EXHIBIT NO. ___(EMM-9HC)
DOCKET NO. UE-06___/UG-06___
2006 PSE GENERAL 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. UE-06____** **Docket No. UG-06____**

EIGHTH EXHIBIT (HIGHLY CONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF ERIC M. MARKELL ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

FEBRUARY 15, 2006

PUGET ENERGY, INC.

MINUTES OF THE BOARD OF DIRECTORS' MEETING DECEMBER 15, 2004

Pursuant to notice duly given on December 9, 2004 a copy of which is filed with these minutes), a meeting of the Board of Directors of Puget Energy was held in Puget Sound Energy's Board Room on the 12th Floor of the Puget Sound Energy Building, beginning at 10:30 a.m. on Wednesday, December 15, 2004.

The following Directors were present:

D. P. Beighle
C. W. Bingham
P. J. Campbell
C. W. Cole
R. L. Dryden
S. E. Frank
T. Moriguchi
K. P. Mortimer
S. G. Narodick, by phone
S. P. Reynolds

being more than a quorum.

Also present were:

Puget Energy and PSE Management
J. W. Eldredge, Corporate Secretary and Chief Accounting Officer
J. L. O'Connor, Vice President and General Counsel
B. A. Valdman, Senior Vice President Finance and CFO

PSE Management
E. M. Markell, Senior Vice President Energy Resources

Mr. Beighle presided and Mr. Eldredge kept the records of the meeting.

EXECUTIVE SESSION

The Board began the meeting with an executive session. Mr. Beighle reported to Mr. Eldredge after the meeting that:

until the next election of Directors by Shareholders. Mr. Cole stated that the Committee has consulted with Mr. Beighle and Mr. Reynolds and has reviewed Mr. Ayer's independence, qualifications, expertise and reputation. Mr. Cole stated the Committee believes Mr. Ayer to be a strong director candidate. After full discussion, upon motion duly made and seconded, it was:

RESOLVED – That the Board of Directors hereby establishes the number of Directors of this Company at eleven.

RESOLVED – That William S. Ayer is hereby appointed as Director of this Company effective January 12, 2005, to serve until the next election of Directors by Shareholders.

RESOLVED – That management is hereby directed to file a timely Form 8-K with the Securities and Exchange Commission reporting the appointment of Mr. Ayer as a Director of this Company.

CALL TO ORDER AND APPROVAL OF PRIOR MEETING MINUTES

Mr. Beighle then asked Mr. Eldredge, Ms. O'Connor, Mr. Markell and Mr. Valdman to join the meeting and called the business portion of the meeting to order. The minutes of the October 5, 2004 Board meeting were reviewed and, on motion duly made and seconded, were approved as recorded.

WIND POWERED ELECTRIC GENERATING PROJECTS UPDATE

Mr. Beighle then asked Mr. Markell to give the Board an update on PSE's electric resource planning and acquisition activities. Mr. Markell made reference to the Summary of Resource Acquisition and Process Update materials provided to the Board in advance of this meeting and are filed with the minutes. He then described the effect that a constrained regional transmission system was having on PSE's resource options. He then described his recommendation that the Board not act at this time upon the proposed

[redacted] Power Purchase agreement inasmuch as [redacted] had recently withdrawn the credit support of [redacted] from the transaction. Mr. Markell then gave a brief overview of the planned purchase of the Wild Horse wind generation project from Zilka Renewable Energy and the Hopkins Ridge wind generation project from Blue Sky Wind, an affiliate of RES America Development, Inc. After Mr. Markell's report, he left the meeting.

TEXT IN BOX IS HIGHLY CONFIDENTIAL

INFRASTRUX STRATEGIC REVIEW UPDATE

Mr. Beighle then asked Mr. Valdman to give the Board an update report on management's strategic review of Puget Energy's investment in InfrastruX. Mr. Valdman then presented and discussed a written report he had prepared concerning Puget Energy management's work conducted in recent months, exploring Puget Energy's strategic alternatives with respect to its investment in InfrastruX Group, Inc. After discussion, the Board determined it would hold a special telephonic meeting on December 30, 2004 to receive a report from management on negotiations with potential interested purchasers of InfrastruX. A copy of Mr. Valdman's report, which was distributed to the Board in advance of this meeting, is filed with the minutes.

REDACTED

EXECUTIVE SESSION WITHOUT MANAGEMENT PRESENT

Mr. Beighle then asked Mr. Reynolds to leave the meeting and the Board went into an executive session. Mr. Beighle informed Mr. Eldredge after the meeting that the Board held a discussion on corporate governance matters.

Highly Confidential per
WAC 480-07-160

PUGET SOUND ENERGY

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[redacted]

Power Purchase Agreement

Summary of Resource Acquisition Process and Update

REDACTED

December 15, 2004
Board of Directors' Meeting

PUGET SOUND ENERGY

Table of Contents

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REDACTED

**PROPOSED RESOLUTIONS
OF THE BOARD OF DIRECTORS
OF
PUGET SOUND ENERGY, INC.**

TEXT IN BOX IS HIGHLY CONFIDENTIAL

APPROVAL OF [redacted] 20 YEAR POWER PURCHASE AGREEMENT

WHEREAS, this Board of Directors of Puget Sound Energy, Inc. (the "Company") has determined that it is in the best interests of the Company and its shareholders to add energy resources into the Company's energy resource portfolio consistent with the Company's 2003 Least Cost Plan; and

WHEREAS, the Company has reviewed and evaluated responses to both the Company's Wind Resource and All-Source Requests for Proposal and has identified through that process a variety of attractive additional generation resources appropriate to meet its planning standard consistent with the 2003 Least Cost Plan, including offers to own generation resources and offers to purchase power; and

WHEREAS, the officers of the Company have negotiated with [redacted], a form of agreement to purchase power pursuant to a long-term power purchase agreement, and have submitted such form of power purchase agreement, a copy of which is attached hereto as **Exhibit A** (the [redacted] PPA"), to this Board of Directors for approval; and

WHEREAS, the [redacted] PPA provides for the purchase by the Company of seasonal on-peak energy for the September through March period of each year of its 20 year term starting January 1, 2007, at a price of $[redacted]/MWh, and delivered firm to the Company's transmission system, in an annual amount of 259,856 MWhs for each year of the term of the contract; and

WHEREAS, the Company has determined that execution of this power purchase agreement would be a prudent, least cost resource to add to its generation resource portfolio in consideration of the Company's needs, evaluation of alternatives, and analyses of costs and risks of the contract individually and as part of the overall portfolio;

IT IS, THEREFORE

RESOLVED, this Board of Directors deems it to be in best interest of the Company and its shareholders to enter into the [redacted] PPA and hereby approves the terms and provisions of the [redacted] PPA in substantially the form attached hereto as **Exhibit A**, together with such changes, additions, and deletions to such terms as the Company's Chief Executive Officer, Chief Financial Officer, Senior Vice President Energy

Resources or Vice President Project Development and Contract Management (together, the "Designated Officers"), or any one of them, may deem necessary or advisable; and

FURTHER RESOLVED, that any one of the Designated Officers is authorized, without further approval of this Board of Directors, to execute, at such time as the Designated Officers collectively deem it to be most advantageous to the Company, and deliver the [redacted]PPA on behalf of the Company; and

FURTHER RESOLVED, that the Board hereby authorizes the officers of the Company to take all actions necessary, proper, advisable or desirable to proceed with the consummation of the transactions contemplated by the [redacted]PPA.

GENERAL AUTHORITY

RESOLVED, FURTHER, that any and all actions taken by the officers of the Company, or any of them, as deemed by such officers to be necessary or advisable to effectuate the transaction contemplated by the foregoing resolutions, including the filing of appropriate documentation with the WUTC, whether prior to or subsequent to this action by this Board of Directors, are hereby authorized, approved and ratified, and the taking of any and all such actions and the performance of any and all such things in connection with the foregoing shall conclusively establish such officers' authority therefor from the Company and the approval and ratification thereof by this Board of Directors.

TEXT IN BOX IS HIGHLY CONFIDENTIAL

REDACTED

THIS IS A WORKING DRAFT PURCHASE AND SALE AGREEMENT FOR THE SALE AND PURCHASE OF ELECTRIC ENERGY. THIS WORKING DRAFT DOES NOT CONSTITUTE A BINDING OFFER, SHALL NOT FORM THE BASIS FOR AN AGREEMENT BY ESTOPPEL OR OTHERWISE. ANY ACTIONS TAKEN BY A PARTY IN RELIANCE ON THE TERMS SET FORTH IN THIS WORKING DRAFT OR ON STATEMENTS MADE DURING NEGOTIATIONS PURSUANT TO THIS WORKING DRAFT SHALL BE AT THAT PARTY'S OWN RISK. UNTIL THE POWER PURCHASE AND SALE AGREEMENT IS SIGNED BY BOTH PARTIES, NEITHER PARTY SHALL HAVE ANY LEGAL OBLIGATIONS, EXPRESSED OR IMPLIED, OR ARISING IN ANY OTHER MANNER UNDER THIS WORKING DRAFT OR IN THE COURSE OF ANY NEGOTIATIONS.

POWER PURCHASE AND SALE AGREEMENT

MADE

BETWEEN

[redacted]

AS SELLER

TEXT IN BOX IS HIGHLY CONFIDENTIAL

AND

PUGET SOUND ENERGY, INC

AS PURCHASER

DATED AS OF DECEMBER 2004

REDACTED

TABLE OF CONTENTS

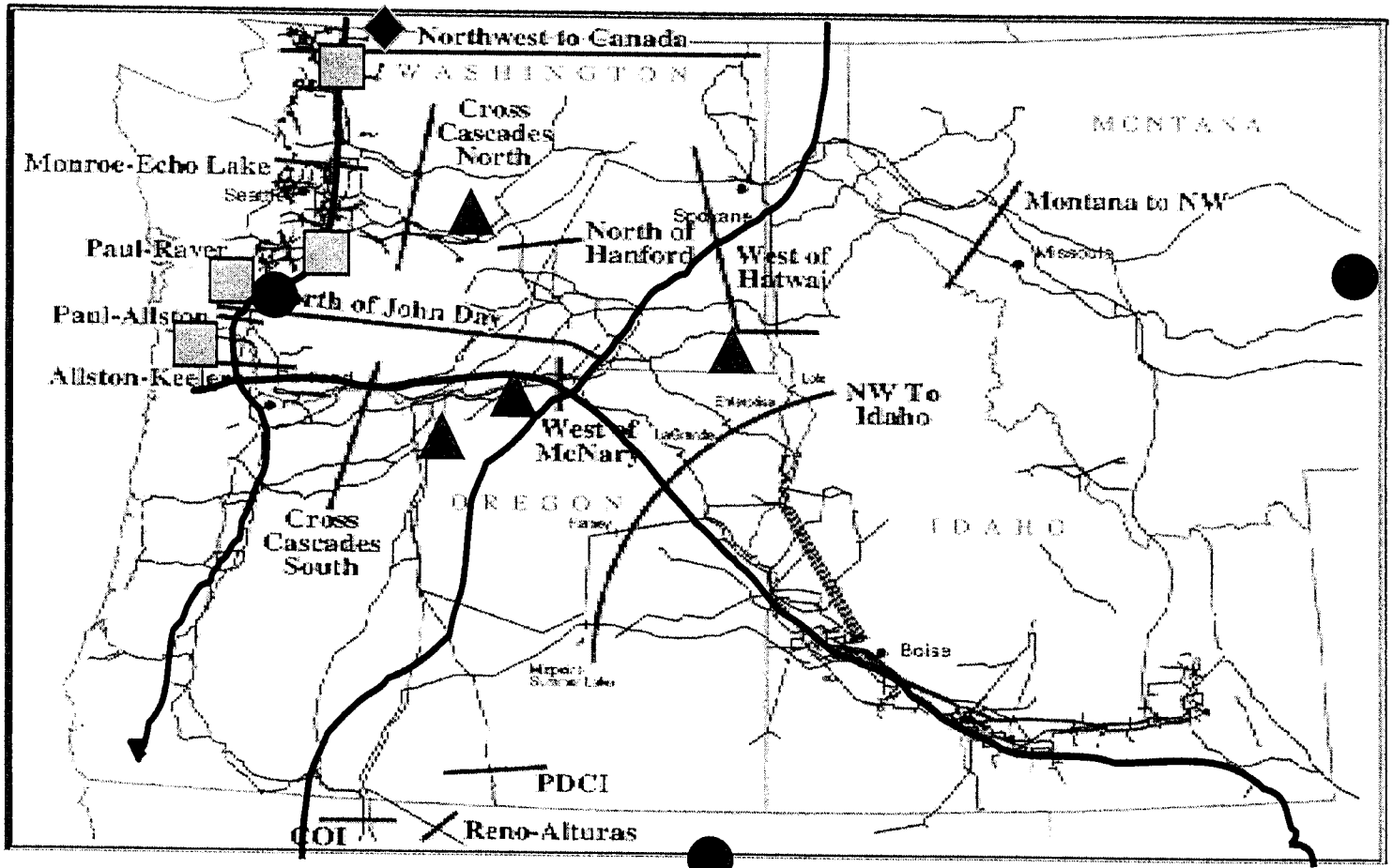
PUGET SOUND ENERGY

Current Transmission and Resource Issues

Eric M. Markell
Senior Vice President, Energy Resources

PUGET SOUND ENERGY

Transmission Constraints Limit Resource Options



PUGET SOUND ENERGY

Resource Issues and Realities

- Natural gas plants are not currently least cost due to forecasted high gas prices and credit costs, but may eventually prove "the only game in town"
- Coal plants require new transmission construction, long development lead time, leadership, and consortium building
- Wind plants are least cost for "first movers" but physical and commercial realities may constrain later development
- Long term bilateral PPAs are very difficult with imputed debt penalty and credit requirements
- Alternative fuel generation is small in scale; a few will be possible
- Buyers and sellers are being pushed to short term transactions, but short term market is highly volatile

PUGET SOUND ENERGY

[redacted]20 Year Power Purchase Agreement ("PPA") (30 aMW annually)

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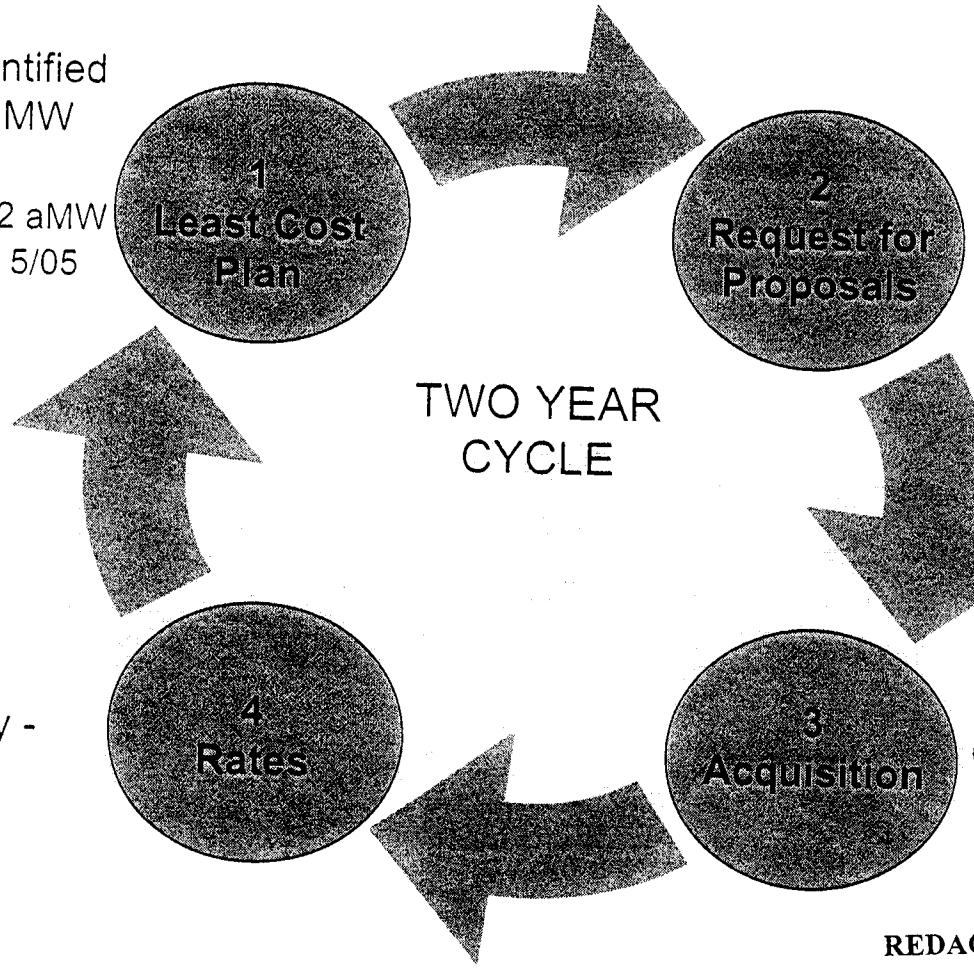
REDACTED

Wayman Robinett
Director, Resource Planning & Analysis

PUGET SOUND ENERGY

What's next after Frederickson acquisition? - Procurement steps

2003 LCP identified need of 355 aMW (2005-2008)
-updated to 382 aMW
-next LCP filed 5/05



Wind and All-Source RFPs - 48 responses received and analyzed

7 short-listed: 3 wind, 3 PPAs, 1 heat recovery - no coal or gas

[redacted] Hopkins Ridge, Wild Horse, and ORMAT

Cost recovery - WUTC

REDACTED

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Exhibit No. ___(EMM-9HC)
Page 14 of 139

PUGET SOUND ENERGY

Who is [redacted]?

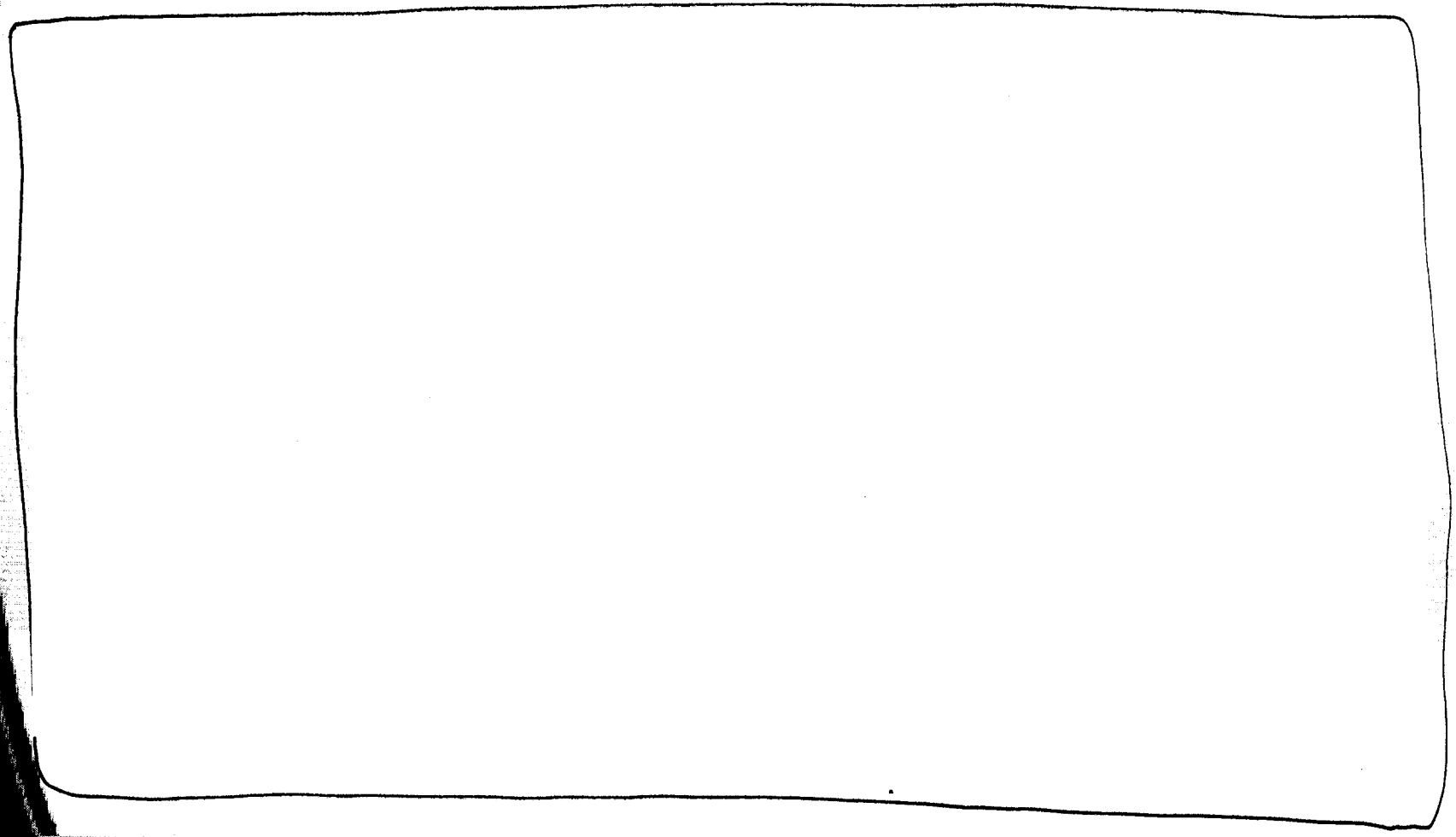

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Exhibit No. ___(EMM-9HC)
Page 15 of 139

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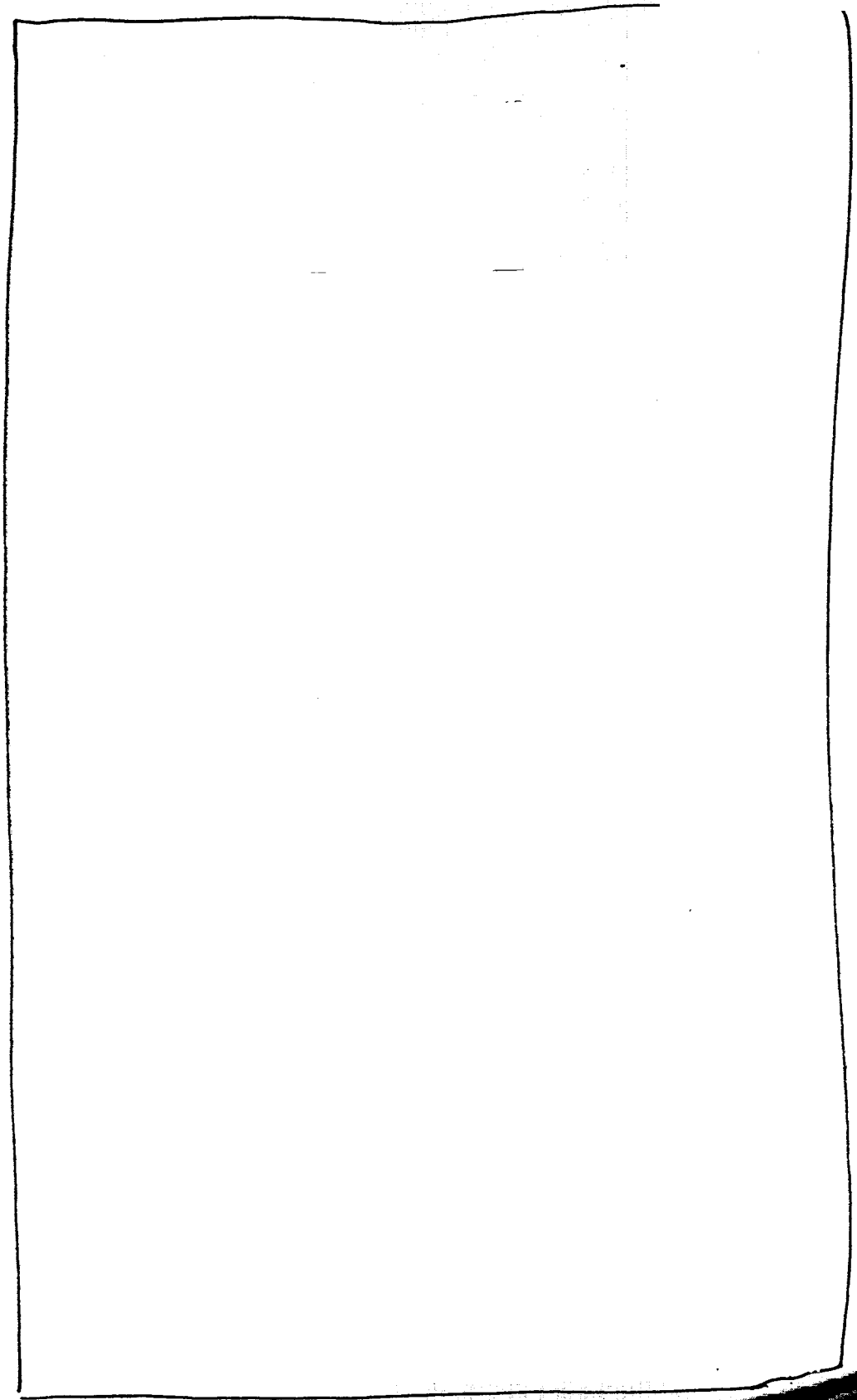
PUGET SOUND ENERGY

Key Commercial Terms



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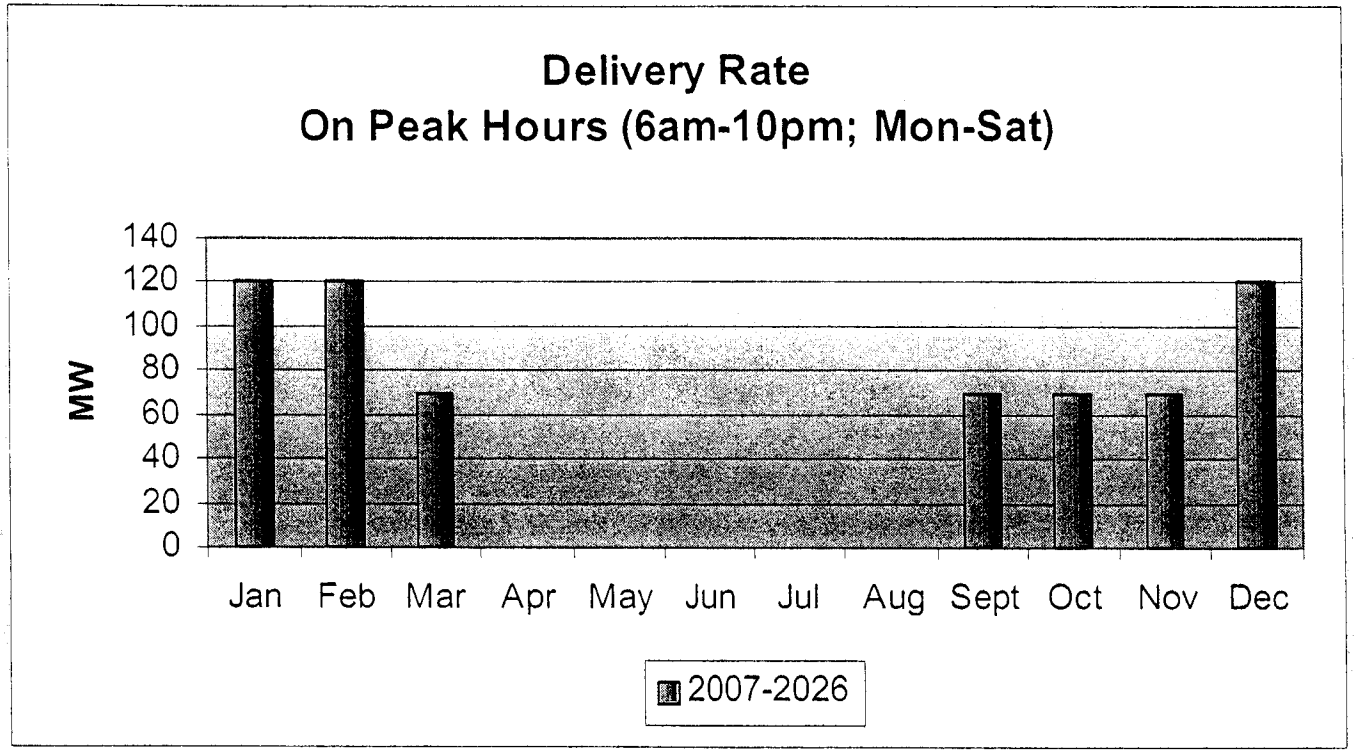
PUGET SOUND ENERGY

Energy shaped to PSE's winter on peak hourly demand



PUGET SOUND ENERGY

RFP process yielded no comparable options

	Energy Shape	Imputed Debt	Cost (with imputed debt; w/o credit) ($/MWh)	Credit	Other Considerations
[redacted] PPA	Seasonal on peak product	$12	[redacted]	$0	No credit or collateral posting
WIND (Ownership)	Intermittent as produced	$0	[redacted]	$0	Not a capacity resource; integration management issues
PPA	Various: Flat, seasonal	$2-$12	[redacted]	$125M	Require credit and collateral posting
COAL (Ownership)	Baseload resource	$0	[redacted]	$0	Requires long lead time; transmission issues
GAS (Ownership)	Intermediate resource: dispatch depending on power and fuel prices	$0	[redacted]	$66M	Uneconomic due to gas price volatility; gas hedging and credit costs

TEXT IN BOX IS HIGHLY CONFIDENTIAL

PUGET SOUND ENERGY

Comparison of [redacted] to other shaped resource alternatives

- Indicative 6 year financial offer from [redacted] and physical offer of underlying commodity from [redacted]
  - $[redacted]/MWh
  - Includes imputed debt; does not include credit and collateral costs
- Combined Cycle Combustion Turbine (equivalent)
  - $[redacted]/MWh
  - Does not include gas hedging and credit costs
  - At least 5 year lead time for self build plant
- Reliance on forecasted short term market 2007-2024
  - Price forecasts are long term estimates of short term market clearing prices without transmission and credit requirements; [redacted]
    - $[redacted]/MWh (assumes mostly gas future)
    - $[redacted]/MWh (assumes 50/50 coal/gas future)

TEXT IN BOX IS HIGHLY CONFIDENTIAL

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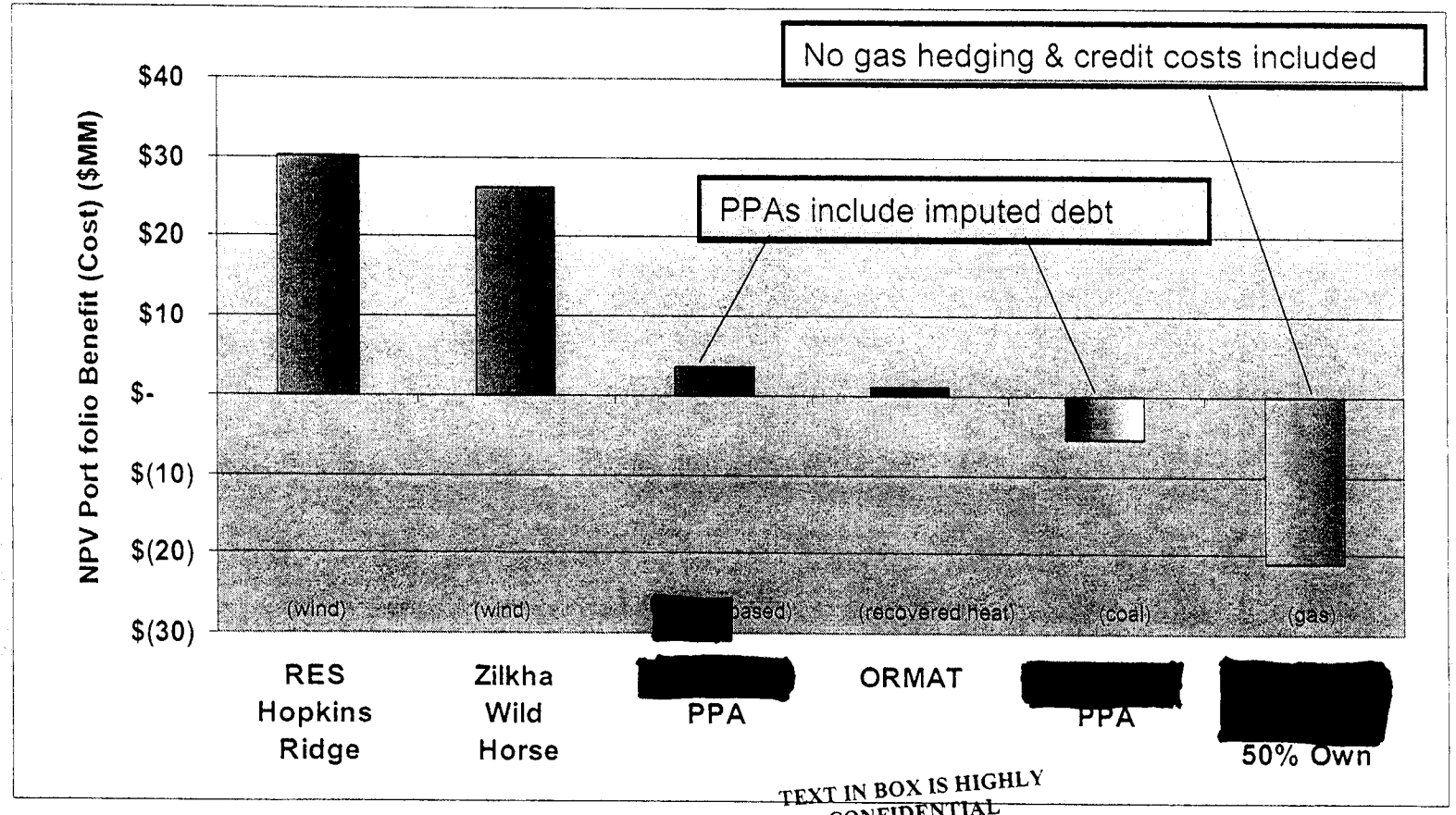
REDACTED

Portfolio Screening Model Used to Determine Resource Benefit

- Key value drivers
  - energy shape
  - price
  - quantity
  - dispatchability
- PSE's generic portfolio:
  - 2005-2008: market prices
  - 2009-2024: 10% wind and the balance 50/50 coal/gas

PUGET SOUND ENERGY

$3.5M NPV benefit compared to PSE's generic portfolio ($2005)



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Value Proposition

PUGET SOUND ENERGY

TEXT IN BOX IS HIGHLY CONFIDENTIAL

RFP Criteria	Benefits
Fit With Need	▪ Shaped to PSE's greatest deficit months ▪ No spring or summer energy (does not increase exposure to market)
Cost/Benefit	▪ Provides long term price stability and portfolio diversity ▪ $3.5M (NPV) benefit to the portfolio ▪ $45M (NPV) if generic future is 100% gas
Transmission	▪ Firm obligation to provide system delivered product ▪ No new transmission required
Risk Management	▪ No fuel procurement risk ▪ No environmental or permitting risk ▪ No operational risk - not unit contingent
Strategic/Financial	▪ No credit/collateral posting ▪ [redacted] counterparty credit rating

REDACTED

PUGET SOUND ENERGY

Key Risk and Mitigation Measures

Risk Type	Risk / Mitigation
Regulatory	▪ Risk: market collapse prior to 2007 start ▪ Mitigation: comprehensive analysis and contemporaneous documentation analysis
Analytical	▪ Risk: assumed future may not materialize ▪ Mitigation: modeled numerous futures and tested sensitivities around each future
Counterparty	▪ Risk: physical and financial performance ▪ Mitigation: [redacted] guarantee, liquidated damages for non-performance, [redacted] in assets, [redacted] S&P rating; [redacted]

REDACTED

TEXT IN BOX IS HIGHLY CONFIDENTIAL

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PUGET SOUND ENERGY

Recommendation to Approve

- Least cost alternative to meet winter peak needs
- Best portfolio benefit behind wind
- Ideally shaped to seasonal and hourly needs
- Multiple operational and transmission benefits
- Leaves ample room for additional diverse resource acquisitions
- Reduces "short position" and need for open credit to buy market power or purchase gas for self generation
- No credit requirements (avoids $60 million of credit requirements)

Documentation Appendix

Board of Directors

Documentation Appendix
Summary of Resource Acquisition Process and Update

Eric M. Markell
Senior Vice President, Energy Resources

December 15, 2004

PUGET SOUND ENERGY
pse.com

20-Year PPA

Other products – indicative

- Market – Shaped like proposed PPA
  - REDACTED
- Combined Cycle Combustion Turbine
  - REDACTED
- Financial Swap - 6 year
  - REDACTED

[redacted] 20-Year PPA

Stage 1 Evaluation showed Original Bid Levelized Positive Mark-to Market versus Aurora 5 Forecast

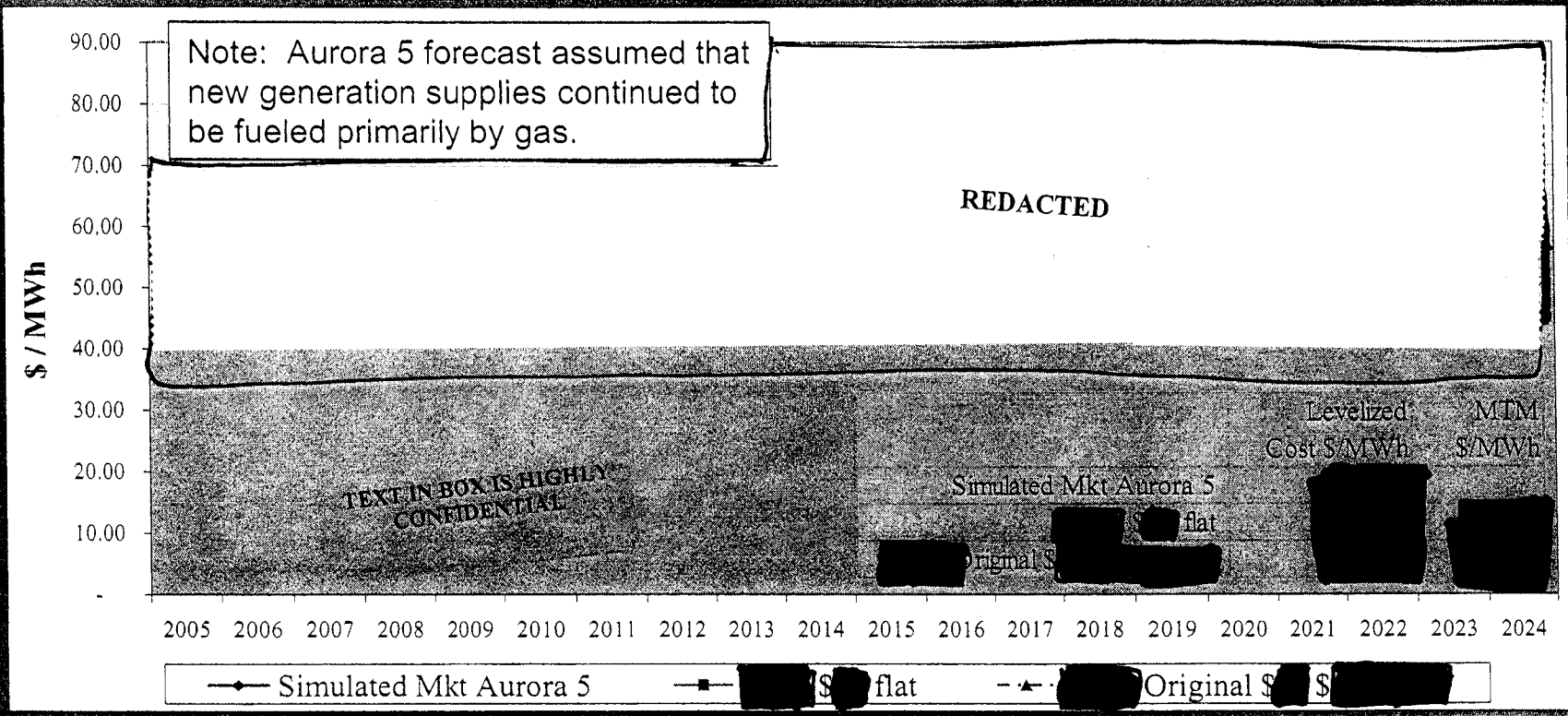

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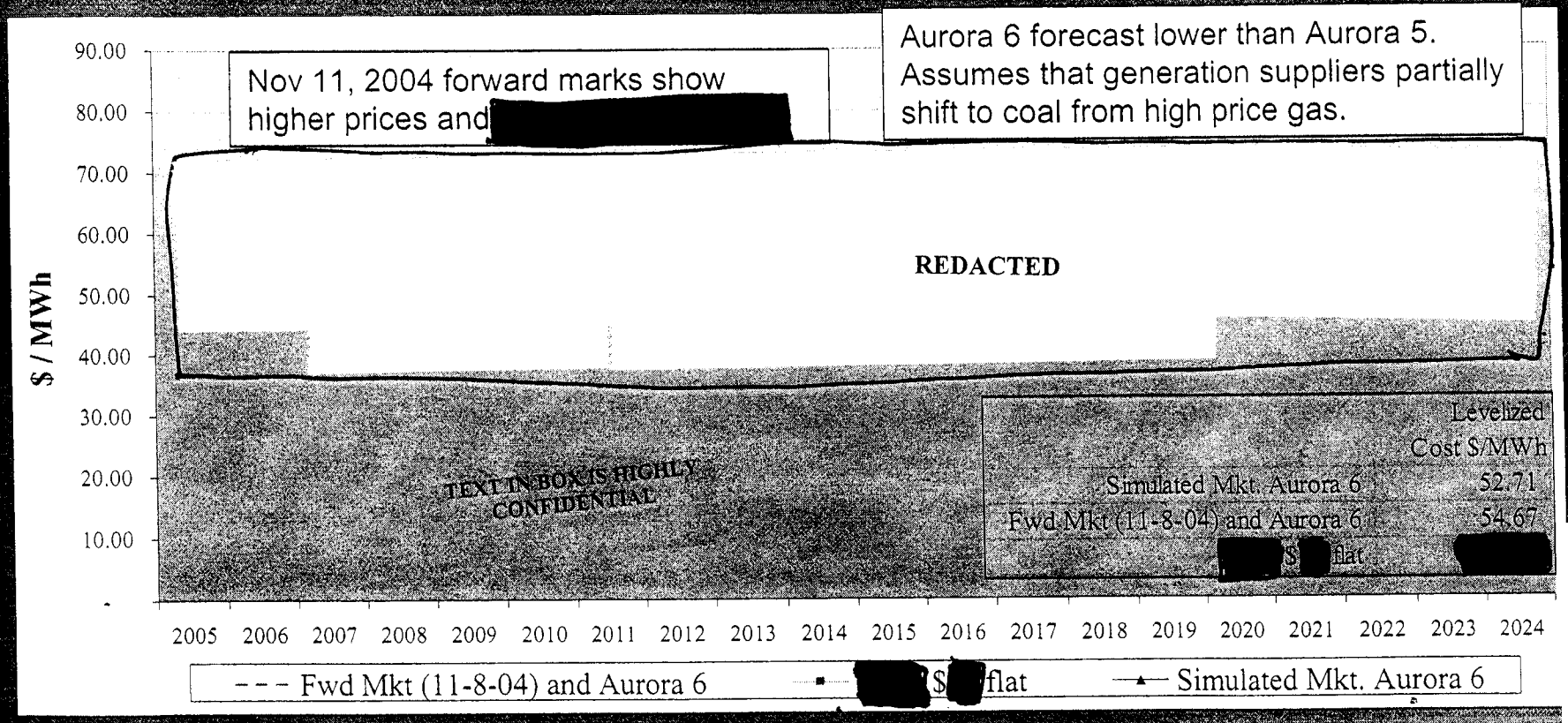
Exhibit No. ___(EMM-9HC)
Page 28 of 139

[redacted] 20-Year PPA

Stage 2 Evaluation – Forward Market Prices Trending Higher than Aurora 6



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[redacted] 20-Year PPA

CCCT Equivalent approx. $[redacted] no credit

CCCT in place of [redacted] PPA: 7 months must run, 5 months economic dispatch

Summary	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020	2024
General:													
Capital Cost $000	REDACTED												
COD/Start Date													
Capital Cost $ / kw													
Capacity													
Capacity Factor													
Energy GWH													
Revenue Required $ millions nominal													
Revenue Required $ millions PV													
Counterparty Credit Rating													
Cost Components in $/MWh:													
Variable Operating Expenses													
Fixed Operating Expenses													
Other Expenses (1)													
System Integration Costs													
Transmission Costs													
Production Tax Credit													
Equity Rebalancing for PPA Imputed Debt													
Levelized Cost:													

(1) Other Expenses includes depreciation, taxes, interest expense and net income

Other Input Assumptions	
Heat Rate:	REDACTED
Must Run:	
Forced Outage Rate:	
Gas Consumption mmbtu / day	
Variable O&M $/MWh	
Variable Fuel Transport	
Variable Transmission $ / Mwh	
Fixed O&M $ / kw-yr	
Fixed Transmission $ / kw-yr	
Fixed Gas Transport $ / kw-yr	
Property Tax % of Investment	

20-Year PPA
Financial

2005 2006 2007 2008 2009 2010 2011 2012

[redacted] $[redacted] *Financial + $[redacted] Physical Premium*

Cost Components

REDACTED

Monthly Generation (MWh)

REDACTED

Cost Componenets ($/MWh)

REDACTED

Fixed Price
$ / Mwh

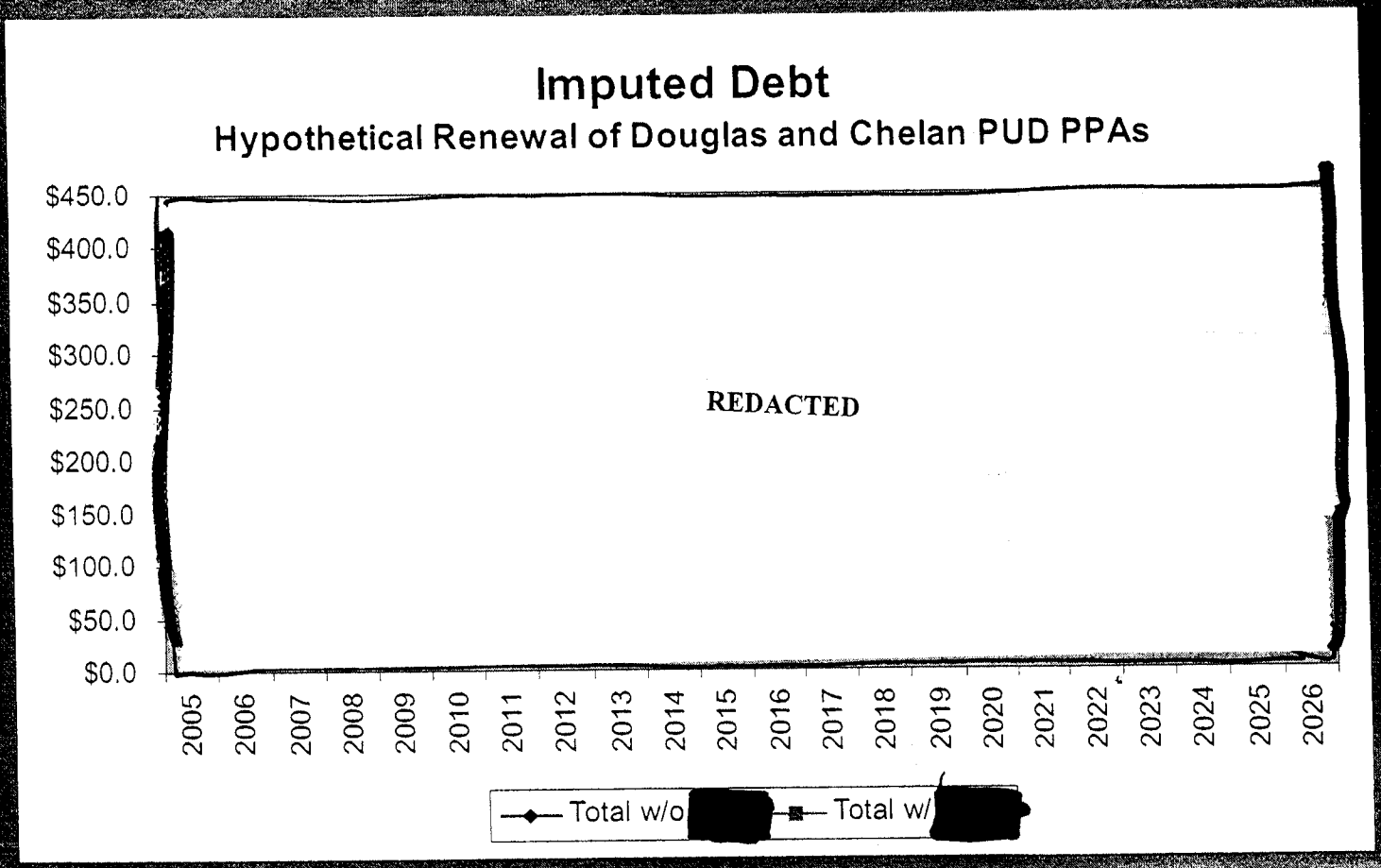
Physical
$ / MWh

Transmission plus losses
~$ / MWh

Total 2007 =
$

[redacted] 20-Year PPA

Imputed debt effects of [redacted] and renewal of Mid-Columbia contracts



Assumes renewal of Mid-C contracts at existing levels - 2012 Rocky Reach (268 aMW) and Rock Island (174 aMW); 2019 Wells (158 aMW); no renewal of March Point, Sumas or Tenaska

Highly Confidential per WAC 480-07-160

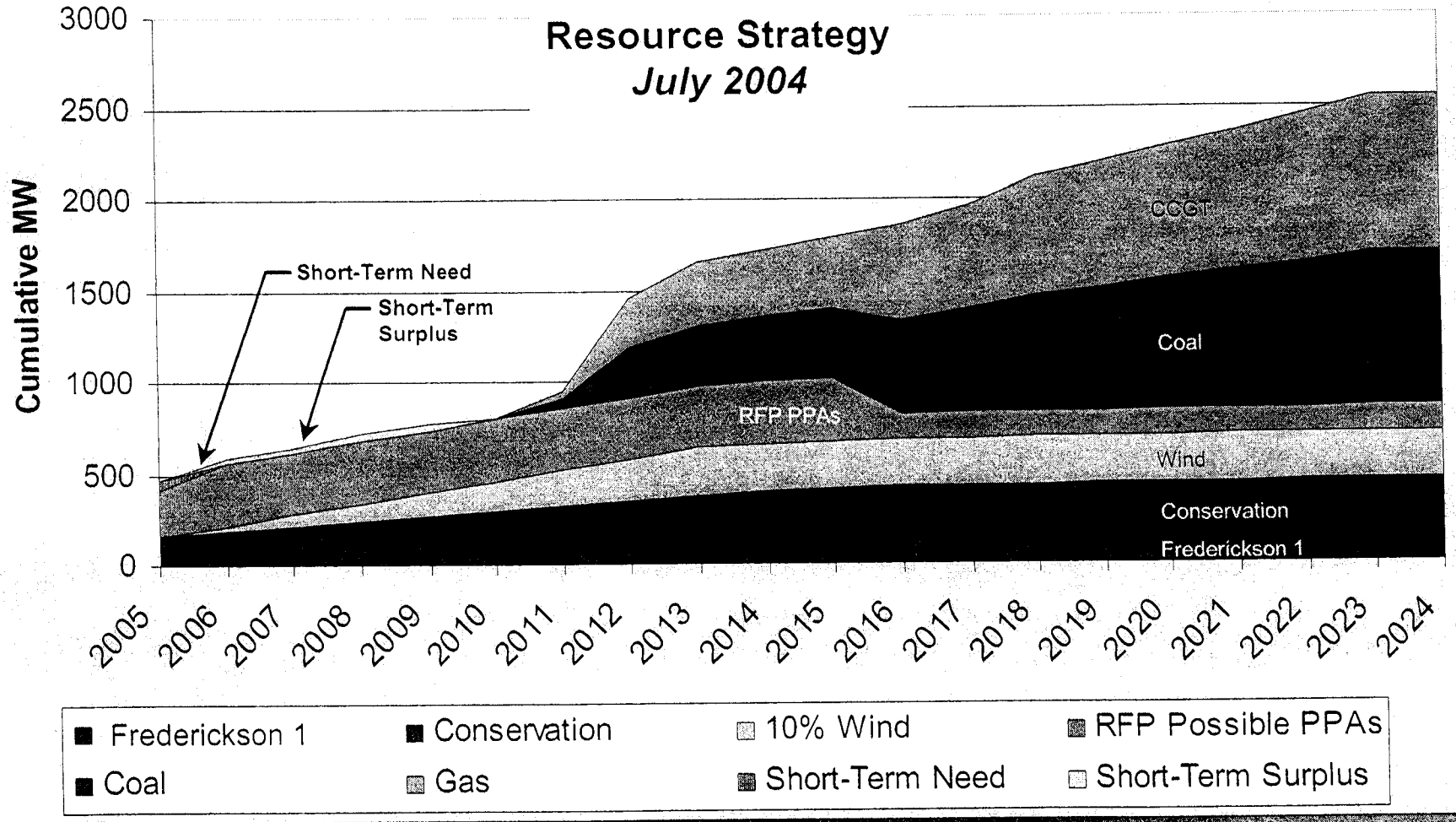
[redacted] 20-Year PPA

Accounting/Financial Reporting Effects

REDACTED

Determination of Need

2004 Resource Strategy



Determination of Need

"B2" Planning Standard Energy Need

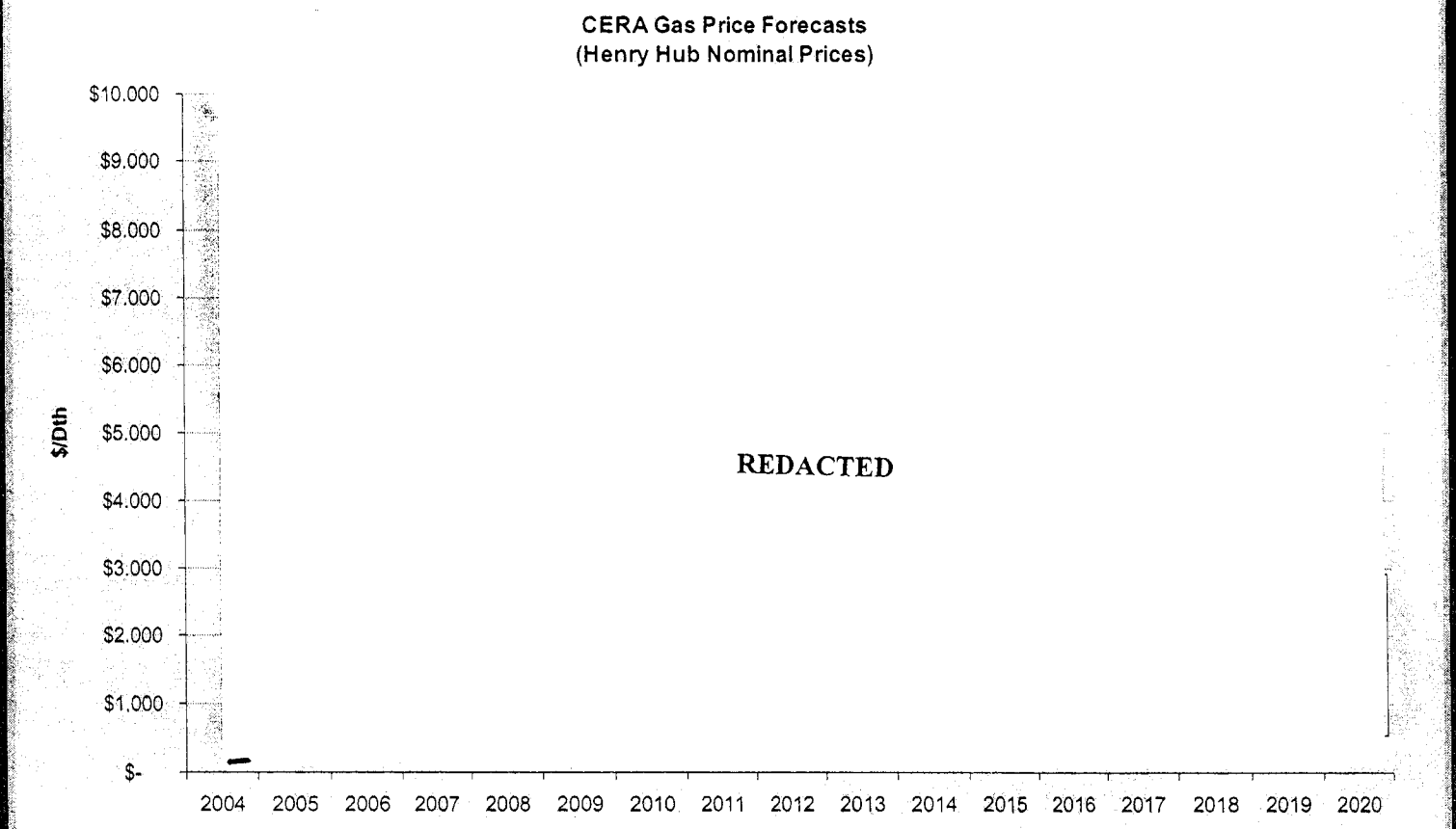
	Highest Deficit Month for 2005 - 08	595 aMW
Less	Conservation Savings	117 aMW
Less	Frederickson 1 Acquisition (125 MW Capability)	123 aMW
	Remaining Need	355 aMW
	Mid-C Hydro Adjustments	27 aMW
	Updated 2004 Need	**382 aMW**

Note: All calculations based on "B2" planning standard in 2003 LCP

Updated Planning Assumptions

- Higher natural gas price forecasts
- Updated wholesale electric price forecast
- Increased imputed debt risk factor per S&P
- Higher generic technology costs reflective of RFP proposals
- Electric and natural gas price volatility in modeling refined to better reflect market
- Updating self-build option

Updated Planning Assumptions
Natural Gas Price Forecast

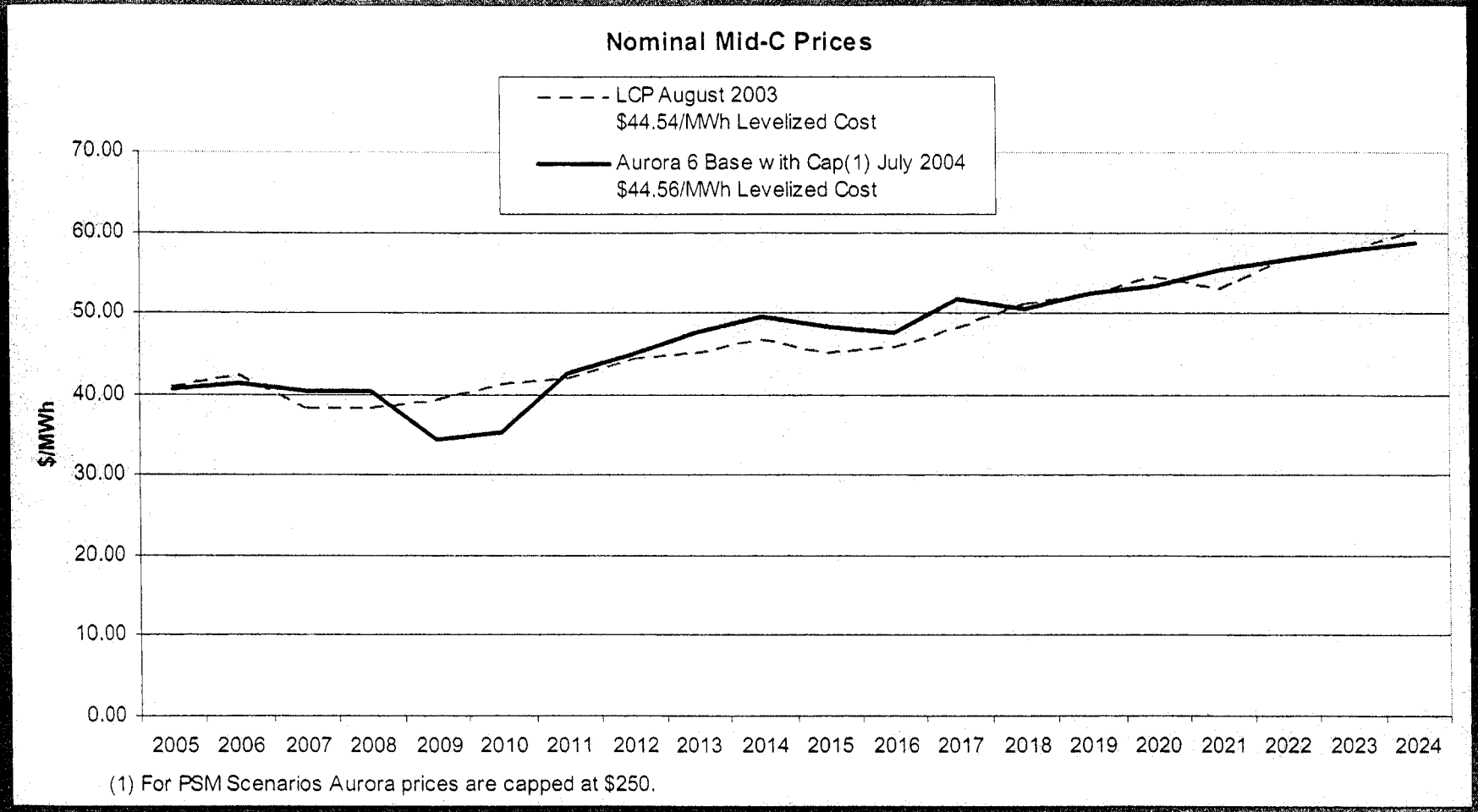


Summary of Scenarios

Base Case-Rearview Mirror: Moderate economic growth, utility/environmental regulation status quo, moderate oil prices.
High Case-Shades of Green: High production cost from tighter environmental regulation, moderate economic growth.
Low Case-World in Turmoil: Low economic growth, high oil prices, status quo in regulation.
Not Used-Technology Enhanced: High economic growth, falling production costs from technology, progressive regulatory policies.

Updated Planning Assumptions

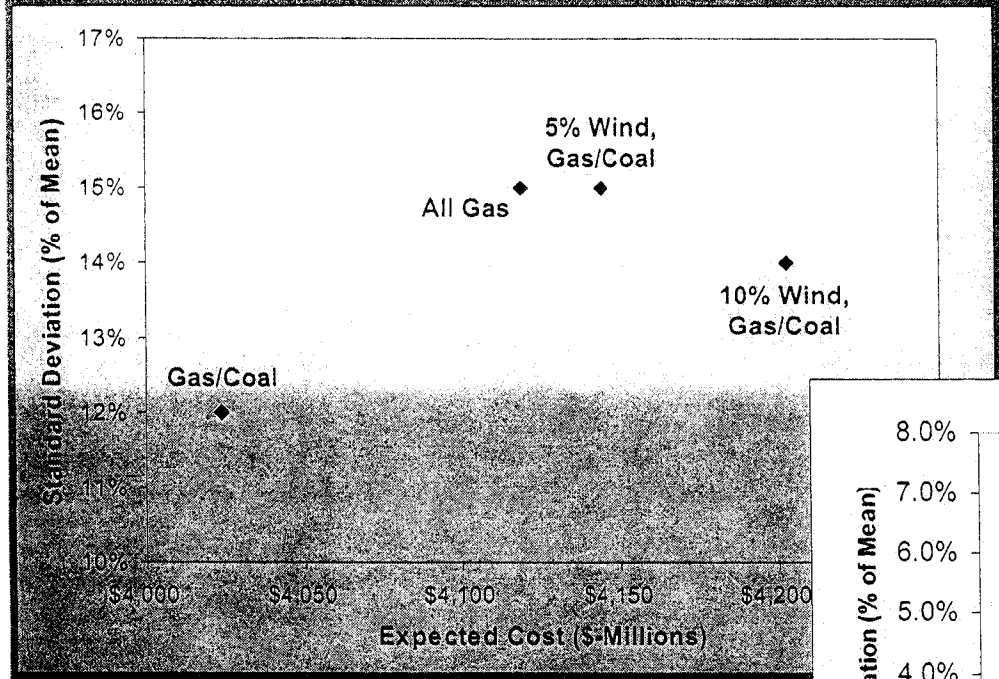
Electric Power Price Forecast



(1) For PSM Scenarios Aurora prices are capped at $250.

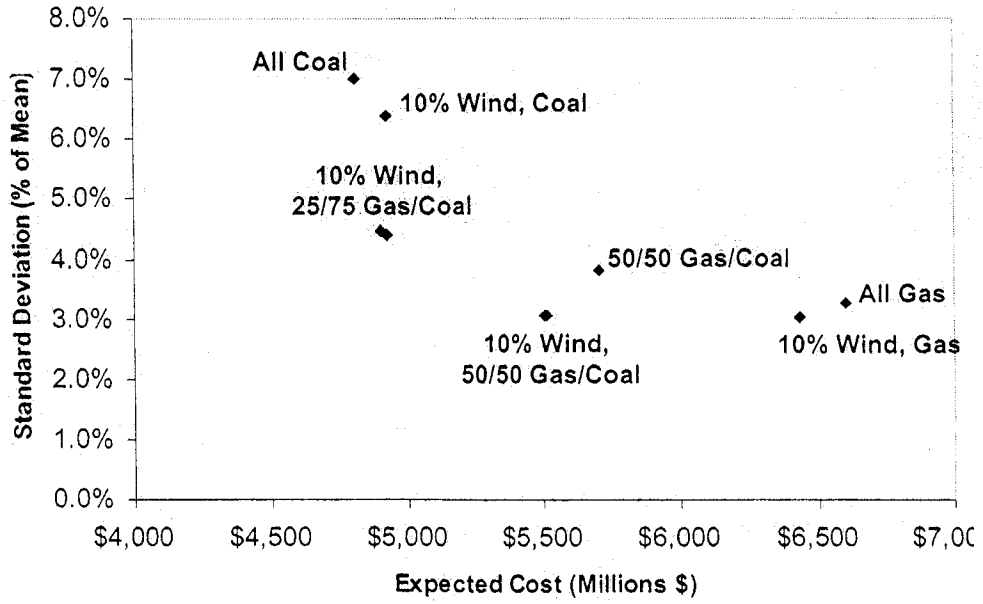
Updated Planning Assumptions

Portfolio Costs and Volatility



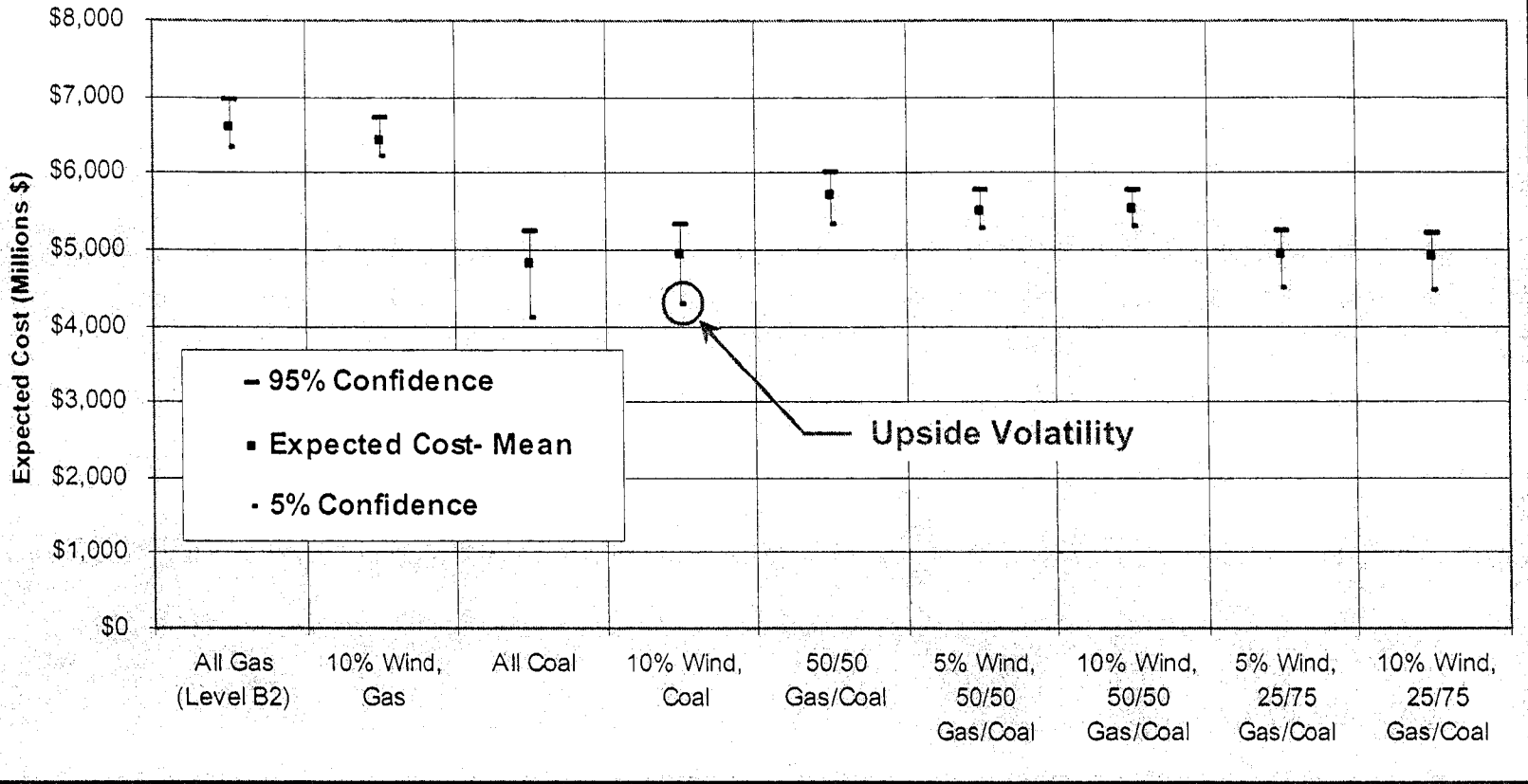
2003 Least Cost Plan

Updated as of July 2004



Updated Planning Assumptions

Portfolio Costs and Volatility (cont.)



Updated Planning Assumptions
PSE Self-Build Review

- PSE revisited the findings of the Tenaska Self-Build Report in the 2003 LCP and reviewed the self-build generation alternatives
- Three (3) potential sites for the self-build were reviewed:
  - 1) Dieringer / White River 2) Frederickson 3) Fredonia
  - Frederickson seems most likely site for self-build; therefore, the infrastructure cost assumptions were based on the Frederickson site
- Two (2) equipment/configuration scenarios were evaluated:
  - 1-on-1 Combined Cycle GE 7FA Combustion Turbine Generators
  - (2) - Simple Cycle GE LMS100 Combustion Turbine Generators
- Worked performed by Tenaska was validated and may be used for further self-build resource analysis
- Self-build options may be a viable alternative when compared to other natural gas proposals in 2004 All-Source RFP
- Self-build option brings additional permitting, schedule, construction, and performance risk

Updated Planning Assumptions

PSE Self-Build Review

Option (1): [redacted] + [redacted] Proposal from All-Source RFP

- Equipment-only proposal
  - GE 7FA Combined Cycle Combustion Turbine Generator (CCCT)
  - 250 MW @ [redacted] % efficiency (Heat Rate [redacted] BTU/kWh)
  - "…in the low $ [redacted] million range…" for each power island
- [redacted] offered to assist in design and installation
  - Estimated Direct Capital Cost - $ [redacted] kW "all-in"
  - No equipment or performance warranties included with equipment
  - $ [redacted] - $ [redacted] million estimated additional cost for warranty wrap
- Would require complete equipment inspection and evaluation

Updated Planning Assumptions

PSE Self-Build Review

Option (2): [redacted]

- General Electric LMS100 Simple Cycle Combustion Turbine (SSCT)
- (2) units @ 102 MW each @ [redacted] % efficiency (Heat Rate [redacted] BTU/kWh)
- Direct Capital Cost $ [redacted] million - $ [redacted] /kW - for 204 MW
  - Offsite infrastructure, permitting, real estate costs not included
- Production schedule supports June 2006 COD
- Promising but unproven technology
- No demonstration units in operation
- Continue to monitor technology and future operational data

Updated Planning Assumptions

PSE Self-Build Review

The table below shows the self-build Portfolio Screening Model (PSM) cost analysis results and the comparison to the lowest cost natural gas proposal from the 2004 All-Source RFP:

Self-Build Option / All-Source Proposal	**Self-Build Option (1): 1X1 GE 7FA CCCT**	**Self-Build Option (2): (2) - GE LMS100 SCCT**	**All-Source RFP Proposal:** [redacted]
Project 20-yr Levelized Cost ($ per MWh)	64.65	107.17	61.97
Capacity Factor 20-yrs	[redacted]%	[redacted]%	[redacted]

Note: The Project 20-yr levelized costs does not include gas hedging or credit costs.

REDACTED

Resource Strategy & Process

Accomplished Milestones

April 30, 2003:	Least Cost Plan Filed
August 31, 2003:	Least Cost Plan Updated
November 17, 2003:	Wind RFP Issued
February 4, 2004:	All-Source RFP Issued Energy Efficiency RFP Issued
February 16, 2004:	Wind RFP Short List Selected
May 14, 2004:	All-Source Short List Selected
July 30, 2004:	Energy Efficiency RFP Short List Selected
September 1, 2004:	Signed LOI with Zilkha for Wild Horse Wind Farm
October 29, 2004:	Signed LOI with RES for Hopkins Ridge Wind Farm
November 2004:	Updated Natural Gas Price Forecasts

Resource Strategy & Process

Targeted Milestones

December 2004:	Execute Power Purchase with Negotiate Definitive Agreements with RES
January 1, 2005:	Begin taking delivery from APS PPA
January 11, 2005:	Seek Board Approval of Hopkins Ridge Wind Acquisition
February 2005:	Negotiate Definitive Agreements with Zilkha
March 1, 2005:	Seek Board Approval of Wild Horse Wind Acquisition
May 1, 2005:	File 2005 Least Cost Plan
August 2005:	Issue Request for Proposals (RFP)
December 2005(1):	Commercial Operation Date for Hopkins Ridge Wind Project
November 2006:	Commercial Operation Date for Wild Horse Wind Project

(1) Assumes financial closing and notice to proceed on April 1, 2004.

Resource Strategy & Process

RFP Evaluation Process

Proposals

Wind RFP
10 - Developers
13 - Projects
43 - Proposals

All-Source RFP
39 - Owners/Developers
47- Projects
89 - Proposals

First Stage Evaluation

1st Screening

- Based on criteria listed in the RFP
- Use respondents data
- Use Acquisition Screening Model model to summarize & compare quantitative factors on equivalent basis:
  - ➢Pro Forma w/ Dispatch
  - ➢20 yr Levelized Cost
  - ➢Revenue Requirements
  - ➢Mark to Model
  - ➢PPA Imputed Debt
  - ➢End-effects
- Key qualitative criteria: (See next slide)

Second Stage Evaluation

Short List

- Evaluate Specific Proposals within PSE Portfolio
- Use Portfolio Screening Model to determine & compare cost variability and risk.
- Separate analysis for Transmission and Integration alternatives.
- Appropriate comparison of PPA's and ownership alternatives.
- Due Diligence
- Continual Application of Stage 1 Criteria

Post-Proposal Negotiation

Least Cost Alternative(s)

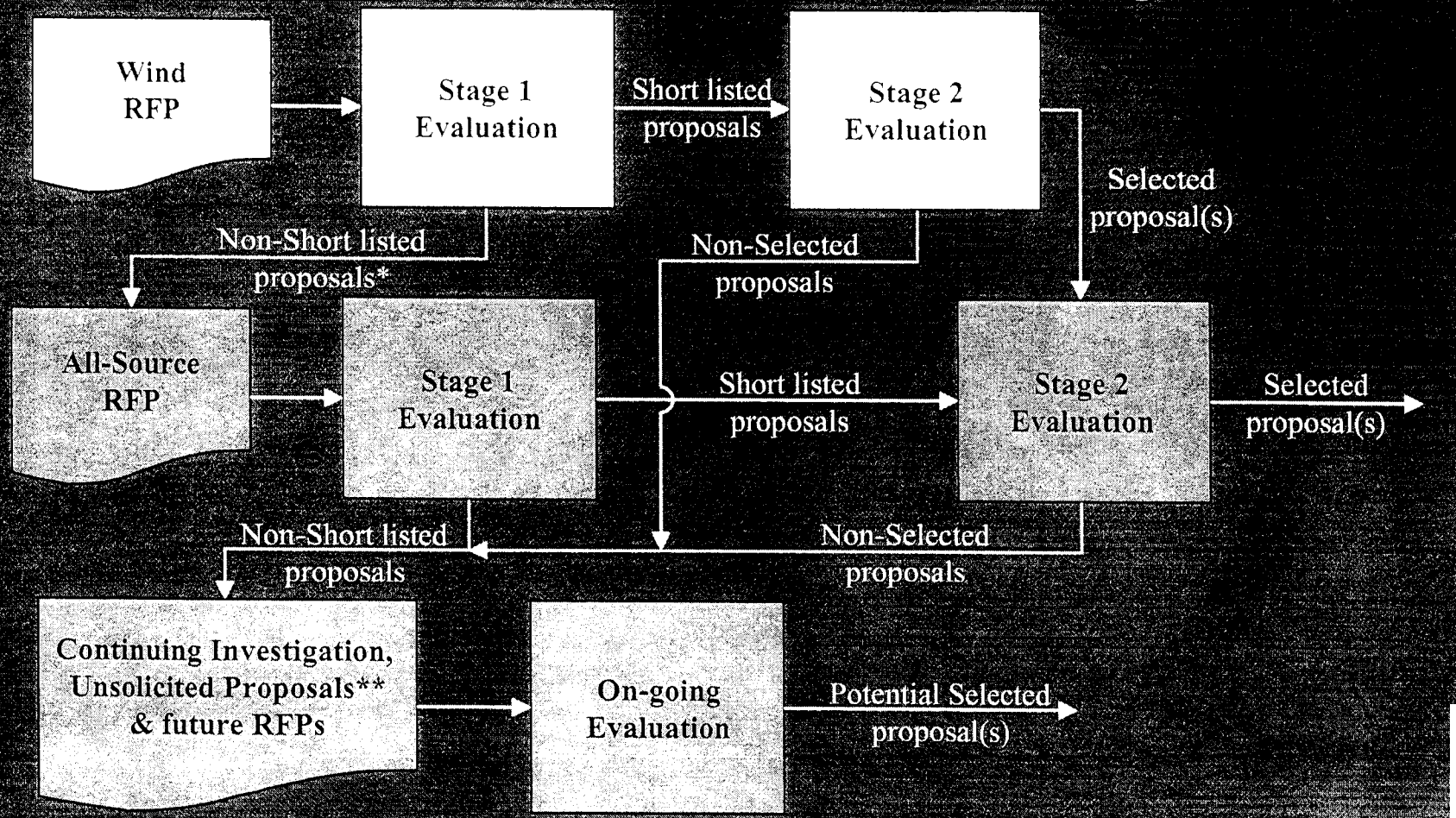
Resource Strategy & Process

RFP Evaluation Criteria

Compatibility with Need	Cost Minimization	Risk Management	Public Benefits	Strategic & 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 • Includes costs of - transmission - upgrades - firming	• Balance potential future exposure to power purchase risk • Balance potential future exposure to power sales risk • Reasonable exposure to counterparty 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 needs • Limits balance sheet impact of imputed debt from PPAs

Resource Strategy & Process

Wind & All-Source RFP Process Merge



* - All but two Non-Short listed as well as all of the Short listed proposals wind projects were officially resubmitted in the All-Source, some with revisions.

** - Non-Short listed all-source proposals and Non-Selected proposals may be revised on an on-going basis to better meet PSE's Least Cost Planning needs and strategies.

Wind RFP Evaluation

Narrative of Wind RFP Evaluation - Stages 1 & 2
(See Attached Word Document)

Wind RFP Evaluation
Stages One and Two

Puget Sound Energy
Resource Planning and Acquisition

TABLE OF CONTENTS

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WAC 480-07-160

I. OVERVIEW[1]

A. Wind RFP

PSE issued a request for proposal ("Wind RFP") on November 19, 2003. The RFP called for approximately 150 megawatts of wind-power capacity. PSE sought proposals for long-term purchase-power agreements or PSE ownership of wind-power projects. The proposals were due on January 16, 2004.

B. Proposals

Table 1B.1 lists the proposals that PSE received in response to the Wind RFP:

Table 1B.1

Code	Developer	Project
W01		
W02		
W03		
W04		
W05		
W06		
W07		
W08		
W09		
W10		
W11		

REDACTED

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Refer to Attachment 1 for a more detail summary of the list of proposals received. [Attachment 01 - Wind RFP Summary of Responses 01-23-2004.xls]

REDACTED

[1] This narrative summarizes the evaluation that PSE performed after it issued the Wind RFP. The narrative does not describe every effort that PSE undertook as part of the evaluation. Further detail can be found in PSE's files.

C. Evaluation Stages

PSE reviewed the proposals in two stages. In Stage One, PSE screened the proposals on a stand-alone basis against certain criteria. PSE retained a wind energy consultant, Garrad Hassan, to assist in this effort. The most promising proposals from Stage One were evaluated in Stage Two, again with assistance from Garrad Hassan.

II. STAGE ONE

A. Evaluation Criteria

PSE screened the proposals in Stage One using qualitative and quantitative analysis. PSE applied five primary criteria and several secondary criteria. The primary criteria were:

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

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Refer to Attachment 2 for the Stage One evaluation criteria detail descriptions.
[Attachment 02 - Wind RFP Stage 1 Evaluation Criteria.doc]

B. Review of Proposals

PSE rejected seven projects due to poor or insufficient wind data. This left six projects and sixteen different proposals for further consideration.

PSE determined that the [redacted] project possessed the highest levelized cost of the six remaining projects. Other issues were associated with this project. [redacted] did not submit an interconnection request or a system impact study, nor did it provide necessary environmental reports and permitting details. PSE therefore decided not to evaluate the [redacted] project in Stage Two.

PSE then determined that, of the five remaining projects, the [redacted] project possessed the most "Low" ratings under the evaluation criteria. The project's scheduled Commercial Operation Date ("COD") ranked the lowest of the five projects. [redacted] had not requested transmission service and had not conducted necessary system impact, facility, and environmental studies. PSE therefore decided not to evaluate the [redacted] project in Stage Two.

REDACTED

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WAC 480-07-160

C. Selection of Short List

Through further application of the evaluation criteria, PSE narrowed the project list to a "Short List" of four projects (five proposals) with various combinations of purchase-power agreements and PSE ownership options. Table 2C.1 lists the short-listed projects:

Table 2C.1

No.	Developer	Project	Location	Size (MW)	COD (Proposed)	Proposal Options PPA	Ownership	
W04	[redacted]				Apr 2005		100%	
W05					Nov 2005		100%	
W06					Nov 2005			50%
W08					Jul 2005	X		50%
W09					Dec 2004	X	100%	
					Totals	**2**	**3**	**2**

III. STAGE TWO

A. Evaluation Criteria

PSE continued to apply the Stage One evaluation criteria in Stage Two. PSE used the Acquisition Screening Model ("ASM") and the Portfolio Screening Model ("PSM") to evaluate the short-listed projects. Qualitative factors for the Stage Two review included:

- Transmission and Integration Alternatives
- Comparison of PPAs and Ownership Alternatives
- Ability to Deliver
- Experience of Developers
- Guarantees and Security
- Environmental and Public Benefit

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Refer to Attachment 3 for the Stage Two evaluation criteria detail descriptions.
[Attachment 03 - Wind RFP Stage 2 Evaluation Criteria.doc]

B. Information Requests

PSE determined that it required additional information in order to further evaluate the short-listed projects. PSE sent information requests to the owners and developers of the short-listed projects on February 20, 2004. Responses were received by March 1, 2004.

REDACTED

C. Criteria Ratings

PSE rated the short-listed projects under the Stage Two criteria using a rating system of LOW-MEDIUM-HIGH, with HIGH being considered more favorable and LOW being considered less favorable.

Table 3C.1 shows the project levelized cost ratings applying the ASM:

Table 3C.1

No.	Developer	Project	Offer Option	ASM5 Levelized Cost - Static ($/MWh)
W05	[redacted]	[redacted]	100%	[redacted]
W09			100%	
W08			PPA + 50%	
W04			100%	
W09			PPA	
W08			PPA	
W06			PPA + 50%	

Rating
HIGH
LOW

Table 3C.2 shows the project expected cost ratings applying the PSM:

Table 3C.2

No.	Developer	Project	Offer Option	PSM2 Static 20-Year Expected Cost ($MM)
W09	[redacted]	[redacted]	100%	[redacted]
W05			100%	
W08			PPA + 50%	
W04			100%	
W08			PPA	
W09			PPA	
W06			PPA + 50%	

Rating
HIGH
LOW

Table 3C.3 shows the project risk ratings applying the PSM:

Table 3C.3

No.	Developer	Project	Offer Option	PSM2 Dynamic 5-Year Risk Factor (95%-50%) ($MM)
W09	[redacted]	[redacted]	100%	[redacted]
W09			PPA	
W08			PPA + 50%	
W08			PPA	
W06			PPA + 50%	
W05			100%	
W04			100%	

Rating
HIGH
LOW

REDACTED

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PSE then combined these ratings with the ratings for the qualitative criteria. Table 3C.4 summarizes the results:

Table 3C.4

	Evaluation Criteria[1]	W04	W05	W06	W08	W09
[A]	Project Analysis[2]	Medium	High	Low	Medium	High
[A]	Portfolio Analysis[3]	Medium	High	Low	Medium	High
[A1]	Transmission	High	Medium	Medium	High	Low
[B]	Risk Management (Quantitative)[4]	Medium	Medium	Medium	Medium	Medium
[B1]	Risk Management (Qualitative)	Low	Medium	Medium	Medium	Medium
[C]	Ability to Deliver	Low	Medium	Medium	Medium	Medium
[D]	Experience	Medium	Medium	High	High	High
[E]	Strategic & Financial	Medium	Medium	High	Medium	Medium
[F]	Environmental & Public Benefit	Low	Medium	Medium	Medium	High

REDACTED

Notes to Table 3C.4:

1. Stage Two ratings were relative to only the short-listed projects.
2. The number (in $/MWh) is the 'ASM5 Levelized Cost - Static'
3. The number (in $ MM) is the 'PSM2 Static 20-Year Expected Cost'
4. The number (in $ MM) is the 'PSM2 Dynamic 5-Year Risk Factor (95%- 50%)'
5. A "Low" rating represents high-risk obstacles.
6. A "High" rating on cost represents a low or more favorable cost ranking, whereas a "Low" rating on cost represents a high or less favorable cost ranking.

D. Ranking of Short List

PSE ranked the short-listed projects in order to prioritize due diligence efforts and possible commercial discussions. The project ranked last due primarily to the project's potential permitting risks. Although the ratings for most of the evaluation criteria were attractive, the RES - Hopkins Ridge project ranked third due to apparent transmission constraints. PSE ranked the Zilkha - Wild Horse project below the project due to the former project's greater potential permitting risks.

Following are the Stage Two project rankings:

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1.
2. Zilkha - Wild Horse
3. RES - Hopkins Ridge
4.

REDACTED

WIND RFP

January 23, 2004

Summary Information from Wind RFP Responses

Code	Project	Developer	Location	COD	MW
W01					
W02					
W03					
W04					
W05					
W06					
W07					
W08					
W09					
W10					
W11					

REDACTED

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WIND RFP

January 23, 2004

Summary Information from Wind RFP Responses		Proposal Options Offered:	
Code	Project	PPA Offer	Build Transfer or Hybrid Offers
W01	REDACTED	PPA for up to 20 yrs - Capacity could be increased to [redacted] MW	- Purchase 100% ownership assumes [redacted] bears all development and construction financing costs.
W02		PPA Alternatives with __ yr term: - Busbar Benchmark "vanilla" - Annual energy output guarantee - Pricing shaped to discount summer months - Internally shaped - a proposal that offers PSE first call on a majority, but not all of the facility output	Regardless of which PPA alternative, proposal offers to PSE 50% interest as tenant in common with [redacted] would assume construction risk and operate the project.
W03		PPA Alternatives: - 20 yr PPA - 20 yr PPA and PSE purchases minority tax partner's interest yr 11 - 20 yr PPA and PSE buys 100% tax partner's interest yr 11 - 20 yr PPA and PSE buys 50% of General Partners minority interest at closing	Does not appear to be a build and transfer where PSE would own tax credits
W04		- Purchase actual energy output under 20-yr PPA	- Bidder intends to develop and construct and transfer ownership upon successful completion and testing.
W05		N/A	- Offer 100% ownership. - [redacted] completes development construction and commissioning - PSE owns and operates
W06		20 yr PPA with 100% ownership by [redacted]	- 50% ownership - 20 yr PPA for 50% from [redacted] - [redacted] would construct, manage and operate
W07		PPA Alternatives with 30 yr term: - As generated - Hourly firm with day ahead preschedule - Month ahead flat and firm HLH / LLH - Annual firm flat and firm	[redacted] is prepared to discuss joint venture not only on proposed projects, but any other assets PSE identifies. 50/50 partnering structure would develop, construct and own. - Services Agreement offer of any or all of the following: development, meteorologists, forecasting, integration, asset optimization etc.
W08		PPA is for full output of [redacted] project	[redacted] offering 50% ownership interest and PPA for remaining 50%
W09		PPA Alternatives: - 20 yr PPA with PTP Transmission - 20 yr PPA with dynamic exchange with [redacted] PSE provides all regulation to [redacted] for intrahour variability	Two Alternatives: - 100% ownership with PTP transmission. BPA firms but PSE pays Imbalance - 100% own with dynamic exchange
W10		25 yr PPA energy delivered to John Day switchyard on an as-produced basis	Alternatives: - PSE buys development rights - Outright purchase and operation of 100% of the project - Joint development and ownership - 100% purchase, Orion responsible for development and operation - 100% purchase, Orion provides training and operation for specified time
W11		PPA 20 yr	Two alternatives: - Joint development and ownership - Purchase land and development rights

REDACTED

	CRITERIA IN RFP	EXPLANATION
A	Resource price ranking as compared to avoided cost. All transaction costs such as taxes and risk transfer will be included in the evaluation.	**Evaluation Criteria: *Cost Minimization*** • Quantitative analysis using a "Pro Forma with Dispatch" model will produce stand-alone valuation for ranking purposes. – Annual revenue requirement – Levelized Cost/MWH • PSE prefers those proposals which satisfy its other evaluation criteria at the lowest cost throughout the project life.
B	Project size & monthly energy production An initial evaluation of the quality of the wind resource data submitted by respondent will be made during this stage.	**Evaluation Criteria: *Compatibility with Need*** • Quantitative analysis using the "Pro Forma with Dispatch" model. – Mark to Model evaluation with simple load. – Consultants to evaluate wind data • Proposals where generation from the underlying generation asset more closely match PSE's monthly energy requirements are preferred.
C	New or already existing project?	**Evaluation Criteria: *Public Benefit and Financial and Strategic*** • Preference is for new projects
D	Proximity and availability of transmission and the status and schedule for completion of the necessary transmission agreements. The respondent shall be responsible for arranging for the transmission interconnection with the WECC high voltage transmission system and for projects located outside of PSE's control area, transmission to agreed to point(s) on PSE's transmission system.	**Evaluation Criteria: *Cost Minimization, Compatibility with Need*** • PSE prefers firm delivery of energy to its service area (particularly at points on its system at which the deliveries may be effected and used to serve load with no or limited transmission congestion). In the absence of assurance at the time of proposal of such firm delivery, PSE prefers proposals that provide a high likelihood of acquiring adequate transmission rights to such points. Proposals that do not include firm transmission to such points, that would produce congestion or that would increase PSE's transmission costs will be compared unfavorably with other proposals and/or will be assessed the additional cost to PSE. • [In-depth transmission and integration analysis will occur in stage 2.]

	CRITERIA IN RFP	EXPLANATION
E	Status and schedule for completion of the project including financial resources of the respondent and securing necessary permits, land, hardware, etc.	**Evaluation Criteria: *Risk Management*** • Respondent needs to show that the project will be completed and commercially operational. • Proposals that include project agreements and all other rights and arrangements coterminous with power purchase delivery periods or project life are preferred. • Proposals that involve minimal risk for timely plant completion within cost projections are preferred.
F	Proposed date of operation and full availability of the project.	**Evaluation Criteria: *Compatibility with Need, Cost Minimization*** • Proposals which would provide an opportunity to achieve bonus MACRS depreciation are highly preferred. All other things being equal, proposals with earlier on-line dates are preferred.
G	PPA, PSE as owner, or hybrid of the two	**Evaluation Criteria: *Compatibility with Need, Strategic and Financial*** • Long-term power purchase agreements (up to 20 years or longer) are preferred over short-term. • Proposals that provide flexibility to expand to meet PSE's growing needs or to be deferred as required are preferred. • Proposals that provide PSE the flexibility to adjust its position in a resource, including termination are preferred. • Proposals are preferred that do not increase PSE's exposure to adverse impact on its financial position (e.g., by requiring PSE to impute debt, by otherwise adversely affecting PSE's financial leverage, operating leverage, credit rating, cash flow, income statement or balance sheet, or by imposing credit requirements).

	CRITERIA IN RFP	EXPLANATION
H	Developer experience and successful history of development of similar wind projects.	**Evaluation Criteria: *Risk Management*** • Respondents that are able to demonstrate they have the experience and financial resources to complete the project and have made significant progress in securing necessary permits, property rights, equipment, regulatory approvals, project agreements and all other rights or arrangements necessary for a commercially operational project within the time proposed are preferred. • Proposals that are based on commercially proven technology with demonstrated long-term reliability and performance history are preferred. • Proposals that minimize exposure to environmental risk or other potential liability are preferred.
I	Project Location	**Evaluation Criteria: *Public Benefit, Compatibility with Need*** • Proposals that are located such that they provide benefits to the regional and PSE transmission system or require minimal or no transmission upgrades are preferred. • Proposals that are not dependent upon constrained transmission are preferred. • Proposals that are located such that they are within PSE's control area are preferred.

	CRITERIA IN RFP	EXPLANATION
A	Portfolio Analysis	**Evaluation Criteria: *Cost Minimization, Compatibility with Need*** • The net impacts of each proposal on cost and risk for the Company's overall electric resource portfolio – How proposed resource interacts with other existing and planned resources in PSE's overall portfolio and with PSE's retail electric loads • Includes: – Imputed debt – Integration costs – Transmission costs (See separate sheets) • Proposals and combinations of proposals that result in the lowest impact on PSE's revenue requirements and rates when included into PSE's existing generation resource portfolio are preferred. • Proposals which provide PSE control of project output acceptable to PSE to respond (i.e., displacement) to system reliability events are preferred, including the ability for PSE to elect to displace for reliability purposes generation output that would otherwise have been used by the other owner.
A1	Portfolio Analysis (Transmission)	**Evaluation Criteria: *Cost Minimization, Compatibility with Need*** • The ability to transmit power from the project site to one or more points on PSE's electric system is a requirement (particularly to points on its system at which the deliveries may be effected and used to serve load with no or limited transmission congestion). PSE will use information provided in response to the RFP to assess whether and to what extent required transmission will be available and whether and to what extent the necessary transmission paths are subject to constraint.

	CRITERIA IN RFP	EXPLANATION
B	Risk	**Evaluation Criteria: *Risk Management*** • Cost uncertainty, price volatility, production uncertainty and other such quantitative factors which can be included into the Portfolio Analysis • Proposals and combinations of proposals will be evaluated to determine the impact of the proposal(s) on the overall risk position with respect to PSE's generation asset base. Risk scenarios will include such factors as hydroelectric production variation, fuel price volatility and price scenarios, and market price volatility and price scenarios. Other considerations will include exposure to transmission congestion and costs. All other factors being equal, PSE prefers proposals that result in lower generation portfolio performance risk.
B1	Risk (Qualitative)	**Evaluation Criteria: *Risk Management*** • Qualitative risk associated with factors such as technology, performance, operations, transactional, vendor support, construction, project completion, schedule, capital cost, and others.
C	Ability of Project to Deliver as Proposed	**Evaluation Criteria: *Risk Management, Compatibility with Need*** • Probability of meeting the proposed commercial operation date – Financing commitments – Permit status and difficulty – Long lead time equipment commitments – Probability of financing – reasonableness of project budgets and pro forma – Project schedule reasonableness – Availability and cost of transmission – Ability to document proposed transaction within schedule requirements • Confidence in long-term energy projections – Quality and quantity of on-site data – Long-term reference data – Experience of the parties making the energy projections – History of proposed turbines – Written opinion and analysis of a nationally recognized meteorological consultant as to the reasonableness of the amount and shape of energy production.

	CRITERIA IN RFP	EXPLANATION
D	Experience of the Project Team	**Evaluation Criteria: *Risk Management*** • The organizations and key personnel responsible for implementing the project including identification of the project manager, his/her tenure, and scope of responsibility. • A legal entity organization chart. • A managerial organization chart • Existing projects owned, developed and/or operated by the respondent • The personnel or organizations responsible for the following areas: – Project wind resource assessment and energy projections – Project financing – Project design, engineering, procurement and construction specifications – Interconnection and substation design – Project environmental assessments – Project land use and zoning approval – Permits and related approvals – Project construction and commissioning – Risk management and insurance – Project operations – Project maintenance • A brief description of relevant experience of the key personnel and organizations for their responsibility area listed above. • Contacts and references (name, title, address, telephone, e-mail and fax numbers) knowledgeable about the previous wind project experience of the key participants in the project.

	CRITERIA IN RFP	EXPLANATION
E	Guarantees, Security and Credit Worthiness	**Evaluation Criteria: *Strategic and Financial*** • This evaluation criterion will include an assessment of the credit worthiness of respondent and any person that would provide any guarantees and security offered to PSE in the proposal. • PSE will consider the information received in response to this RFP in determining risk associated with the financial condition of and performance by a respondent and any third parties depended upon by respondent. • PSE may require additional guarantees or security pursuant to Section 9 of this RFP. • Lower-risk respondents are preferred.
F	Environmental and Public Purpose	**Evaluation Criteria: *Public Benefit*** • This criterion will include an assessment of the magnitude of potential environmental impacts, the thoroughness of the plan to identify and mitigate those impacts regardless of whether the proposal results in a new wind resource being added to the Northwest region. • Proposals with lower environmental impacts are preferred. Environmental impacts refer to the full range of issues evaluated in an environmental impact statement (EIS) or environmental assessment (EA). • Proposals that demonstrate support from public, local, state and federal government entities and Native American nations, if applicable, are preferred.

Wind RFP Evaluation

Stage 1: Short List Selection Process

- Combined the review and ratings of each:
  - PSE Qualitative Evaluation Teams
  - PSE Quantitative Evaluation Teams
  - Garrad Hassan Report and Technical Analysis
- Garrad Hassan Wind Data Assessment
  - 7 Projects considered "Non-Financable" due to poor or insufficient wind data
- Of the 6 projects remaining:
  - 1 dropped due to having the highest cost of the 6
  - 1 dropped due to immature development
- 4 Projects (5 proposals) selected for Stage 2 Evaluation

Wind RFP Evaluation

Stage 1: Evaluation Summary Matrix

PROPOSALS		EVALUATION CRITERIA SUMMARY (as of February 13, 2004)								
Code	Developer - Project	Low Levelized Cost Rank [A]	Size (MW) & Capacity / WTG [B]	New or Existing [C]	Transmission Availability & Proximity [D]	Status & Schedule [E]	COD [F]	PPA, Owner, or Hybrid [G]	Risk Management [H]	Public Benefit / Location [I]
REDACTED			[redacted] GE1.5sl	New	BPA / 115kV					
			[redacted] GE1.5sl	New	BPA / 230kV					
			[redacted] NM82	New	BPA / 230kV		Dec-04	PPA & Other		[redacted]
			High [redacted] Open	New	High PSE / 230kV	Medium	Medium	Medium	Medium	Medium [redacted]
			Medium [redacted] Open	New	High PSE / 230kV	High				[redacted]
			Medium [redacted] Open	New	High PSE / 230kV	High				
			[redacted] GE1.5sl/V80	New	BPA / 230kV		Dec-05	PPA & Hybrid		[redacted]
			[redacted] GE1.5sl/V80	New	BPA / 230kV		Dec-05	PPA & Hybrid		[redacted]
			[redacted] GE1.5sl/V80	New	P-Corp / 230kV					
			[redacted] GE1.5sl/V80	New	BPA / 115kV					
			Medium [redacted] GE1.5sl	New	High PSE / 230kV	High	Medium Jul-05	Medium PPA & Hybrid	High	High [redacted]
			Medium [redacted] GE1.5sl	New	Medium BPA / 115kV	Medium	High Dec-04	Medium PPA or Own	High	High [redacted]
			[redacted] GE1.5sl/V80	New	BPA / 500kV		Dec-06	PPA or Own		[redacted]
			[redacted]	New	[redacted]		Late 05	PPA & Other		[redacted]

7 Projects dropped due to poor or insufficient wind data

Project dropped due to higher cost compared to remaining 6 projects

Project dropped due to due to immature development

Wind RFP Evaluation

Short List Selection

No.	Developer	Project	Location	Size (MW)	COD (Proposed)	Proposal Options		
						PPA	Ownership	
W04	REDACTED				Apr 2005		100%	
W05					Nov 2005		100%	
W06					Nov 2005			50%
W08					Jul 2005	X		50%
W09					Dec 2004	X	100%	
					Totals	**2**	**3**	**2**

(as of February 13, 2004)

- Four projects (five proposals) selected for Stage 2 Evaluation (including both PPA and ownership options)
- Stage 2 includes Portfolio Screening Model runs and additional qualitative analyses

Wind RFP Evaluation

Stage 2: ASM & PSM Costs

by Project Analysis (Acquisition Screening Model):

No.	Developer	Project	Offer Option	ASM5 Levelized Cost-Static
(as of March 31, 2004)				$ / MWh
W05	REDACTED		100%	REDACTED
W09			100%	
W08			PPA + 50%	
W04			100%	
W09			PPA	
W08			PPA	
W06			PPA + 50%	

Rating
"High"
"Low"

by Portfolio Analysis (Portfolio Screening Model):

No.	Developer	Project	Offer Option	PSM2 Static 20-Year Expected Cost
(as of March 31, 2004)				
W09	REDACTED		100%	REDACTED
W05			100%	
W08			PPA + 50%	
W04			100%	
W08			PPA	
W09			PPA	
W06			PPA + 50%	

Rating
"High"
"Low"

by Project Risk (Portfolio Screening Model):

No.	Developer	Project	Offer Option	PSM2 Dynamic 5-Year Risk Factor (95%- 50%)
(as of March 31, 2004)				
W09	REDACTED		100%	REDACTED
W09			PPA	
W08			PPA + 50%	
W08			PPA	
W06			PPA + 50%	
W05			100%	
W04			100%	

Rating
"High"
"Low"

REDACTED

Wind RFP Evaluation

Stage 2: Evaluation Summary Matrix

(as of March 31, 2004) Evaluation Criteria[1]		W04	W05	W06	W08	W09
[A]	Project Analysis[2]	Medium	High	Low	Medium	High[5]
[A]	Portfolio Analysis[3]	Medium	High	Low	Medium	High
[A1]	Transmission	High	Medium	Medium	High	Low
[B]	Risk Management (Quantitative)[4]	Medium	Medium	Medium	Medium	Medium
[B1]	Risk Management (Qualitative)	Low	Medium	Medium	Medium	Medium
[C]	Ability to Deliver	Low	Medium	Medium	Medium	Medium
[D]	Experience	Medium	Medium	High	High	High
[E]	Strategic & Financial	Medium	Medium	High	Medium[6]	Medium
[F]	Environmental & Public Benefit	Low	Medium[7]	Medium[7]	Medium	High

Notes:

1. Stage 2 Evaluation Ratings were relative to only the Short-List projects
2. For summary purposes, the number (in ($/MWh) equates to the 'ASM5 Levelized Cost - Static' for the lowest Offer Option
3. For summary purposes, the number (in $ MM) equates to the 'PSM2 Static 20-Year Expected Cost' for the lowest Offer Option
4. For summary purposes, the number (in $ MM) equates to the 'PSM2 Dynamic 5-Year Risk Factor (95%- 50%)'
5. The levelized cost for a 50% PSE Ownership option would equal $45.45 / MWh
6. This rating would trend to "High" if [redacted] were to provide guarantee
7. Rating is trending to "Low" due to current likelihood of [redacted]
8. "Low" ratings represents high risk obstacles

Wind RFP Evaluation

Stage 2: Short List Order Ranking

Order Ranking by Project: (as of 3/ 31/ 2004)	
1	[redacted]
2	Wild Horse
3	Hopkins Ridge
4	[redacted]

- Order Ranking provides priority on beginning commercial negotiations and proceeding with due diligence phase
- Monitoring of all proposed projects will continue
- All-Source RFP provides opportunity to gather additional information on resources
- Goal to choose resource(s) that best fit PSE needs at least cost

All-Source RFP Evaluation

Narrative of All-Source RFP Evaluation - Stages 1 & 2

(See Attached Word Document)

All-Source RFP Evaluation
Stages One and Two

Puget Sound Energy
Resource Planning and Acquisition

TABLE OF CONTENTS

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IV. ATTACHMENTS

A. 01- All-Source RFP Summary of Responses 03-12-2004

B. 02 - All-Source RFP Stage 1 Evaluation Criteria

C. 03 - All-Source RFP Stage 2 Evaluation Criteria

REDACTED

I. OVERVIEW[1]

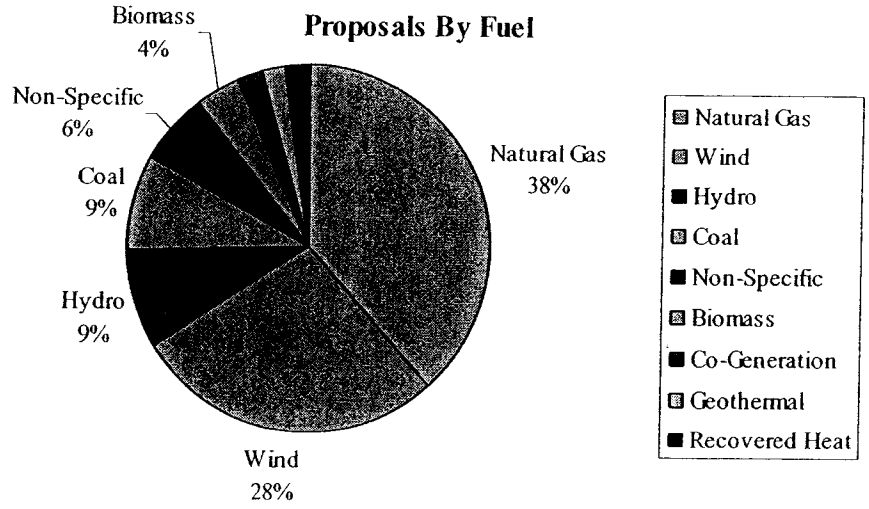
A. All-Source RFP

PSE issued a request for proposal for all generation sources ("All-Source RFP") on February 4, 2004. PSE sought proposals for a wide variety of generation projects that would provide approximately 355 average megawatts ("aMW") of energy, under long-term purchase-power agreements ("PPAs") and/or PSE ownership of power projects. The Washington Utilities and Transportation Commission ("WUTC") approved the All-Source RFP on January 28, 2004. A pre-proposal conference was held on February 11, 2004. Proposals in response to the RFP were due on March 12, 2004.

B. Proposals

PSE received 47 project proposals ("All-Source proposals") that involved 39 different owners/developers. Many of the All-Source proposals contained multiple offer options such as PPAs, asset ownership, and hybrid options. Figure 1B.1 shows the relative proportions of the fuel sources that backed the All-Source proposals.

Figure 1B.1



[1] This narrative summarizes the evaluation of the All-Source proposals. It does not describe every effort that PSE undertook as part of the evaluation. Further detail can be found in PSE's files.

Table 1B.1 lists the All-Source proposals.

Table 1B.1

Code	Project Name	Owner / Developer	Code	Project Name	Owner / Developer
A01	REDACTED		A25	REDACTED	
A02			A26		
A03			A27		
A04			A28		
A05			A29		
A06			A30		
A07			A31		
A08			A32		
A09			A33		
A10			A34		
A11			A35		
A12			A36		
A13			A37		
A14			A38		
A15			A39		
A16			A40		
A17			A41		
A18			A42		
A19			A43		
A20			A44		
A21			A45		
A22			A46		
A23			A47		
A24					

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Refer to Attachment 1 for a more detail summary of the list of proposals received. [Attachment 01 – All-Source RFP Summary of Responses 03-12-2004.xls]

C. All-Source RFP and Wind RFP Merge

All but two of the proposals that were submitted in response to the Wind RFP ("Wind proposals") were resubmitted in response to the All-Source RFP. In addition, all of the short-listed proposals from the Wind RFP were resubmitted in response to the All-Source RFP. For these reasons, PSE decided to merge the ongoing evaluation of the Wind proposals with the evaluation of the All-Source proposals.

D. Evaluation Stages

Similar to its evaluation of the Wind proposals, PSE evaluated the All-Source proposals in two stages. In Stage One, PSE screened the All-Source proposals on a stand-alone basis against certain criteria, with the goal of creating a "short list." In Stage Two, PSE evaluated the short-listed All-Source proposals in more detail. Figure 1D.1 shows this process.

Figure 1D.1

In addition to its own staff, PSE used outside consulting firms to evaluate the technical and environmental attributes of the All-Source proposals. These firms included Garrad Hassan, 3Tier, Sargent & Lundy, CH2M Hill, and URS Corp.

II. STAGE ONE

A. Evaluation Criteria

PSE screened the All-Source proposals in Stage One using qualitative and quantitative analysis. PSE applied five primary criteria and various secondary criteria to narrow the All-Source proposals to a short list. The criteria included:

A. Compatibility with PSE Resource Need
1. Timing
2. Resource match to monthly need
3. Match to monthly need through contract
4. Operational Flexibility

B. Cost Minimization
1. Resource price
2. Transmission

C. Risk Management
1. Status & Schedule
2. Price Volatility
3. Resource Flexibility and Stability
4. Resource Technology
5. Long-term Flexibility
6. Project Risk

D. Public Benefits
1. Environmental Impacts
2. Resource Location
3. Community Impacts

E. Strategic & Financial
1. Capital Structure Impacts
2. Future exposure to environmental regulations and/or taxes

Refer to Attachment 2 for the Stage One evaluation criteria detail descriptions.
[Attachment 02 – All-Source RFP Stage 1 Evaluation Criteria.doc]

B. Process Review

Figure 2B.1 summarizes how PSE screened the All-Source proposals in Stage One.

Figure 2B.1

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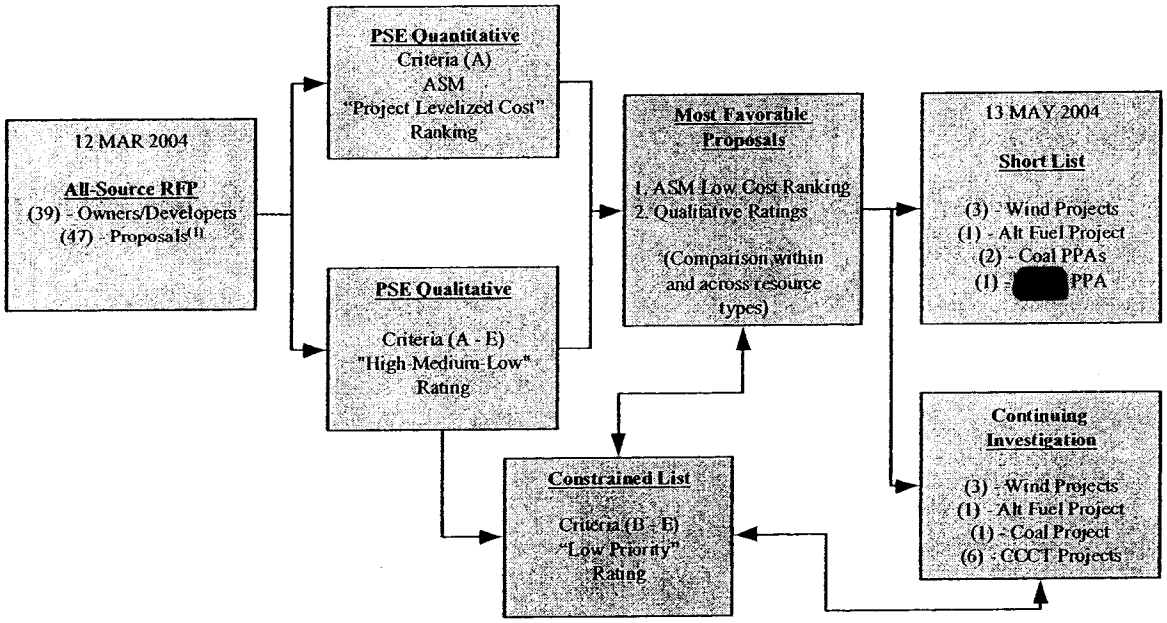

(1) Proposals included (48) - PPAs, (23) - Asset Ownerships, (18) - Hybrids = (89) - Total Proposal Options.

C. Constrained List

The initial screening that PSE performed in Stage One identified 13 projects that warranted lesser priority. PSE moved these projects to the "constrained list" that is described in Table 2C.1.[2]

Table 2C.1

CONSTRAINED LIST		
Code	Project Name	Owner / Developer
A13		
A14		
A17		
A18		
A20		
A27		
A34		
A37		
A40		
A41		
A44		
A45		
A47		

REDACTED

D. Use of Acquisition Screening Model

In January 2004, PSE modified the Portfolio Screening Model ("PSM") to create a second model -- the Acquisition Screening Model ("ASM") -- for use in evaluating the Wind and All-Source proposals. PSE created the ASM so that it could more easily screen the proposals based upon their levelized cost.

PSE used the ASM in Stage One to summarize and compare quantitative factors on an equivalent basis. These factors included:

- Pro Forma w/ Dispatch
- 20-yr Levelized Cost
- Revenue Requirements
- Mark-to-Model
- PPA Imputed Debt
- Transmission Costs, including ancillary services
- Integration Costs
- End-effects

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[2] Despite the constrained identification, PSE analyzed [redacted] coal project (A20) in Stage Two -- using the PSM -- in order to evaluate the impacts of coal projects on PSE's portfolio. In addition, PSE removed two proposals from the constrained list -- [redacted] (A31) and [redacted] (A33) -- due to BPA's increased interest in the McNary - John Day line construction.

The ASM calculated the levelized cost of a proposal -- whether an acquisition or a PPA -- over a 20-year period. With this information, PSE was able to develop a cost ranking for each proposal that passed the initial screening.[3]

Table 2D.1 shows the inputs that PSE used to develop the ASM calculations.

Table 2D.1

PLANT CHARACTERISTICS:	PLANT COST DATA:
• Capacity • Heat rate • Maintenance outage schedule • Forced outage rate • Sample 8760 hour generation profile for wind projects • Book and tax depreciation rates • Emission rates for SO2, NOX, and CO2	• Capital cost including AFUDC and deal transaction costs • Fixed O&M per kw of capacity • Fixed A&G costs per kw of capacity (this will include property taxes and insurance) • Variable O&M per MWh • Fuel transportation costs including fixed pipeline and lateral charges as well as pipeline commodity charges plus fuel use (losses) and Washington State use tax • Fixed and variable transmission costs including wheeling, ancillary services and imbalance or integration costs
PPA COST DATA:	**OTHER ASSUMPTIONS:**
• PPA fixed prices and escalation • PPA variable prices, and or variable adders • Transmission costs fixed and variable • Tolling: fixed and variable gas transportation, variable O&M strike price, seasonal and maintenance outage forecast, forced outage rate	• Costs of borrowing debt and equity capital. Uses the weighted average cost of capital for levelizing costs • Natural gas price = input to AURORA5 • Power price = hourly output from AURORA5 • Trading values of emissions • Imputed debt risk percentage • Production tax credits for qualifying renewable projects

E. Most Favorable Proposals

PSE evaluated the proposals that passed the initial screening by applying levelized cost calculations under the ASM as well as certain qualitative criteria. This process eliminated certain proposals with high costs, unacceptable risks, and/or feasibility constraints.

PSE determined that 18 proposals should be included in a list of "most favorable proposals." Table 2E.1 lists these proposals.

[3] In Stage Two, PSE used the PSM to evaluate the short-listed proposals by calculating the portfolio impacts for a given set of resources. These portfolio analyses were also compared to updated generic portfolios similar to those that PSE evaluated in its 2003 Least Cost Plan ("2003 LCP").

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All-Source RFP Evaluation
Stages One and Two

Table 2E.1

MOST FAVORABLE PROPOSALS		
Code	Project Name	Owner / Developer
Alternate Fuel Sources		
A15	[redacted]	
A39	NWPL Sumas Recovered Heat	ORMAT
Power Purchase		
A19	APS - Centralia 2-yr PPA	Arizona Public Service (APS)
A24b	[redacted]0-yr PPA	[redacted]
A30	[redacted]2-yr Seasonal On-Peak PPA	
Thermal (Natural Gas, Coal-Cogen) Projects		
A20	REDACTED	
A29		
A26		
A35		
A24a		
A28		
A32a		
Wind Projects		
A03	Hopkins Ridge	RES
A07	[redacted]	
A02b	Wild Horse	Zilkha
A06	[redacted]	
A08		
A01		

REDACTED

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F. Continual Investigating List

PSE then identified certain proposals that -- although attractive at some levels -- faced obstacles such as transmission constraints, high fuel costs, premature development, permitting obstacles, and other issues. PSE placed these proposals on a "continual investigating list." PSE continued to monitor their status in the remainder of Stage One and in Stage Two.

Table 2F.1 lists the proposals that PSE placed on the continual investigating list.

Table 2F.1

CONTINUAL INVESTIGATING LIST		
Code	Project Name	Owner / Developer
Alternate Fuel Sources		
A15	[redacted]	
Thermal (Natural Gas, Coal, Cogen) Projects		
A20	REDACTED	
A29		
A26		
A35		
A24a		
A28		
A32a		
Wind Projects		
A07	[redacted]	
A08		
A01		

G. Selection of Short-Listed Proposals

The remaining All-Source proposals from the most favorable list were placed on a short list. PSE determined that, for the most part, the short-listed proposals were both low cost under the ASM levelized-cost analysis[4] and low risk under the qualitative criteria.

Given the high level of current and forecasted natural gas prices, PSE did not include any natural gas-fired projects in the short list. To evaluate the impacts of natural gas projects in PSE's portfolio, PSE did analyze representative natural gas proposals -- drawn from the continual investigating list -- in the PSM during Stage Two.

Table 2G.1 lists the short-listed proposals.

[4] The ASM did not fully address the value of the [redacted] on-standard PPA offer (A30). [redacted] offered on-peak power during September through March. On-peak market prices during September through March were compared to the [redacted] PPA proposed contract prices. Since, on a present value basis, the cost of the [redacted] PPA proposal was less than assumed market prices, this proposal merited further consideration in the Stage Two evaluation. PSE therefore added the [redacted] PPA proposal to the short list so that the proposal could be evaluated in the PSM.

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Table 2G.1

SHORT LIST		
Code	Project Name	Owner / Developer
Alternate Fuel Sources		
A39	NWPL Sumas Recovered Heat	ORMAT
Power Purchase Agreement (PPA)		
A19	APS - Centralia 2-yr PPA	Arizona Public Service (APS)
A24b	[redacted] 0-yr PPA	[redacted]
A30	[redacted] 22-yr Seasonal On-Peak PPA	[redacted]
Wind Projects		
A03	Hopkins Ridge	RES
A02b	Wild Horse	Zilkha
A06	[redacted]	[redacted]

REDACTED

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III. STAGE TWO

A. Evaluation Criteria

PSE continued to apply the Stage One evaluation criteria during Stage Two. In addition, PSE applied certain secondary criteria. The criteria that PSE considered are shown below.

A. *Compatibility with PSE Resource Need*
   1. Performance Within Existing PSE Generation Portfolio
   2. Timing
   3. Resource Mix/Diversity

B. *Cost Minimization*
   1. Cost Impact

C. *Risk Management*
   1. Impact on PSE Overall Risk Position
   2. Environmental and Permitting Risk
   3. Respondent Risk
   4. Ability to Deliver as Proposed (Development Status & Schedule)
   5. Ability to Deliver as Proposed (Experience & Qualification)
   6. Status of Transmission Rights
   7. Security & Control

D. *Public Benefits*
   1. Environmental Impacts

E. *Strategic and Financial*
   1. Guarantees and Security

Refer to Attachment 3 for the Stage Two evaluation criteria detail descriptions. [Attachment 03 - All-Source RFP Stage 2 Evaluation Criteria.doc]

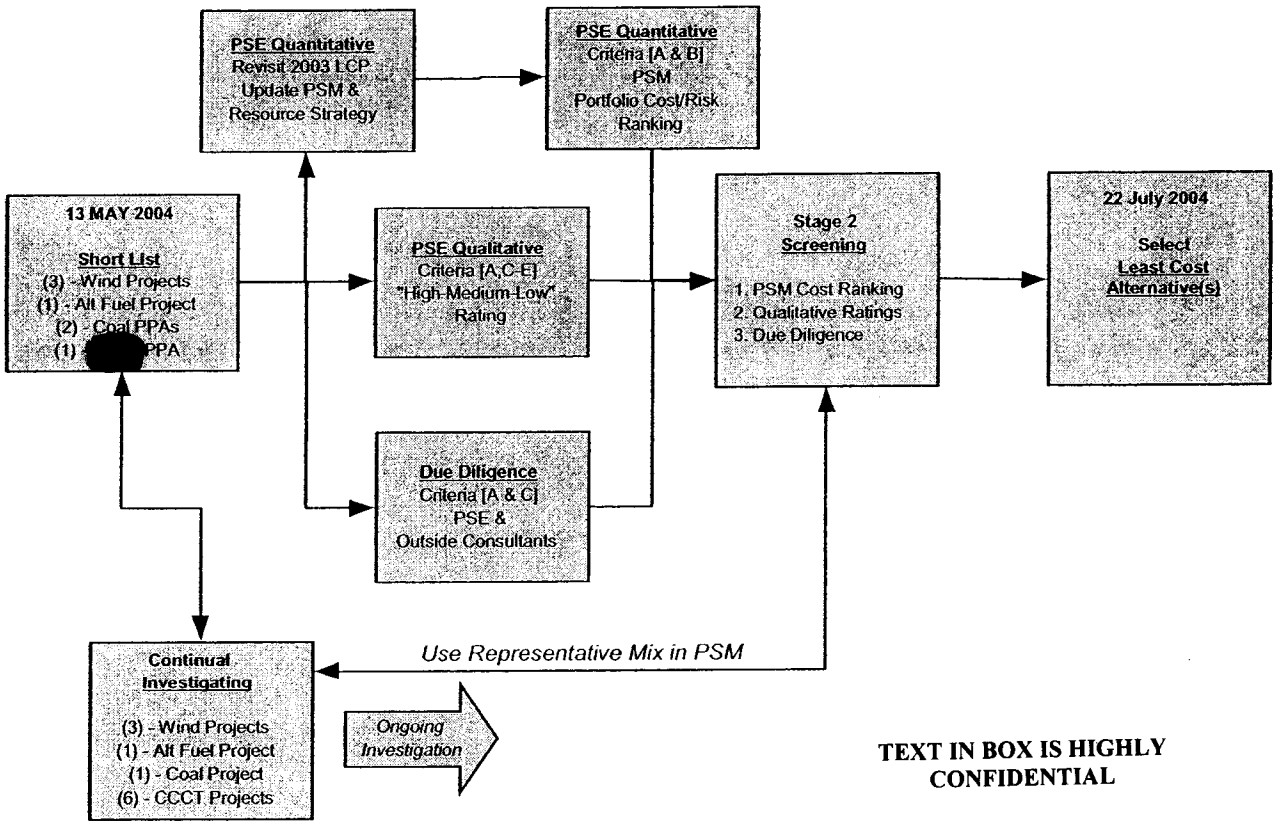
B. Information Requests

PSE determined that it required additional information to further evaluate the proposals that it had short-listed in Stage One. On May 25, 2004, PSE sent information requests to the owners and developers of the short-listed projects. Responses to the requests were received by June 11, 2004.

C. Process Review

Figure 3C.1 summarizes how PSE screened the short-listed proposals.

Figure 3C.1



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PSE rated the short-listed proposals under the evaluation criteria using a rating system of LOW-MEDIUM-HIGH, with "HIGH" being considered more favorable and "LOW" being considered less favorable.

PSE revisited the 2003 LCP resource strategy in order to update and reaffirm the current resource assumptions and strategy. PSE then analyzed the portfolio costs by selecting, from the short list, 36 portfolio combinations in addition to representative projects that PSE chose from the continual investigating list.

Using the PSM, PSE developed a portfolio cost ranking of each proposal. The PSM provided a framework to evaluate the long-term costs of each resource option and how that resource would perform in the PSE portfolio.

Environmental, real estate, financial, technical, and other efforts were employed to gather data and analyze the soundness and feasibility of the proposals that were asset-based.

D. Criteria Ratings

Table 3D.1 lists the short-listed proposals and their ratings under the evaluation criteria.

Table 3D.1

PROPOSAL	STAGE 2 EVALUATION CRITERIA RATINGS				
Project Name Owner / Developer	[A] Compatibility with Need	[B] Cost Minimization	[C] Risk Management	[D] Public Benefits	[E] Strategic & Financial
2-yr PPA (Centralia Coal Plant) Arizona Public Service Co.	High	High	High	High	High
22-yr Seasonal On-Peak PPA [redacted]	High	High	Medium	High	Medium
10-yr PPA [redacted] Coal [redacted]	High	High	High	High	Low
Hopkins Ridge Wind Project RES North America, LLC	Medium	High	High	High	Medium
Wild Horse Wind Project Zilkha Renewable Energy	High	High	Medium	High	Medium
[redacted]	High	High	Medium	Medium	Medium
NWPL Sumas Recovered Heat Ormat Nevada, Inc.	High	High	Medium	High	High

REDACTED

The short list as a whole was rated medium to high in all categories; however, the [redacted]PPA rated low in Criteria 'E' due to certain credit and accounting issues (see below). Some concern with regard to permitting risks caused the Wild Horse and [redacted] projects to receive a medium rating in Criteria 'C'. The Hopkins Ridge project rated medium in Criteria 'A' due to the uncertainty of securing firm transmission. Further analysis during the due diligence phase of Stage Two, coupled with greater knowledge of the credit and accounting issues, enabled PSE to evaluate these issues more thoroughly.

E. Portfolio Analysis

As part of its Stage Two evaluation, PSE revisited the portfolio modeling assumptions in the 2003 LCP. PSE did so because it wanted the evaluation of the short-listed proposals to reflect changes in the current and forecasted market.

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In this regard, it was necessary for PSE to consider new gas price forecasts, generic plant costs and types, and the strategies and cost to meet peak demand. For example, natural gas prices have risen since PSE acquired its interest in the Frederickson 1 facility. In addition, the RFP process showed that the capital costs of new wind plants are higher now than the costs that PSE modeled generically in the 2003 LCP. Moreover, the initial proposals that PSE received did not include seasonal joint ownership options for new gas plants.

For gas price forecasting in the base scenario, PSE used the CERA "Rear View Mirror" forecast -- updated in the fourth quarter of 2003 -- which is approximately [redacted] percent higher than the gas price forecast that PSE used in the 2003 LCP. The changed input assumptions that PSE ran in the AURORA model resulted in an average increase in electric prices of approximately 14 percent (compared to the forecast in the 2003 LCP).

REDACTED

PSE used the AURORA model to develop an hourly long-term price forecast for use in the PSM. During this process, however, PSE found that the AURORA model produced certain long-term price spreads between peak and off-peak prices during August and September of each year. PSE therefore considered alternatives that could reduce the spreads.

One alternative was to apply the $250/MWh price cap that FERC ordered on October 1, 2002. An advantage of modeling with price caps is that the cap does not affect most hours and most months, since the forecast spikes in prices occur primarily in the late afternoons of August and September in the later years. PSE therefore selected this alternative as the "Base Case" scenario it would use to evaluate possible resource acquisitions.

PSE then defined three other price scenarios, which yielded a total of four price scenarios that PSE used to test portfolio cost and risk:

1. Base Case scenario ($250/MWh price cap).
2. No Cap scenario (removal of the price cap).
3. Low Gas scenario (use of CERA "World in Turmoil" forecast with prices approximately 23 percent lower than in the "Rear View Mirror" forecast).
4. Reserve Margin scenario (use of planning reserve margin similar to what FERC has proposed in Docket No. RM01-12-000).

PSE did not consider these scenarios with equal probability or weight. Rather, PSE used the latter three scenarios (Nos. 2-4) as indicators of how resource portfolios might respond under varying gas and power prices.

Due to recent shifts in natural gas prices, PSE determined that the Monte Carlo approach might not provide sufficient price variability to adequately test the various acquisition alternatives. The four price scenarios that PSE defined provided a more robust testing of portfolio cost and risk than the testing that Monte Carlo simulation alone provided.

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PSE observed during this analysis that portfolios with a wind component generally had lower costs, whereas portfolios with a natural gas component generally had higher costs. The most uncertain portfolio involved exclusive reliance on market purchases (through the deferral of any new resource acquisitions through 2008).

PSE identified and analyzed 36 different portfolios. Of these proposals, PSE selected 12 representative portfolios for further evaluation under the four price scenarios. Table 3E.1 summarizes the representative portfolios.

Table 3E.1

#1: Market through Y2008 • Generic Coal • Natural Gas beginning in Y2009	**#11: (3) PPAs & (2) Wind** • [redacted]22-yr PPA • APS 2-yr PPA • [redacted]10-yr PPA • Wild Horse Wind • [redacted]	**#5: (2) PPAs & (1) Wind** • APS 2-yr PPA • [redacted]0-yr PPA • Wild Horse Wind
#2: (3) PPAs • [redacted]22-yr PPA • APS 2-yr PPA • [redacted]10-yr PPA	**#14: (2) PPA & (1) Gas** • APS 2-yr PPA • [redacted]10-yr PPA • [redacted]gas-fired CCCT	**#14: (2) PPA & (1) Gas** • APS 2-yr PPA • [redacted]10-yr PPA • [redacted]gas-fired CCCT
#5: (3) PPAs & (1) Wind • [redacted]22-yr PPA • APS 2-yr PPA • [redacted]0-yr PPA • Wild Horse Wind	**#17: (1) PPA & (1) Gas** • APS 2-yr PPA • [redacted]gas-fired CCCT	**#5: (2) PPAs & (1) Wind** • [redacted]22-yr PPA • APS 2-yr PPA • Wild Horse Wind
#7: Entire Short List • [redacted]2-yr PPA • APS 2-yr PPA • [redacted]0-yr PPA • Wild Horse Wind • Hopkins Ridge Wind • [redacted]Wind • ORMAT Recovered Heat	**#23: (2) PPAs, (2) Wind, (1) Coal, & ORMAT** • APS 2-yr PPA • [redacted]0-yr PPA • Wild Horse Wind - COD Y2007 • Hopkins Ridge Wind - COD Y2007 • ORMAT Recovered Heat • [redacted]COD Y2010	**#36: Proposed Portfolio – (2) PPAs & (2) Wind** • [redacted]2-yr PPA • APS 2-yr PPA • Wild Horse Wind • Hopkins Ridge Wind

REDACTED

PSE then calculated the present values of portfolio costs for each of the representative portfolios. Figure 3E.1 shows the present value of portfolio costs ranked from lowest costs on the left to highest costs on the right.[5]

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[5] The rectangular column in Figure 3E.1 represents the range of portfolio costs that resulted from 100 Monte Carlo iterations of the Base Case scenario -- *i.e.*, the taller the rectangle, the greater the cost range and the higher the cost risk. The lime green triangle represents the portfolio cost of the Reserve Margin scenario before running Monte Carlo simulation. The dark green circle represents the portfolio cost of the Base Case scenario before running Monte Carlo simulation. The black diamond represents the portfolio cost of the Low Gas scenario before running Monte Carlo simulation. Finally, the pink square represents the portfolio cost of the No Cap scenario before running Monte Carlo simulation.

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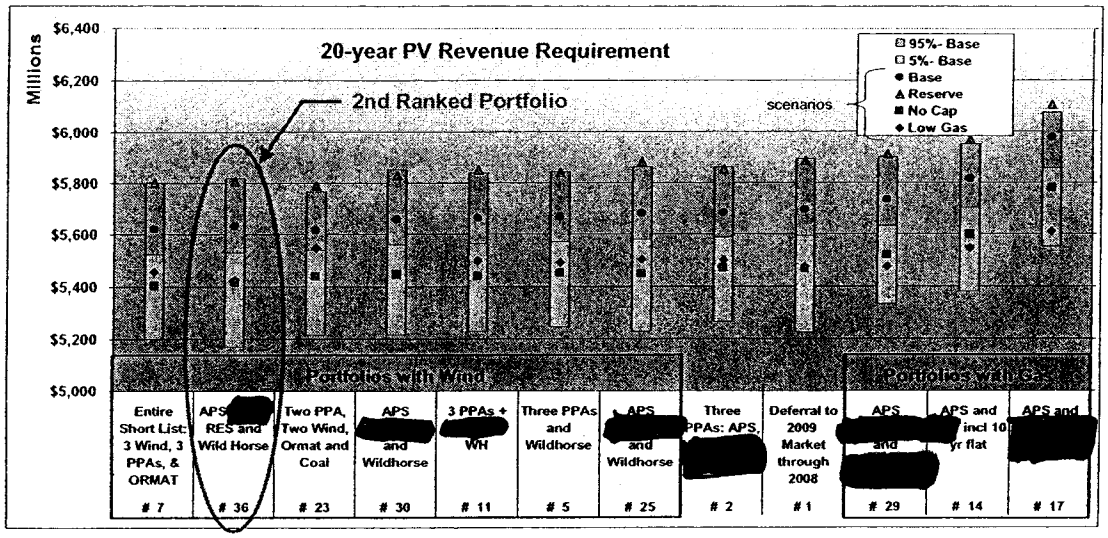
All-Source RFP Evaluation
Stages One and Two

Figure 3E.1



Note: Credit costs for PPAs and gas purchases not included.

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PSE's analysis showed that Portfolio #36 -- composed of the APS, [redacted] RES (Hopkins Ridge), and Zilkha (Wild Horse) proposals --has the second lowest cost in the Base Case scenario and a similarly low cost in the other price scenarios. Portfolio #36 does offer medium risk compared with other portfolios, in part because it only meets half of PSE's resource need in 2008 and is thus exposed to market purchase cost volatility. Figure 3E.2 depicts this analysis.

Figure 3E.2[6]

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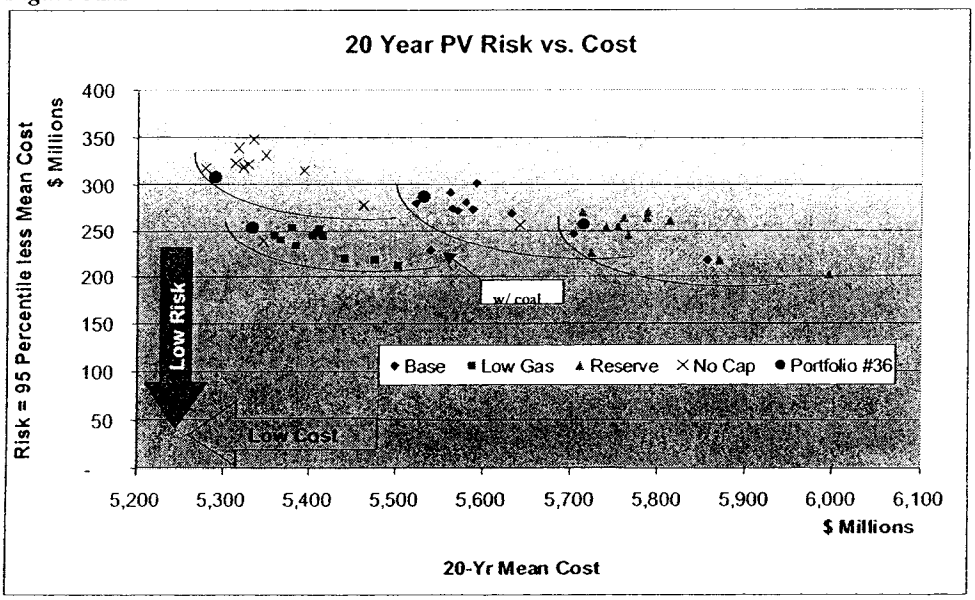

[6] In Figure 3E.2, the "swoosh" indicates the frontier with optimal balance between low cost and low risk. In the Base Case scenario, the swoosh has been drawn above the black diamond data point that represents the portfolio containing coal beginning in 2010.

F. Credit and Accounting Issues

Based on its analysis, PSE determined that the entire short list and most combinations thereof would likely result in a low cost portfolio. On an individual basis, however, the analysis showed that the [redacted] PPA was less attractive. Credit and accounting standard issues adversely affected the economics and overall viability of that proposal. Since PSE and [redacted] were unable to resolve these issues, PSE did not include the [redacted] proposal in the portfolio that it selected.

REDACTED

G. Wind Energy Assessment

During the due diligence phase, PSE determined that the [redacted] project's wind energy production assessment was insufficient. This meant that -- as originally represented by [redacted] -- the project's economics and overall viability could not be supported. PSE therefore decided to place the [redacted] project "on hold" until such time as [redacted] submits a more viable proposal.

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H. Selection of Portfolio

PSE selected Portfolio #36 from the short list as a group of potential acquisition opportunities. Table 3E.2 summarizes the selected portfolio.

Table 3E.2

Project Name	Owner / Developer	Location
2-yr PPA (Centralia Coal Plant)	Arizona Public Service Co.	Centralia, WA
22-yr Seasonal On-Peak PPA [redacted]	[redacted]	[redacted]
Hopkins Ridge Wind Project	RES North America, LLC	Columbia Co, WA
Wild Horse Wind Project	Zilkha Renewable Energy	Kittitas Co, WA
NWPL Sumas Recovered Heat	ORMAT Nevada, Inc.	Sumas, WA

1. APS PPA

PSE determined that the PPA that APS proposed offers significant benefits. The Risk Management Committee approved the APS proposal on June 3, 2004, and PSE and APS signed definitive contracts on June 25, 2004.

2. [redacted] PPA

The [redacted] PPA offers the benefit of a seasonally-shaped, heavy-load only, system-delivered product. The portfolio analysis showed that this PPA lowers PSE's portfolio costs. [redacted] also agreed to an important commercial term that allows a mutual credit pass. PSE and [redacted] have therefore entered into contract negotiations. December 2004 is the target for signing definitive contracts provided that PSE's Board of Directors approves the transaction.

3. Hopkins Ridge Wind Project

The Hopkins Ridge wind project was the lowest-cost wind project according to the ASM. All of the project's qualitative ratings were high with the exception of the inability to secure firm transmission. The portfolio analysis showed that the Hopkins Ridge project lowers PSE's portfolio costs. Further analysis of the transmission constraints showed that the potential for transmission congestion might be manageable. In addition, the Hopkins Ridge project has the greatest potential to reach commercial operations by the end of 2005, which would qualify the project for production tax credits. PSE and RES therefore signed a Letter of Intent on October 29, 2004, for acquisition of the Hopkins Ridge project by PSE. Negotiations for definitive contracts are proceeding.

4. Wild Horse Wind Project

PSE's due diligence showed that the Wild Horse wind project is a viable project, with a desirable location in Kittitas County and a strong potential for receiving timely permits. The portfolio analysis showed that the Wild Horse project lowers PSE's portfolio costs. Although the Wild Horse project requires upgrades to the transmission line (which involve cost and schedule risks), the permitting and engineering for the transmission line upgrades are underway. PSE and Zilkha therefore signed a Letter of Intent on September 1, 2004, for acquisition of the Wild Horse project by PSE. Negotiations for definitive contracts are proceeding.

5. NWPL Sumas Recovered Heat Project

The NWPL Sumas recovered heat project showed a very attractive 20-year levelized-cost according to the ASM. The project's qualitative ratings were also favorable. PSE therefore issued a Letter of Interest to ORMAT on August 18, 2004. PSE and ORMAT are currently developing a term sheet for the transaction, and studies are underway to identify and resolve possible transmission constraints.

2004 'All-Source Generation RFP' Respondent List

Code	Project Unit Nbr	Owner / Developer	Location	Resource	New or Existing	Capacity (MW)	COD	Offers
A01		REDACTED		Wind	New	REDACTED	Dec-05	20-yr PPA or 100% Ownership
A02				Wind	New		Dec-05	20-yr PPA or 50% Ownership
A03				Wind	New		Dec-05	20-yr PPA or 100% Ownership
A04				Wind	New		Jul-05	PPA + Ownership
A05				Wind	New		Aug-05	20-yr PPA or 20-yr PPA + 50% Ownership or 100% Ownership
A06				Wind	New		Feb-06	PPA or 50% PPA + 50% Ownership
A07				Wind	New		Oct-05	20-yr PPA or 100% Ownership
A08				Wind	New		Dec-05	30-yr PPA + 50% Ownership
A09				Wind	New		Dec-06	30-yr PPA + 50% Ownership
A10				Wind	New		Dec-05	30-yr PPA + 50% Ownership
A11				Wind	New		Nov-05	20-yr PPA
A12				Wind	New		Nov-05	20-yr PPA
A13				Hydro	New		May-06	25-yr PPA
A14				Hydro	New		Oct-07	100% Ownership
A15				Biomass (wood)	New		May-06	JV w/ PSE
A16				n/a	Existing		n/a	5-yr PPA
A17				Natural Gas	New		n/a	Equipment Purchase of 3-GE7FA CC Power Islands
A18				Coal	New		Dec-06	100% Ownership
A19				Coal	Existing		n/a	1-yr PPA
A20				Coal	New		late 2008	Up to 100% Ownership
A21				Natural Gas	New		Jul-07	20-yr PPA + 50% Ownership
A22				Natural Gas	New		late 2007	20-yr PPA or 100% Ownership
A23				Natural Gas	New		late 2007	20-yr PPA or 100% Ownership
A24				Natural Gas (PPA Coal)	Existing		Aug-02	10-yr PPA of [redacted] 100% Ownership of [redacted] 10-yr PPA of [redacted]

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Exhibit No. ___ (EMM-9HC)
Page 93 of 139

2004 'All-Source Generation RFP' Respondent List

Code	Project Name	Owner / Developer	Location	Resource	New or Existing	Capacity (MW)	COD	Offers
A25	REDACTED	REDACTED	REDACTED	Natural Gas	Existing	REDACTED	n/a	5-yr PPA
A26				Natural Gas	60% Complete		Nov-05	100% Ownership
A27				Natural Gas	New		Late 2005	20-yr PPA or 100% Ownership
A28				Natural Gas	New		Sep-07	25% or 50% or 70% Ownership (PPA option available)
A29				Natural Gas	New		Dec-05	50% Ownership
A30				Hydro	Existing		late 2006	22-yr PPA
A31				Natural Gas	New		May-07	20-yr PPA + Partial Ownership or 50% Ownership
A32				Natural Gas	Existing		Oct-03	1-yr PPA or 3-yr PPA or 100% Ownership
A33				Natural Gas	New		Nov-06	20-yr PPA or 20-yr PPA + Ownership or 100% Ownership
A34				Natural Gas	New		Apr-08	20-yr PPA or 100% Ownership
A35				Natural Gas	60% Complete		late 2005	100% Ownership
A36				Natural Gas	Existing		n/a	5-yr PPA (25 MWh)
A37				Natural Gas	Existing		Feb-09	100% Ownership or 7.5-yr Lease Renewal
A38				Cogen	New		Jan-07	100% Ownership
A39				Recovered Heat	New		De 2005	20-yr PPA or 100% Ownership
A40				Hydro	New		Mar-05	25-yr PPA
A41				n/a	Existing		n/a	1-yr PPA (100 MWh)
A42				Geothermal	New		Sep-07	20-yr PPA (potential partial ownership)
A43				Natural Gas	Existing		n/a	PPA assignments
A44				Wind	New		Nov-05	20-yr PPA
A45				Biomass (wood)	New		Jun-06	20-yr PPA or 100% Ownership
A46				n/a	Existing		n/a	3 Tolling-based Proposals
A47				Coal	Existing		n/a	Capacity w/ associated energy from [redacted]

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Exhibit No. ___(EMM-9HC)
Page 94 of 139

2004 'All-Source Generation RFP' Respondent List

Code	Project Name	Owner / Developer	Location	Resource	New or Existing	Capacity (MW)	COD	Offers

Summary:

47 - Total Proposals with options for PPA, Ownership and/or Hybrid
39 - Different Owners/Developers

Proposal Breakdown
18 - Natural Gas Projects (10-New & 6-Exisitng & 2-Suspended)
13 - Wind Projects (13-New)
4 - Hydro Projects (3-New & 1-Existing)
4 - Coal Projects (2-New & 2-Existing)
3 - Non-specific Power Purchases
2 - Biomass (wood) Projects (2-New)
1 - Co-generation Project (1-New)
1- Geothermal Project (1-New)
1 - Recovered Heat Project (1-New)

33 - New Projects
12 - Exisitng Projects
2 - Suspended Projects

12 - Wind Projects Re-Submitted from '2004 Wind RFP'
1 - New Wind Project

Options Breakdown
24 - PPA and/or Ownership
13 - PPA only
9 - Ownership only

Evaluation Criteria		Explanation of Criteria
Compatibility with PSE Resource Need		
A	1. Timing	• Proposals which are available early in the acquisition time period (2005 through winter '07/'08) are preferred. • Proposals that provide substantial assurances of being commercially available in 2005 are preferred.
	2. Resource match to monthly need	• Proposals where generation from the underlying generation asset closely match PSE's monthly energy requirements or whose output can be controlled by PSE are preferred over those which rely on shaping through short- or long-term arrangements.
	3. Match to monthly need through contract	• Proposals that provide a fixed annual price to shape the underlying generation asset output to PSE monthly energy requirements are preferred. • PSE will not consider proposals for contractual shaping that are tied to an energy price index. Contracts for a term of 3 or more years are preferred.
	4. Operational Flexibility	• Proposals that provide PSE control of project output acceptable to PSE to respond to seasonal & real-time fluctuations in load/resource balance and system reliability events are preferred. • This includes, for example, dispatch or displacement of the project in real-time and, for jointly–owned projects, the ability for PSE to elect to use for reliability purposes generation output that would otherwise have been displaced by the other owner.

Evaluation Criteria		Explanation of Criteria
Cost Minimization		
B	1. Resource price	• PSE prefers those proposals that satisfy its other evaluation criteria at the lowest cost throughout the project life.
	2. Transmission	• PSE prefers firm delivery of energy to its service area (particularly at points on its system at which the deliveries may be effected and used to serve load with no or limited transmission congestion). • In the absence of assurance at the time of proposal of such firm delivery, PSE prefers proposals that provide a high likelihood of acquiring adequate transmission rights to such points. • Proposals that do not include firm transmission to such points, that would produce congestion or that would increase PSE's transmission costs will be compared unfavorably with other proposals and/or will be assessed the additional cost to PSE.

Evaluation Criteria		Explanation of Criteria
Risk Management		
C	1. Status & Schedule	• All other things being equal, PSE prefers operating projects first, projects under construction second, and development projects third. With respect to development projects, respondent proposals that are able to demonstrate they have the experience and financial resources to complete the project and have made significant progress in securing necessary permits, property rights, equipment, regulatory approvals, water rights, wastewater and disposal rights, project agreements and all other rights or arrangements necessary for a completely commercially operational project within the time proposed for commercial operation are preferred.
	2. Price Volatility	• Proposals that provide significant long-term control of fixed and variable costs are preferred.
	3. Resource Flexibility and Stability	• Proposals that provide flexibility to expand to meet PSE's growing needs or to be deferred as required are preferred. • Proposals that include project agreements and all other rights and arrangements coterminous with power purchase delivery periods or project life are preferred.
	4. Resource Technology	• Proposals that are based on commercially proven technology with demonstrated long-term reliability and performance history are preferred. • Proposals that are based on technologies whose output may be controlled are preferred.
	5. Long-term Flexibility	• Proposals that provide PSE the flexibility to adjust its position in a resource long-term up to and including termination are preferred.
	6. Project Risk	• Proposals that involve minimal risk for timely plant completion within cost projections are preferred. • Proposals that minimize exposure to environmental risk or other potential liability are preferred.

Evaluation Criteria		Explanation of Criteria
Public Benefits		
D	1. Environmental Impacts	• Proposals with lower environmental impacts are preferred. Environmental impacts refer to the full range of issues evaluated in an environmental impact statement (EIS) or environmental assessment (EA).
	2. Resource Location	• Proposals that are located such that they provide benefits to the regional and PSE transmission system or require minimal or no transmission upgrades are preferred. • Proposals that are not dependent upon constrained transmission or fuel transportation paths are preferred. • Proposals that are located such that they are within PSE's control area are preferred.
	3. Community Impacts	• Proposals that demonstrate support from public, local, state and federal government entities and Native American nations, if applicable, are preferred.
Strategic & Financial		
E	1. Capital Structure Impacts	• Proposals are preferred that do not increase PSE's exposure to adverse impact on its financial position (e.g., by requiring PSE to impute debt, by otherwise adversely affecting PSE's financial leverage, operating leverage, credit rating, cash flow, income statement or balance sheet, or by imposing credit requirements).
	2. Future exposure to environmental regulations and/or taxes.	• Proposals for resources with lower potential exposure to future environmental regulations and/or taxes are preferred.

STAGE 2 EVALUATION CRITERIA	EXPLANATION OF CRITERIA
A. Compatibility with PSE Resource Need	
A1. Performance Within Existing PSE Generation Portfolio	Analyses in this stage of evaluation will include such factors as system dispatch and displacement, termination rights, location with respect to the regional transmission system and PSE's electric system, impacts on system reserves, load following, integration costs and other factors as appropriate.
A2. Timing	Proposals which individually and in combination best meet PSE's need for energy from 2005 through winter '07/'08 time period are preferred. Proposals that provide flexibility in their development time-line are preferred.
A3. Resource Mix/Diversity	The diversity of resource technology and fuel types will be considered consistent with PSE's Least Cost Plan and the RFP. Specific considerations include: • technology type • fuel supply type • fuel supply source • fuel supply reliability & deliverability
B. Cost Minimization	
B1. Cost Impact	Proposals and combinations of proposals that result in the lowest impact on PSE's revenue requirements and rates when included into PSE's existing generation resource portfolio are preferred.

STAGE 2 EVALUATION CRITERIA	EXPLANATION OF CRITERIA
C. Risk Management	
C1. Impact on PSE Overall Risk Position	Proposals and combinations of proposals will be evaluated to determine the impact of the proposal(s) on the overall risk position with respect to PSE's generation asset base. Risk scenarios will include such factors as hydroelectric production variation, fuel price volatility and price scenarios, and market price volatility and price scenarios. Other considerations will include exposure to transmission congestion and costs. All other factors being equal, PSE prefers proposals that result in lower generation portfolio performance risk.
C2. Environmental and Permitting Risk	Proposals will be evaluated considering their status in acquiring needed permits and the risk associated with further environmental regulation and taxes.
C3. Respondent Risk	PSE will consider the information received in response to Section 5.4 and Section 7 to this RFP in determining risk associated with the financial condition of and performance by a respondent and any third parties depended upon by respondent. Lower-risk respondents are preferred.
C4. Ability to Deliver As Proposed (Development Status & Schedule)	Information submitted by respondents in response to Section 5.7 will be used to evaluate the ability of the respondent to meet the commercial operation date proposed.

STAGE 2 EVALUATION CRITERIA	EXPLANATION OF CRITERIA
C. Risk Management (continued)	
C5. Ability to Deliver As Proposed (Experience & Qualification of the Project Team)	An important consideration in judging the ability of a respondent to provide a commercially operable project in the time frame proposed is the experience and qualifications of the entire project team as further detailed in Section 5.7. PSE will use the information that is provided in response to Section 5.7 to evaluate the respondent team for this criterion. PSE prefers providers that have proven track records.
C6. Status of Transmission Rights	The ability to transmit power from the project site to one or more points on PSE's electric system is a requirement (particularly to points on its system at which the deliveries may be effected and used to serve load with no or limited transmission congestion). PSE will use information provided in Section 5.6 of the RFP to assess whether and to what extent required transmission will be available and whether and to what extent the necessary transmission paths are subject to constraint.
C7. Security & Control	Proposals that supply firm, fixed price fuel supply are preferred. Proposals that provide for other methods of managing price volatility will be favorably considered. Proposals that supply firm energy and capacity are preferred.

STAGE 2 EVALUATION CRITERIA	EXPLANATION OF CRITERIA
D. Public Benefits	
D1. Environmental Impacts	PSE will further consider the environmental impacts of a proposed acquisition. PSE will consider information supplied in response to Sections 5.2 and 5.8.
E. Strategic & Financial	
E1. Guarantees & Security	PSE will consider the information provided in response to Section 5.4 of their proposal in determining whether it will require any additional guarantees or security pursuant to Section 7 of this RFP.

All-Source RFP Evaluation
Summary of Proposals

47 - Proposals with options for PPA, Ownership and/or Hybrid
39 - Owners/Developers

- 18 - Natural Gas
- 13 - Wind
- 4 - Hydro
- 4 - Coal
- 3 - Non-Specific
- 2 - Biomass
- 1 - Cogeneration
- 1 - Geothermal
- 1 - Recovered Heat

Note: Summary is based on initial draft figures from bid opening.

All-Source RFP Evaluation

Stage 1: Short List Selection Process

- Level 1 screening identified 13 low priority projects and moved them to a "Constrained" list
- Acquisition Screening Model (ASM) Cost Ranking
- Qualitative Evaluation Ratings
- Combined the review and ratings of each:
  - ASM Cost Ranking
  - Qualitative Evaluation Ratings
- Determination and Review of "Most Favorable" Projects
- Selection to Short List vs. "Continual Investigating" List
- 7 Projects selected to the Short List for Stage 2 Evaluation

All-Source RFP Evaluation

Acquisition Screening Model (ASM) Components

ASM Resource Project Cost: Levelized cost of acquisition or PPA over twenty years of length of proposal / project which is based upon the following inputs:

Plant characteristics:

- Capacity
- Heat rate
- Maintenance outage schedule
- Forced outage rate
- Sample 8760 hour generation profile for wind projects
- Book and tax depreciation rates
- Emission rates for SO2, NOX, and CO2

Plant Cost Data:

- Capital cost including AFUDC and deal transaction costs
- Fixed O&M per kw of capacity.
- Fixed A&G costs per kw of capacity (this will include property taxes and insurance)
- Variable O&M per MWh
- Fuel transportation costs including fixed pipeline and lateral charges as well as pipeline commodity charges plus fuel use (losses) and Washington State use tax.
- Fixed and variable transmission costs including wheeling, ancillary services and imbalance or integration costs.

PPA Cost Data:

- PPA fixed prices and escalation
- PPA variable prices, and or variable adders
- Transmission costs fixed and variable
- Tolling: fixed and variable gas transportation, variable O&M strike price, seasonal and maintenance outage forecast, forced outage rate.

Other Assumptions:

- Costs of borrowing debt and equity capital. Uses the weighted average cost of capital for levelizing costs.
- Natural gas price = same as input to AURORA5
- Power price = hourly output from AURORA5
- Trading values of emissions
- Imputed debt risk percentage
- Production tax credits for qualifying renewable projects

All-Source RFP Evaluation

Stage 1: Evaluation Summary Matrix by Type

Costs Very Attractive

Rating mainly reflects undeveloped status of the proposal

PROPOSALS			STAGE 1 EVALUATION SUMMARY by TEAM									(as of May 13, 2004)
Code	Type	Project Name	Project Levelized Cost ($ / MWh)	20-yr Expected Cost ($ / MWh)	Levelized Capacity Factor	Business / Commercial [A-B-C-D-E]	Fuel Supply [C1-C2-D2]	Transmission [B2 - C1 - D2]	Technical [C4]	Real Estate [C1-C6-D2]	Environmental [C1-C6-D1-E2]	Community [D3]
ALTERNATE FUEL												
A15	BG					LOW	LOW	LOW-MEDIUM	MEDIUM	LOW	LOW	HIGH
A39	HR					MEDIUM	HIGH	LOW-MEDIUM	HIGH	LOW	HIGH	HIGH
~~A45~~	~~BG~~											
~~A42~~	~~CT~~											
~~A14~~	~~H~~											

REDACTED

Higher Costs and/or on "Constrained" List

All-Source RFP Evaluation

Stage 1: Evaluation Summary Matrix by Type

On-Peak Product (See Next Slide)

Costs Very Attractive and Qualitative Ratings are Highly Favorable

PROPOSALS			STAGE 1 EVALUATION SUMMARY by TEAM									(as of May 13, 2004)
Code	Type	Project Name	Project Levelized Cost ($ / MWh)	20-yr Expected Cost ($ / MWh)	Levelized Capacity Factor	Business / Commercial [A-B-C-D-E]	Fuel Supply [C1-C2-D2]	Transmission [B2 - C1 - D2]	Technical [C4]	Real Estate [C1-C6-D2]	Environmental [C1-C6-D1-E2]	Community [D3]
POWER PURCHASE - Long-Term (>10yrs)												
A24b	C	[redacted]				HIGH	HIGH	VERY HIGH	N/A	N/A	MEDIUM-HIGH	HIGH
A30	H					HIGH	N/A	MEDIUM	N/A	N/A	MEDIUM-HIGH	N/A
~~A43~~	~~C~~					~~MEDIUM~~	~~MEDIUM~~	~~LOW-MEDIUM~~	~~N/A~~	~~N/A~~	~~MEDIUM-HIGH~~	~~HIGH~~
~~A13~~	~~H~~							~~MEDIUM~~	~~MEDIUM~~	~~MEDIUM~~	~~LOW-MEDIUM~~	~~N/A~~
~~A40~~	~~H~~							~~LOW~~	~~LOW~~	~~LOW~~	~~LOW~~	~~MEDIUM~~
POWER PURCHASE - Short-Term (<10yrs)												
A19	C	[redacted]				HIGH	HIGH	VERY HIGH	HIGH	N/A	MEDIUM-HIGH	HIGH
~~A32c~~	~~C~~					~~HIGH~~	~~MEDIUM~~	~~MEDIUM~~	~~HIGH~~	~~N/A~~	~~HIGH~~	~~HIGH~~
~~A16~~	~~C~~							~~N/A~~	~~N/A~~	~~N/A~~	~~HIGH~~	~~N/A~~
~~A32b~~	~~C~~							~~HIGH~~	~~N/A~~	~~N/A~~	~~HIGH~~	~~HIGH~~
~~A25b~~	~~C~~					~~MEDIUM~~	~~MEDIUM HIGH~~	~~LOW~~	~~N/A~~	~~N/A~~	~~MEDIUM~~	~~HIGH~~
~~A25c~~	~~C~~					~~MEDIUM~~	~~MEDIUM HIGH~~	~~LOW~~	~~N/A~~	~~N/A~~	~~MEDIUM~~	~~HIGH~~
~~A46~~	~~C~~					~~MEDIUM~~	~~LOW~~	~~N/A~~	~~N/A~~	~~N/A~~	~~HIGH~~	~~N/A~~
~~A47~~	~~C~~					~~HIGH~~	~~HIGH~~	~~VERY LOW~~	~~N/A~~	~~N/A~~	~~LOW-MEDIUM~~	~~N/A~~
~~A36~~	~~C~~					~~MEDIUM~~	~~LOW~~	~~MEDIUM~~	~~LOW~~	~~N/A~~	~~HIGH~~	~~N/A~~
~~A41~~	~~C~~					~~LOW~~	~~N/A~~	~~N/A~~	~~N/A~~	~~N/A~~	~~MEDIUM~~	~~N/A~~

[redacted]

Higher Costs and/or on "Constrained" List

Higher Costs and/or on "Constrained" List

[redacted]

Gray Shade = "Constrained" List

REDACTED

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All-Source RFP Evaluation

Stage 1: Selection of A30: Powerex PPA

- Acquisition Screening Model (ASM) used to quantify costs of All-Source proposals does not capture portfolio benefits of non-standard offer that is tailored to PSE's seasonal needs as stated in the All-Source RFP, e.g. [redacted] PPA.
- [redacted] offered On-Peak power during September through March.
- Recommendation to take this offer through to Short List to be evaluated by Portfolio Screening Model (PSM).
- On-Peak AURORA5 forecasted prices during September - March were compared to the [redacted] PPA original proposed contract prices. On a PV basis the [redacted] contract was about $[redacted] /MWh lower than assumed market prices.
- Given the above, [redacted] PPA merited further consideration in Stage 2 evaluation; therefore, selected for Short List.

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All-Source RFP Evaluation

Stage 1: Evaluation Summary Matrix by Type

Cost Attractive but Transmission is Constrained

PROPOSALS			STAGE 1 EVALUATION									(as of May 13, 2004)
Code	Type	Project Name	Project Levelized Cost ($ / MWh)	20-yr Expected Cost ($ / MWh)	Levelized Capacity Factor	Business / Commercial [A-B-C-D-E]	Fuel Supply [C1-C2-D2]	Transmission [B2 - C1 - D2]	Technical [C4]	Real Estate [C1-C6-D2]	Environmental [C1-C6-D1-E2]	Community [D3]
THERMAL (Natural Gas, Coal, Cogen)												
A20	C					MEDIUM	LOW	VERY LOW	LOW	LOW	HIGH	N/A
A29	G					MEDIUM	MEDIUM-HIGH	LOW-MEDIUM	LOW	MEDIUM	MEDIUM-HIGH	N/A
A26	G					LOW	[illegible]	[illegible]	[illegible]	[illegible]	MEDIUM	HIGH
A35	G					MEDIUM					MEDIUM	MEDIUM
A24a	G					HIGH					W-MEDIUM	HIGH
A28	G					MEDIUM					EDIUM-HIGH	LOW
A32a	G					HIGH	MEDIUM	MEDIUM	HIGH	N/A	HIGH	HIGH
A22	G					MEDIUM	MEDIUM-HIGH	LOW-MEDIUM	MEDIUM	MEDIUM	MEDIUM	HIGH
A21	G					MEDIUM	MEDIUM-HIGH	MEDIUM	HIGH	HIGH	MEDIUM-HIGH	HIGH
A23	G					MEDIUM	MEDIUM	LOW-MEDIUM	LOW	MEDIUM	MEDIUM	HIGH
A38	C					MEDIUM	LOW	MEDIUM	LOW	MEDIUM	MEDIUM	MEDIUM
A17	C					LOW	N/A	N/A	LOW	N/A	MEDIUM	MEDIUM
A18	IG					LOW	LOW	HIGH	LOW	MEDIUM	LOW	LOW
A27	G					LOW	LOW	VERY LOW	LOW	MEDIUM	LOW	N/A
A31	G					MEDIUM	HIGH	VERY LOW	N/A	LOW	HIGH	N/A
A33	G					MEDIUM	MEDIUM-HIGH	VERY LOW	MEDIUM	LOW	MEDIUM	N/A
A34	G					LOW	HIGH	LOW	MEDIUM	MEDIUM	MEDIUM-HIGH	LOW
A37	G					LOW	HIGH	HIGH	LOW	N/A	HIGH	HIGH

REDACTED

Best Natural Gas Projects' Qualitative Ratings are Favorable but Costs Range $[redacted] to $[redacted]

Higher Costs and/or on "Constrained" List

40 Gray Shade = "Constrained" List Board of Directors Meeting // December 15, 2004

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All-Source RFP Evaluation

Stage 1: Evaluation Summary Matrix by Type

Costs Attractive and Ratings are Highly Favorable

Costs Attractive but Wind Energy Assessment Rates as "Non-Financable"

PROPOSALS			STAGE 1 EVALUATION SUMMARY by TEAM										(as of May 13, 2004)
Code	Type	Project Name	Project Levelized Cost ($ / MWh)	20-yr Expected Cost ($ / MWh)	Levelized Capacity Factor	Business / Commercial [A-B-C-D-E]	Fuel Supply [C1-C2-D2]	Transmission [B2 - C1 - D2]	Technical [C4]	Real Estate [C1-C6-D2]	Environmental [C1-C6-D1-E2]	Community [D3]
WIND												
A03	W					HIGH	MEDIUM	LOW	HIGH	MEDIUM	HIGH	HIGH
A07	W					MEDIUM	LOW	LOW	LOW	LOW	MEDIUM-HIGH	MEDIUM
A02b	W					MEDIUM	MEDIUM	HIGH	MEDIUM	MEDIUM	HIGH	HIGH
A06	W					HIGH	MEDIUM	MEDIUM-HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM
A08	W					MEDIUM	LOW	MEDIUM-HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM
A01	W					LOW	MEDIUM	HIGH	MEDIUM	MEDIUM	MEDIUM	LOW
~~A10~~	~~W~~											
~~A09~~	~~W~~											
~~A05~~	~~W~~											
~~A02a~~	~~W~~											
~~A04~~	~~W~~											
~~A11~~	~~W~~											
~~A12~~	~~W~~											

REDACTED

Higher Costs and/or on "Constrained" List

High Permitting Risk due to [redacted]

41 Gray Shade = "Constrained" List Board of Directors Meeting // December 15, 2004 PUGET SOUND ENERGY

REDACTED

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Exhibit No. ___(EMM-9HC)
Page 111 of 139

All-Source RFP Evaluation

Stage 1: "Most Favorable" Projects Matrix

Code	Type	Project Name	Owner / Developer	Proposal Option	Location	Status	Capacity (MW)	COD	Project Levelized Cost ($ / MWh)	20-yr Expected Cost ($ / MWh)	Levelized Capacity Factor
									(as of May 13, 2004)		
ALTERNATE FUEL											
A15	BG	REDACTED		JV w/ PSE	REDACTED	Development		May-06	REDACTED		
A39	HR			100% Ownership		Development		Dec-05			
POWER PURCHASE											
A19	C	REDACTED		2-yr PPA	REDACTED	Operating	REDACTED	n/a	REDACTED		
A24b	C			10-yr PPA 100 to 200 MW [redacted]		Operating		n/a			
A30	H			2-yr Bridge + 20-yr Seasonal On-Peak PPA		Operating / Development		late 2006			
THERMAL (Natural Gas, Coal, Cogen)											
A20	C	REDACTED		100% Ownership	REDACTED	Development	REDACTED	late 2008	REDACTED		
A29	G			50.2% Ownership w BPA Transmission		Development		Dec-05			
A26	G			100% Ownership		Suspended		Nov-05			
A35	G			100% Ownership		Suspended		late 2005			
A24a	G			100% Ownership o[redacted] 10-yr PPA 100		Operating		Aug-02			
A28	G			70% Ownership		Development		Sep-07			
A32a	G			100% Ownership		Operating		Oct-03			
WIND											
A03	W	REDACTED		100% Ownership	REDACTED	Development	REDACTED	Dec-05	REDACTED		
A07	W			20-yr PPA or 100% Ownership		Development		Oct-05			
A02b	W			100% Ownership		Development		Dec-05			
A06	W			50% PPA + 50% Ownership		Development		Feb-06			
A08	W			30-yr PPA + 50% Ownership		Development		Dec-05			
A01	W			100% Ownership		Development		Dec-05			

All-Source RFP Evaluation

Stage 1: Significant Comments & Decision

Code	Type	Project Name	Owner / Developer	Project Levelized Cost ($ / MWh)	Significant Comments (as of May 13, 2004)	DECISION
ALTERNATE FUEL						
A15	BG	[redacted]			*Very early stages of development *Fuel Supply Plan not fully developed *Very little emissions data. Assumes that only cleanup will be paticulates. *BFB supposed to cut NOx and convert CO to CO2.	"Continual Investigating"
A39	HR	**Sumas Recovered Heat**	ORMAT		*Need to decide if PSE Ownership is a feasible option *PPA is not attractively priced	"SHORT-LIST"
POWER PURCHASE						
A19	C	**APS - Centralia 2-yr PPA**	Arizona Public Service (APS)		*Reviewed & Evaluated by EPM *Recommendation is to Pursue *Product has many benefits: provides reliability, good exchange value, and loss savings *Price is DJ Mid-C Index minus $0[redacted]MWh	"SHORT-LIST"
A24b	C	[redacted]10-yr PPA			*Low Cost & Low Risk PPA	"SHORT-LIST"
A30	H	[redacted] 22-yr Seasonal On-Peak PPA			*On Peak PPA is worth evaluating in the Portfolio Model *May be about $[redacted]wer than assumed market prices	"SHORT-LIST"

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All-Source RFP Evaluation

Stage 1: Significant Comments & Decision

Code	Type	Project Name	Owner / Developer	Project Levelized Cost ($ / MWh)	Significant Comments (as of May 13, 2004)	DECISION
THERMAL (Natural Gas, Coal, Cogen)						
[redacted]					*Not expected to get service agreement without improvements through West of Hatwai. *Must assume that PSE can live with non-firm transmission or wait for more Cross Cascades transmission *Contains a coal supply proposal from the adjacent mine but [redacted] The extent of reserves are known but may require the plant owner(s) to operate the mine as well	"Continual Investigating"
A29	G				[redacted] involvement (optional) makes transaction look like a tolling deal. *The [redacted] turbine represents a major development effort on the part of [redacted] to resolve combustion and cooling issues; this turbine may present significant risks to long-term operation.	"Continual Investigating"
A26	G				[redacted] filed [redacted] Bankruptcy in [redacted] *No transmission request in BPA queue; Cross Cascades path is expected to sell out before contract is offered	"Continual Investigating"
A35	G				*Project attractively priced *Fixed fuel charges of approx. [redacted]M/month *No transmission request in; two constraints on I-5, others in queue will use capacity	"Continual Investigating"
A24a	G				*LM6000 units with quickstart capability may have optionality and/or capacity value *Concern with [redacted] permit and [redacted]	"Continual Investigating"
A28	G				*PSE Interconnection will be extremely expensive *BP very high in queue, should receive a transmission offer shortly. Their path to John Day has higher impacts than delivering the power to PSE *CT technology is a concern; Users are just getting to the first combustion inspections and only one has reached the hot gas path interval. None have reached the 48k hour major inspection yet	"Continual Investigating"
A32a	G				*Attractive plant	"Continual Investigating"

REDACTED

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All-Source RFP Evaluation

Stage 1: Significant Comments & Decision

Code	Type	Project Name	Owner / Developer	Project Levelized Cost ($ / MWh)	Significant Comments (as of May 13, 2004)	DECISION
WIND						
A03	W	Hopkins Ridge	RES		Transmission Constraints: *Wrong side of the 'West of McNary' cutplane; Not expected to get service agreement without completion of McN - JDA. *The project is too low in the transmission queue to have any certainty of receiving firm transmission. *Must assume that PSE can live with nonfirm transmission	"SHORT-LIST"
A07	W				*Non-Financable: Rated "LOW" in the Wind Data and Energy Assessment evaluation *No transmission requested on BPA, way down in queue; Cross Cascades path is expected to sell out before contract is offered *No formal easements or leases in place for [redacted]	"Continual Investigating"
A02b	W				*Second Ranked Project in Wind RFP *Most significant issue is likelihood of EFSEC pre-emption request	"SHORT-LIST"
A06	W				*First Ranked Project in Wind RFP *Currently pursuing through due diligence *Began commerical discussions	"SHORT-LIST"
A08	W				*Non-Financable: Rated "LOW" in the Wind Data and Energy Assessment evaluation	"Continual Investigating"
A01	W				Permit Obstables: [redacted] creates strong negative reaction to the project *The County intends to oppose the project and [redacted]	"Continual Investigating"

REDACTED

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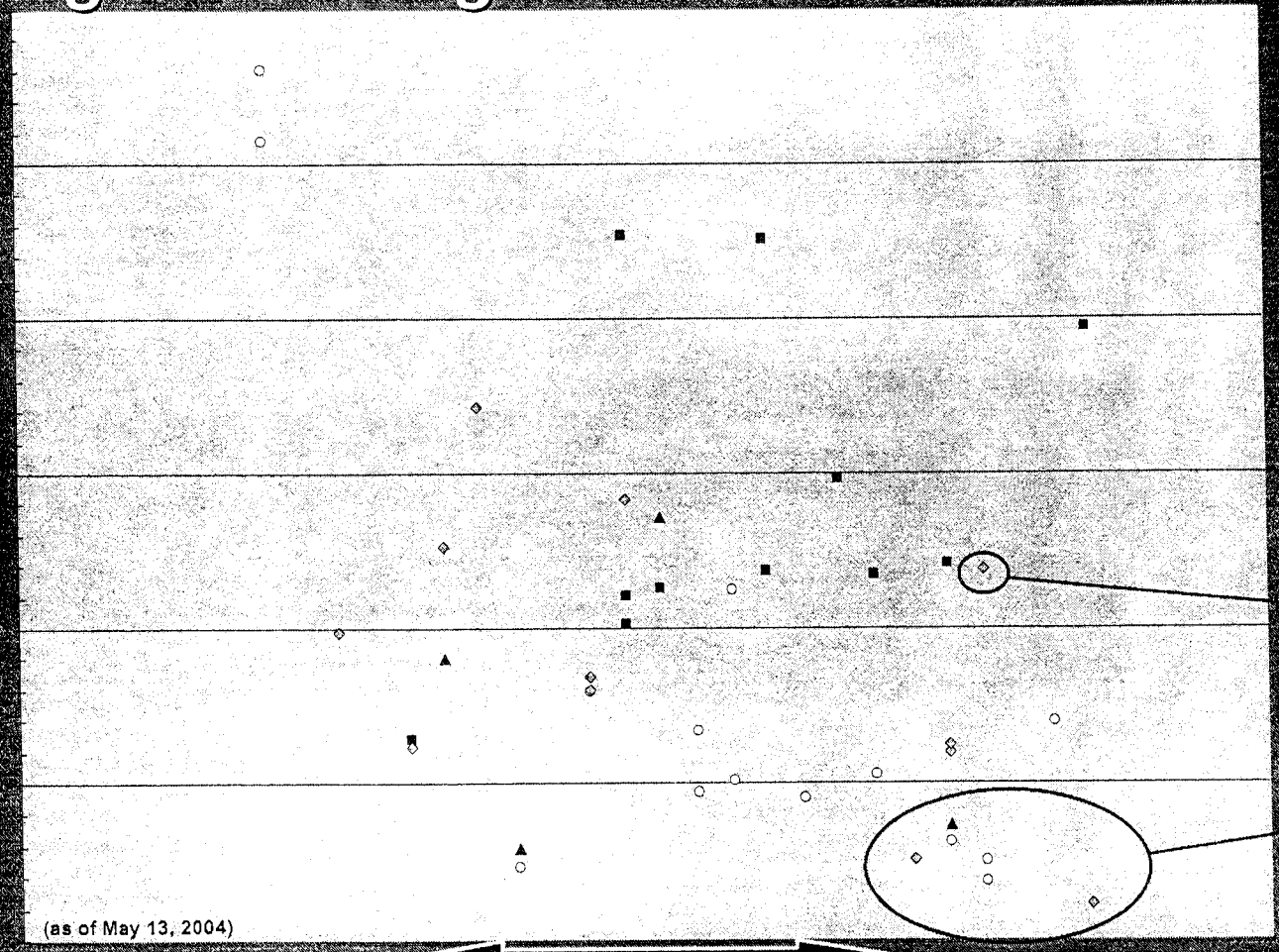
All-Source RFP Evaluation

Stage 1: Rating vs. Cost Distribution (ASM)



Notes:
(1) The levelized cost reflects the original proposal offers.
(2) This chart is for graphical illustration purposes. Evaluation Ratings for this chart weigh all evaluation ratings equally; however, each criteria is evaluated on its own risk.

All-Source RFP Evaluation

Stage 1: Short List Selection for Stage 2

- Short Listed projects were both "Low Cost" and evaluated as "Low Risk" through the integrated assessment of qualitative criteria that led to natural groupings.

- Diverse projects selected to the Short List include:
  - (1) Alternate fuel (recovered heat from gas compressors)
  - (2) Coal PPAs (10-yr & 2-yr terms)
  - (1) [redacted]PPA (22-yr On-Peak Winter Only)
  - (3) Wind projects (3 of 4 from Wind RFP Short List)

- Given current forecasted high gas prices, no gas projects selected for Stage 2 evaluation.

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All-Source RFP Evaluation

Stage 1: Short List Selection

Project Name (as of May 13, 2004)	Owner / Developer	Location
2-yr PPA (Centralia Coal Plant)	Arizona Public Service Co.	Centralia, WA
22-yr Seasonal On-Peak PPA	[redacted]	[redacted]
10-yr PPA [redacted] Coal [redacted]	REDACTED	
Hopkins Ridge Wind Project	RES North America, LLC	Columbia Co, WA
Wild Horse Wind Project	Zilkha Renewable Energy	Kittitas Co, WA
[redacted]	[redacted]	[redacted]
NWPL Sumas Recovered Heat	Ormat Nevada, Inc.	Sumas, WA

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All-Source RFP Evaluation

Stage 2: Short List Evaluation Summary

PROPOSAL	STAGE 2 EVALUATION CRITERIA QUALITATIVE RATINGS (as of June 26, 2004)				
Project Name Owner / Developer	**[A] Compatibility with Need**	**[B] Cost Minimization**	**[C] Risk Management**	**[D] Public Benefits**	**[E] Strategic & Financial**
2-yr PPA (Centralia Coal Plant) Arizona Public Service Co.	High	High	High	High	High
22-yr Seasonal On-Peak PPA [redacted]	High	High	Medium	High	Medium
10-yr PPA [redacted] Coal [redacted]	High	High	High	High	Low
Hopkins Ridge Wind Project RES North America, LLC	Medium	High	High	High	Medium
Wild Horse Wind Project Zilkha Renewable Energy	High	High	Medium	High	Medium
[redacted]	High	High	Medium	Medium	Medium
NWPL Sumas Recovered Heat Ormat Nevada, Inc.	High	High	Medium	High	High

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All-Source RFP Evaluation

Short List Review Summary

Project Name - Counterparty	Key Evaluation Results	Current Status (as of 11/09/04)
PPA 2-year (Centralia) - Arizona Public Service Co.	➢ Reviewed & evaluated by Energy Portfolio Management group ➢ Recommendation to pursue	➢ Approved by RMC on June 3, 2004 ➢ Executed agreement on June 25, 2004
PPA 22-year [redacted] REDACTED	➢ Seasonally shaped, on peak hours only, firm system delivery ➢ Lowers portfolio cost ➢ Responsive to PSE's seasonal needs as stated in the All-Source RFP	➢ [redacted] accepted proposed "mutual pass on credit and collateral posting" on [redacted] ➢ Target PPA execution December 2004
PPA 10-year [redacted]	➢ Low evaluated cost without credit ➢ Qualitative ratings favorable ➢ Portfolio costs are high	➢ Counterparty risk ➢ PSE's inability to post credit
NWPL Sumas Recovered Heat Project - Ormat Nevada, Inc.	➢ Cost is attractive ➢ May have transmission constraints	➢ Issued "Letter of Interest" ➢ Developing draft term sheet ➢ Transmission studies underway

Continued...

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All-Source RFP Evaluation

Short List Review Summary (continued)

Project Name - Counterparty	Key Evaluation Results	Current Status (as of 11/09/04)
Hopkins Ridge - RES North America, LLC	➢ Lowest cost wind project ➢ Lowers portfolio cost ➢ Firm transmission not currently available	➢ Signed LOI on October 29, 2004 ➢ Transmission congestion potential appears manageable ➢ Pursuing short-term firm transmission solution
Wild Horse - Zilkha Renewable Energy	➢ Good wind energy resource ➢ Lowers portfolio cost ➢ Most acceptable Kittitas Valley location ➢ Upgrades to IP line required	➢ Signed LOI on September 1, 2004 ➢ Zilkha is working cooperatively to obtain county approvals in state permit process ➢ IP line upgrade permitting and engineering underway
REDACTED	➢ Initially, low cost wind project ➢ Local permit process developed county permit staff support	➢ Due diligence revealed significant wind resource deficiency ➢ [redacted] Planning Commission rejected the project

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Exhibit No. ___(EMM-9HC)
Page 121 of 139

All-Source RFP Evaluation

Summary of Recommended Portfolio

Project Name (as of 11/09/04)	Owner / Developer	Location
2-yr PPA (Centralia Coal Plant)	Arizona Public Service Co.	Centralia, WA
22-yr Seasonal On-Peak PPA [redacted]	[redacted]	
Hopkins Ridge Wind Project	RES North America, LLC	Columbia Co, WA
Wild Horse Wind Project	Zilkha Renewable Energy	Kittitas Co, WA
NWPL Sumas Recovered Heat	ORMAT Nevada, Inc.	Sumas, WA

- The conclusion of the final quantitative analysis showed that the entire short list and most combinations thereof would present a low cost portfolio.
- However, on an individual basis the analysis showed that the [redacted] PPA, unlike the other short-listed proposals, became less attractive after the portfolio costs proved to be high. Furthermore, credit issues and accounting standard practices adversely effect the economics and viability of the [redacted] proposal. The counterparty risks and the credit impacts proved to be unacceptable obstacles.
- During the due diligence of the [redacted] wind project, the wind energy production assessment was found to be insufficient which adversely effected the economics of the project. At this time the proposal will be placed on hold until [redacted] reassess their project and resubmits a viable proposal.

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Portfolio Analysis

Stage 2 : Process & Strategy

- Revisit LCP 2003 Generic Resource Strategy

  Step 1

  - Update PSM model
    - Add wind variability logic (similar to Stage 2 of wind evaluations)
    - Update generic plant assumptions (all-in cost, O&M, outage rate, heat rate, etc.)
    - Update variability of power price and gas price
    - Update coal market prices

  Step 2

  - Run Aurora optimization with new generic plant assumptions

  Step 3

  - Run PSM with new commodity prices, generic assumptions and price and wind variability for the generic portfolios to revisit the LCP 2003 strategy

- Determine optimum portfolio combination of All-Source Short-listed projects using updated PSM, RFP offers, and generic resources filling resource shortfalls in future years.
- Stress test portfolios in alternative price scenario environments.

Portfolio Analysis

PSM Generic Resource Assumption Changes

Review of 2003 LCP resource strategy yielded following changes in generic resource assumptions in the Portfolio Screening Model:

	2003 LCP	2004 Acquisition Analysis
Market Purchases	N/A Market only used to balance hourly loads and resources	2005-2008 Any resource need not met through specific resource additions was met through market purchases
Joint Ownership of CCCT by PSE and IPP	2004 – 2011 Assumed PSE could share ownership if PSE was surplus power in the summer months	N/A RFP bids did not confirm this relatively low cost sharing of CCCT generation
Wind	~10% portfolio energy by 2013 No capacity credit	~10% portfolio energy by 2012 Capacity Credit ~ 20% Capacity
Wind Capital Costs	$1,003 / KW	$1,200 / KW Per RFP bid responses
50:50 Coal and Gas	2012 - 2023	2009 - 2024
Peak Supply Cost (PSE portfolio mgt. group purchases calls)	Single Cycle Gas Turbine ~ $4 / kw-mo all year Dispatch price $58 / MWh ($5 gas)	Call Options ~$2.50 / kw-month winter only Dispatch price $60 / MWh ($5 gas)

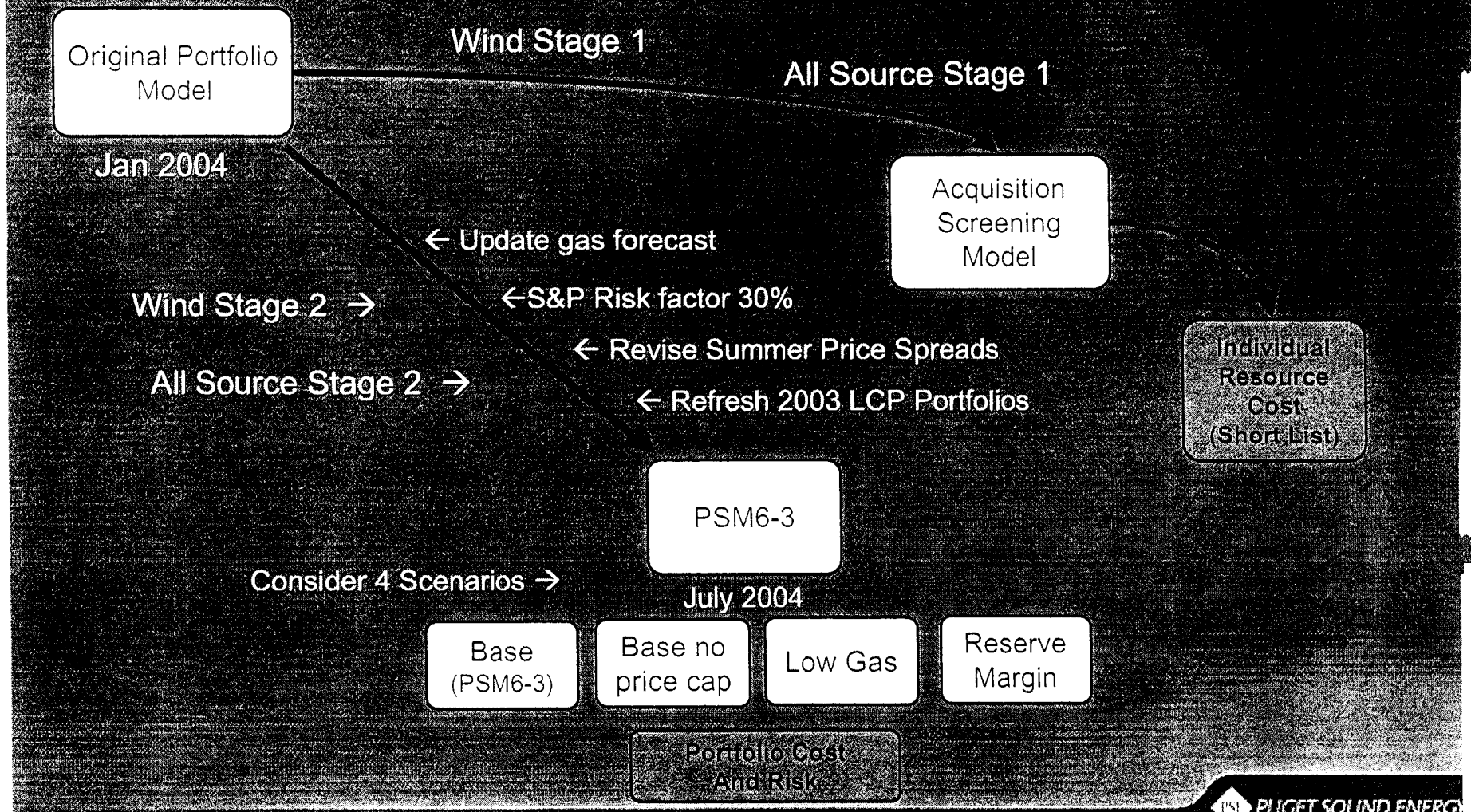
Portfolio Analysis
Portfolio Model Evolution - Description

- Portfolio Screening Model (PSM) was improved over time with updates in data (gas prices), formatting and some logic changes.
- In January 2004 the PSM was modified to create the Acquisition Screening Model (ASM), for use in the Wind and All Source RFP bid evaluation.
  - ASM smaller and more agile model
  - Screen proposals based upon levelized cost
- The following slide depicts the changes and improvements in the portfolio screening model

Portfolio Analysis

Portfolio Model Evolution

(since Frederickson Acquisition)



Portfolio Analysis
Power and Gas Price Scenarios

- The Aurora model was used to develop an hourly long-term price forecast in the Portfolio Screening Model. The Aurora model produced some untenable long term price spreads between peak and off-peak prices during August and September. PSE considered alternatives to reduce the spreads. One alternative was to apply a price cap of $250/MWh as FERC instituted on October 1, 2002. This alternative was selected as PSE Base Price Scenario with which to evaluate acquisitions.

- Other reasons for price scenarios were:
  - Recent major price shifts in natural gas prices
  - Monte Carlo may not provide enough price variability to test the alternative portfolios
  - The four scenarios provide a more robust testing of portfolio cost and risk

- PSE analysts defined three lesser price scenarios yielding a total of four scenarios to test portfolio cost and risk:
  1) Base price scenario with $250/MWh price cap
  2) No price cap scenario
  3) Reserve margin scenario
  4) Low gas price scenario

- These scenarios should not be considered with equal probability or weighting. Only the base scenario received review for consistent assumptions in Aurora. The other three scenarios are to be used as indicators of how resource portfolios might respond under widely varying gas and power prices.

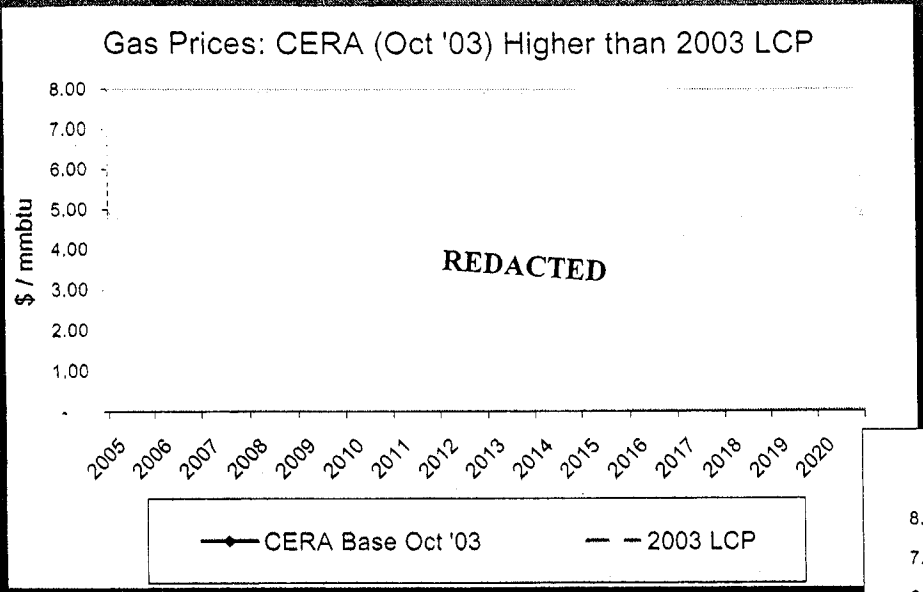
Portfolio Analysis
Power and Gas Price Scenarios - continued

- Base Scenario
  - Price cap of $250/MWh as FERC instituted on October 1, 2002
  - Forecast spikes in prices occur primarily in the late afternoons of August and September of the later years
  - Cap had no affect on any hours in 2008; however by 2014 there were 46 hours over $250/MWh and in 2020 there were 71 hours over $250/MWh
- No Cap Scenario -- Removed the $250/MWh power price cap
- Low Gas Price Scenario
  - Gas prices from the CERA 2003 forecast titled "World in Turmoil" approximately ercent lower than those in the base "Rear View Mirror" forecast used in the base scenario
  - See next slide
- Reserve Margin Scenario
  - Reserve margin as FERC proposal (FERC Docket No. RM01-12-000, Page 264, Paragraph 489)
  - PSE tested a 6% planning reserve by using a load 6% greater for the optimization process, then reverting back to the base load to determine prices
  - Lower overall prices because of the increased available capacity through all years
- The four price scenarios are shown graphically on the following two slides

Portfolio Analysis

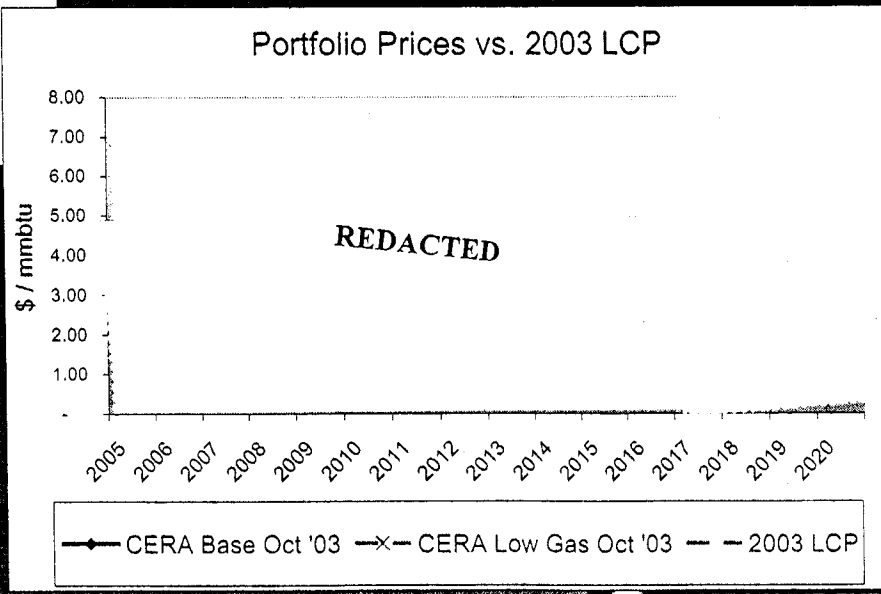
Future Gas Prices Uncertainty

Portfolio Model Input Assumptions



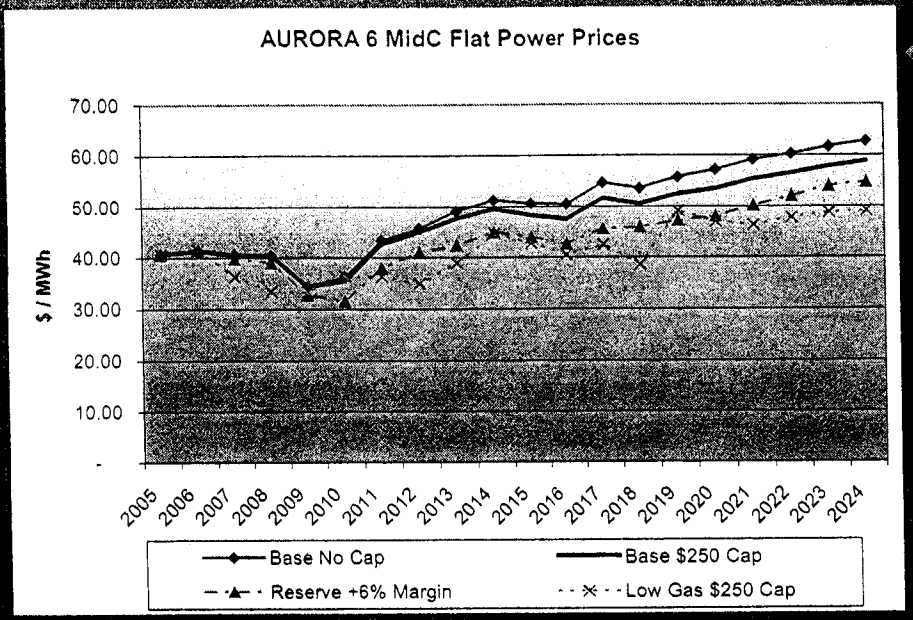
- Portfolio gas price updated with CERA (Oct 2003) in late Q1 2004
- Upward trend from gas prices assumed in 2003 LCP

- Because of uncertainty, a Low Gas price scenario (CERA "World in Turmoil") was added as an input assumption
- Because gas resources were high cost in the base case, a High Gas price scenario was not necessary



Portfolio Analysis

2 Gas Price Forecasts
4 Aurora Price Scenarios

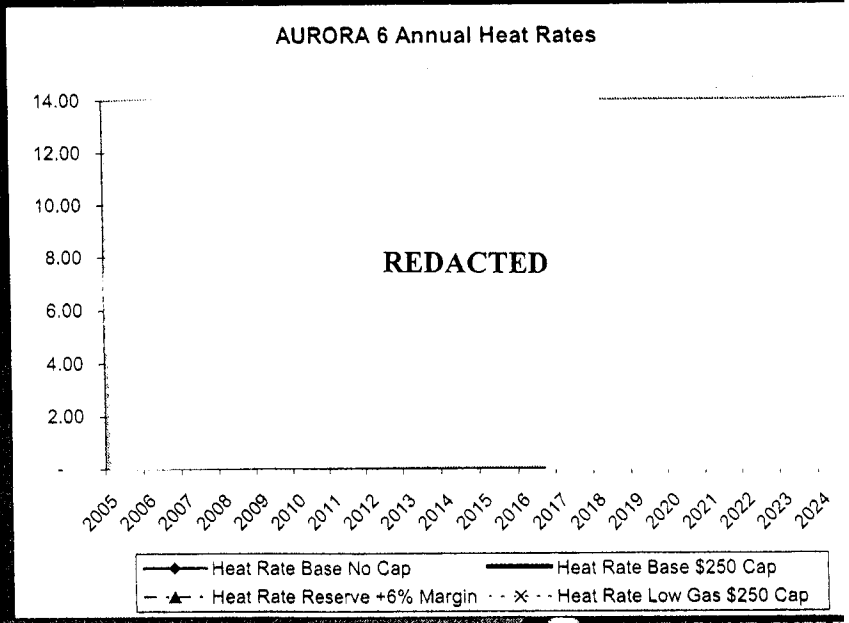


4 Power Price Scenarios:

1) Base Case with $250 price cap
2) Base Case without price cap
3) Base Case 6% Planning Reserve
4) Low Gas price

4 Heat Rate Scenarios:

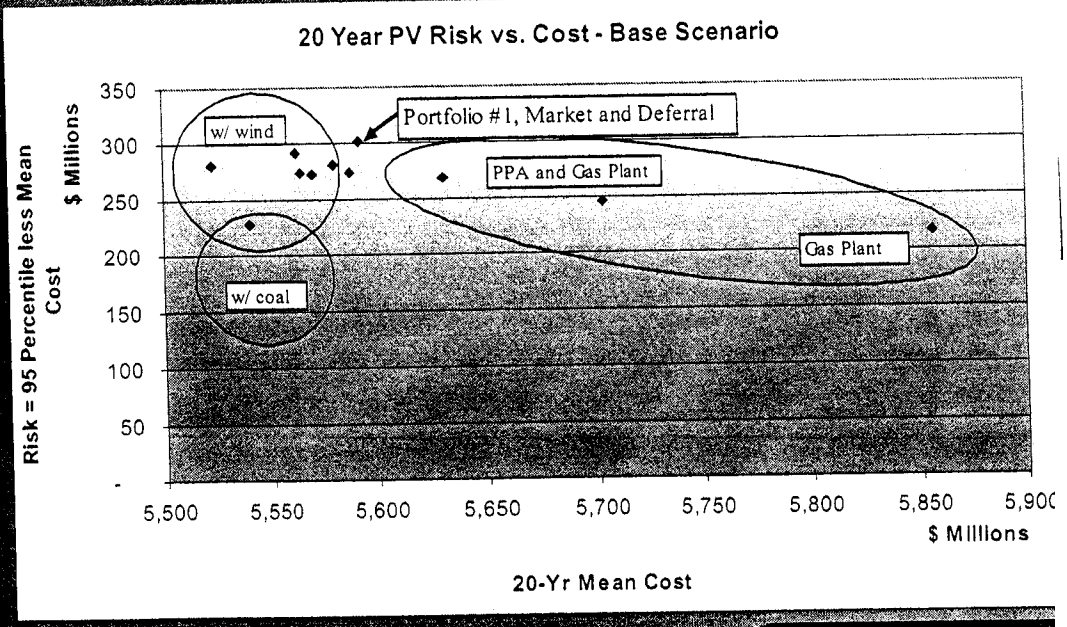
- Low Gas price scenario yields high heat rates that favor natural gas generation
- 6% Planning Reserve scenario yields low heat rates that favor alternatives to natural gas generation



Portfolio Analysis

Selected Analytical Observations – Base Scenario

- Portfolios that include wind generally have lower costs
- Portfolios that include natural gas generally have higher cost
- Portfolio #1 that has highest uncertainty:
  - reliance on market and deferral of new resource acquisitions through Y2008



Portfolio Analysis

Diversity of Portfolios Analyzed

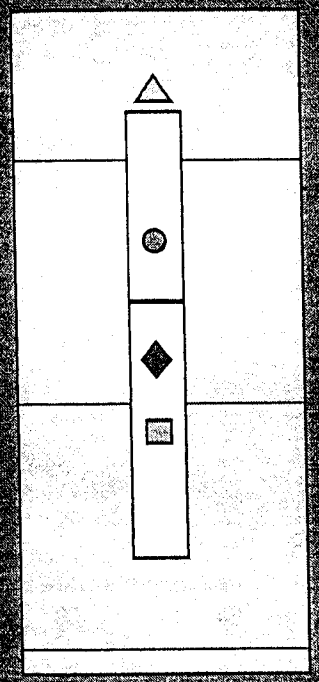
- Identified and analyzed 36 portfolios
- Selected 12 representative portfolios for further evaluation under the four selected price scenarios:

1. Market through 2008. Generic Coal:Gas beginning in 2009	17. One PPA (APS) and [redacted] – [redacted]
2. Three PPAs APS, [redacted]	23. Two PPAs APS & [redacted] two wind 2006 and 2007, ORMAT, and Coal in 2010
5. Three PPAs and Wild Horse	25. APS, [redacted] and Wild Horse
7. Entire Short List	29. APS, [redacted] and [redacted]
11. Three PPAs two wind [redacted] and Wild Horse	30. APS [redacted] nd Wild Horse
14. APS and [redacted] Gas Plant with 10-yr PPA	36. APS, [redacted] RES and Wild Horse – Proposed Portfolio

Portfolio Analysis

Ranking of Portfolio Costs - Explanation

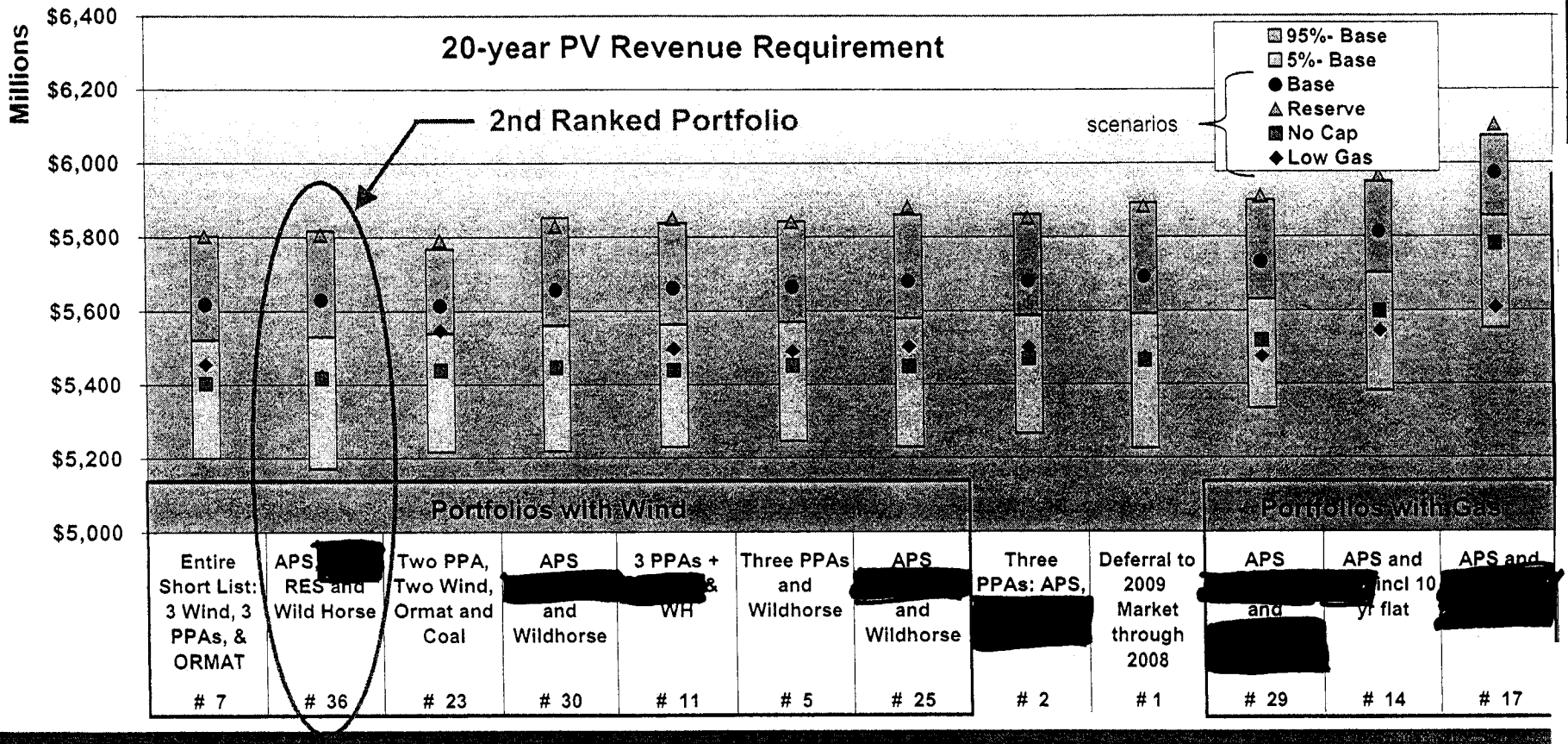
- Present value of portfolio costs were calculated for each of the 12 portfolios
- The following slide shows the present value of portfolio cost ranked from lowest cost on the left to highest cost on the right
- The legend is explained below:



- Rectangular column represents the range of portfolio costs resulting 100 Monte Carlo iterations of the Base scenario
  - Top rectangle is range between the mean and 95th percentile of costs
  - Bottom rectangle is range between the mean and 5th percentile of costs
  - Line between top and bottom rectangles is the dynamic mean measured over 100 iterations
- Triangle is the portfolio cost of the Reserve Margin scenario before running Monte Carlo simulation
- Circle is the portfolio cost of the Base scenario cost before running Monte Carlo simulation (This is higher cost than the mean of the 100 iterations because iterations capture margin when prices spike)
- Diamond is the portfolio cost of the Low Gas scenario before running Monte Carlo simulation
- Square is the portfolio cost of the No Cap scenario before running Monte Carlo simulation

Portfolio Analysis

*Ranking of Portfolio Costs**



Note: *Credit costs for PPAs and gas purchases not included

Portfolio Analysis

Recommended Portfolio: Contribution to "Need"

	2005	2006	2007	2008	2009	2010	2011	2012
NEED - January Average Energy MW	299	351	370	382	423	488	630	1,099
Portfolio #36 APS, [redacted] RES, Wild Horse								
APS - Centralia 2-yr PPA								
[redacted] 22-yr Seasonal On-Peak PPA								
Hopkins Ridge 100% Own 150 MW								
Wild Horse 100% Own 240MW								
Sum of Acquisitions								
Relative to Need (Short) Long								

REDACTED

Market Purchases

Generic coal and gas resources

Portfolio Analysis:

- Selection of four short-listed proposals fills 194 MW of the 382 MW Need in Y2008
- Shortfall of 188 MW met with market purchases in 2008
- Shortfall of 229 MW in Y2009 met with up to 10% wind and the balance with 50:50 coal & gas thermal generation

Note: "Need" calculated based on "B2" planning standard energy need

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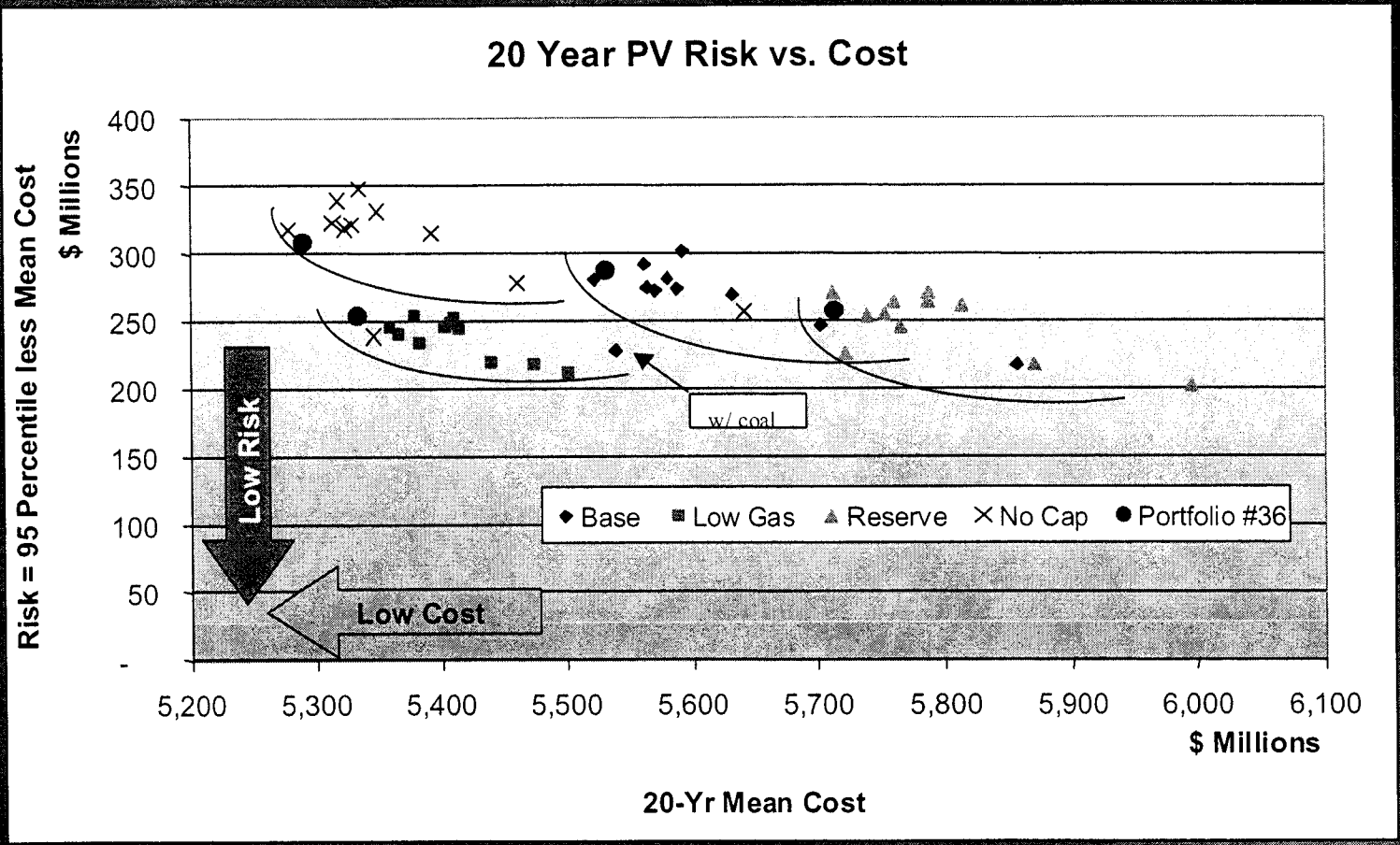
Page 135 of 139

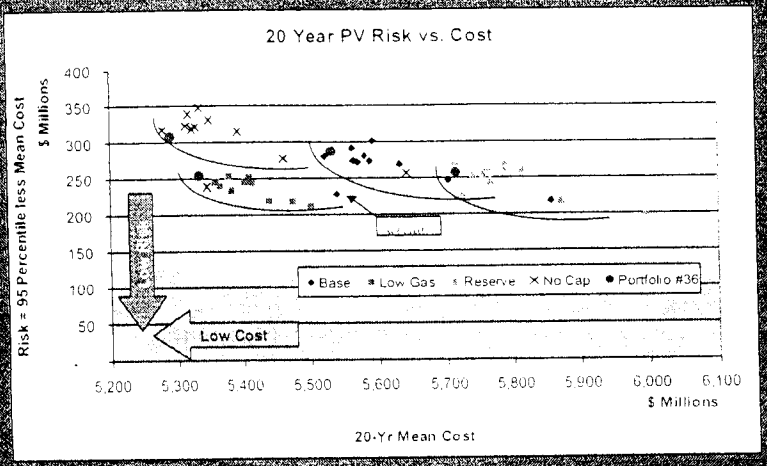
Portfolio Analysis
Recommended Portfolio: Cost & Risk

- Proposed portfolio has low cost and reasonable risk in each of the four price scenarios



Portfolio Analysis

Explanation: Portfolio Cost & Risk



- On the previous slide, shown in miniature at the left, the swoosh is indicative of the frontier with optimal balance between low cost and low risk.
- In the Base scenario the swoosh has been drawn above the black diamond data point that represents the portfolio containing coal beginning in 2010.

- Portfolio #36, that includes the APS contract (2005-2006), RES wind (late 2005), Wild Horse wind (late 2006), and [redacted] (2007) is the 2nd lowest cost in the Base scenario and similarly low cost in the other price scenarios.
- Portfolio #36 has medium risk compared with other portfolios in part because it only meets half of the resource need in 2008 and is thus exposed to market purchase cost volatility.
- Risk is defined as range of costs between the 95th percentile portfolio cost and the 50th percentile portfolio cost. In other words, the downside exposure of portfolio power costs.

Wild Horse Wind Project

Status Update

Developer:	Zilkha Renewable Energy, LLC
Deal Structure:	PSE purchase of development assets at closing and construction of facility by Zilkha affiliate
Size:	230 MW
Capacity Factor:	[redacted]
Capital Cost:	
Energy Cost:	$ [redacted] MWh[1] (20-year levelized cost)
Turbine Choice:	129 x Vestas V80 1.8 MW Tower Height @ Hub = 67 meters Rotor Diameter = 80 meters
Project Foot Print:	~8,500 acres
Schedule:	Non-Binding Letter of Intent — September 1, 2004 Definitive Agreements finalized[2] — February 15, 2005 Board of Directors Approval — March 1, 2005 Closing and Notice to Proceed[3] — January 1, 2006 Commercial Operation — November 2006

Notes:
(1) Assumes $18/MWh unescalated PTCs
(2) Expected date for finalization of form of agreements
(3) Assumes receipt of all, necessary non-appealable permits and extension of 2006 PTCs in the 4Q of 2005

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Exhibit No. ___(EMM-9HC)
Page 138 of 139

Hopkins Ridge Wind Project

Status Update

Developer:	Renewable Energy Systems, Ltd.
Deal Structure:	PSE purchase of development assets at closing and construction of facility by RES affiliate
Size:	150 MW
Capacity Factor:	
Capital Cost:	
Energy Cost:	$ MWh[1] (20-year levelized cost)
Turbine Choice:	83 x Vestas V80 1.8 MW Tower Height @ Hub = 67 meters Rotor Diameter = 80 meters
Project Foot Print:	6,000 to 8,500 acres

Schedule:		
	Non-Binding Letter of Intent	October 29, 2004
	Definitive Agreements finalized[2]	December 31, 2004
	Board of Directors Approval	January 11, 2005
	Closing and Notice to Proceed[3]	April 1, 2005
	Commercial Operation	December 31, 2005

Notes:
(1) Assumes $18/MWh escalated PTCs
(2) Expected date for finalization of form of agreements
(3) Assumes receipt of all, necessary non-appealable permits; if delayed, extension of 2006 PTCs would be required to issue NTP