EXHIBIT NO. ___(WJE-19HC) DOCKET NO. UE-06___/UG-06___ 2006 PSE GENERAL RATE CASE WITNESS: W. JAMES ELSEA

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

Docket No. UE-06____ Docket No. UG-06____

PUGET SOUND ENERGY, INC.,

Respondent.

EIGHTEENTH EXHIBIT (HIGHLY CONFIDENTIAL) TO THE PREFILED DIRECT TESTIMONY OF W. JAMES ELSEA ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

FEBRUARY 15, 2006

Exhibit No. ____(WJE-19HC) Page 1 of 35

"All Source" Resource Bids **Quantitative Evaluation** Acquisition Modeling

PSE meeting with WUTC Staff September 30, 2004



Executive Group Briefing July 26, 2004

Prologue - Radiative Evaluation Process	Process is natural progression of modeling from 2003 LCP and Frederickson analysis	Process and Model Improvement Sources:	External coordination - meetings with WUTC Staff to review Portfolio and Acquisition screening models and assumptions	 Internal coordination – examples: wind integration cost analysis, variability of power and gas prices, analysis PPAs, credit, etc. 	

Executive Group Briefing July 26, 2004

Exhibit No. ____(WJE-19HC) Page 3 of 35

Presentation Objectives

Review modeling tools, improvements and process

- Four scenario approach
- Portfolios
- Draft Results
- Developing issues regarding analysis

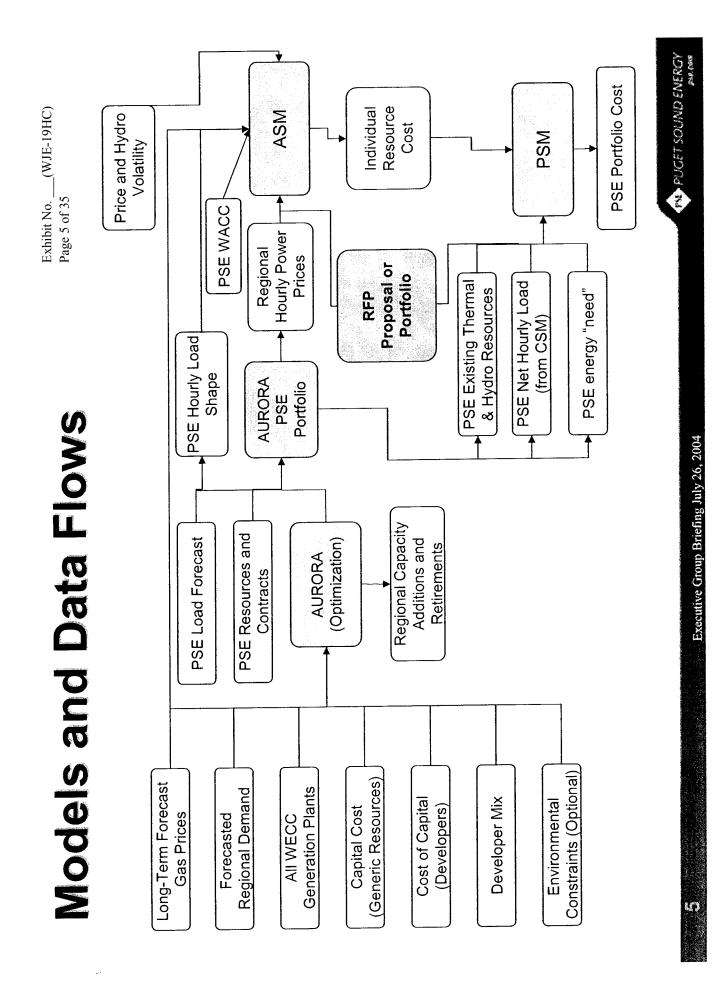


Exhibit No. ____(WJE-19HC) Page 4 of 35

Models and Applications

- AURORA
- Least Cost Plan
- Resource Acquisition
- Power Costs for Rate Case
- 5 Year Financial Plan
- Acquisition Screening Model (ASM)
 - Resource Acquisition
- Portfolio Screening Model (PSM)
- Resource Acquisition
- Least Cost Plan





Screening	phing Model Evolution ^{Page 6 of 35}
Original PSM	A in Fre forecast
ASM1	ASM1 – For individual project evaluation strip out PSE portfolio, move start date to 2005, add wind acquisition input tab, input '05 '06 forward market power and gas prices from December 2003
ASM2 – ASM4	ASM2 - 4 minor logic and data format changes.
ASM5	ASM5W created capability to evaluate inter-annual wind variability
PSM2	PSM2 run with 30% S&P risk factor on imputed debt calculation
G	Executive Group Briefing July 26, 2004

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Objectives

Exhibit No. ____(WJE-19HC) Page 8 of 35

Review modeling tools, improvements and process

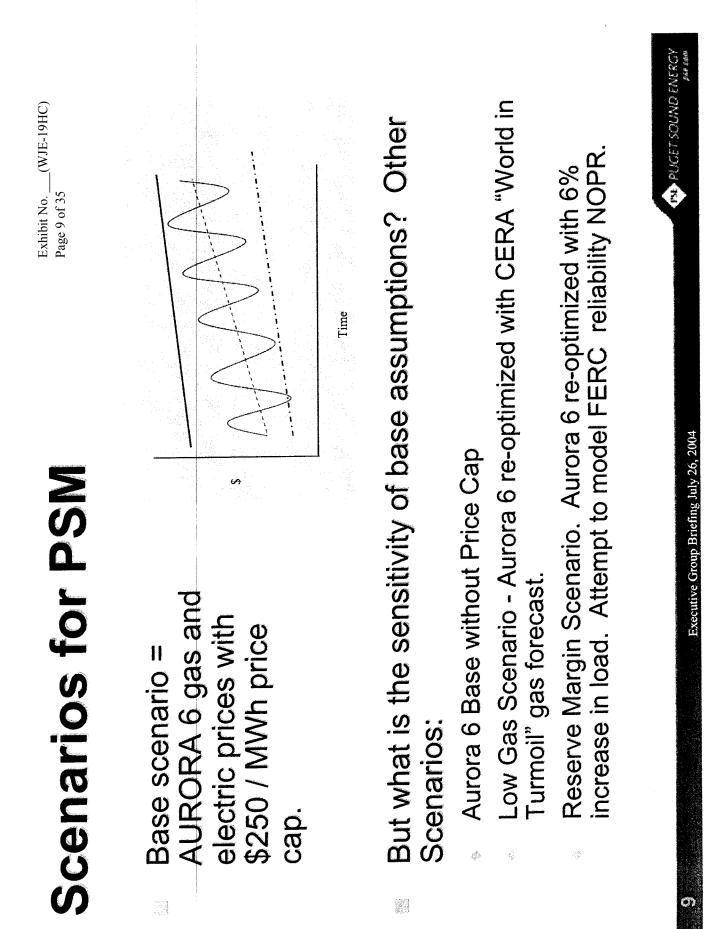


Four scenario approach

- Portfolios
- Draft Results
- Developing issues regarding analysis



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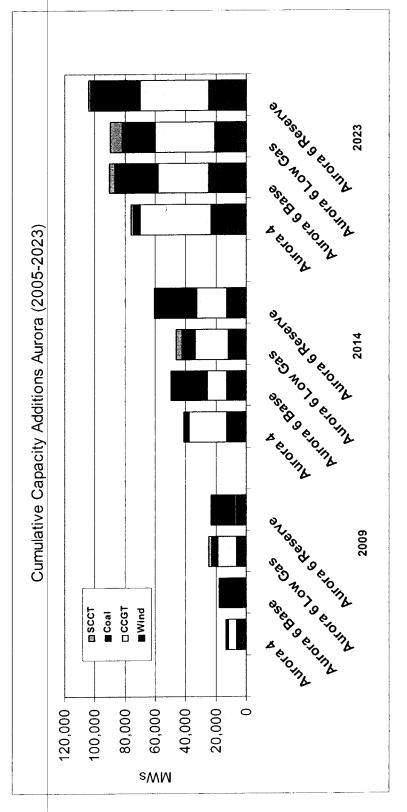
Nominal Sumas Gas Price Comparisons	Aurora 6 gas prices average 19%
 8.00 7.00 7.00 PSE relied on third-party vendors for the materials contained on this chart. PSE's license with such third party vendors requires this chart. PSE's license with such third party vendors requires PSE to secure permission from such vendors before filing any materials in a regulatory proceeding. PSE has requested such permission, but it has not yet been granted. 1.00 	Aurora 6 gas based on forward markets in 2005-2006 and CERA "rear view mirror" Oct. 2003 LCP gas forecast an average of forecasts from
$\begin{array}{c} & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & &$	Nominal Mid-C Prices
Aurora 5 was our All source	80.00 B0.00
Stage I curve.	70.00 60.00 50.00
new mix of coal and gas resources.	HWM/ 2 30.00
Price cap \$250 / MWh adjusts model bias for on/off-off peak	20.00
spreads of over \$80 in August	

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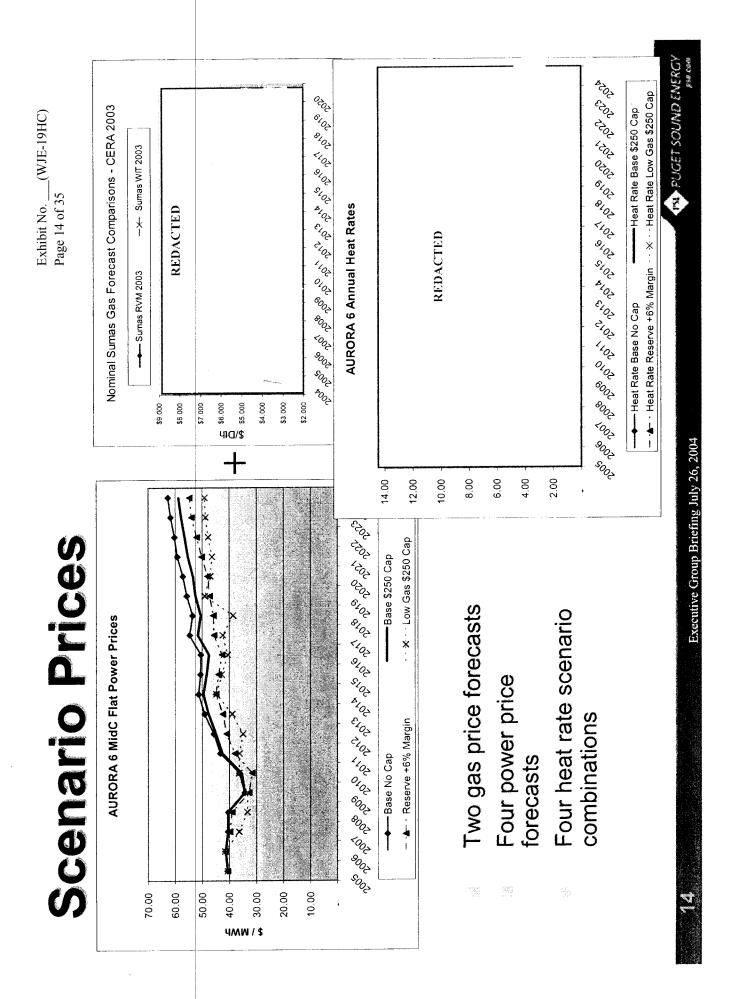
|--|

	Cun 80,000 90,000 70,000 70,000 10,000 10,000 000 000 000 000 000	 With his With his<	With higher gas prices AURORA 6 optimization selected a higher percentage of coal plants to meet need EIA Annual Energy Outlook 2004 Base Case shows ~40 GW of coal addition by 2023 GW of coal addition by 2023 PacifiCorp Planning Assumptions. "There are 9,000 MW of new coal plants that are in the
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assumed 6% higher load forecast – an attempt to model FERC reliability notice of Note: Higher level of capacity additions in AUORA 6 Reserve resulted from proposed rulemaking. TSN PUCET SOUND ENERCY



(WJE-19HC) Page 15 of 35 Exhibit No.

Objectives

- Review modeling tools, improvements and process 89
 - Four scenario approach
 - Portfolios Î
- **Draft Results**

Developing issues regarding analysis



Executive Group Briefing July 26, 2004

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Ľ	Preliminary PSI	PSM PortfolloS ^{Page 16 of 35}	Exhibit No(WJE-19HC) Page 16 of 35
	Identified 30+ portfolios		HIGHLY CONFIDENTIAL per WAC 480-07-160
	Selected 11 representative portfolios for evaluation	portfolios for evaluation	REDACTED
	Portfolio #1 is deferral of acquisition to 2009, assuming market through 2008. Portfolio #1 does not begin to meet the planning standard until 2009.	quisition to 2009, assum loes not begin to meet tl	ing market ne planning
Ň	Three PPAs APS,	17. One PPA (APS) and	
<u>5</u> .	Three PPAs and one wind Wildhorse	23. Strategic Plan Scen. #1. Two PPAs APS & two wind 2006 2007, ORMAT, and Coal in 2010	#1. Two two wind and Coal in
7.	Entire Short List	25. APS, and W	and Wildhorse
1	11. Three PPAs two wind and Wildhorse	29. APS, and	
14	14. APS and Gas Plant with 10-yr PPA	30. APS, and W	and Wild Horse
91	16 Executive Group Briefing July 26, 2004	riefing July 26, 2004	CASE PUCET SOUND EMERCY

2009 213:0 423:0 HIGHL	REDACTED	generic start 2009 ->	320.6 320.6 423.0 (49.4) (6.14) - D		start	346.6 423.0 (35.4 -	January 2008	generic start 2009 -> 2 437.1 437.1 437.1
2006 1gh 2008, then g		generic	233.9 325.6 320.6 (65.1) (25.4) (49.4)			233.9 351.6 346.6 (65.1) 0.6 (23.4)		generic 233.9 442.1 437.1
Deferral to 2009 Market through 2008 Sum of Acquisitions	Three PPAs APS - Centralia 2-or PPA	10-yr PPA 22-yr Seasonal On-Peak PPA	Sum of Acquisitions Relative to Need (Short) Long	3 PPAs + Wildhorse	APS - Centralia 2-yr PPA 10-yr PPA 22-yr Seasonal On-Peak PPA Wild Horse 100% Own	Sum of Acquisitions Relative to Need (Short) Long Whole Shorr 1 ist	APS - Centralia 2-yr PPA APS - Centralia 2-yr PPA 10-yr PPA 22-yr Seasonal On-Peak PPA Hopkins Ridge 100% Own 100% Own	Wild Horse 100% Own ORMAT - Sumas Recovered Heat Sum of Acquisitions

Executive Group Briefing July 26, 2004

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of 35							HIGHLY CONFIDENTIAL per	WAC 480-07-160		REDACTED																			
Page 18 of 35	2009		ilino liseoj	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	423.0	•	HIG				423.0	•	C C C C C C C C C C C C C C C C C C C			0.005	0.76	Contraction of Contraction								136.0	423.0	•	
	2008				п 2009 -> 359.6	(22.4)				rt 2009 ->	333.8	(48.3)				eneric start 2009 ->	138.0									conneric start 2000 ->	287.0	(95.0)	
	2007				generic start 2009 -> 359.6 359.6	(10.4)				peneric start 2009 ->	333.8	(36.3)	strandor a state of a			generic sta	(110.0) 138.0									Cenaric et.	287.0	(83.0) (95.0)	
	2006	-			364.6	13.6					418.8	67.8	 A second sec second second sec			0345	(0.9)		and the second								299.0	(52.0)	
U U U U	2005				233.9	(65.1)		and the state of the second			85.0	(214.0)	generation of the second se			346.0	46.0										176.8	(122.3)	ny atao ya maa ahaana ahaan kana ahaa ahaa
Portolios continuec	t Three PPAs + and Wildhorse	a 2-yr P PPA	22-yr Seasonal On-Peak PPA	00% Own Wild Horse 100% Own	Sum of Acquisitions	Relative to Need (Short) Long	APS and incl 10 yr flat	utrali		& PPA Flat 100 MW	Sum of Acquisitions	Relative to Need (Short) Long	APS and	APS - Centralia 2-yr PPA	Power Plant - Progressive	Structor A source of A	Relative to Need (Short) Long	Stratadio Dian Cann 1		AFS - Centralia Z-yr FFA 10-vr PPA	Wild Horse 100% Own	Hopkins Ridge 100% Own	ORMAT - Sumas Recovered Heat	PPA 3-year, priced at narket	PPA. I.yr, priced at market	Coal Project - 100% Own	Sum of Acquisitions	Relative to Need (Short) Long	
	o Project	19 74h	30	5 Q			-	19	Pre 4 1	24a				19	32			a a na an	01	19 24b	2	3	39	a dan sana a sana a sana a sana a sana san		20			
Ĕ	Portfolio 11			area a conserva de la			4						17					50	3					and a second sec				And Annual A	

Exhibit No. (WJE-19HC) Page 19 of 35

Portfolios continued

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	HIGHLY CONFIDENTIAL per	WAC 480-07-160

APSand WildhorseAPSCentralia 2-yr PPAI0-yr PPAWild Horse 100% OwnSum of AcquisitionsSum of AcquisitionsSelative to Need (Short) LongRelative to Need (Short) LongAPSandAPSAPSandAPSSelative to Need (Short) Long(122.3)(56.5)(160.5)APSCentralia 2-yr PPAI0-yr PPAAPSCentralia 2-yr PPASum of AcquisitionsSum of AcquisitionsRelative to Need (Short) LongAPSAPSCentralia 2-yr PPAAPSAPSCentralia 2-yr PPAAPSCentralia 2-yr PPAAPSAPSSum of AcquisitionsAPSSum of AcquisitionsAPS	Ч Ч	Portfolio Project	Project		2005	2006	2007	2008	2009	REDACTED
19APS - Centralia 2-yr PPA24b(10-yr PPA24b(10-yr PPA24bSum of Acquisitions16Sum of Acquisitions176.8294.58Relative to Neêd (Short) Long19APS - Centralia 2-yr PPA29APS - Centralia 2-yr PPA30APS - Centralia 2-yr PPA31APS - Centralia 2-yr PPA32 <td< th=""><th></th><th>25</th><th></th><th>APS</th><th></th><th></th><th></th><th></th><th></th><th></th></td<>		25		APS						
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29APSand19APS - Centralia 2-yr PPA24b10-yr PPA24b10-yr PPA24b10-yr PPA29Sum of Acquisitions165176.830APS30APS30APS30APS3022-yr Seasonal On-Peak PPA3022-yr Seasonal On-Peak PPA3020% Own2Wild Horse 100% Own2Sum of Acquisitions30142.130142.130142.130Sum of Acquisitions30Sum of Acquisitions31Sum of Acquisitions32Sum of Acquisitions33Sum of Acquisitions34Sum of Acquisitions35Sum of Acquisitions36Sum of Acquisitions37Sum of Acquisitions38Sum of Acquisitions39Sum of Acquisitions30Sum of Acquisitions31Sum of Acquisitions31Sum of Acquisitions31Sum of Acquisitions32Sum of Acquisitions33Sum of Acquisitions34Sum of Acquisitions35Sum of Acquisitions36Sum of Acquisitions37Sum of Acquisitions38Sum of Acquisitions39Sum of Acquisitions30Sum of Acquisitions31Sum of Acquisitions32Sum of Acquisitions33Sum			and the second second second second	Relative to Neêd (Short) Long	(122.3)	(56.5)	(160.5)	<u> 1</u>	•	
19APS - Centralia 2-yr PPA24b10-yr PPA24b10-yr PPA29Sum of Acquisitions176.8537.58Sum of Acquisitions30APS30		29								
24b10-yr PPA29& BPA delivery29Sum of Acquisitions176.8\$37.58Sum of Acquisitions176.8\$37.530APS30APS19APS30-22-yr Seasonal On-Peak PPA30-22-yr Seasonal On-Peak PPA30-22-yr Seasonal On-Peak PPA2Wild Horse 100% Own2Sum of Acquisitions142.1168.1184.2.9(182.9)			19	APS - Centralia 2-yr PPA						
29 & BPA delivery 537.5 8um of Acquisitions 176.8 537.5 8um of Acquisitions 176.8 537.5 30 APS and Wildhorse (122.3) 186.5 30 APS and Wildhorse (122.3) 186.5 30 APS and Wildhorse (122.3) 186.5 30 APS centralia 2-yr PPA (122.3) 186.5 30 APS<-Centralia 2-yr PPA		1	24b	10-yr PPA					17.44	
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Sum of Acquisitions176.8537.5Relative to Need (Short) Long(122.3)186.5Relative to Need (Short) Long(122.3)186.5APSand Wildhorse(122.3)186.519APSAPSand Wildhorse30APS-Centralia 2-yr PPA30-22-yr Seasonal On-Peak PPA2Wild Horse 100% Own2Wild Horse 100% Own8um of Acquisitions142.1168.1Relative to Need (Short) Long(156.9)(182.9)(182.9)							generic s	start 2009 ->	.t.	
Relative to Need (Short) Long(122.3)186.5APSand Wildhorse(122.3)186.519APS - Centralia 2-yr PPA30			A LUMA DECOMPOSING AND A DECOMPOSING	Sum of Acquisitions	176.8	537.5	452.5	452.5	452.5	
APSand Wildhorse19APS - Centralia 2-yr PPA30APS - Centralia 2-yr PPA302 Wild Horse 100% Own2Wild Horse 100% Own2Sum of Acquisitions142.1168.1Relative to Need (Short) Long(156.9)		Capity 1997 - 1998 - 1997 - 19	an in the second se	Relative to Need (Short) Long	(122.3)	186.5	82.5	70.5	29.5	
APS - Centralia 2-yr PPA- 22-yr Seasonal On-Peak PPAWild Horse 100% OwnWild Acrea 100% OwnSum of AcquisitionsSum of AcquisitionsRelative to Need (Short) Long(156.9)		30							(
- 22-yr Seasonal On-Peak PPA Wild Horse 100% Own Sum of Acquisitions 142.1 168.1 Relative to Need (Short) Long (156.9) (182.9) (1			19	APS - Centralia 2-yr PPA						
Wild Horse 100% OwnSum of AcquisitionsSum of AcquisitionsRelative to Need (Short) Long(156.9)			30	r 22-yr Seasonal On-Peak PPA						
· 142.1 168.1 (182.9) (182.9) (7	Wild Horse 100% Own						
142.1 168.1 163.1 (156.9) (182.9) (206.9)							generic s	start 2009 ->		
(156.9) (182.9) (206.9)		Construction of the second	a company and a second s	Sum of Acquisitions	142.1	168.1	163.1	163.1	423.0	
				Relative to Need (Short) Long	(156.9)	(182.9)	(206.9)		-	

NUCET SOUND ENERGY

Objectives

Exhibit No. (WJE-19HC) Page 20 of 35

- Review modeling tools, improvements and process
 - Four scenario approach
- Portfolios
- Draft Results
- Developing issues regarding analysis

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HIGHLY CONFIDENTIAL per WAC 480-07-160 Stage 2 Evaluation* Short List Summary

(WJE-19HC) Page 21 of 35 Exhibit No.

REDACTED

PROPOSAL	/SOc	The second se						ASM8
		Owner/Developer			Carting			Levelized
epoo Code	Type	¹⁹⁹⁶ Project Name		Location	Status	AAIA	1	(S/MWh)
DNIM								
A03	×	RES - Hopkins Ridge	100% Ownership	Columbia Co, WA	Development	150	Dec-05	
A02b	≥	Zikha - Wild Horse	100% Ownership	Kittitas Co, WA	Development	150	Dec-05	
A06	3		100% Ownership w/ Royalty		Development		Feb-06	
ALTER	VATE F	ALTERNATE FUEL						
A39	A	ORMAT - Sumas Recovered Heat	100% Ownership	Sumas, WA	Development	4.5	Dec-05	
POWEF	R PURC	POWER PURCHASE AGREEMENTS						
A19	U	APS PPA	2-yr Centralia PPA	Centralia, WA	Operating	85	Jan-05	
A24b	U	PPA	10-yr		Operating	200	Jan-05	
A30	I	РРА	22-yr Seasonal On-Peak PPA		Operating / Development	240	Jan-05	

Notes:

(1) Using mid-year MACRS instead of 1st quarter MACRS to compare with non-wind bids.

(2) In addition to mid-year MACRS, corrected a PTC error in year 10 that moved the price down.(3) Based on \$59 flat price for on-peak power September through March

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

Executive Group Briefing July 26, 2004

NUCET SOUND ENERGY

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Exhibit No(WJE-19HC) Page 22 of 35	HIGHLY CONFIDENTIAL per WAC 480-07-160	ASM8		Oct-05	Dec-05	Dec-05	late 2008		Aug-02	Dec-05
REDACTED	nary			Development	Development	Development	Development		Operating	Development
aluation*	estigation Summary			100% Ownership	30-yr PPA + 50% Ownership	100% Ownership	100% Ownership		100% Ownership +	50.2% Ownership
Stage 2 Ev	1	Model and American American								
Sta	Co	PROPOSAL	MIN	AD7 W	A08 W	A01 W	A20 C	ссат	A24a G	A29 G

(1) Using mid-year MACRS instead of 1st quarter MACRS to compare with non-wind bids.

Executive Group Briefing July 26, 2004

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

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Oct-03

Sep-07

Development

Operating

Suspended Suspended

May-06

Development

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100% Ownership

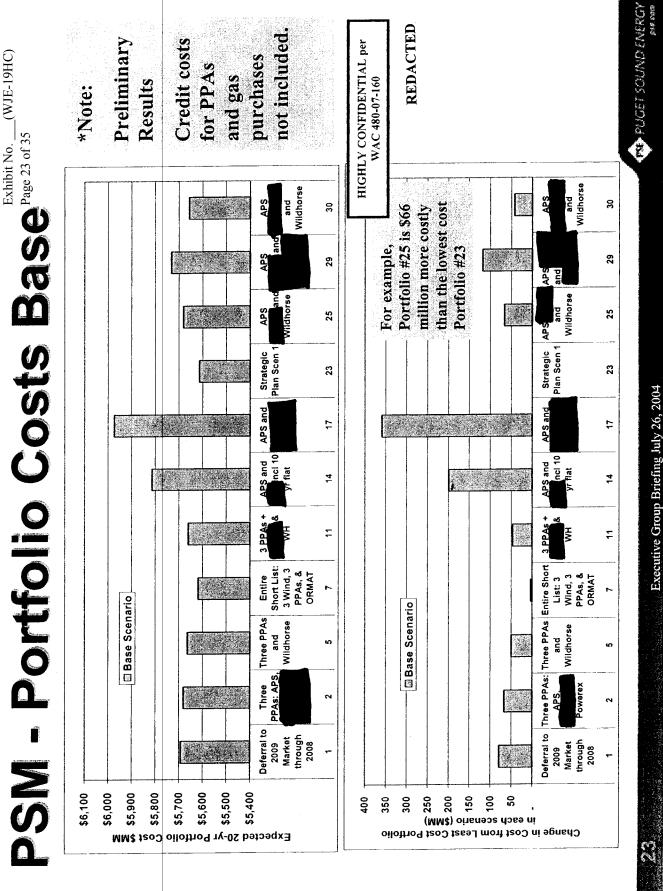
100% Ownership 100% Ownership

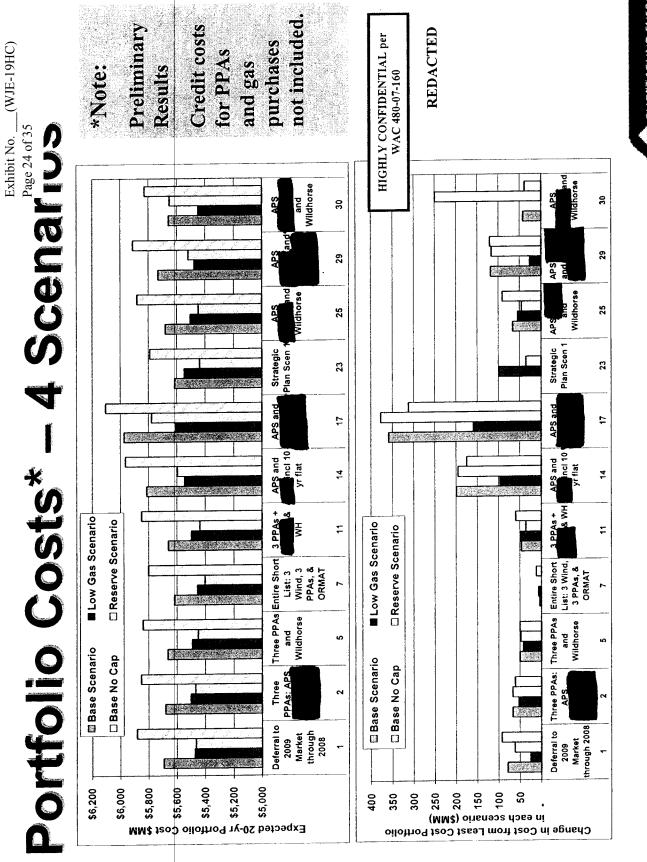
70% Ownership

Joint Venture w/ PSE

late 2005

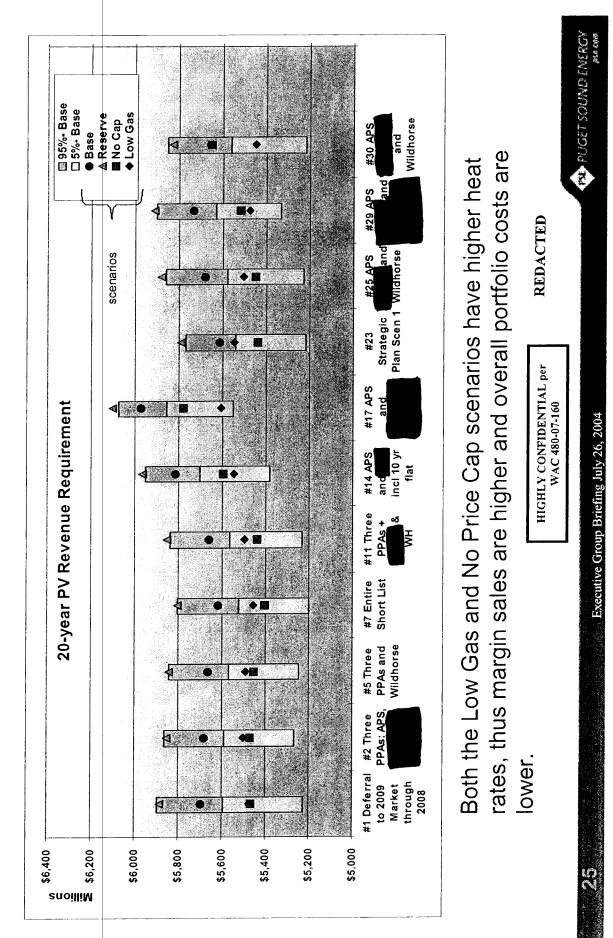
Nov-05



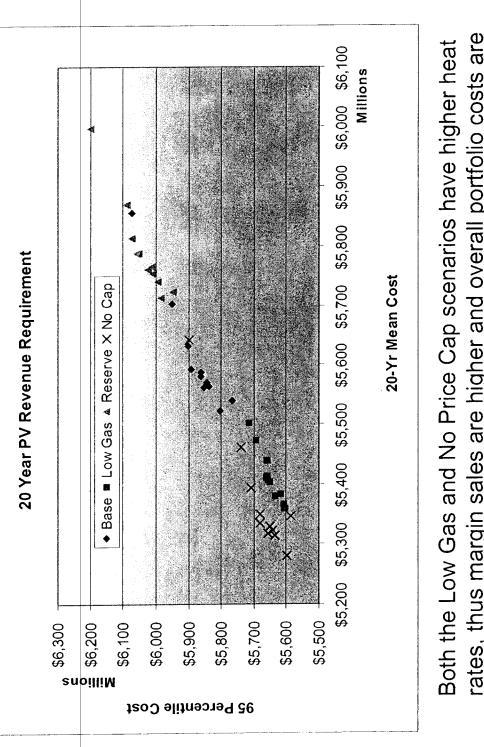


Executive Group Briefing July 26, 2004

(WJE-19HC) Other Views of Portfolio CCsus Exhibit No._

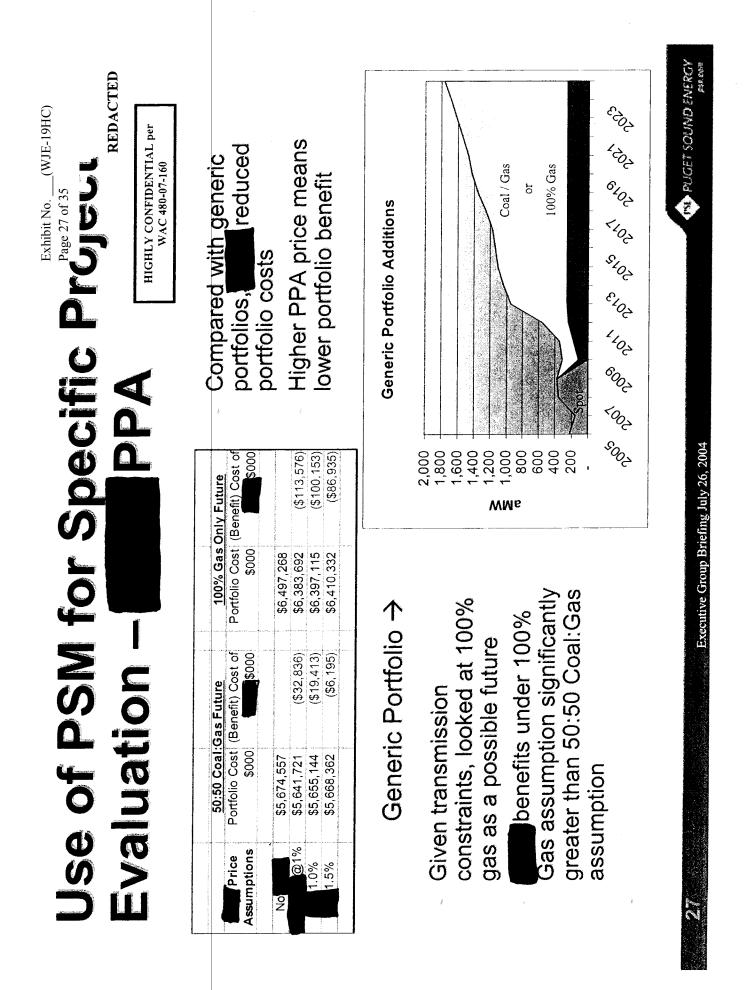


(WJE-19HC) Other Views of Portfolio Cusus Exhibit No.



rates, thus margin sales are higher and overall portfolio costs are lower.

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Objectives

(WJE-19HC) Page 28 of 35 Exhibit No.

- Review modeling tools, improvements and process
 - Four scenario approach
- Portfolios
- **Draft Results**



Developing analysis issues



Executive Group Briefing July 26, 2004

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C L	Credit Support PPAs & Gas Supply	Exhibit No(WJE-19HC) Page 30 of 35
	Interest cost on Letter of Credit	
	Shared credit facility could save	
	Existing PSE credit facilities not enough to cover long- term contracts	ver long-
	Possibility of imputed debt on synthetic letter of credit	of credit
	 What will be S&P methodology? Risk factor? MTM limit or LOC amount? 	limit or LOC
	Gas purchases	
	 Power and gas positions would determine optimal hedge quantities 	ledge
30	Executive Group Briefing July 26, 2004	PUICET SOUND ENERGY

4	Credit Cost -							
preliminary analy	alysis	S)	НІСНІ	HIGHLY CONFIDENTIAL per WAC 480-07-160	DENTIAL
	Nominal \$000		Levelized S/MWh	Synthetic LOC Assumptions:	LOC As	ldunss	tions:	REDACTED
A Contract Payments (no transmission)			43.50 0.27	Rate	Rate = 1 15%	e		
C Imputed Debt Equity Offset	41.831	32.276	0.//					
SUBTOTAL	and a set of the set o		\$47.66	Amo	Amount = \$125 million	25 millio	u	
D LoC Interest - PSE	14 375	Q 718	6 1 (13	S&P	S&P = 100% risk	rìsk		
	5/5/L1		\$1.02 \$1.02		•	;		
Debt Equ Credit	190,385	•, [•	\$13.03 \$13.03	ר אַ אַ	S&P imputes debt first year	debt tir	st year	_
TOTAL Levelized Cost	diven		\$62.73 2005 Dahr stort	1				
	ЯТУЩ.	S&P	S&P Assigned Risk	ai sk	Bivell:	100% S&P KISK Start Year S&P Immited I.of Deht	100% S&F Risk Year S&P Immited	LoC Deh
Sensitivity	•	25%	50%	100%			2	
	\$65,000	\$2.75	\$4.45	\$7.84	\$65,000	\$7.84	\$6.93	\$6.10
Of credit cost →	\$85,000	\$3.60	\$5.82	\$10.25	\$85,000	\$10.25	\$9.06	\$7.97
	\$105,000	S 4.45	\$7.19	\$12.66	\$105,000	\$12.66	\$11.19	\$9.85
	\$125,000	\$5.30	\$8.55	\$15.07	\$125,000	\$15.07	\$13.33	\$11.73
	\$145,000	\$6.14	\$9.92	\$17.48	\$145,000	\$17.48	\$15.46	\$13.60
TO	TOTAL Levelized Cost	st			TOTAL Levelized Cost	elized Cost		
	•	25%	50%	100%		-	2	9
	\$65,000	\$50.41	\$52.11	\$55.49	S65,000	\$ 55.49	\$54.59	\$53.76
	\$85,000	\$51.26	\$53.48	\$57.91	\$85,000	S57.91	\$56.72	\$55.63
	\$105,000	\$52.11	\$54.84	\$60.32	\$105,000	\$60.32	\$58.85	\$57.51
	\$125,000	S52.96	\$56.21	\$62.73	\$125,000	S62.73	\$60.99	\$59.38
	\$145,000	\$53.80	\$57.58	S65.14	\$145,000	ፍሐና 14	SK2 17	861 JK

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Recovery of Equity Offset Costs resulting from LOC imputed debt

Approximate...

S: \$ 125,000 or year S&P imputes de heet 2005 or year S&P imputes de 100% S&P LoC S&P LoC 2005 GRC S&P LoC Imputed Year-end S&P LoC S Year-end S S Offset \$ 32,440,398 55.0% Offset \$ 1,996,690 45.0% \$ 102,273	LoC Imputed Debt Equity Offset						
osted Amount \$ 125,000 C put on Balance Sheet 2005 Visk Factor 2005 GRC Year-end Estimate \$ 000 \$2,440,398 y	nptions:						and a second
C put on Balance Sheet 2005 kisk Factor 2005 GRC 2005 GRC Year-end Estimate \$ 000 y \$2,440,398	\$ 125	•					
tisk Factor 100% S&P LoC 2005 GRC S&P LoC Year-end Estimate Equity \$ 000 55.0% Offset \$2,440,398 55.0% \$ 102,273	e Sheet	or year S&P	imputes de	sbt on Letter	of Credit		next and the second
2005 GRC S&P LoC Year-end Imputed Estimate Equity \$ 000 000 \$ 2,440,398 55.0% \$ 1,996,690 45.0% 102,273			Management of the second se				n na Anna an ann an Anna an Anna an Anna an Anna An
Year-end Imputed Estimate Equity \$ 000 0ffset \$2,440,398 55.0% \$1,996,690 45.0% 102,273	2005 GR	o	S&P LoC				
Estimate Equity \$ 000 \$ 000 \$ 000 \$ 000 \$ 2,440,398 \$ 55.0% \$ 1,996,690 45.0%	Year-en	ğ	Imputed				
\$ 000 Offset \$2,440,398 55.0% Offset \$1,996,690 45.0% \$ 102,273	Estimat	e	Equity				
\$2,440,398 55.0% \$1,996,690 45.0% \$ 102,273	\$ 00	Q	Offset	y			
\$1,996,690 45.0%	\$2,440,398		A companying of the second static	\$2,440,398	53.8%		And and a set of an effort of the advector of the set of the
	\$1,996,690	45.0%	\$ 102,273	\$2,098,962	46.2%	1.2%	1.2% incremental equity ratio
\$4,437,088 100.0%		~		\$4,539,361	100.0%		de la contrar en la contrar de la contrar La contrar de la contrar de

needed to recover the equity offset for the imputed debt related to This increase in allowed equity ratio is in addition to the increase PPA payments.

_(WJE-19HC)

Gas Hedge – Equity Offset Cost hypothetical example

				****		% Drice	Strees		Approx. Treasury	Discount
					Year	Stress	Price	MTM \$MMM	Yield Curve	MM\$ MTM
250	MW plant capacity	acity			-	30%	\$3.50	\$ 14.2	2.30%	\$ 14.0
60%	capacity factor				7	20%	\$4.00	9.5	2.80%	9.08
7200	Heat Rate				ო	20%	\$4.00	9.5	3.00%	8.79
150	aMW Expected	d annual g	nual generation		4	20%	\$4.00	9.5	3.40%	8.42
<u>25,920</u>	mmbtu / day gas requirement	as requirei	ment		S	20%	\$4.00	9.5	3.80%	8.00
20	years				o	20%	\$4.00	9.5	4.00%	7,63
\$5.00	average gas price	ice			7	20%	\$4.00	9.5	4.20%	7.24
			and the second descent from a second descent and the second descent descent descent descent descent descent des	A regulation of the second sec	8	20%	\$4.00	9.5	4.35%	6.87
					റ	20%	\$4.00	9.5	4.50%	
\$ 129.5	Imputed Debt				10	20%	\$4.00	9.5	4.60%	6.17
\$ 106.0	Equity Offset		· · · · · · · · · · · · · · · · · · ·	• • • •	F	20%	\$4.00	9.5	4.65%	
					12	20%	\$4.00	9.5	4.70%	5.58
					13	20%	\$4.00	9.5	4.75%	
All and a second se			and the second		14	20%	\$4.00	9.5	4.80%	5.02
					15	20%	\$4.00	9.5	4.85%	4.76
					16	20%	\$4.00	9.5	4.90%	4.51
					17	20%	\$4.00	9.5	4.95%	4.26
					18	20%	\$4.00	9.5	5.00%	
a se se de la contra o referención en la contra contra de la contra contra de la contra de la contra de la cont		100 C C C C C C C C C C C C		not and an and the second s	19	20%	\$4.00	9.5	5.00%	3.84
					20	20%	\$4.00	9.5	5.00%	3.65
					The second state of the se			and a second s		\$ 129.5
	2005 GRC Vear-end		tmonited					*******		
	Estimate		Equity							
	\$ MM		Offset 2005							
Debt	\$2,440	55.0%	1	\$2,440	53.7%	1997 - 19			volan dar de Malaboladoro de caldenda calera en estador renor	a faran an anna ann an ann an ann anna anna an an
Equity	\$1,997	45.0%	\$ 106	\$2,103	46.3%		1.3%	.3% incremental equity ratio	equity ratio	d de la maneterio de la construction a construire E
	\$4.437	100.0%	a ser	\$4.543	100.0%					

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(*) (*)

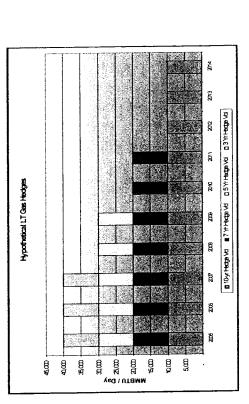
CONTRACT SOUND ENERGY

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Gas Hedge – 10,000 mmbtu / day **\$22 million Credit Requirement**

Assumptions:

- S&P liquidity stress test of 30% price change in first year and 20% thereafter.
- Hedges are comprised of an equal mix of 10, 7, 5, and 3year fixed price deals.
- 10,000 mmbtu/day and a \$5 nominal fixed price.
- Discounted at Libor/Treasury rates for terms of 1 to 10years.



r Credit	32.	\$ 18.9M	5	\$ 22.1M
First year	10yr	, yı 5yr	3yr	Average

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Q&A

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