

NATIONAL RENEWABLE PORTFOLIO STANDARD: MYTHS AND FACTS

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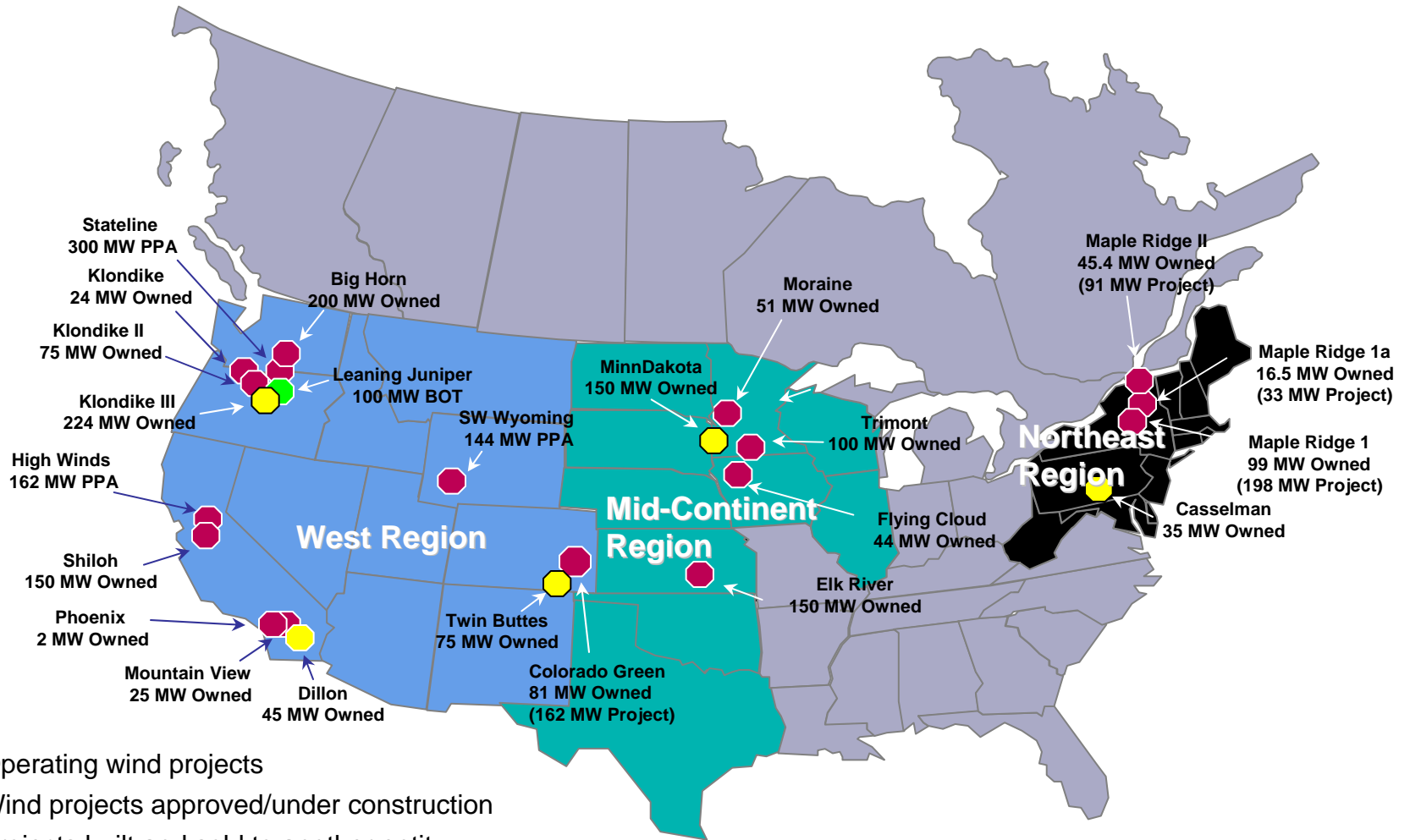
PPM ENERGY

- Develops and operates wind energy projects
 - 1,665 MW of operating assets – 3,500 MW by 2010
 - Second largest U.S. wind company
- Some thermal energy facilities
- Natural gas storage
- Energy marketing
- Entering solar energy market
- Recently acquired by Iberdrola
 - World leader in wind energy
 - 6,400 MW of wind capacity worldwide



PPM Energy
A ScottishPower Company ²

PPM WIND ASSETS



Operating Assets	1,665 MW
2007 Approved / Construction	528 MW
2010 Goal	3,500 MW



BACKGROUND

- Substantial renewable electricity resources
 - According to ACORE, there is the potential to meet 50% of all electric demand in the U.S.
 - President Bush 20% goal for wind energy
- Non-hydro renewables currently account for ~ 2% of electric generation
- Costs have come down, but renewable electricity not always competitive with fossil generation
- Renewable PTC and solar ITC help reduce costs
- Renewable portfolio standards needed to establish the market
- State RPS programs helpful, but a national program is needed for efficient and cost-effective renewable energy markets
- Two major national RPS proposals:
 - Bingaman (15% by 2020)
 - Udall/Platts (20% by 2020)

NATIONAL RPS BENEFITS

- Reduced emissions
- Energy independence
- Lower gas and electricity prices
- Enhanced economic competitiveness
- Rural economic development

MYTH #1: ELECTRIC PRICES WILL SKYROCKET

Facts

- An RPS will reduce gas demand and prices
- Electric market prices are generally set based on the cost of fossil fuel-fired generation
- Wood Mackenzie concludes that a 15% RPS reduces electric generation costs by more than \$100 billion
- EIA concludes a 15% RPS increases residential electric prices by 0.4% -- residential gas prices decline
- New Energy Choices concludes that a 20% RPS reduces consumer energy bills by 1.5% per year
- An RPS rewards only the most cost-effective renewable energy projects

MYTH #2: AN RPS HURTS REGIONS WITH LESS WIND

Facts

- Multiple renewable technologies are eligible for RPS credits
- Each region has significant renewable potential
- EIA analysis concludes that biomass generation will be 4X higher than wind pursuant to the Senate RPS proposal – solar has higher percentage increase than wind or biomass
- According to UCS, the Southeast has enough renewable energy potential to meet 50% of its current electricity demand
- Some regions, including the Southeast, import a significant amount of coal and other energy resources

MYTH #3: A NATIONAL RPS DISRUPTS STATE PROGRAMS

Facts

- Approximately 24 states have individual RPS programs
- H.R. 969 expressly permits state RPS programs (no preemption) – consistent with environmental laws that permit state laws to exceed Federal requirements
- Utilities complying with state RPS programs will receive Federal credits for eligible renewable energy
- National credit trading market improves efficiency and lowers compliance costs



MYTH #4: AN RPS REQUIRES BACKUP POWER PLANTS

Facts

- Some renewable resources (i.e. wind and solar) are intermittent – other renewable resources (i.e. biomass and geothermal) provide baseload generation opportunities
- While intermittent generation requires backup facilities, these plants don't run when wind and solar power are available – reducing fossil energy demand and emissions

MYTH #5: GHG LEGISLATION MAKES AN RPS UNNECESSARY

Facts

- According to Wood Mackenzie a 15% RPS reduces electric sector GHG emissions by 10%
- Most GHG cap and trade proposals are projected to increase gas demand and prices – An RPS, by reducing gas demand and prices, acts as a hedge
- An RPS is more than just climate change policy:
 - National energy security
 - Consumer energy costs
 - Economic development and competitiveness

MYTH #6: SMALL RURAL UTILITIES WILL BE BURDENED

Facts

- H.R. 969 exempts all electric cooperatives and municipal utilities
- Only investor-owned utilities would be required to comply with national RPS requirements