, utilities recognized the need to balance load with physical generation to avoid exposure to volatile prices

- **California utilities lost up to ½ their market cap in the 5 weeks between December 1st 2000 and January 4th, 2001 from unprecedented exposure to rising spot prices**
  - PG&E (-55%)
  - SCE (-51%)
  - Sempra (-19%)

- **Even outside California, utilities faced huge losses due to spot market volatility**
  - Seattle City Light
  - Local PUDs
  - Northwestern
  - Avista
  - PacifiCorp
  - Nevada Power

- **Many utilities then moved to transfer generation assets back into rate base or to develop new plants to replace what they had sold**
  - Cinergy
  - DQE
  - OG&E
  - El Paso Electric
  - PG&E
  - PacifiCorp
  - Pinnacle West

The wholesale market collapse caused PSE and many other utilities to reassess their resource needs and exposure price volatility

- **As the wholesale markets collapsed in 2001 a strategic planning team within PSE reexamined the planned path from being relatively balanced, to becoming relatively short, due to a significant loss of contracted resources**
  - This effort culminated in PSE's Load Resource Balance Report 2001-2010, completed in February 2002

- **The unprecedented gas and power price volatility increased the awareness of the potential financial impact of being even slightly off in forecasting loads and resource balances**
  - Previously, alternatives had been available in the near-term market at a reasonable price to respond to near-term loads and resource variations
  - Increasing priority for risk management strategy

- **This also created an opportunity for PSE to conduct an early assessment of opportunities to acquire generation in the region**

- **The Audit Committee of the Board of Directors recommended that PSE management provide a comprehensive update on energy supply at a future meeting**

PSE Has Taken a Number of Steps to Focus on Energy Resource Planning and Acquisition

- **Strong organizational focus on long term energy portfolio**
  - New Senior VP Energy Resources
  - New VP Project Development and Contract Management
  - New Director Resource Planning
  - New Director Conservation
  - New Director Gas Resources (pending)
  - New Manager Project Development
  - New Manager Gas Resource Planning
  - Staffing plan and budget for resource planning
  - Recruiter assisting process to fill remaining vacancies

- **Enhanced Energy Risk Management Team focused on shorter term markets**
  - New tools to manage gas and power portfolio
  - New analytic approaches

- **An enhanced "toolkit" provides comprehensive analytical capabilities**
  - Used AURORA model to produce multiple scenario forecasts of regional power markets (extensive review and updating of model assumptions and data)
  - Developed a PSE-specific long-term resource portfolio analysis model with risk analysis capabilities
  - Began implementing a detailed short-term portfolio management model with risk analysis capabilities (KW3000) as a bridge from short-term to long-term portfolio planning

PSE Has Taken a Number of Steps to Focus on Energy Resource Planning and Acquisition

- **Multi-level internal review and broad organizational involvement examined the integrated resource strategy and acquisition process**
  - Weekly internal Resource Analysis Work Group meetings, with active participation by Resource Planning, Project Development, Portfolio Management, Regulatory and other departments
  - Periodic reviews by Energy Resource Committee of senior managers
  - Ongoing updates and directional discussions with Board of Directors

- **Frequent and open communication with stakeholders**
  - Dozens of meetings with WUTC Staff, Least Cost Plan Advisory Group, Conservation Resource Advisory group (CRAG), and other interest groups .
  - Addressed a large number of topics raised by participants and incorporated many of their suggestions
  - Stakeholders have commented that the 2003 Least Cost Plan process has been rigorous and credible

Resource Alternatives Have Been Analyzed in Terms of their Net Impacts on Cost and Risk in PSE's Overall Resource Portfolio

- **The same long-term portfolio analysis model that was developed for the Least Cost Plan is also used for analysis of acquisition alternatives**
- **The long-term portfolio analysis model explicitly addresses risks from key uncertainties -- market prices for natural gas, market prices for power, variability in hydroelectric generation**
  - Monte Carlo (probabilistic) analysis of risk factors provides more useful information than analysis that focuses only on expected-value outcomes
  - For example, two resource alternatives might have similar impacts on portfolio cost, but different impacts on portfolio risk (i.e., insurance has value)
- **In addition to Monte Carlo risk analysis, alternate scenarios were modeled (e.g., cost of capital, planning standards, resource mix, levels of conservation)**
- **Analysis addresses differences between asset ownership and power purchase contracts (e.g., imputed debt impacts of contracts)**
- **Analysis includes factors identified in previous WUTC proceedings (e.g., end effects)**

Least Cost Plan Provides a Foundation for Analysis of Acquisition Alternatives

April LCP established a balanced, diversified resource strategy:

- 15 aMW per year conservation (based on 2002 rate case settlement)
- goal to meet 10 percent of customer energy needs with renewable resources by 2013
- mix of thermal generation to meet remaining needs
- shaping transactions to balance the portfolio seasonally

Work continued after the April LCP and August LCP Update has refined the resource strategy

- integrated portfolio analysis of conservation and generation resources
- more aggressive goal for conservation - 203 aMW by 2013
- affirmation of 10 percent goal for renewable resources
- thermal generation still required to meet remaining need for resources

Board-adopted standard for resource adequacy

- meet energy need in all months
- meet capacity need on day that minimum temperature is 16° F at Sea-Tac

Consistency with State Energy Strategy

- diverse mix of resources
- protect retail customers against market volatility

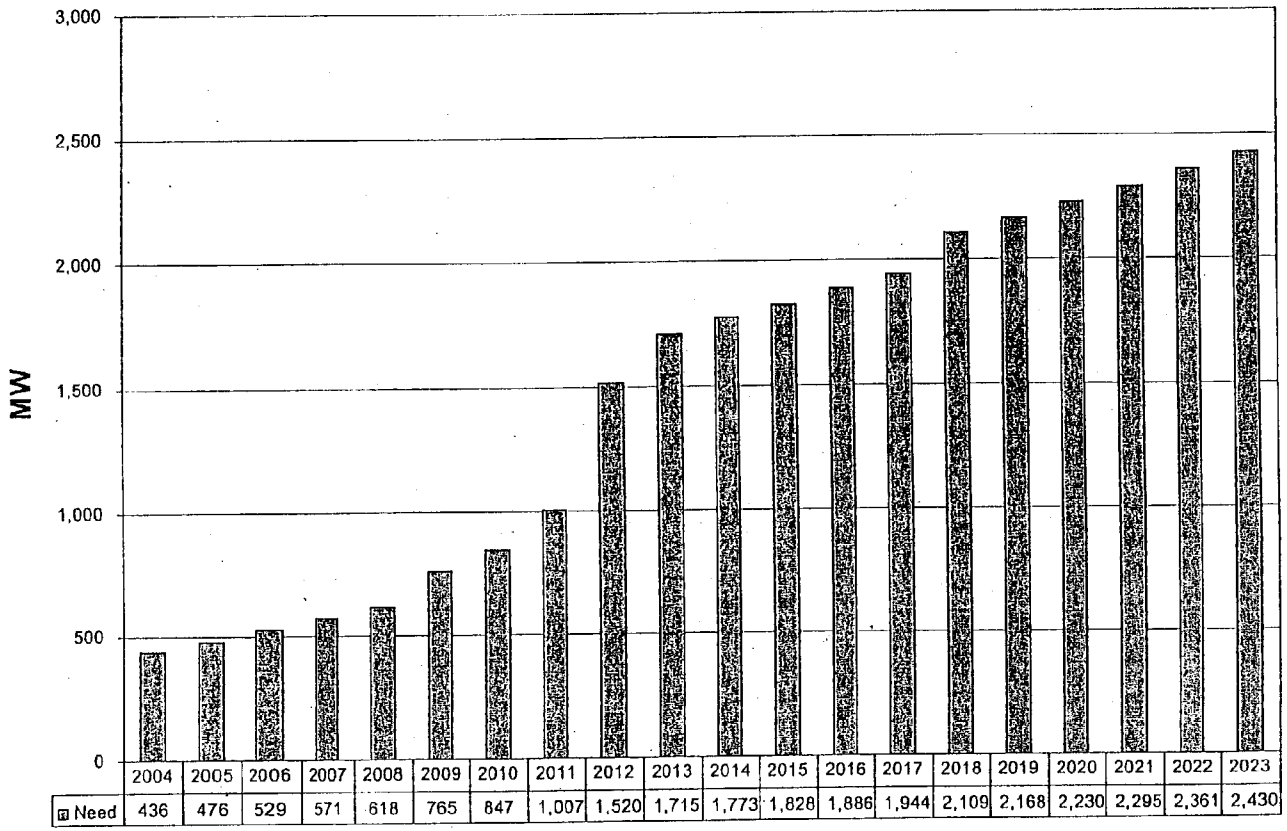
Resource shaping to balance the portfolio seasonally

- need for new resources in winter months
- no need for new resources in summer months until 2012
- selling summer surplus as necessary

Analysis of environmental impacts

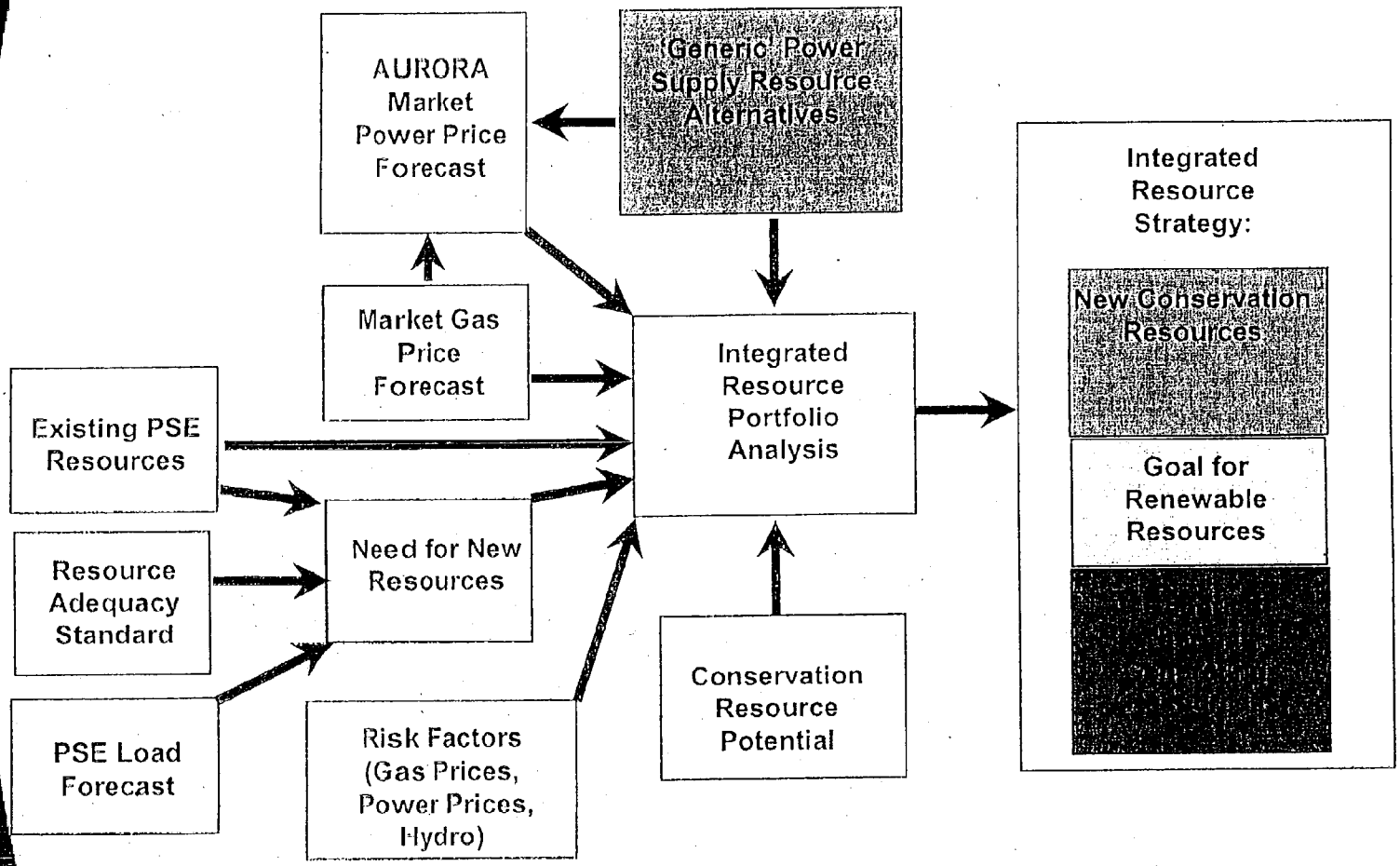
- Conservation and renewables reduce CO2 emissions by 50 mil. tons (18%)

Need for New Resources from the August Least Cost Plan Update (B2 Adequacy Standard)



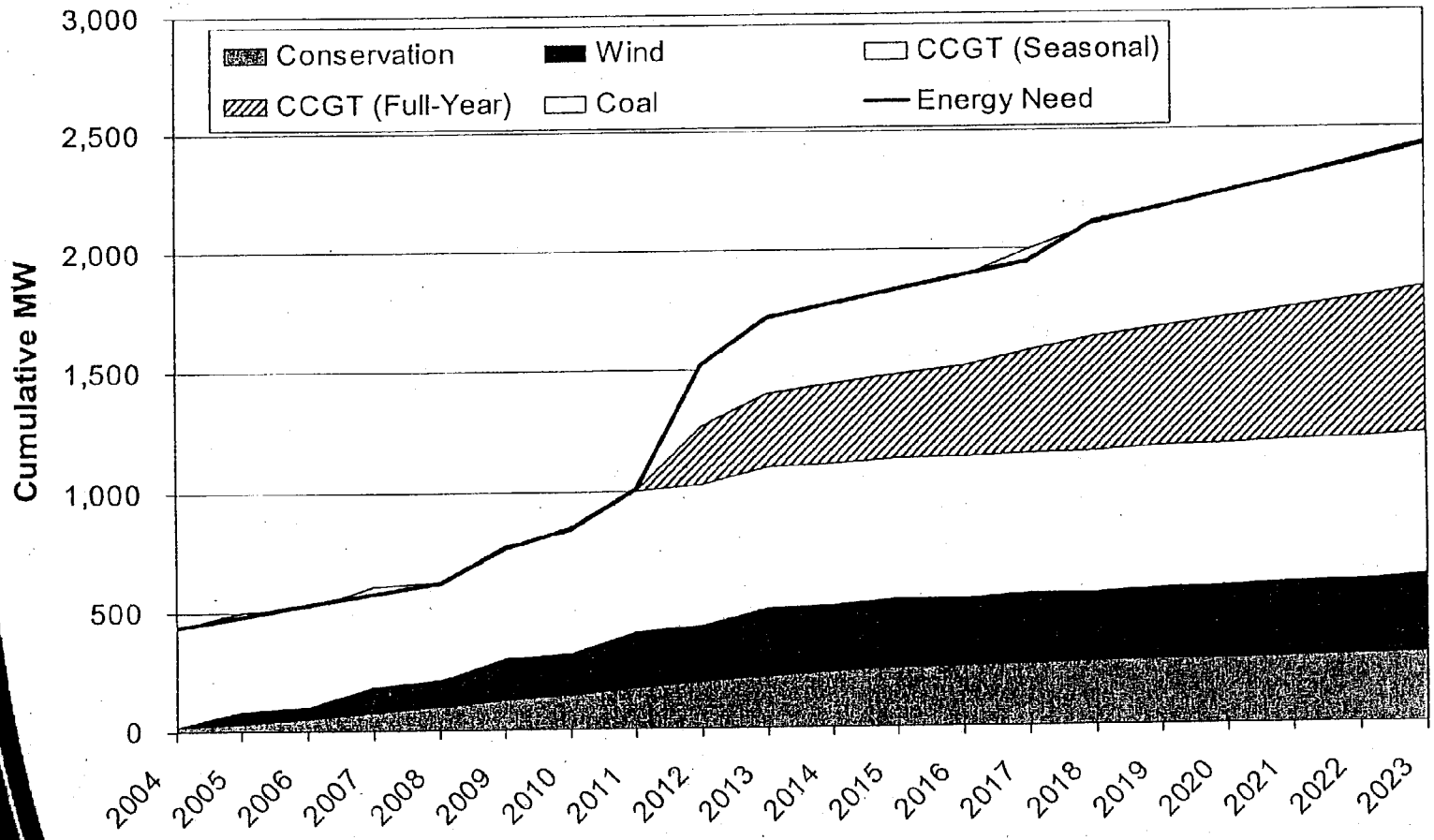
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Need	436	476	529	571	618	765	847	1,007	1,520	1,715	1,773	1,828	1,886	1,944	2,109	2,168	2,230	2,295	2,361	2,430

The Least Cost Plan Used an Integrated Portfolio Analysis Framework to Develop a Strategy with 'Generic' Resources*



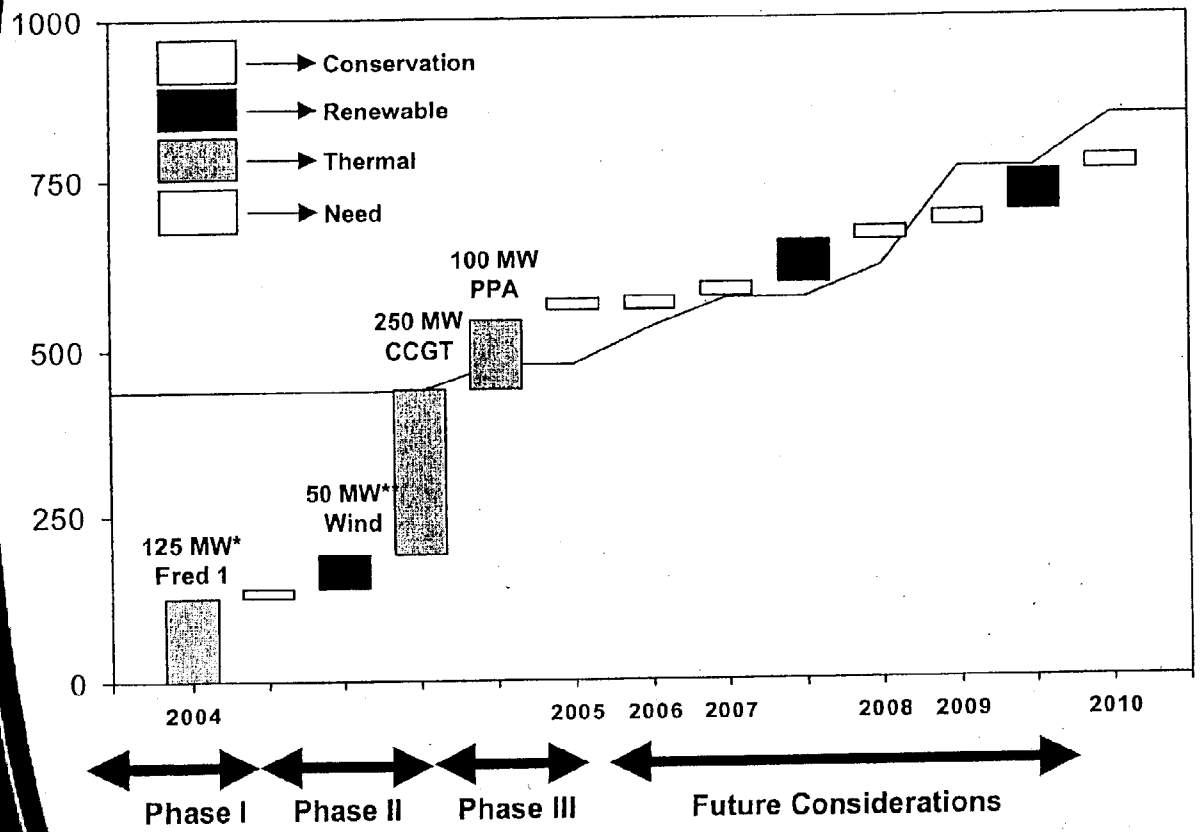
* This strategy used estimated cost of "generic new resources" to develop the optimal resource strategy. Comparisons of acquisition alternatives utilized the same generic resources to fill any gaps in portfolio construction

The August Least Cost Plan Update Confirmed PSE's Diversified Resource Strategy



Recommended Strategy Entails Multiple Steps to Meet Growing Resource Needs

Effective MW To Meet Energy Needs Under B2 Planning Standard



* Reflects Frederickson I only without 1-A upgrades
** Reflects energy based on 150 MW nameplate capacity

- Resource strategy sets aggressive targets on simultaneous fronts; will need to continually "check and adjust" as environment changes
- Frederickson I represents 1st step of longer-term process

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BOARD MEETING [illegible]

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Agenda

- **Summary Recommendation**

- **APPENDIX – Background and Documentation**
  - Evolution of PSE Resource Strategy
  - Review Of Merchant Landscape
  - Description Of Multi-track Solicitation Process
  - Evaluation Of Alternatives
  - Due Diligence With Priority Targets
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Section Summary

Changing Merchant Landscape

- *Several merchants (and potential counter-parties) have moved closer and even filed for bankruptcy as Wall Street concerns about risk and attractiveness of the generation sector has increased , creating a highly dynamic negotiating environment*

- *As the wholesale market collapsed, it brought down the merchant utility business model with it. Merchants, who had anticipated significant profits from trading operations, tried to evolve a model requiring long term power sales contracts to support new project developments. They are still struggling with execution of this model*

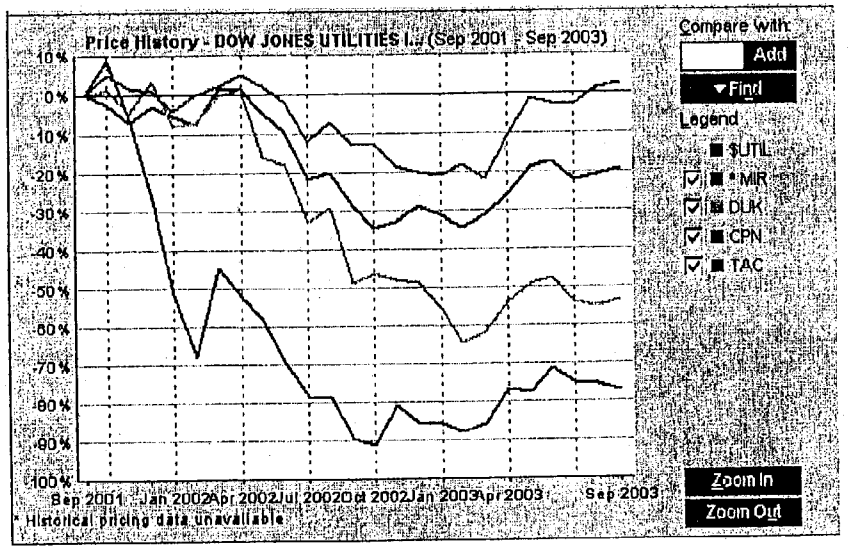
- *After holding out for higher asset prices during the past 2 years, in the past few months merchants are now being forced to sell assets or to default to the banks (putting the banks into the merchant's shoes)*

- *Historic transaction prices for generation assets have always fluctuated widely. The potential to acquire assets at attractive valuations is a function of a number of different variables that can be difficult to predict*

Evaluating asset opportunities has been a dynamic process during the two past years as the merchant utility sector* has suffered greatly

Most merchant utility stocks fell precipitously in summer of 2002 and have struggled since then, creating significant credit issues and concerns

- Their stated focus was to sell assets and repair their balance sheets
- Asset sales were difficult to transact in 2002, as a considerable bid-ask spread remained
- Some merchants were in "technical default" on their obligations even though lenders were reluctant to trigger a Chapter 11 filing



Many of PSE's potential counter-parties were also among likely bankruptcy candidates

• Mirant	Filed Chapter 11 on 7-14-03
• Northwestern	Filed Chapter 11 on 9-15-03
• Calpine	Lost 90% of its market cap in '02
• Duke	Lost 50% of its market cap in '02

Other merchants outside the PNW faced similar pressures

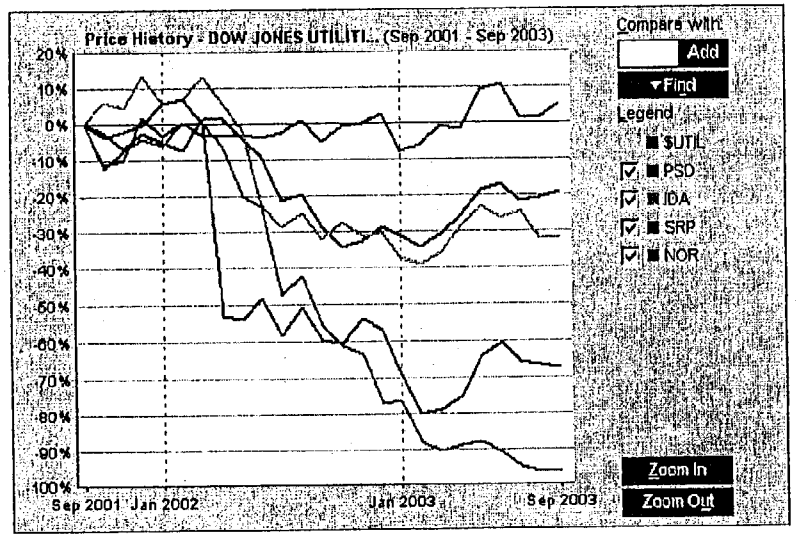
• NEG	Filed Chapter 11 on 7-8-03
• NRG	Filed Chapter 11 on 5-15-03

Note: The term "energy merchant" refers to a separate business or non-regulated subsidiary focused on the Generation and/or Energy Marketing & Trading business (e.g. Mirant, Calpine) , while a "Merchant Utility" focuses on the same businesses, but is also closely affiliated or owned by a utility parent (e.g. Duke, Northwestern)

Many IOU's also faced severe market corrections as derivative credit issues and exposure to wholesale markets came under increased scrutiny

Wall Street concerns regarding many IOU's was particularly high in the summer of 2002

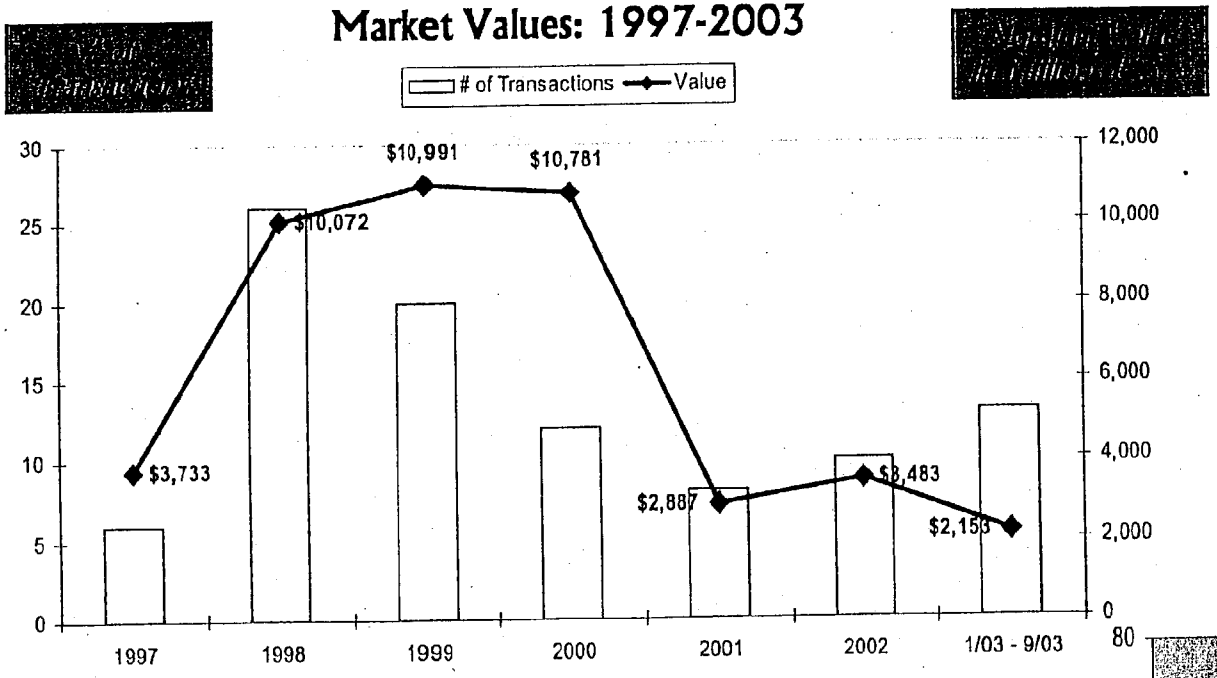
- Companies exposed to wholesale power contracts were among the most severely hurt
- While some companies were damaged through flawed diversification strategies, regulatory uncertainty related to treatment of PPA contracts also alarmed Wall Street



$Util	**Dow Jones Utility Average**
IDA:	IdaCorp
SRP:	Sierra Pacific
NOR:	Northwestern

Over the past 12 months, the number of asset transactions is slowly starting to increase

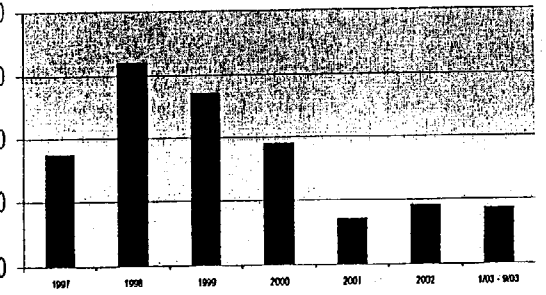
Generating Asset Transactions and Total Market Values: 1997-2003



- Declining activity in 2001-2002 attributed to differences in perceived value and bid-ask spread
- Transactions appear to be increasing in 2003 as merchants are facing increasingly difficult prospects and need to raise cash

Note: many earlier transactions driven by PUC mandated Utility divestitures

Number of Individual Plants



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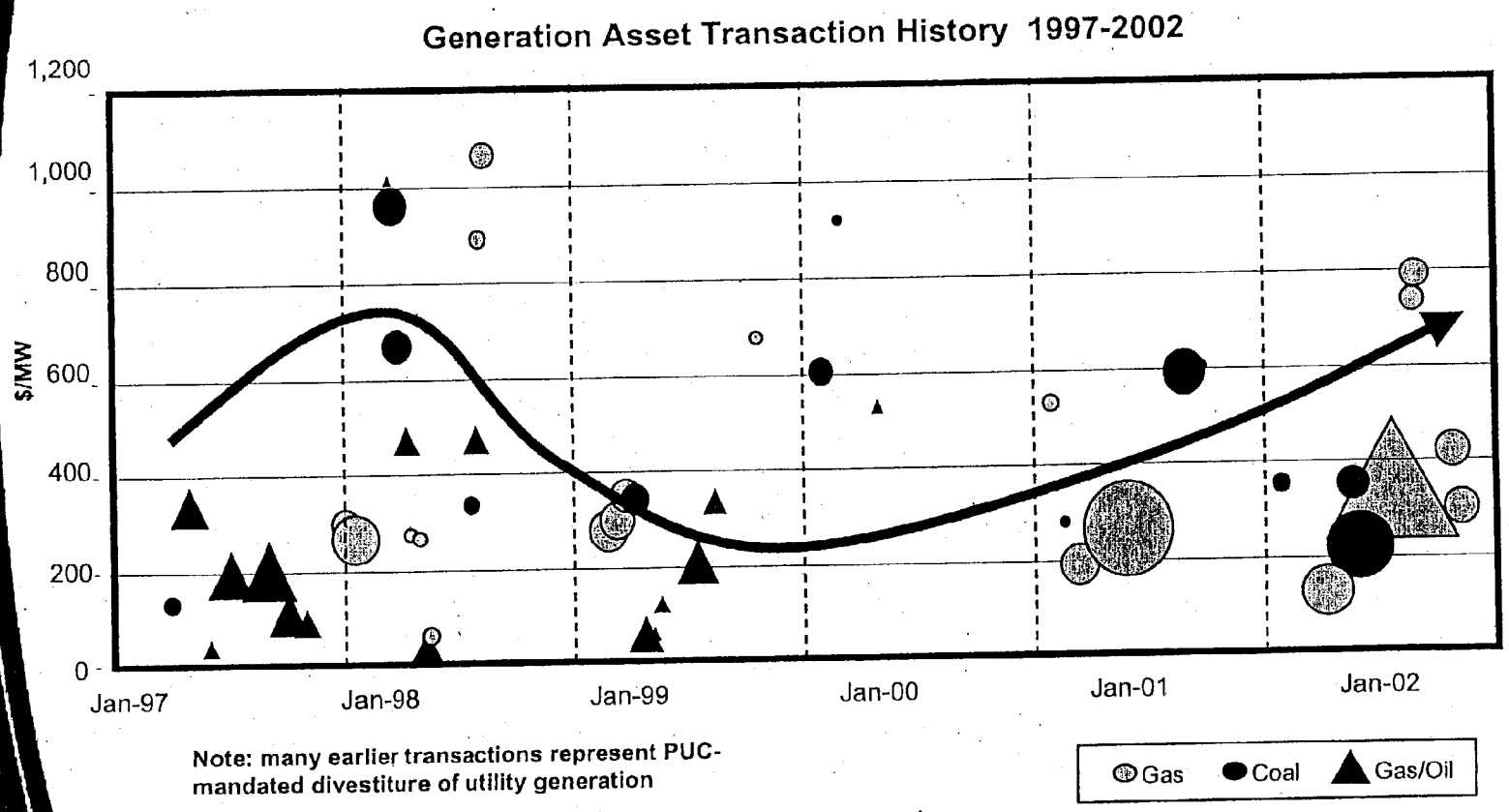
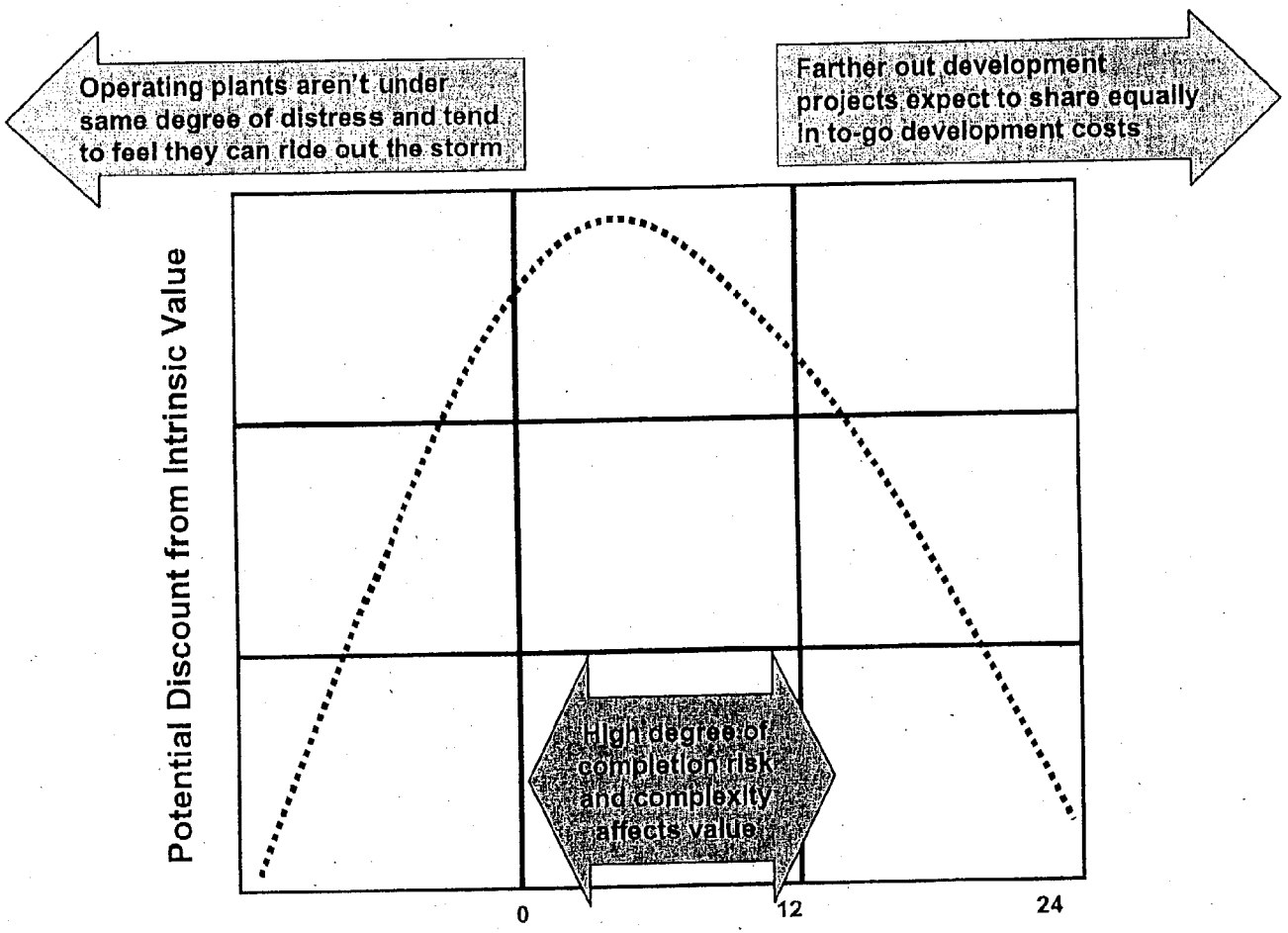
Transaction prices have varied widely in recent years and have not always been linked to a value measures such as book value or Discount Cash Flow



Note: many earlier transactions represent PUC-mandated divestiture of utility generation

Reflects all fuel-specific transactions for gas, coal, and gas/oil. Does not reflect nuclear, renewable or bundled (e.g. coal + gas) transaction. Trend line is illustrative.

A key factor affecting a potential sale price is where the project is on its development cycle



Potential regional candidate projects for PSE fall into some natural groupings

1. Projects Owned by Distressed Parent

Merchants under pressure to sell off assets to repair their balance sheets and ease Wall Street concerns. Examples include:

2. Operating Projects

Established, or recently completed projects that could be for sale despite currently generating revenue. Examples include:

3. Development Projects

Projects that require additional cash investment to complete in an otherwise unattractive period. Examples include:

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Multi-Track Solicitation Process

- *PSE's process to identify and evaluate resource opportunities was rigorous and comprehensively assessed all alternatives in a structured, methodical approach that considered three parallel tracks*
  - *Asset acquisition opportunities*
  - *Power Purchase Agreement (PPA) alternatives*
  - *Self-build options*

- *Evaluative criteria were defined and used to consistently identify, screen, and prioritize alternatives along each track. Various management levels up to and including the Board were involved with evaluating the alternative candidates*

- *As PSE conducted its solicitation and screening process, resulting actions and emerging insights were integrated with the ongoing LCP process*

In early 2002, PSE used internal and external resources to develop a comprehensive market review

- The Loads and Resources Report, completed in February '02 also reviewed the impact of the wholesale market collapse on regional project developments
- BOD presentation in September 2002 focused extensively on merchant sector collapse and implications for PSE
- Tenaska hired in summer 2002 to perform more detailed review and assessment of potential regional opportunities
- Navigant retained in August 2002 to evaluate and recommend potential opportunities in the context of a structured, methodical regional review

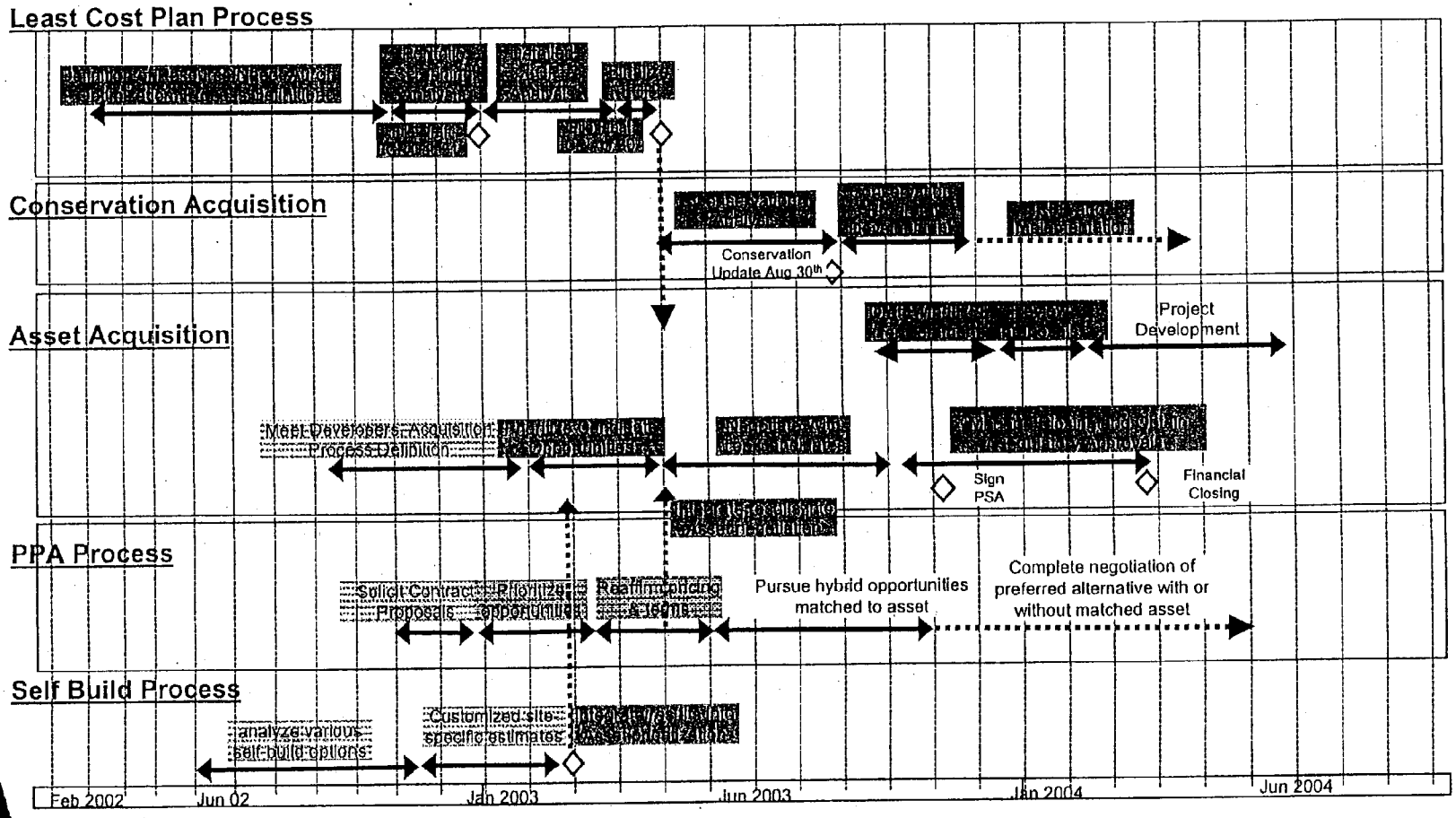
PSE's process examined all feasible alternatives to meet its resource needs

Asset Purchase	• Hedges long term exposure for life of asset • Helps limit future costs to O&M and capital recovery	• Fuel management issues • Plant location relative to PSE territory • Integration challenges
PPA	• Potential to get attractive deal in today's market environment	• Counter-party exposure • Shorter time duration than plant life • No operating control • Imputed debt on PSE's balance sheet • Potential Credit support requirements
Self-Build	• PSE drives project from beginning to end (e.g. equipment specification, contract awards)	• Hedge is delayed until COD • Potential cost and schedule overruns • Siting and permitting challenges

Consistent evaluative criteria were applied to all tracks

Compatibility with Need	Cost Minimization	Risk Management	Public Benefits	Strategic and Financial
• Meet short and long term energy and capacity requirements • Balance capacity and energy needs without risk of excess capacity • Provide shaped resource to balance seasonality of load	• Provide lowest cost alternative to meet energy and capacity needs • Balance potential future exposure to power sales risk	• Balance potential future exposure to power purchase risk • Balance potential future exposure to power sales risk • Reasonable exposure to counter party risk	• Lower portfolio emission levels • Contribute to regional energy adequacy • Support renewable energy development objectives • Promote energy efficiency (conservation and demand response)	• Reasonable exposure to future environmental regulations • Reasonable exposure to future state wholesale market restructuring trends • Contribute to regional energy adequacy • Limits balance sheet impact of imputed debt from PPA contract

PSE has always viewed the resource acquisition process as an integrated component of the overall resource strategy effort



Asset Evaluation: The Asset Evaluation track was formerly initiated with a September 13, 2002 solicitation

58 Parties Representing 71 Projects Receive Solicitations	27 Respondents (30 Projects) Sign Confidentiality Agreements	Prioritize Leading Opportunities	Meet With Projects to Evaluate Opportunities	Prioritize Candidates for Due Diligence
September	*October*	*November*	*December*	*January* / *February*
• all known asset owners in region	• 23 gas projects • 3 wind projects • 2 coal projects • 2 Geo/Bio	• 11 gas projects • 3 wind projects	• 11 gas projects • 3 wind projects	• 5 gas projects • 3 wind projects viable*

Application Cont'd

- **Compatibility with Need**
  - COD by end of 2004
  - Size
  - Potentially lo
  - seasonal shape
- **Cost Minimization**
  - Revenue requirements
  - PPA
  - Potential discount
- **Risk Management**
  - Counterparty risk
  - Construction completion risk
- **Public Benefits**
  - Contribution to regional energy adequacy
  - Lower portfolio emission levels
- **Strategic & Financial**
  - Counterparty risk
  - Operating and development risks

BOARD MEETING // OCTOBER 2003

* *Economic viability of wind projects totally dependent upon extension of Production Tax Credits*

Asset Evaluation: A primary screen for evaluating assets is when the resource is expected to be in service.

The first threshold for respondents expressing an interest in further discussions was to be able to agree on a Confidentiality Agreement (CA).

- Some expressed interest, but then withdrew from discussions when a CA could not be agreed to
- Some expressed interest, but then were lax about responding to request for additional information

Evaluation of asset opportunities focused on projects with a likely in-service date before Dec '04

- PSE's immediate resource needs were described as in the 200-300 MW range. The current focus was to meet this near-term shortfall, while longer-term resource needs would be reevaluated as part of the ongoing LCP process
- Projects with a later in-service date are basically development projects with little or no "iron in the ground" and less incurred expenditures. These projects were primarily looking for PSE to jointly or wholly incur both future development costs and completion risks, representing little value opportunity
- Projects with an earlier in-service date had already incurred considerable expenditures and the "to-go" costs were less. These parties were motivated to make concessions to complete their plant and to provide some ROI, thus representing a greater near-term value opportunity for PSE
- An additional consideration was that many of the in-service dates provided by the respondents could be viewed as "optimistic". The farther out the in-service date, the more susceptible that project is to additional schedule delays. Given the near-term supply deficit that PSE needs to fill, it was judged to be too speculative to pursue these farther out projects to meet current needs

Asset Evaluation: The financial prioritization focused on two metrics

Discounted Cash Flow (DCF)

- **Projects are valued using a commercial transaction approach that uses an unleveraged discounted cash flow model**
- **The model assumes:**
  - Power sold at market prices as derived by Aurora model;
  - When calculating annual average power prices, the two lowest priced months (May, June) were excluded to replicate the impact of an 80% capacity factor for gas fired units;
  - Fuel cost based on PIRA natural gas forecast;
  - O&M as supplied by developer;
  - Depreciation, tax, and cost of capital as supplied by PSE.
- **After tax cash flows are discounted at PSE's General Rate Case pro-forma cost of capital of 8.76% (7.3% after tax)**

Revenue Requirement

- **A revenue requirement model was developed with assistance from the PSE regulatory department**
- **Values from DCF model were used as capital cost for revenue requirement model**
- **Using assumptions from DCF model for inputs such as O&M and fuel cost, and PSE assumptions for cost of capital, a required revenue forecast was be derived**
- **The sensitivity of the revenue requirement to various inputs was tested to determine the impact on revenue requirement**
- **The model may change after a review by PSE's regulatory department is complete. However for comparison purposes this should not affect the results.**

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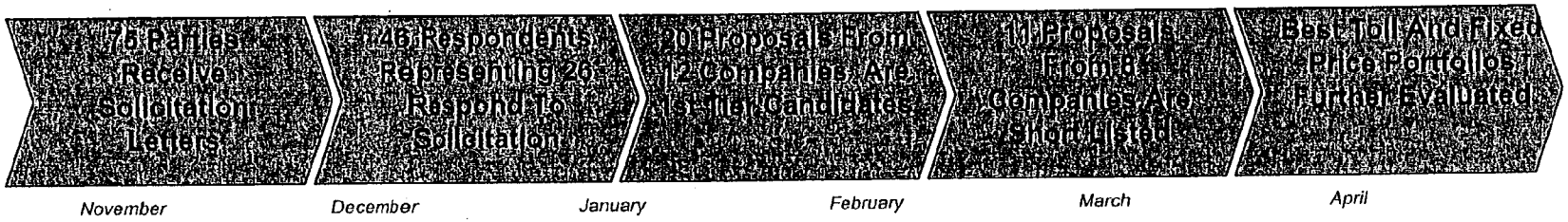
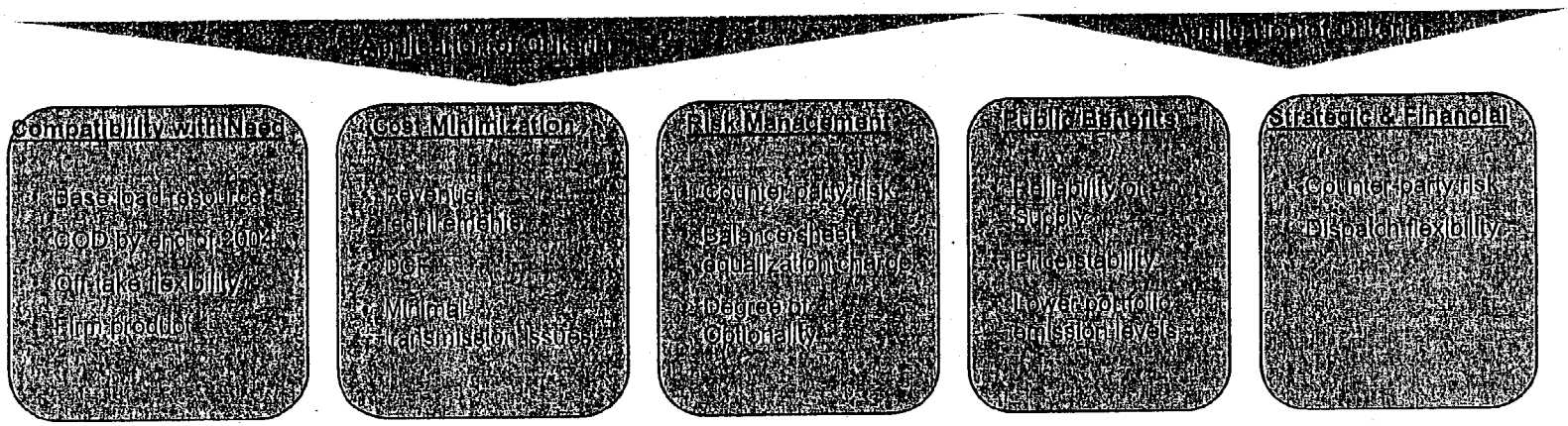
Asset Evaluation: The PPA evaluation track was initiated with a November 27,2002 solicitation

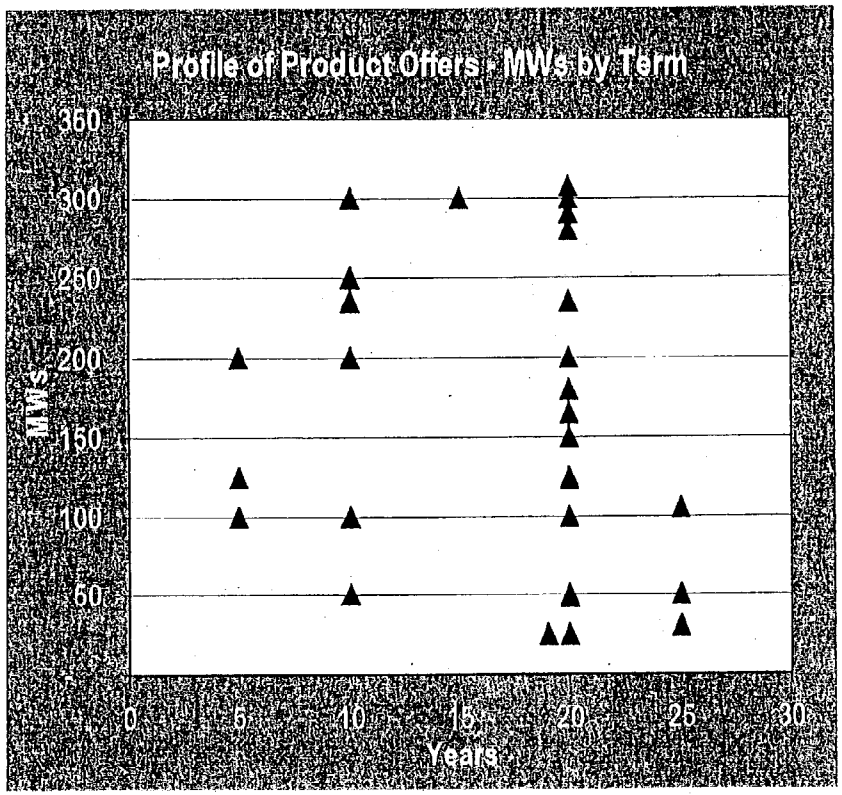


By staging the PPA solicitation after the asset solicitation, PSE was able to acquire a more informed perspective of the plants' individual economics and leverage this during negotiations



* *Economic viability of wind projects totally dependent upon extension of Production Tax Credits*

PPA Evaluation: 46 PPA proposals containing a variety of terms and attributes were received.



Preliminary Observations

- Comparability of PPA options involves normalizing for differences in size, duration, or other factors, and is a complex evaluation
- Different PPA options (e.g. fixed price, toll) could have a considerable effect on the PSE portfolio's price and volatility profile
- Strategic and financial implications of a PPA counter-party are a significant decision driver

PPA Evaluation: PSE received a broad response to its November 27th PPA solicitation for base load resources

PPA Proposal Segmentation

- **Pricing Terms**
  - Fixed price: 23 proposals
  - Tolling: 15 proposals
  - Other: 7 proposals
- **Contract Durations**
  - <= 5 years: 3 proposals
  - 6 to 10 years: 7 proposals
  - 11 to 19 years: 4 proposals
  - =>20 years: 28 proposals
- **Delivery Starting Dates**
  - 2003: 12 proposals
  - 2004: 13 proposals
  - 2005: 6 proposals
  - =>2006: 14 proposals
- **Resource**
  - Unit Contingent: 31 proposals
  - Portfolio / System / Other: 15 proposals
- **Fuel Type**
  - Gas: 29 proposals
  - Coal: 5 proposals
  - Wind: 4 proposals
  - Geothermal: 2 proposals
  - Hydro: 1 proposal
  - Mixed: 5 proposals

Product Terms

- **Fixed price and Tolling**
- **5 to 25 year contract lives**
- **Unit contingent, market and portfolio based**
- **Mix of pricing structures**
  - Fixed and escalating capacity charges
  - Unit start costs (warm and cold)
  - Fixed and variable O&M charges
  - Up front advance payments
- **Capacity and energy**
  - Base load
  - Peaking
  - 24 x 7 > 1 x 16 > 1 x 24
- **Various delivery points**
  - PSE, BPA, Avista, PacifiCorp systems

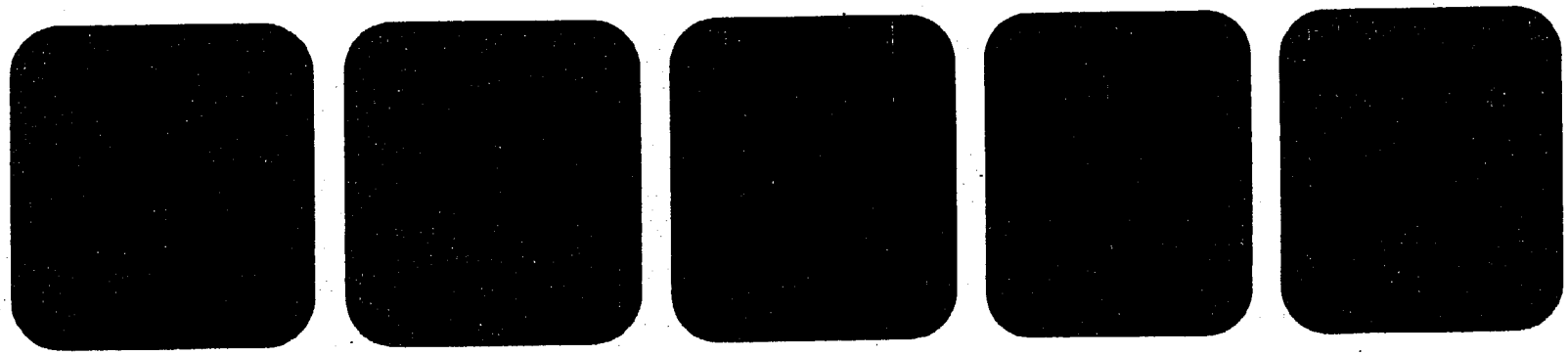
Self-Build Evaluation
The self-build evaluation track

- Tenaska Study
- Northwest Power Planning Council

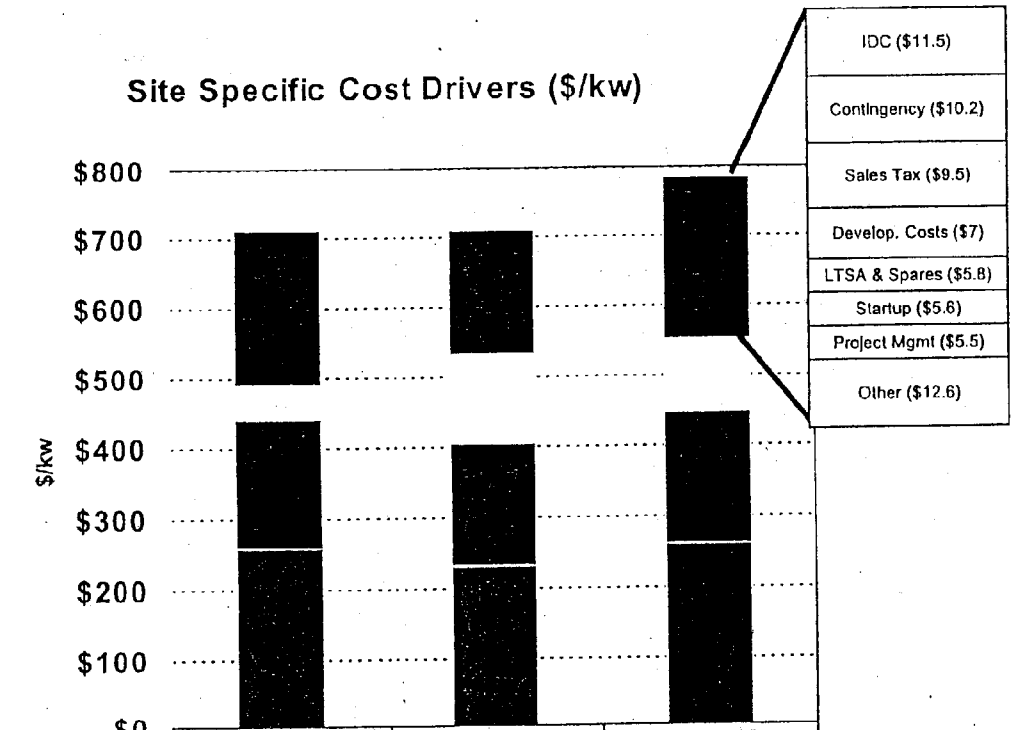
- Near Frederickson and Derringer site locations
- 2x1 and 1x1 plant configurations

- Siemens Westinghouse V84.3 design
- Other GT technology developments

- LM-6000 Design with 4x1 plant configuration
- Capital and O&M costs



Self- Build Evaluation: Permitting risks, and project schedule and viability are unique for each specific plant



	Project "A"	Project "B"	Project "C"
■ Soft Cost	222	178	232
Interconnection	49	127	106
■ Equipment	182	173	186
■ EPC	258	232	260
Total	710	711	784

Source: *March 2003 Assessment and Report on Self-Build Generation Alternative for PSE's LCP (March 2003)*

Conclusions

- Estimated cost-to-build provides a useful comparison among options and is an important input to planning models
- Developing a project-specific cost estimate from a generic estimate requires detailed assessment of specific design, construction variables as well as soft costs
- Development, permitting, and/or construction risks have a considerable impact on the actual cost-to-build
- Leading asset candidates all appear to be more favorable than self-build option, without associated risks

Self- Build Evaluation: A number of key design and construction cost drivers dramatically determine specific plant costs

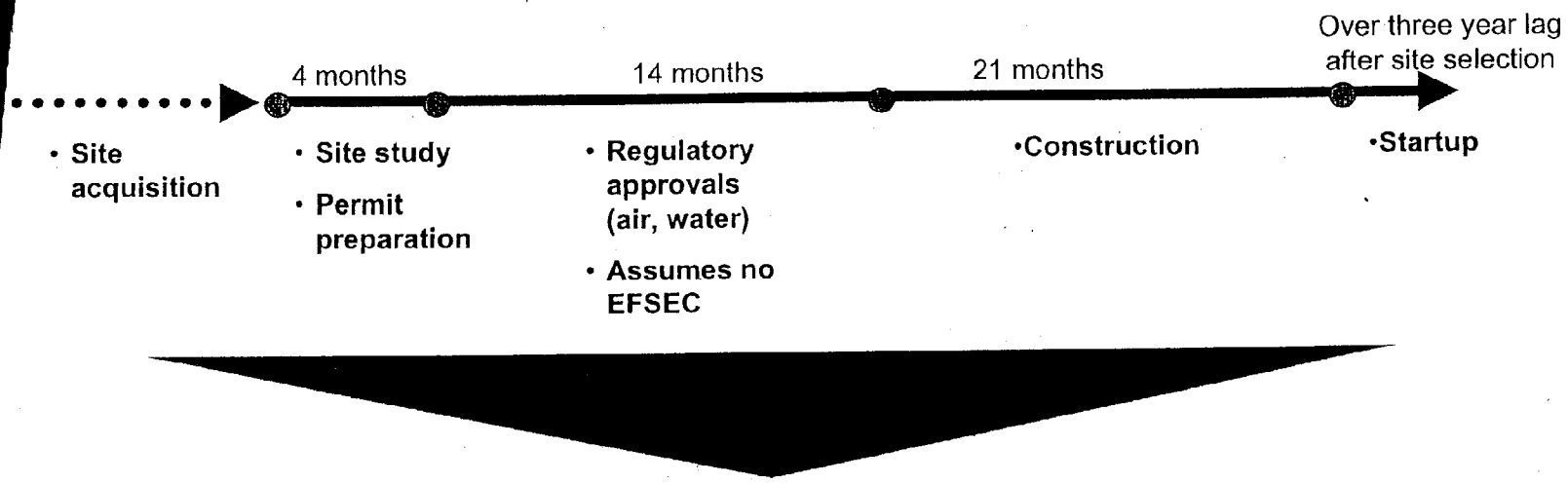
Design Cost Drivers

Cooling System	Duct Firing
Wet Cooling • Consumes more water (typically 2 mil gpd for generic 1x1) • ~80% of water consumed due to evaporation • Not feasible if water unavailable or environmental restrictions **Dry Cooling** • Consumes <10% water • Less efficient (project capacity reduced ~2-3%) • Higher capital costs (~15% more EPC cost or $10 mil)	• CC steam turbines typically oversized to accommodate duct firing (small cost/efficiency penalty if not used) • Supplemental firing via "duct burners" to hot gases passing thru HSRG into ST • Efficiency loss offset by low cost/incremental kW added (typically add ~38 MW to 1x1 at cost of ~$150/kW) • Incremental HR still more attractive than simple cycle alternative (9,200 vs. 11,000 btu/kwh)

Construction Cost Drivers

Equipment Cost	Timing	Site Specific
• Typically largest component of capital costs (~1/3 of total) and carry premium/penalty provisions • Costs vary considerably with market conditions (e.g. costs fell estimated 5-10% in 2nd half of 2002) • Costs can increase in corresponding manner when market conditions recover	• Waiting periods for turbine orders can grow dramatically in high demand • Price of GT varies closely with market conditions (e.g. rose quickly in late '90's to peak at ~$40 mil in early '01, today's costs about $30 mil) • ST/HRSG typically have more manufacturers and prices are less volatile	• Development and Transmission interconnection costs vary widely depending on location and community • Tenaska assessed 24 potential site locations, performed site-visits and screened these down to two feasible locations

Self- Build Evaluation: Permitting challenges, and on project schedule and viability are unique for each specific plant



Project Schedule Vary With The Specific Project

- Assumes no schedule contingency
- Delays could add 12-24 months to project schedule (add corresponding increase in IDC)

Agenda

I. Summary Recommendation

II. APPENDIX – Background and Documentation

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After meeting with each individual developer in face-to-face meetings, the list of candidates was screened down from 11 to 5

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After screening down to the short listed alternatives for all three tracks, a number of options were available to PSE

Asset Acquisition Candidates	PPA Candidates	Self Build Option

HIGHLY CONFIDENTIAL INFORMATION REDACTED		• Three site-specific and design-specific alternatives
		  • Site "A" 1x1
		  • Site "B" 1x1
		  • Site "B" 2x1

NOTE: Wind alternatives were carved out of this evaluation process as a result of :

- The company's new environmental policy statement and LCP strategy to seek to meet 10% of energy needs via wind warranted pursuit of this option through a separate RFP process
- Continued uncertainty related to extension of the Production Tax Credit made it advantageous to wait until later in 2003

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For opportunities evaluated during this process, asset acquisition candidates were equal or better to self-build option on each of the five criteria

Side by Side Comparison Of Asset Versus Self-Build Options

Compatibility with Need	Cost Minimization	Risk Management	Public Benefits	Strategic and Financial
• Self-build option could not be relied upon for at least 4-5 years • Permitting and schedule-related risks to meet need were judged to be significant • Existing pool of acquisition candidates were clearly more attractive to meet near-term needs	• Existing pool of candidates were comparable or lesser cost alternative to site-specific options • Existing candidates represented less or (zero) risk of construction cost overruns	• Construction and development could be managed, but would require considerable distraction from PSE management attention • Any reduced exposure to market risk from physical plant would be equivalent to existing candidates	• Any benefits from physical plant ownership equivalent to asset acquisition candidates	• Any benefits from physical plant ownership equivalent to asset acquisition candidates • Construction completion risk and internal capabilities needed to complete

Conclusion: It is more attractive to pursue acquisition of operating or development project than to pursue self-build option

Under current market conditions, a PPA option appears most attractive when bundled with an asset

Side by Side Comparison Of Asset Versus PPA Options

Compatibility with Need	Cost Minimization	Risk Management	Public Benefits	Strategic and Financial

• A hybrid portfolio of an asset bundled with a fixed price coal PPA better meets PSE's seasonal shaping requirement	• Some PPA's appeared as low cost, but still carried long-term risk exposure and credit requirements
	• Difficult to accurately estimate all the credit support requirements on comparable basis to asset
		• Counter-party risks are considerable, and could potentially change dramatically over longer term
		• Potential for contract abrogation similar to other precedents:
		  • State of CA
		  • PEPCO-Mirant
		  • NRG-1st Energy
		  • others
			• n/a	• PSE already has above-average exposure to purchase power in their portfolio

Conclusion: Not attractive to continue pursuit of PPA option unless paired with asset;

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Plan of attack for short-listed opportunities proceeded with specific directions based upon emerging insights

Asset Acquisition Candidates	PPA Candidates

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With PSE's adoption of an aggressive renewable goal, it was determined to address wind in a separate solicitation

Uncertainties related to extension of Production Tax Credit and other legislative initiatives slowed many wind developments in 2002

- Difficult to accurately determine which development projects had greatest likelihood of successful development

PSE established aggressive goal of meeting 10% of average customer demand by 2013 with renewable resources – over 300aMW

PSE submitted draft RFP to WUTC in August 2003, to solicit wind resources

Wind resources were eliminated from consideration during this phase of the resource acquisition effort since they would be better addressed in later solicitation

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Due Diligence on Priority Targets

- *PSE actively pursued due diligence on a number of separate parallel tracks, to ensure it negotiated the most favorable deal possible for each opportunity*
- *In reviewing each of the final three asset opportunities, PSE successfully negotiated a number of concessions which increased value for PSE*
- *In reviewing the Toll PPA alternative, PSE's efforts focused on tailoring an off-take agreement to best meet PSE's shaped needs*
- *In reviewing a Fixed Price alternative, negotiations, which are still active, "bundled" the best PPA proposal with a leading asset candidate to extract the most value.*

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Agenda

- **Summary Recommendation**

- **APPENDIX – Background and Documentation**
  - Evolution of PSE Resource Strategy
  - Review Of Merchant Landscape
  - Description Of Multi-track Solicitation Process
  - Evaluation Of Alternatives
  - Due Diligence With Priority Targets
  - Review Of Management/BOD Involvement And Decision Process
  - Comprehensive Assessment And Recommendation To BOD

Section Summary

Management BOD Involvement

- *PSE Board was actively involved in all stages and issues related to the resource strategy and acquisition process*
- *PSE Board provided explicit and clear direction on a number of key issues during the course of the review*
- *PSE management organized itself appropriately for the decision itself and involved all appropriate company groups in the decision process*

Timeline of BOD involvement and key discussions

March 5, 2002
- Audit Committee recommends that PSE management provide comprehensive update on energy supply at future meeting

September 9, 2002
- Markell/Gaines/Ryan present detailed overview of Regional Energy Markets and PSE needs

October 8, 2002
- Reynolds provides update on Resource Acquisition Team process and approach

January 6, 2003
- Ryan updates on Power Supply Portfolio 2003-2004
- Markell updates on progress and walks through top 13 candidates

February 19, 2003
- Markell/Gaines/Harris/Black present LCP progress update, preliminary planning standards, and Resource Acquisition Team progress and regulatory requirements

March 7, 2003
- Gaines/Black present revised planning standards following Board direction
- Markell reviews top candidates and discusses benefits of hybrid portfolio approach

April 16, 2003

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July 8, 2003

Evolving discussion and insight on key points

- Appropriate Planning Standards
- Hybrid Portfolio Concept to Mitigate Risk Exposure
- Review and Discussion Of Top Five Asset Opportunities
- Requirements to Finance and Execute Transaction
- Potential Exposure to Gas Price Risk and Volatility
- Strategy to pursue multi-stage acquisitions (e.g.

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PSE Has Taken a Number of Steps to Focus on Energy Resource Planning and Acquisition

- **Strong organizational focus on long term energy portfolio**
  - New Senior VP Energy Resources
  - New VP Project Development and Contract Management
  - New Director Resource Planning
  - New Director Conservation
  - New Director Gas Resources (pending)
  - New Manager Project Development
  - New Manager Gas Resource Planning
  - Staffing plan and budget for resource planning
  - Recruiter assisting process to fill remaining vacancies

- **Enhanced Energy Risk Management Team focused on shorter term markets**
  - New tools to manage gas and power portfolio
  - New analytic approaches (e.g. Profit at Risk)

- **An enhanced "toolkit" provides comprehensive analytical capabilities**
  - Used AURORA model to produce multiple scenario forecasts of regional power markets (extensive review and updating of model assumptions and data)
  - Developed a PSE-specific long-term resource portfolio analysis model with risk analysis capabilities
  - Began implementing a detailed short-term portfolio management model with risk analysis capabilities (KW3000) as a bridge from short-term to long-term portfolio planning

PSE Has Taken a Number of Steps to Focus on Energy Resource Planning and Acquisition

- **Multi-level internal review and broad organizational involvement examined the integrated resource strategy and acquisition process**
  - Weekly internal Resource Analysis Work Group meetings, with active participation by Resource Planning, Project Development, Portfolio Management, Regulatory and other departments
  - Periodic reviews by Energy Resource Committee of senior managers
  - Ongoing updates and directional discussions with Board of Directors
- **Frequent and open communication with stakeholders**
  - Dozens of meetings with WUTC Staff, Least Cost Plan Advisory Group, Conservation Resource Advisory group (CRAG), and other interest groups
  - Addressed a large number of topics raised by participants and incorporated many of their suggestions
  - Stakeholders have commented that the 2003 Least Cost Plan process has been rigorous and credible

Agenda

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Comprehensive Assessment - Contents

- Summary of the portfolios considered
- Selected Analytical Observations
- Summary of comparative analysis results
- Detailed profile of the portfolios considered
- General Market Assessment

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Index to Documentation Book

1. PSE 2001-2002 Gas & Electric LCP (December 1999)
2. PSE Loads & Resources Report "Blue Book" (February 2002)
3. PSE Presentation To Board On Regional Energy Markets And PSE Needs (September 2002)
4. NCI-PSE Preliminary Thoughts On Structuring A Resource Acquisition Effort (August 9, 2002)
5. Asset Solicitation Letter (September 13, 2002)
6. Preliminary Screening Evaluation Of Asset Candidates (December 4, 2002)
7. PPA Solicitation Letter (November 27, 2002)
8. Summary Review And Analysis Of All PPA Proposals (July 23, 2003)
9. Tenaska Assessment and Report on Self-Build generation Alternatives (March 2003)
10. Markell presentation to ERC Prioritizing Top Five Asset candidates ((January 24, 2003)
11. Tenaska Field review of Mint Farm Power Plant (May 2003)
12. LLGM bankruptcy Advisory memo to PSE (April 7,2003)
13. PSE Letter to Montana 1st megawatts expressing concerns (March 27, 2003)
14. PSE memo to TransAlta summarizing due diligence open issues (June 11, 2003)
15. TransAlta Presentation to PSE addressing due diligence open Issues (August 11,2003)