

**EXHIBIT NO. \_\_\_(RG-30HC)  
DOCKET NO. UE-09\_\_\_/UG-09\_\_\_  
2009 PSE GENERAL RATE CASE  
WITNESS: ROGER GARRATT**

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**PUGET SOUND ENERGY, INC.,**

**Respondent.**

**Docket No. UE-09\_\_\_  
Docket No. UG-09\_\_\_**

**TWENTY-NINTH EXHIBIT (HIGHLY CONFIDENTIAL) TO THE  
PREFILED DIRECT TESTIMONY OF  
ROGER GARRATT  
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**REDACTED  
VERSION**

**MAY 8, 2009**



## **RENEWABLE RESOURCE ACQUISITION**

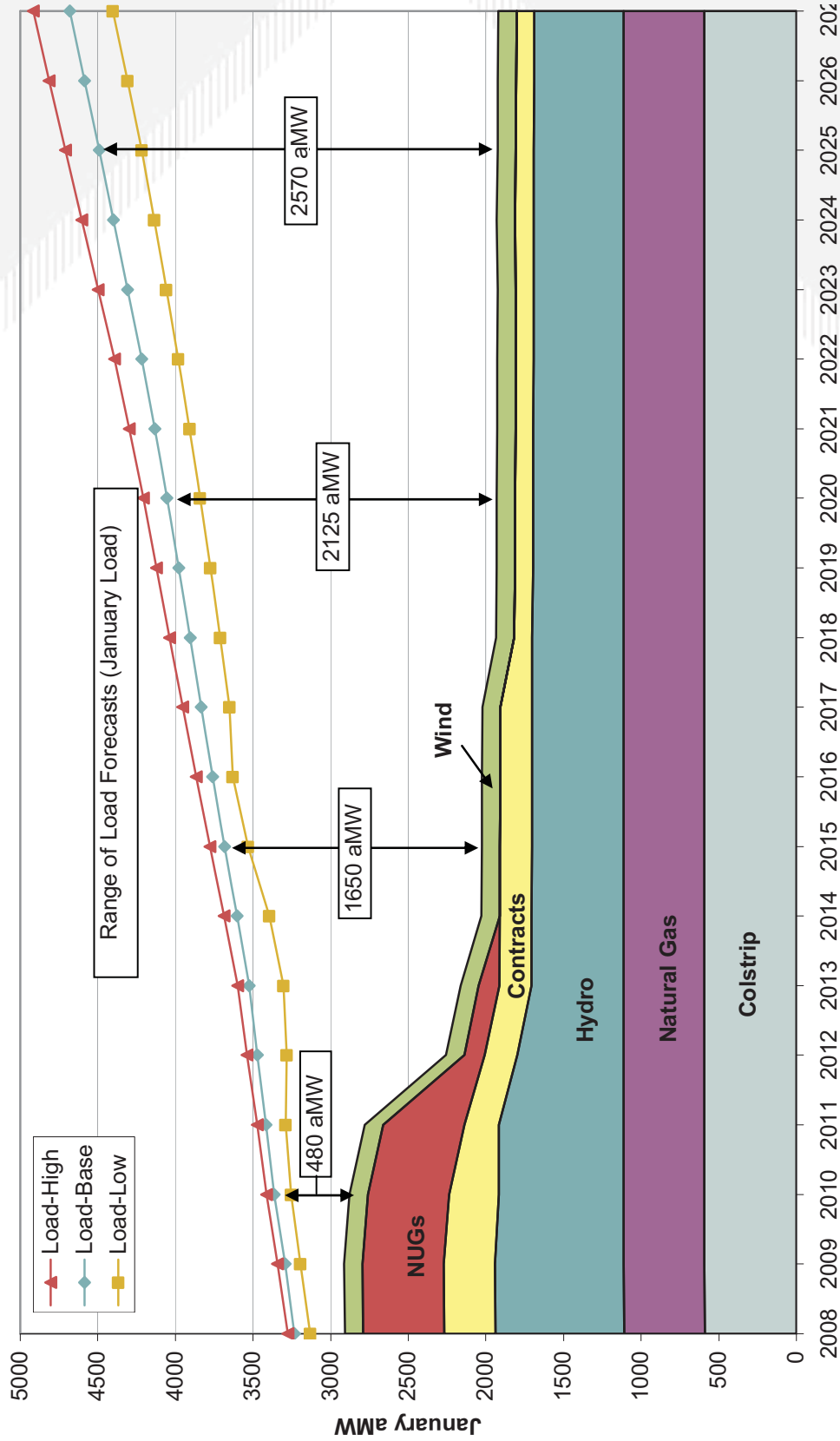
**PSE Board of Directors Retreat  
August 3, 2007**

Roger Garratt  
Director, Resource Acquisition

# Agenda

- Resource Need and Strategy
- Renewable Market Overview
- Renewable Opportunities
- Summary

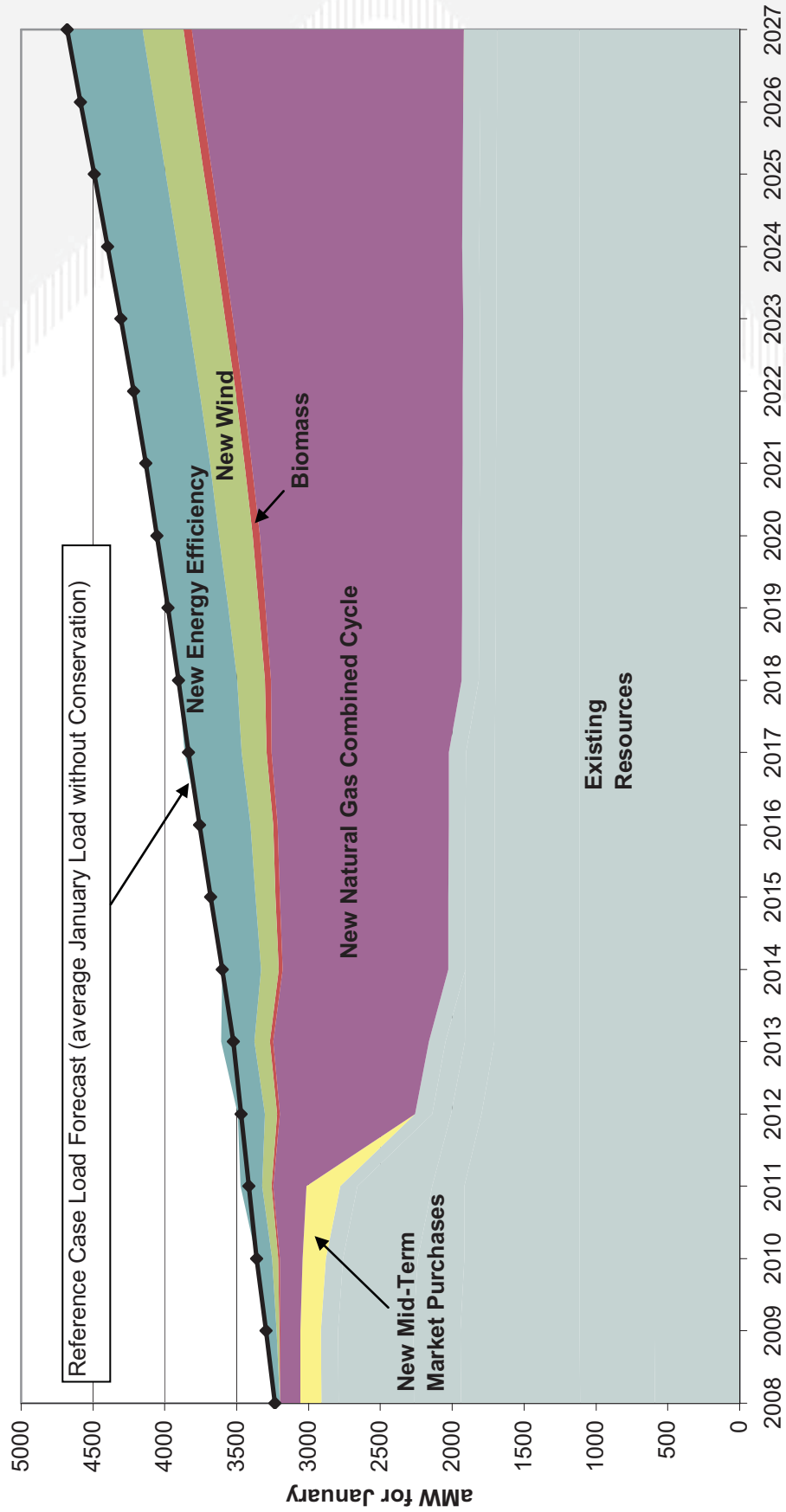
# Resource Need\*



\*As identified in PSE's 2007 Integrated Resource Plan



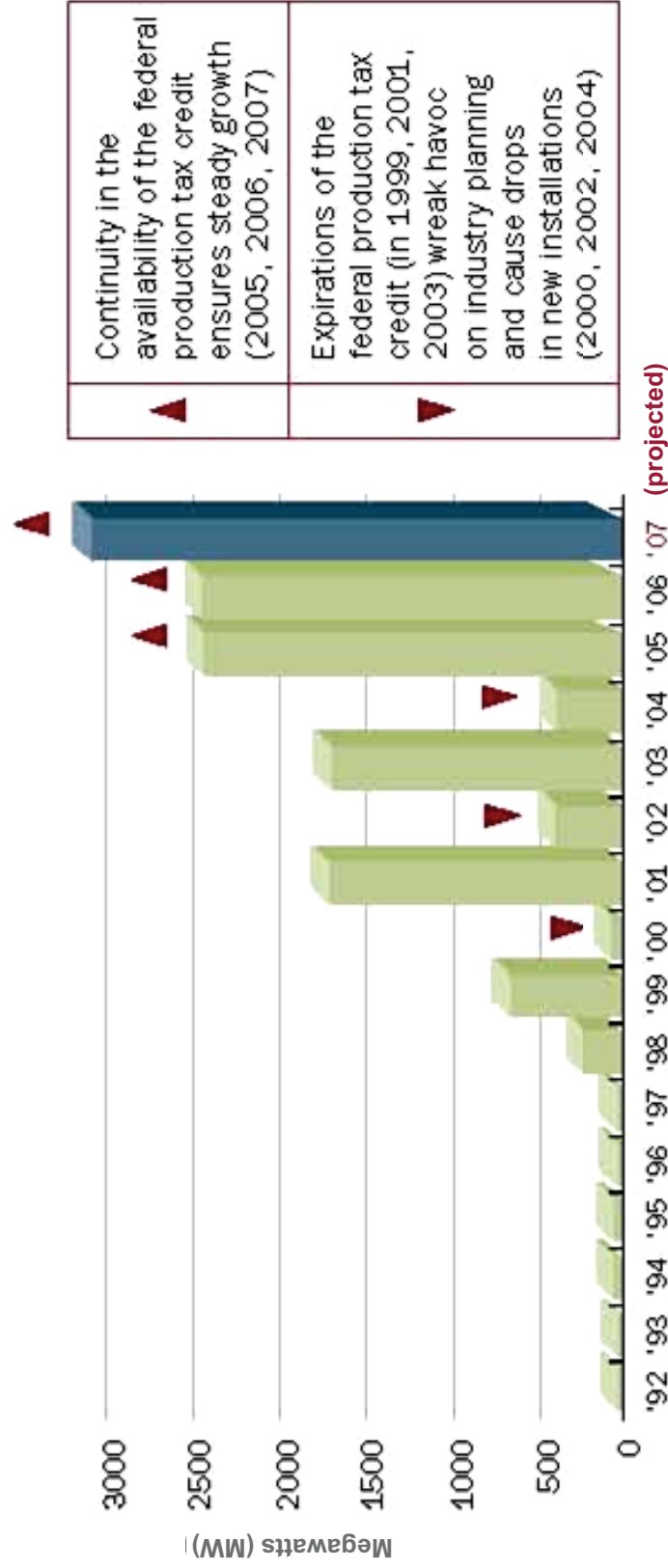
# Resource Strategy\*



\* As identified in PSE's 2007 Integrated Resource Plan



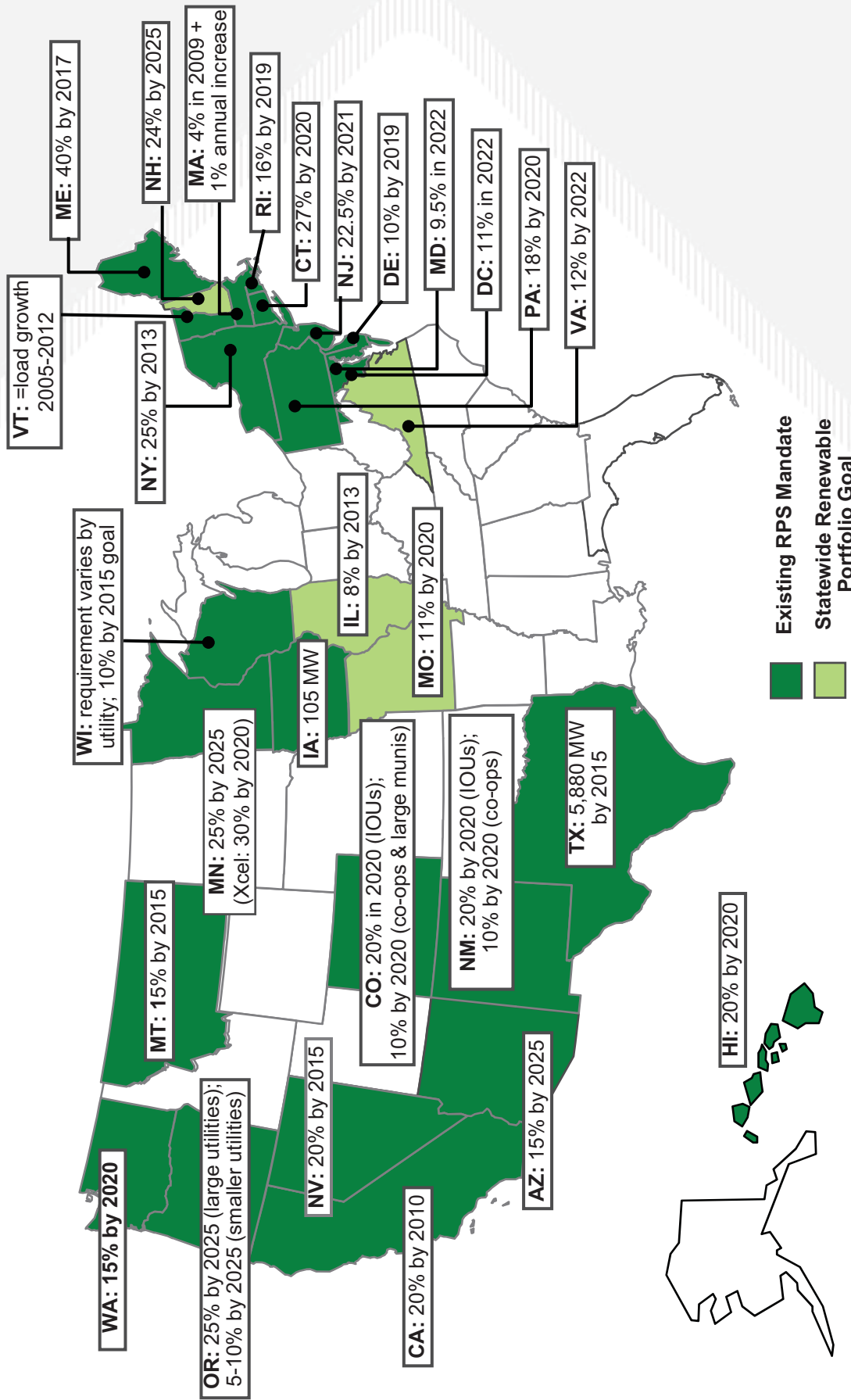
# Annual Installed U.S. Wind Energy Capacity On the Rise



Source: American Wind Energy Association, "Wind Power Outlook 2007"



# Renewable Portfolio Standards (RPS)

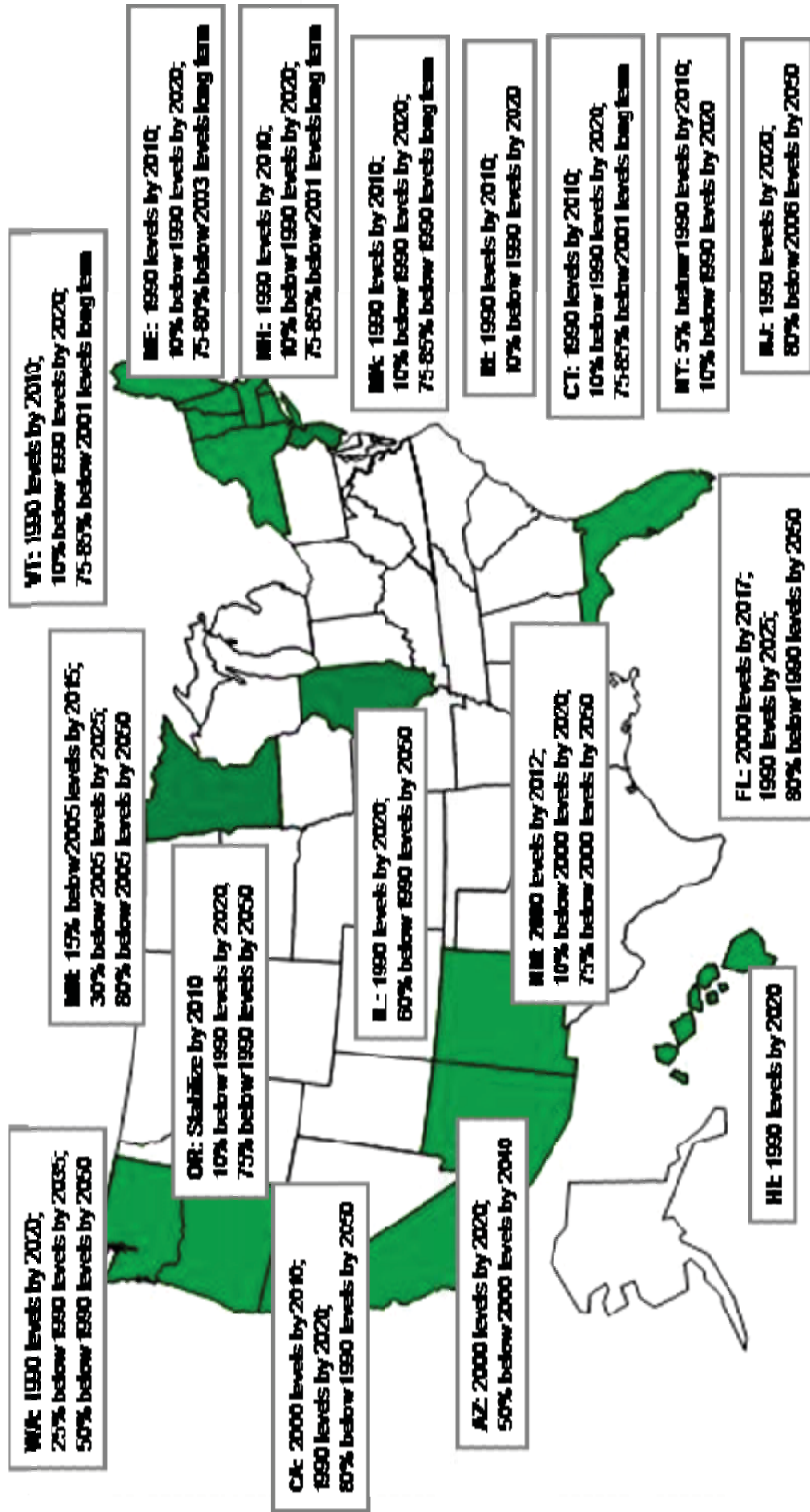


Existing RPS Mandate  
 Staterwide Renewable Portfolio Goal

Sources: [www.dsireusa.org](http://www.dsireusa.org) and EEI, July 2007



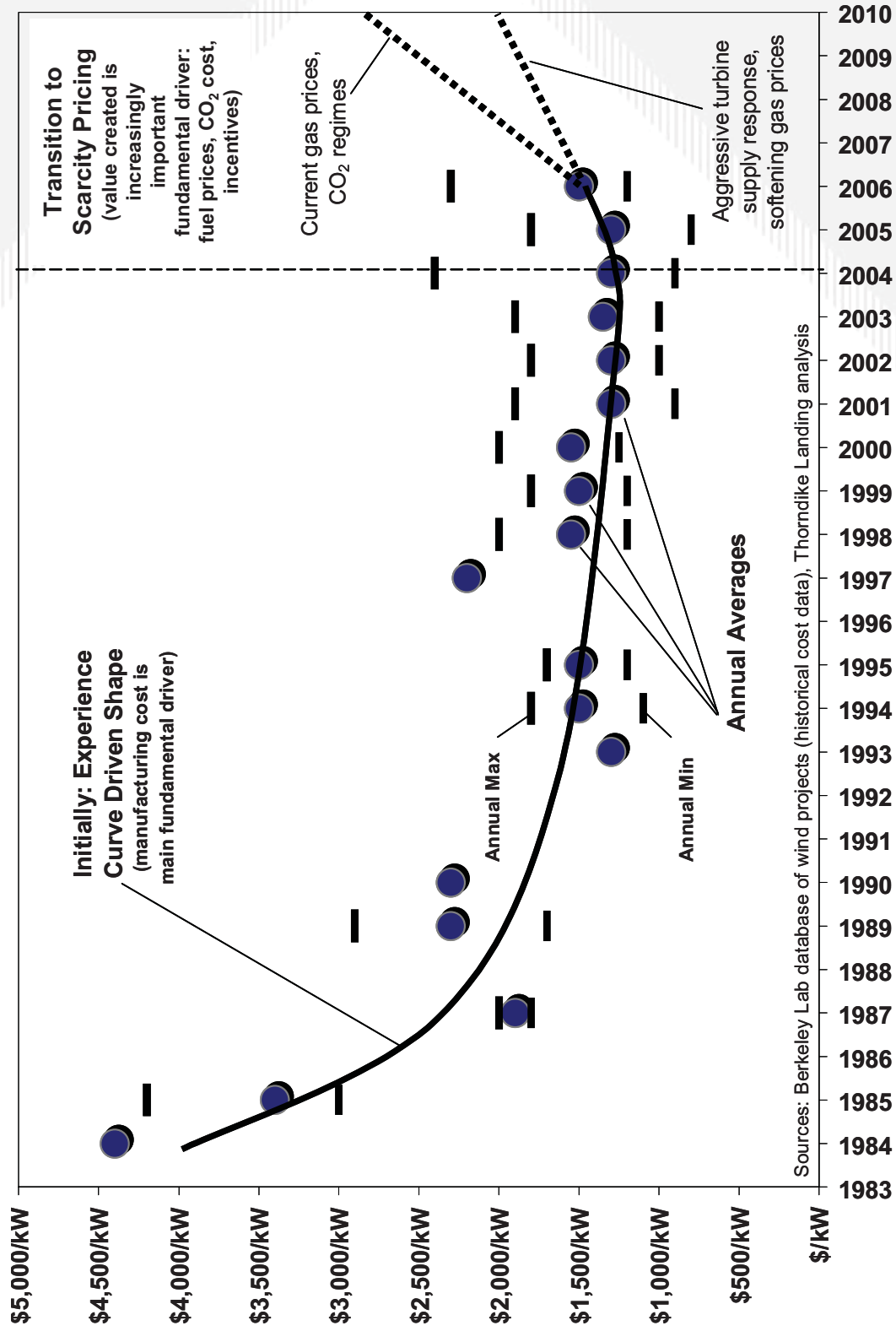
# Greenhouse Gas (GHG) Targets



Source: [www.pewclimate.org](http://www.pewclimate.org)

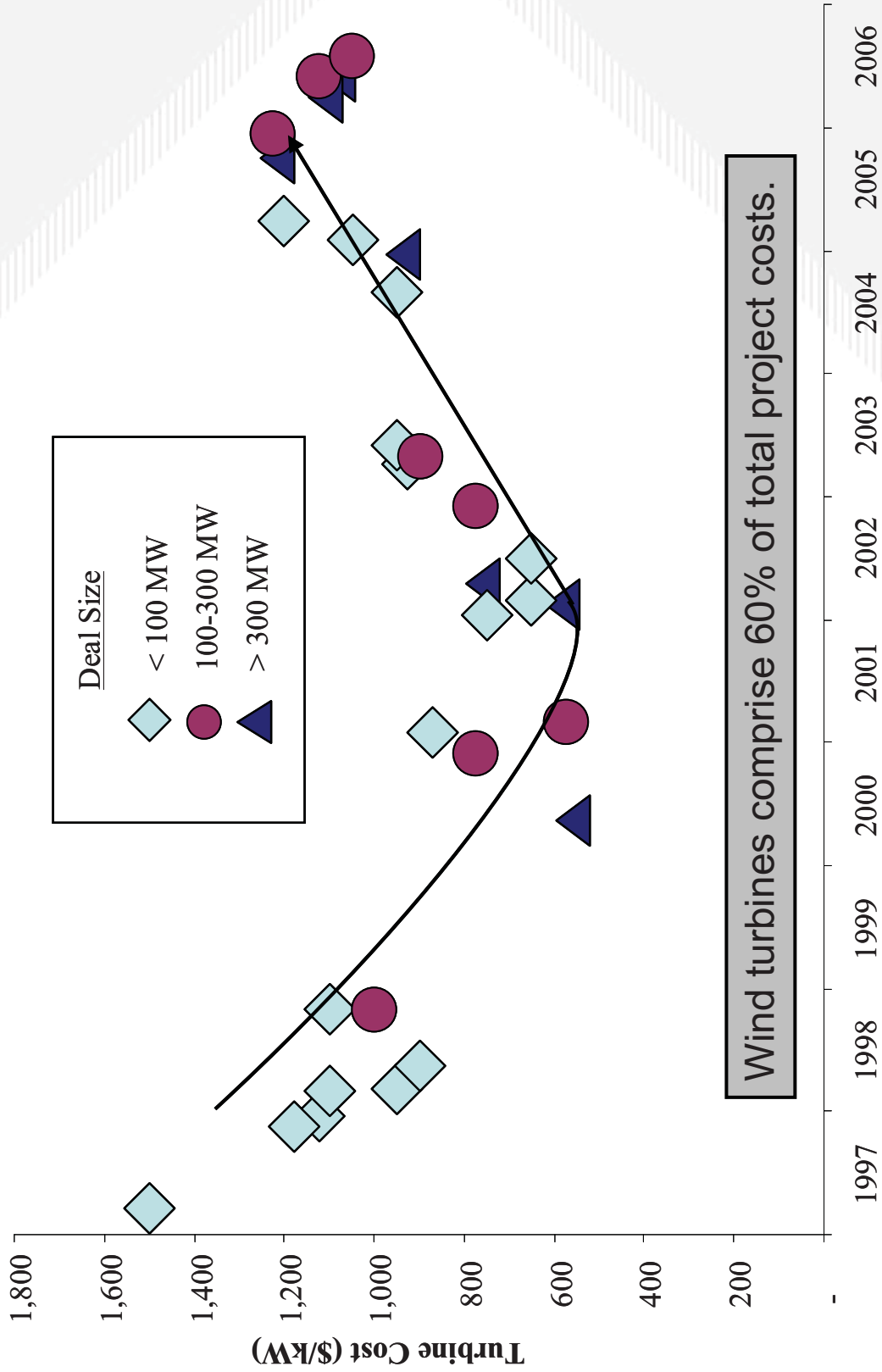


# Rising Installed Wind Project Costs



Source: Thorndike Landing analysis

# Rising Wind Turbine Costs



Source: Berkeley Lab database. Thorndike Landing analysis.



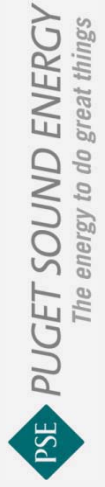
# Developer Consolidation

Merger and acquisition activity among U.S. wind development companies\*

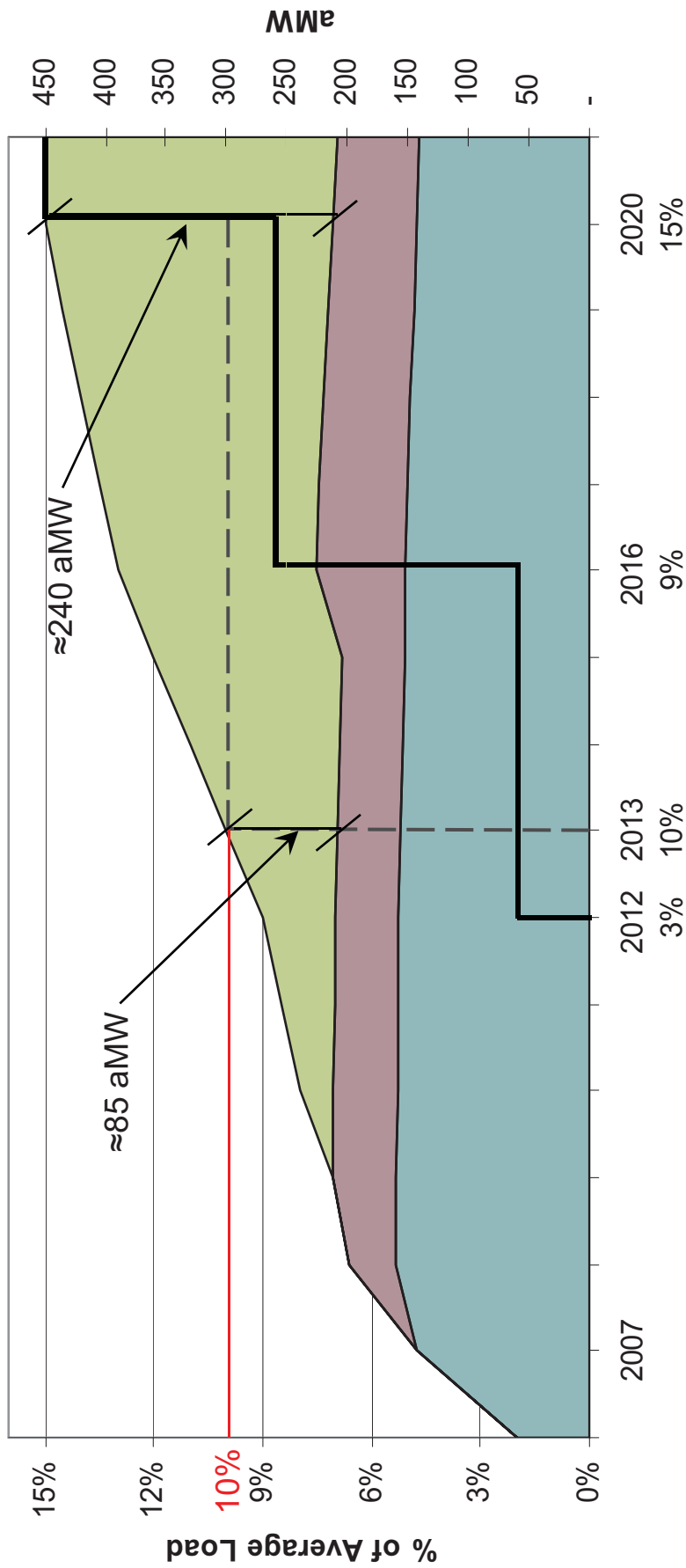
Investor	Transaction Type	Developer	Announced
EDF (SIIF Energies)	Acquisition	enXco	May-02
Gamesa	Investment	Navitas	Oct-02
AES	Investment	US Wind Force	Sep-04
PPM Energy	Acquisition	Atlantic Renewable Energy Corp.	Dec-04
AES	Acquisition	SeaWest	Jan-05
Goldman Sachs	Acquisition	Zilkha (Horizon Renewable Energy)	Mar-05
JP Morgan Partners	Investment	Noble Power	Mar-05
Arlight Capital	Investment	CPV Wind	Jul-05
Diamond Castle	Acquisition	Catamont	Oct-05
Pacific Hydro	Investment	Western Wind Energy	Oct-05
Greenlight	Acquisition	Coastal Wind Energy LLC	Nov-05
EIF U.S. Power Fund II	Investment	Tierra Energy, LLC	Dec-05
Airtricity	Acquisition	Renewable Generation Inc.	Dec-05
Babcock & Brown	Acquisition	G3 Energy LLC	Jan-06
Iberdrola	Acquisition	Community Energy Inc.	Apr-06
Shaw / Madison Dearborn	Investment	UPC Wind	May-06
NRG	Acquisition	Padoma	Jun-06
CPV Wind	Acquisition	Disgen	Jul-06
BP	Investment	Clipper	Jul-06
BP	Acquisition	Greenlight	Aug-06
Babcock & Brown	Acquisition	Superior	Aug-06
Enel	Investment	TradeWind	Sep-06
Iberdrola	Acquisition	Midwest Renewable Energy Corp.	Oct-06
Iberdrola	Acquisition	Gamesa's U.S. project pipeline	Oct-06
Iberdrola	Acquisition	PPM (Scottish Power)	Dec-06
BP	Acquisition	Orion Energy	Dec-06
EDP	Acquisition	Horizon Renewable Energy	Mar-07

\*Select list of announced transactions; excludes joint development activity.

Source: U.S. Department of Energy, Annual Report on U.S. Wind Power Installation, Cost, and Performance Trends: 2006. Berkeley Lab and Black & Veatch.



# PSE Renewable Acquisition Strategy



- PSE 10% Goal
- RPS Requirement
- Future Renewable Acquisitions
- Under Active Consideration: Kittitas Valley + Simpson + Hopkins Ridge Infill + Wild Horse Solar + Raft River
- Existing Renewables: Hopkins Ridge + Wild Horse + Klondike 3



# Current PSE Position

- Strong commercial reputation
- Proven track record as closer and partner
- Demonstrated project management and construction management skill set

## BUT

- Market is more competitive
- We don't control any options

# Identified Opportunities for Future Acquisition & Improved Control

## Acquisition and Development Opportunities

aMW	MW	COD	Project	Developer	County	State	C.F.	Notes
XX	XXX	XXX	XXXXXXXXXX	XXXXXXXXXX	XXXXX	XX	XXXX	XXXXXXXXXX
XX	XXX	XXX	XXXXXXXXXX	XXXXXXXXXX	XXXXX	XX	XXXX	XXXXXXXXXX
XX	XXX	XXX	XXXXXXXXXX	XXXXXXXXXX	XXXXX	XX	XXXX	XXXXXXXXXX
XX	XXX	XXX	XXXXXXXXXX	XXXXXXXXXX	XXXXX	XX	XXXX	XXXXXXXXXX
<b>92</b>	<b>300</b>	<b>TOTAL</b>						

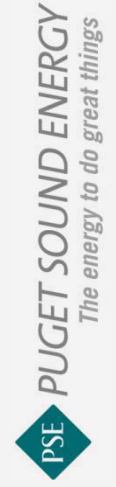
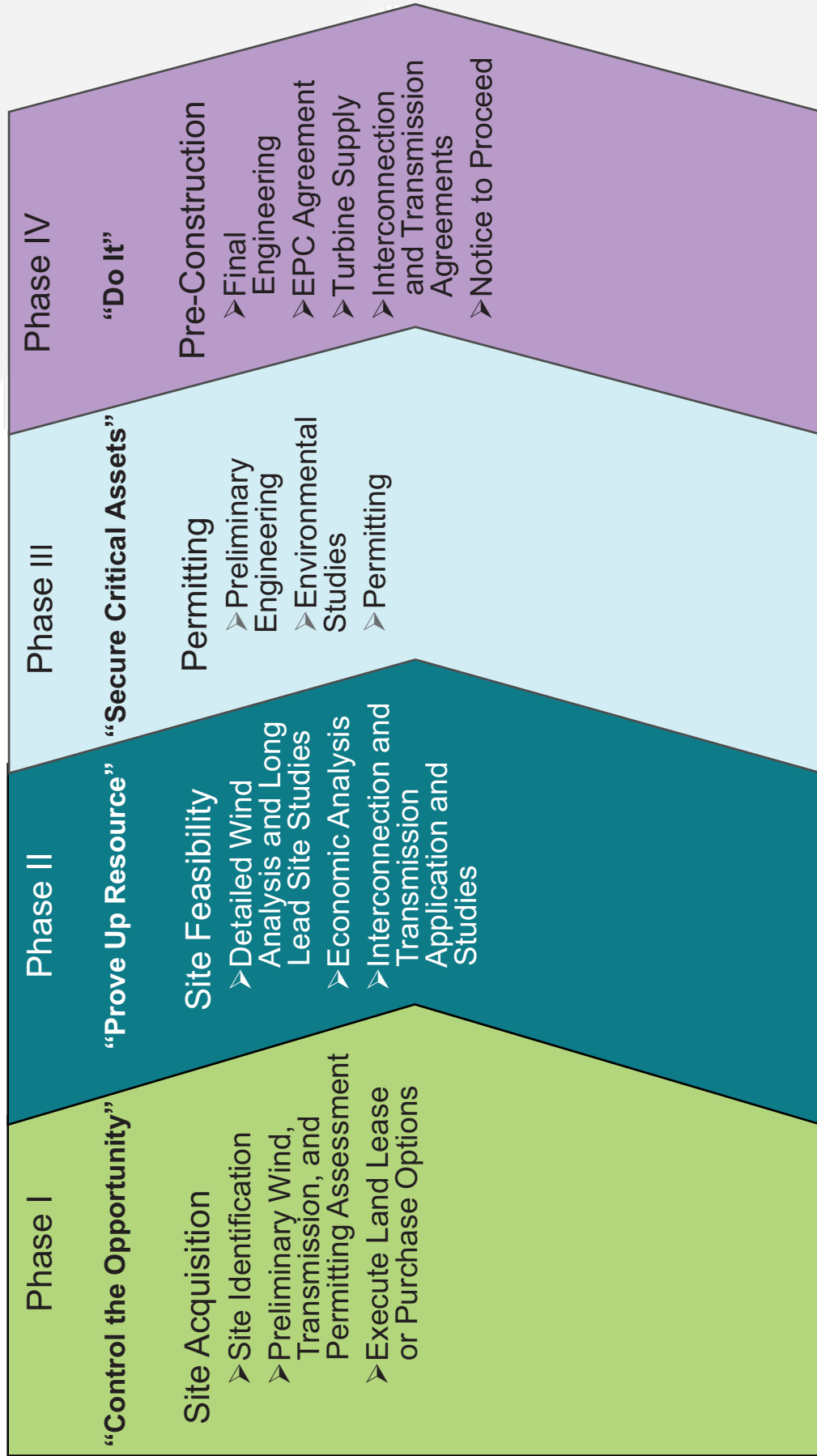
## Joint Development Opportunities

aMW	MW	COD	Project	Developer	County	State	C.F.	Notes
XX	XXX	XXX	XXXXXXXXXX	XXXXXXXXXX	XXXXX	XX	XXXX	XXXXX XXXXX
90	300	2010	JV Development Phase I	PSE / RES	(Eastern)	WA	30.0%	Joint venture under negotiation
90	300	2011	JV Development Phase II	PSE / RES	(Eastern)	WA	30.0%	Joint venture under negotiation
XX	XXX	XXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXX	XX	XXXX	XXXXX
<b>331</b>	<b>1,050</b>	<b>TOTAL</b>						

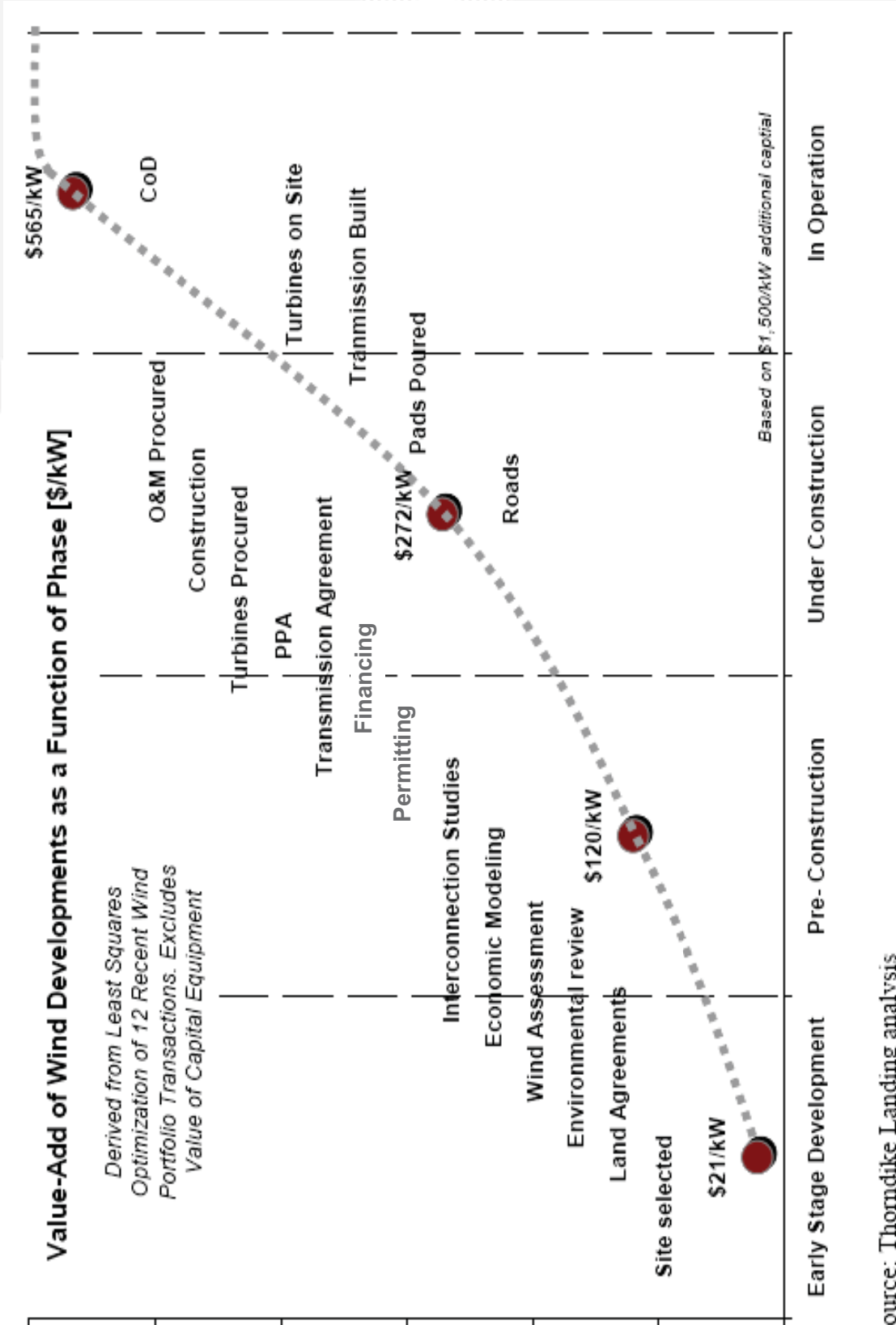
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# Wind Development Activities



# Wind Farm Value Chain



Source: Thorndike Landing analysis





# Key Impacts

Deal and development team staffing	O&M expenditures
Project management staffing	Accounting treatment
Tax credit financing	Regulatory treatment

# Summary

- Moving Up the Development Chain
- Pursuing Joint Development Opportunities