

EXHIBIT NO. ____ (EMM-8HC)
DOCKET NO. UE-07 ____
2007 PSE PCORC
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-07 ____

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

**REDACTED
VERSION**

MARCH 20, 2007

Energy Resources Progress Report

Board of Directors Meeting

July 13, 2006

**Eric Markell, Sr. Vice President
Energy Resources Group**

Contents

Review of Resource Need

2006 Request for Proposals (RFP) Status

Transactions of Special Note:

Redacted

Goldendale Acquisition - 277 MW Combined Cycle Gas Plant

Whitehorn Lease Restructure - 140 MW Simple Cycle Gas Plant

Highly Confidential
Per WAC 480-07-160

Text in box is Highly Confidential

Contents

Other Transactions and Progress Reports:

Redacted

[Redacted] Power Purchase Agreement [Redacted]
[Redacted] Geothermal Power Purchase Agreement [Redacted]
[Redacted] Power Purchase Agreement Restructure [Redacted]

Disposition of White River Project Properties

Cascade Water Alliance - Lake Tapps

Cascades Land Conservancy - White River Wild Life Lands

Baker Project License Implementation

[Redacted]

Snoqualmie Falls License Implementation

Jackson Prairie Gas Storage Expansion Project

Colstrip 1 and 2 Coal Supply Contract

Proposed Washington Renewable Portfolio Standard

Hopkins Ridge Wind Project Update

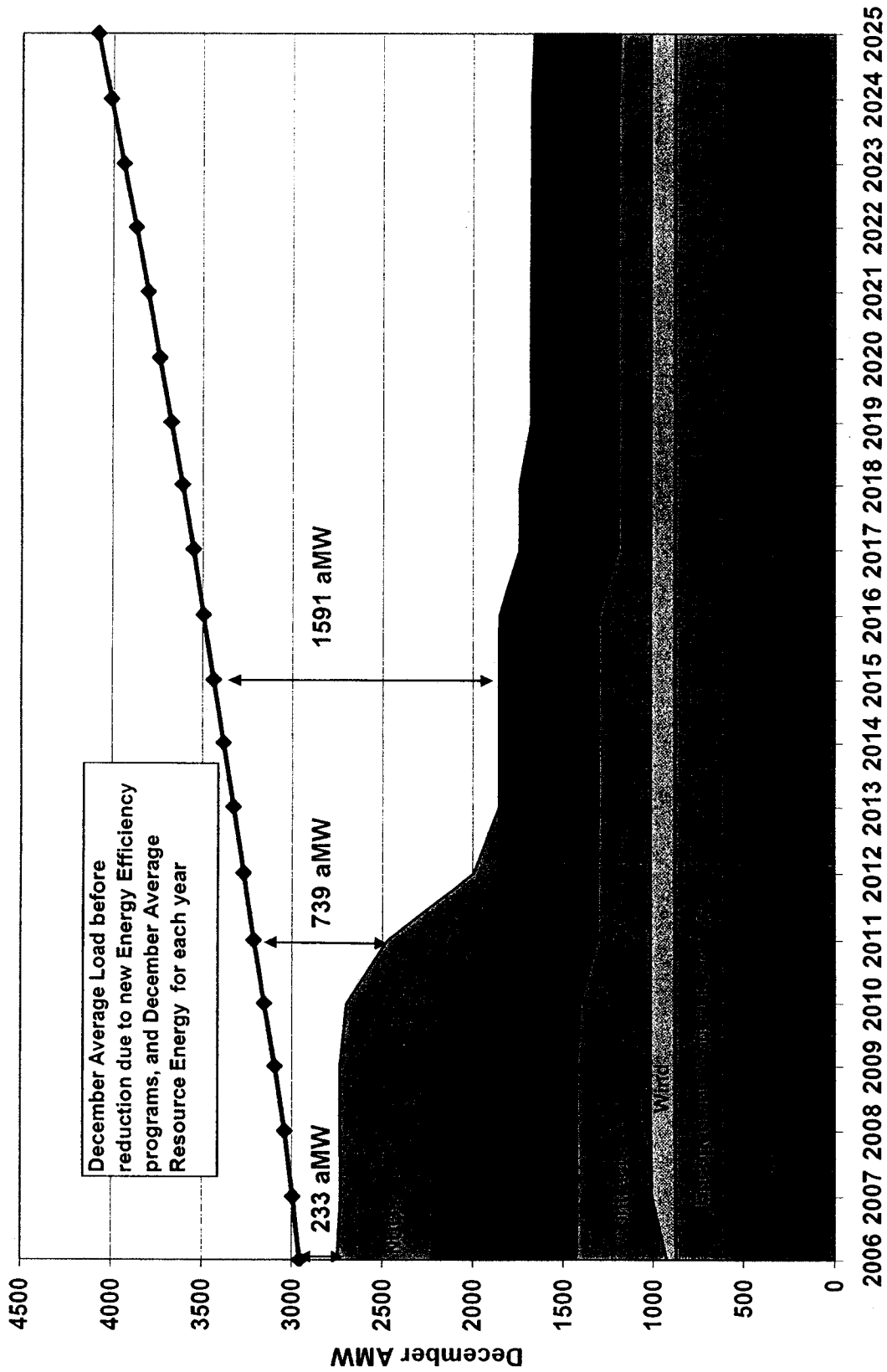
Wild Horse Wind Project Update

Highly Confidential
Per WAC 480-07-160

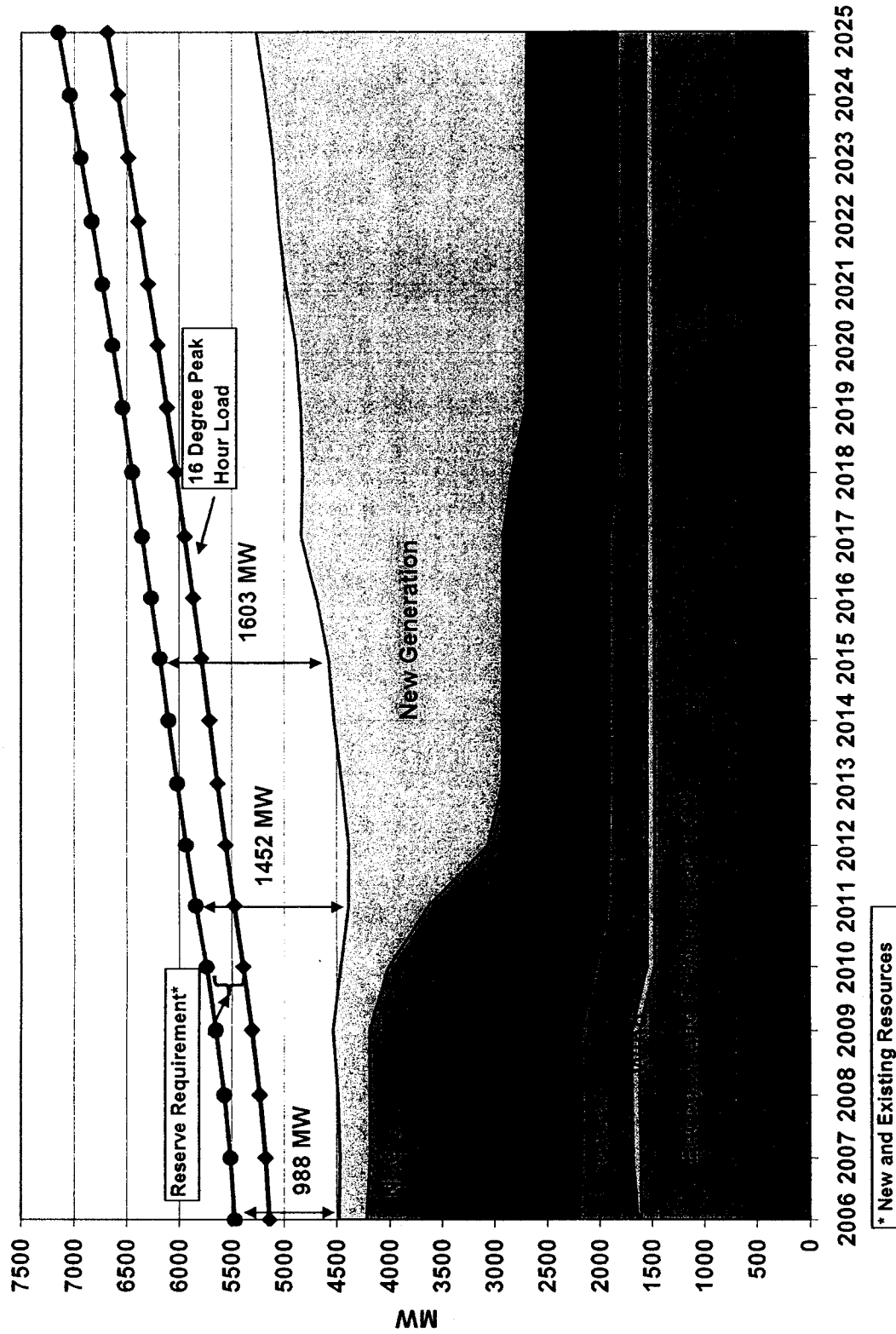
Text in box is Highly Confidential

Review of Resource Need

Energy Need



Capacity Need



* New and Existing Resources

RFP Status

RFP Status Report as of 7/1/06 - Leading Projects

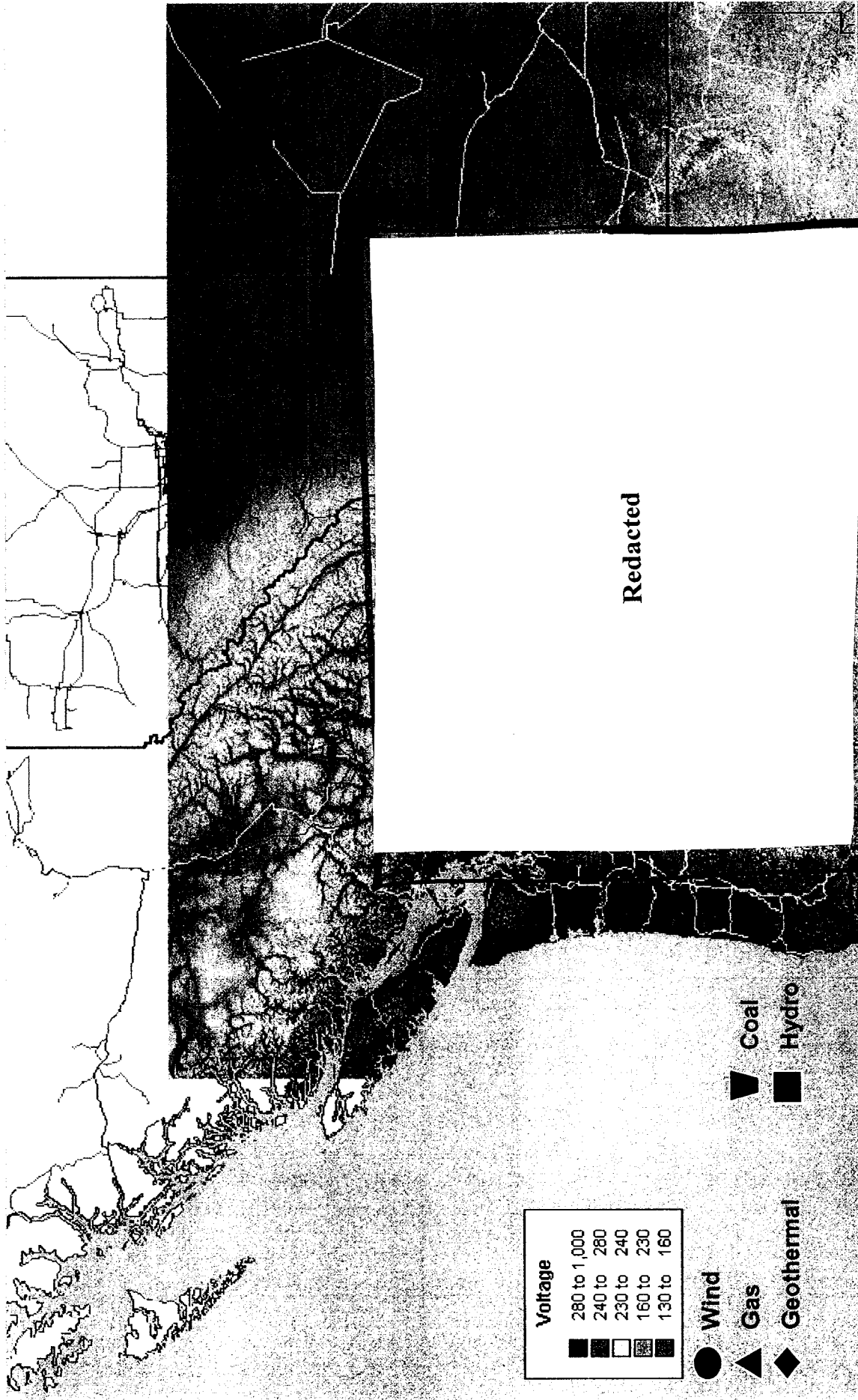
Fuel	Project/Offer	Owner/Developer	MW	Status	Commercial Operation Date
Geothermal					
Wind					
Wind					
Natural Gas					
Natural Gas	Goldendale (ownership)	Calpine	277	Operating	Sep-04
System Power Purchase Agmt					

Redacted

Text in box is Highly Confidential

Highly Confidential
Per WAC 480-07-160

Projects by location...



Highly Confidential
Per WAC 480-07-160

Text in box is Highly Confidential

Transactions of Special Note

Redacted

Highly Confidential
Per WAC 480-07-160

Text in box is Highly Confidential

Highly Confidential
Per WAC 480-07-160

Redacted

Text in box is Highly Confidential

Project Description

Redacted

Developer:

Location:

Size:

Capacity Factor

Turbines:

Real Estate:

Transmission:

Levelized Cost:

COD:

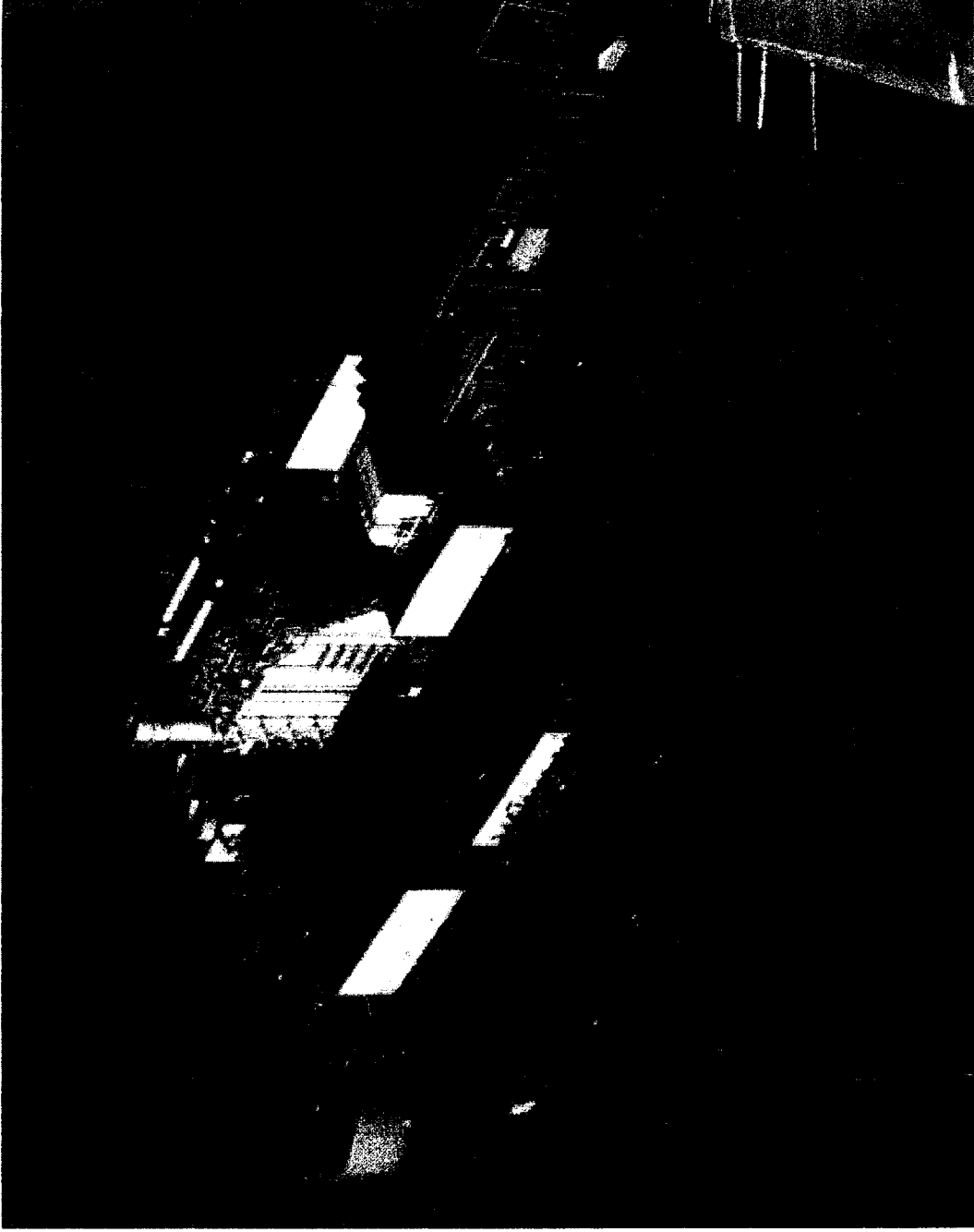
Redacted

Highly Confidential
Per WAC 480-07-160

Text in box is Highly Confidential

277 MW Goldendale CCCT Acquisition

Seller: Calpine
Purchase price
approximately
\$100M with
maximum of
\$120M
Process:
Bankruptcy
Auction
Competition
unknown
Potential close
Q4, 2006



Goldendale Acquisition - Bankruptcy Process

Under Section 363 of Bankruptcy Code, PSE and Calpine would negotiate and execute binding purchase agreement for the sale of the plant ("Stalking Horse Bid")

Stalking Horse Bid submitted by Calpine to bankruptcy court for approval

If approved, court would hold an auction within 2 months from filing date

✓ If no bidder outbids Stalking Horse Bid, PSE would own plant

✓ If outbid, the winning bidder must pay PSE a break-up fee of 2-3% of the PSE's bid

Considerations with regard to buying assets out of bankruptcy:

Buyer takes plant "as is" with limited recourse to Seller; few warranties or indemnities available; requires extremely thorough due diligence

Though Stalking Horse Bid would not require SEC disclosure, the bid is made public through bankruptcy process so control by PSE of disclosure may be warranted

Goldendale Plant Profile

Location:	Goldendale, WA
Size (acreage):	Project sited on 42 acres
Capacity:	277 MW natural gas-fired CCCT plant
Technology:	GE 7FA gas turbine; Siemens steam turbine
Heat Rate:	6,858 Btu/kWh
Fuel Supply:	42,000 MMBtu/day
Gas Transport:	PSE to secure NWPL mainline transportation
Transmission:	Klickitat PUD to BPA
Point of Delivery:	Mid-C
Levelized Cost:	significant portfolio benefit

Redacted

Whitehorn CT Financing Lease: 150 MW Capacity - Acquisition vs. Lease Extension

Unit acquired in 1980 using a financing lease; lease term expires 2/2/09

Notice to extend lease term must be given by 2/2/07; earlier notice sought by Lessor (Public Service Resources Corporation)

Lessor has been pushing PSE to purchase facility at Stipulated Loss Value, i.e. [redacted] and prefers 2006 closing

Lessor has increased pressure to force purchase via Notice of Default (evergreen gas transportation agreement, water franchise, maintenance)

Negotiations continuing

Total purchase cost of approximately [redacted] more economic than lease extension or capacity offers in RFP

Regulatory and Rate Recovery Issues:

Recovery of "acquisition premium" (amount in excess of Seller's Net Book Value) under FERC and WUTC rules

Special dispensation from WUTC will be needed to recover any acquisition premium

Lease Extension Option, if acquisition cannot be agreed, will likely require [redacted] O&M expense by 2/2/09 to meet vague lease terms with respect to condition of facility to be returned

Redacted

Other Transactions and Progress Reports

On-Peak Power Purchase

Redacted

Highly Confidential
Per WAC 480-07-160

Text in box is Highly Confidential

Geothermal Project

Redacted

Highly Confidential
Per WAC 480-07-160

Text in box is Highly Confidential

Redacted

Highly Confidential
Per WAC 480-07-160

Text in box is Highly Confidential

Redacted

Text in Box is Confidential

CONFIDENTIAL
Per WAC 480-07-160

Redacted

CONFIDENTIAL
Per WAC 480-07-160

Text in Box is Confidential

Redacted

CONFIDENTIAL

Per WAC 480-07-160

Text in Box is Confidential

Baker River Hydro Plants (170 MW) License Implementation

FERC issued DEIS on April 7, 2006

Excluded approximately \$37 million of environmental and cultural enhancements from the Settlement Agreement

16 Parties filed comments on June 16, 2006

PSE expect substantially all enhancement items in Settlement Agreement will ultimately be accomplished

Early implementation, engineering and design work on Upper and Lower Baker projects continues

Upstream/downstream fish passage systems

Hatchery expansion

Lower Baker powerhouse

Documentation of historic structures

Treatment plans for archaeological resources

Work continues on shoreline permit, SEPA process, CZMA Consistency Certification and Water Quality Certification

PSE anticipates FEIS late summer; new FERC license early 2007

Redacted

Text in box is Highly Confidential

Highly Confidential
Per WAC 480-07-160

Snoqualmie Falls Hydro Plant (54 MW) License Implementation

New 40-year FERC license issued June 29, 2004

PSE requested and FERC approved revised construction schedule, starting June 29, 2008 with completion by June 29, 2010

Engineering and design work continues

New diversion dam

Plant 1 intake, penstocks and powerhouse

Plant 2 intake, tunnel, penstocks, powerhouse and flow continuation valve

PSE is operating in compliance with operations and environmental License articles

PSE has coordinated Community meetings to solicit input on improvements to public areas of the project

Snoqualmie Tribe's appeal of the license is before the 9th Circuit Court of Appeals

Oral arguments anticipated by end of 2006

Resolution expected in 2007

Jackson Prairie Expansion

Capacity expansion ongoing; expected to complete 2011-2012; increases storage capacity from 37 Bcf to 48 Bcf (10.5 Bcf additional)

- ✓ PSE share of working gas 2.1BCF; cost of \$10.5M

Deliverability expansion expected to complete fall 2008; increase withdrawal capability from 850 MMcf to 1,150 MMcf

- ✓ Pending FERC application (recently filed)

- ✓ PSE's share of deliverability 104,000 dekatherms/day; PSE cost of \$14.6M

Redelivery Service commences at completion of deliverability expansion

- ✓ NWPL transports storage withdrawals from Jackson Prairie to PSE citygates and generation sites

- ✓ 20-year term at annual cost of \$3.5M which reflects long-term discount of 75% of tariff rate in exchange for extensions of PSE's other primary contracts with NWPL

Expansion provides current value to PSE's customers; reduces long term costs by \$50M+

Colstrip 1 & 2 New Coal Supply Agreement

Original Coal Supply Agreement with Western Energy Company (WEC) ends 12/31/09; PSE annual purchase is approximately 1.4M tons at a current cost of \$19M/year (\$13.70/ton)

Recommendation to PSE Energy Management Committee in August 2005 to pursue alternative strategies:

- Long-term contract with WEC
- Competitive purchases of Powder River Basin (PRB) coal supported by long-term rail agreement

Cost of plant modifications and PRB coal market prices increased significantly: focus shifted to WEC exclusively

Contract documents exchanged; profit level and third party sales still under discussion; estimated new contract price \$16-\$18/ton

Goal: Execute contract with WEC before end of 2006.

Renewable Portfolio Standard Update

- Ballot initiative for Washington anticipated this November; passage expected
- Applies to utilities with more than 25,000 customers
 - 17 utilities affected
- Eligible renewables include wind, geothermal, biomass located in Washington; limited ability to import
- Targets for serving retail load with renewables:
 - 3% by 2012; 9% by 2016; 15% by 2020
 - PSE is ok until 2015
- Penalty for non-compliance is \$50/MWh
- PSE represents 30%-33% of the affected load
- Regional initiatives as to address integration and transmission issues

Hopkins Ridge Wind Project Status

Placed in service November 27, 2005

3 weeks ahead of schedule
~\$10 million under budget

Energy production



expected capacity factor
year to date capacity factor
(which has been limited by BPA
transmission line maintenance)

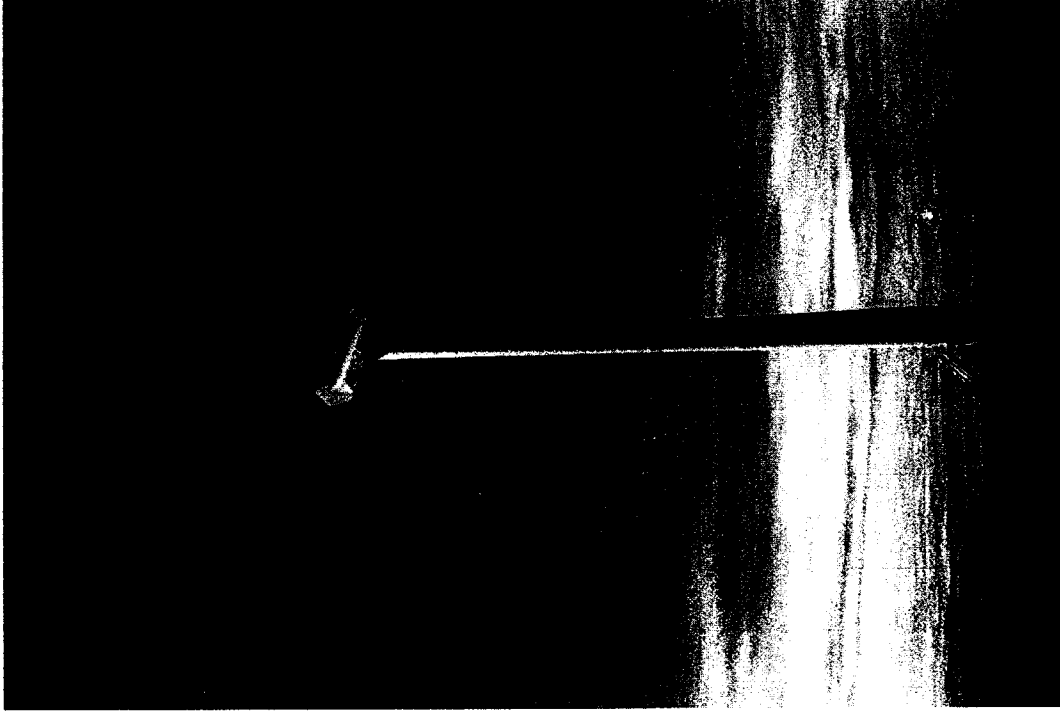
Punch List Items Complete

Final Completion signed off on
May 26th

Excellent community/landowner
relations

CONFIDENTIAL
Per WAC 480-07-160

Text in Box is Confidential



Wild Horse Wind Project Status

On Budget

On Schedule

Completion Statistics:

Roads: 83%

Foundations: 60%

Underground Cable: 54%

Project Substation: 98%

Maintenance Building: 22%

Turbine Delivery: 30%

Turbine Erection: 5%

230 kV Transmission Line: 100%

230 kV Interconnection/Transmission Upgrade: 87%

In compliance with all permits and environmental requirements

Excellent community relations

Operating Personnel Hired:

Environmental and Communications Manager

Plant Manager

