BUSINESS AS UNUSUAL

Gaining Advantage in a Dynamic Project Landscape

SEPT. 1ST–4TH
2010

RITZ CARLTON
GRANDE LAKES

ORLANDO,
FLORIDA

42ND ANNUAL ECC CONFERENCE

engineering and construction contracting conference

General Session

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Gaining Advantage in a Dynamic Project Landscape

SPEAKER

Four Decades of Pursuing a Diversified Energy Portfolio at CPS Energy

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CPS Energy – Background

- Electric & Gas utility serving the greater San Antonio area
  - Oldest energy utility in Texas – Founded in 1860
  - First service was gas lights in front of The Alamo
  - Celebrating 150 years of operation
- One of the largest municipally-owned utilities in the U.S.
  - 707,000 electric customers
  - 323,000 natural gas customers
  - 3,600 employees
- Outstanding customer satisfaction track record
  - Low electric rates – 2009 Residential rates averaged about 9¢/kwh

J.D. Power Survey – Southern Region	2008	2009	2010
Electric Residential Customers	2nd	1st	3rd
Gas Residential Customers	2nd	1st	n/a

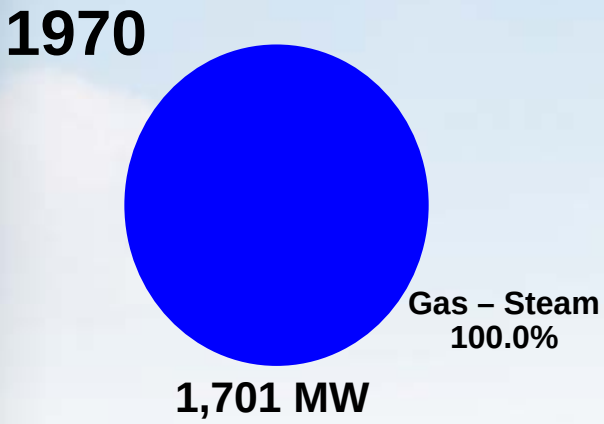
CPS Energy's Vision 2020

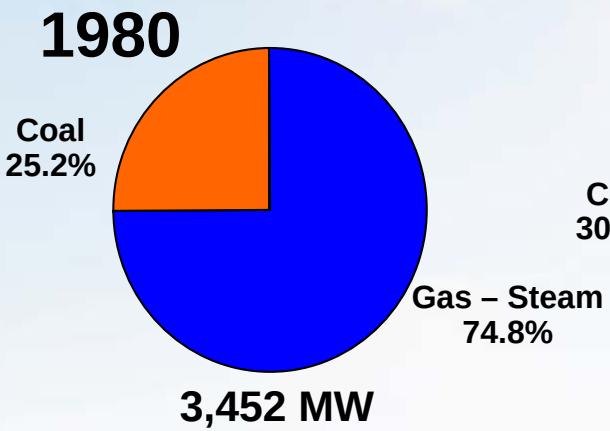
- **Goals for Renewable Energy**
  - **1,500 MW of renewable energy capacity by 2020**
  - **100 MW from renewable sources other than wind by 2020**
- **Goals for Energy Efficiency & Conservation**
  - **Save for Tomorrow Energy Plan (STEP) will help avoid 771 MW of electric load growth by 2020**
- **Drive local economic development by maintaining retail electric rates at least 10% lower than other major Texas cities**

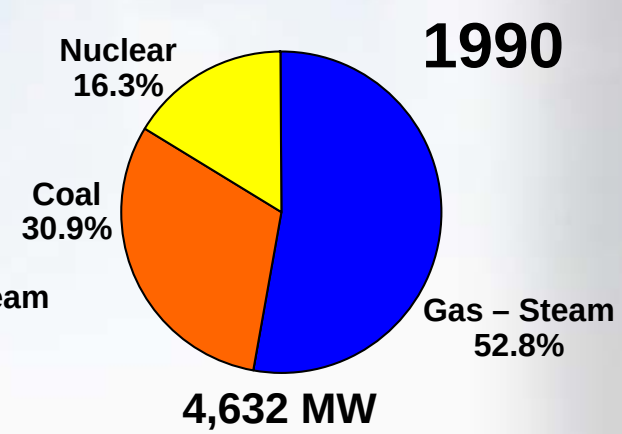
Main Take-Aways

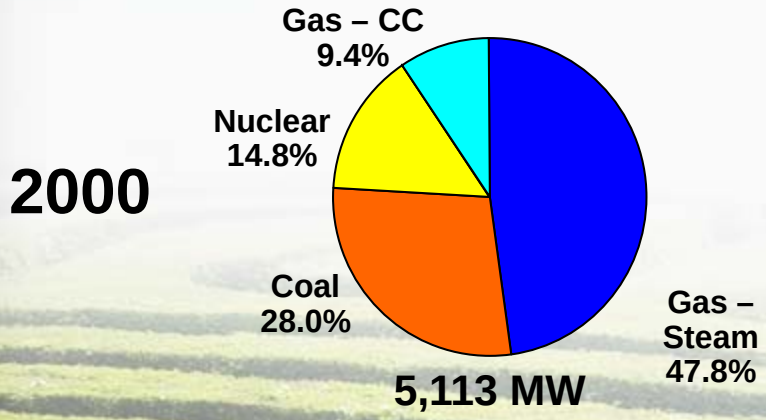
- Energy diversification and energy independence have been cornerstones of CPS Energy's strategy for the past four decades
- Renewable energy is growing fast, but there are challenges to overcome, and traditional energy sources are still important
- Uncertainty around natural gas prices is a significant risk for all new energy projects including nuclear, coal and renewables, as well as plant upgrades

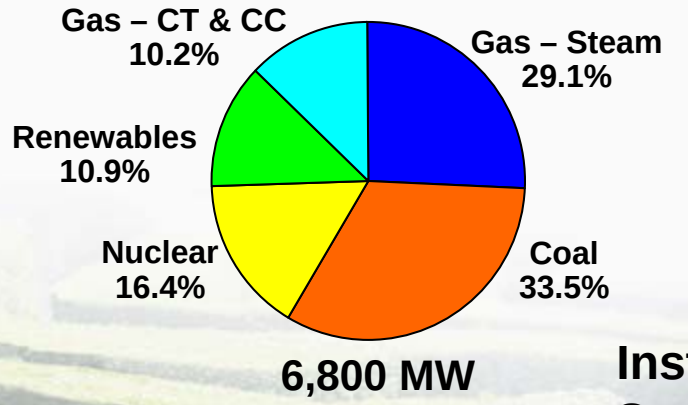
Four Decades of Energy Mix Diversification at CPS Energy











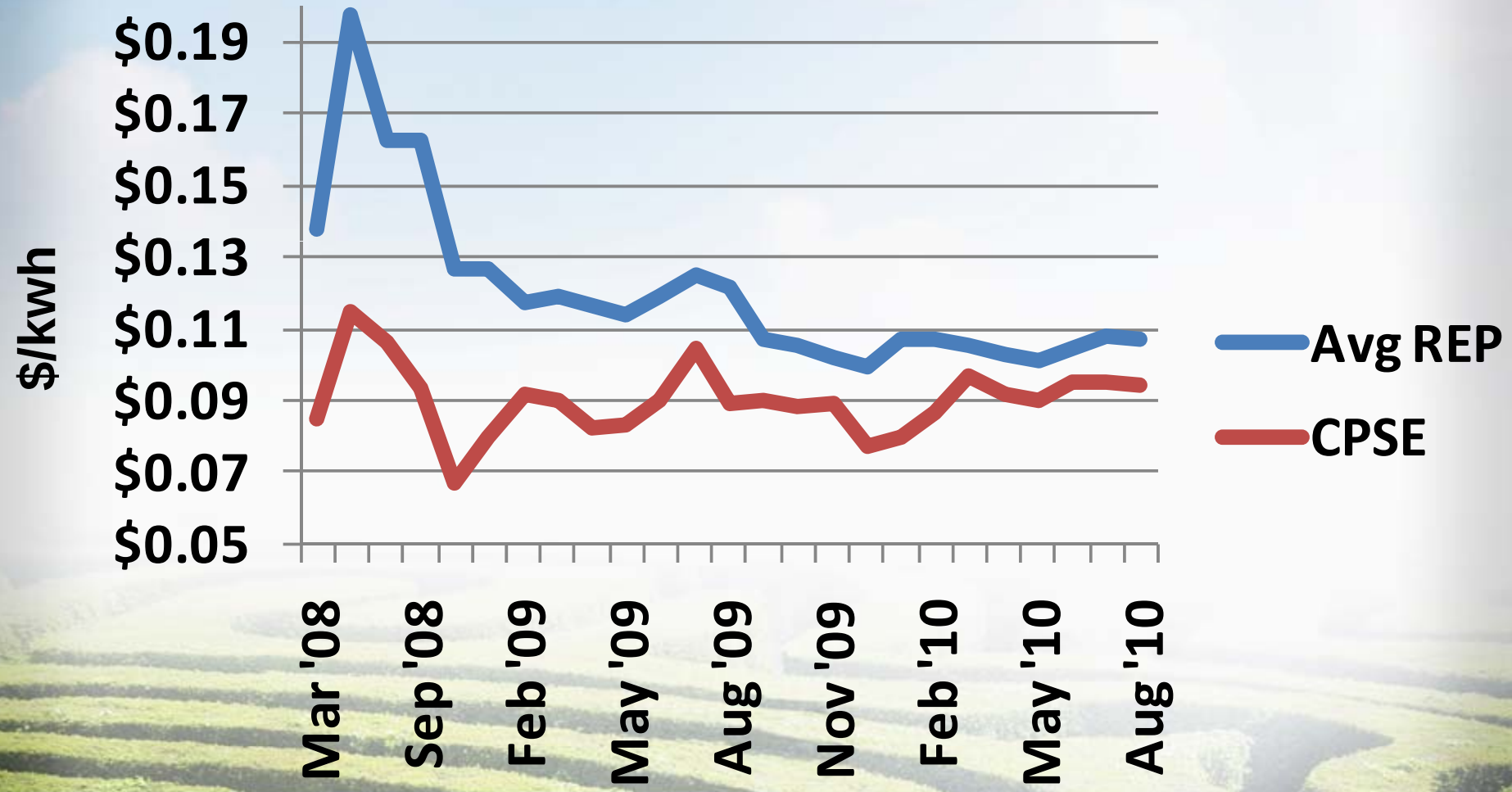
Installed Capacity

970 Megawatts of New Generation Capacity in 2010

Spruce Unit 2
780 Megawatts
PRB Low-Sulfur Coal

Braunig Peaking Turbines
190 Megawatts
Natural Gas / Fuel Oil

Diverse Energy Mix Keeps CPS Energy's Residential Bills Low



CPS' Renewable Energy Projects

Projects in Commercial Operation	
Wind	709.0 MW
Landfill Gas	9.6 MW
Total	718.6 MW

Projects in Development	
Wind	150.0 MW
Solar	41.4 MW
Total	191.4 MW

CPS Energy is a leader in Renewable Energy with more than 900 MW under contract

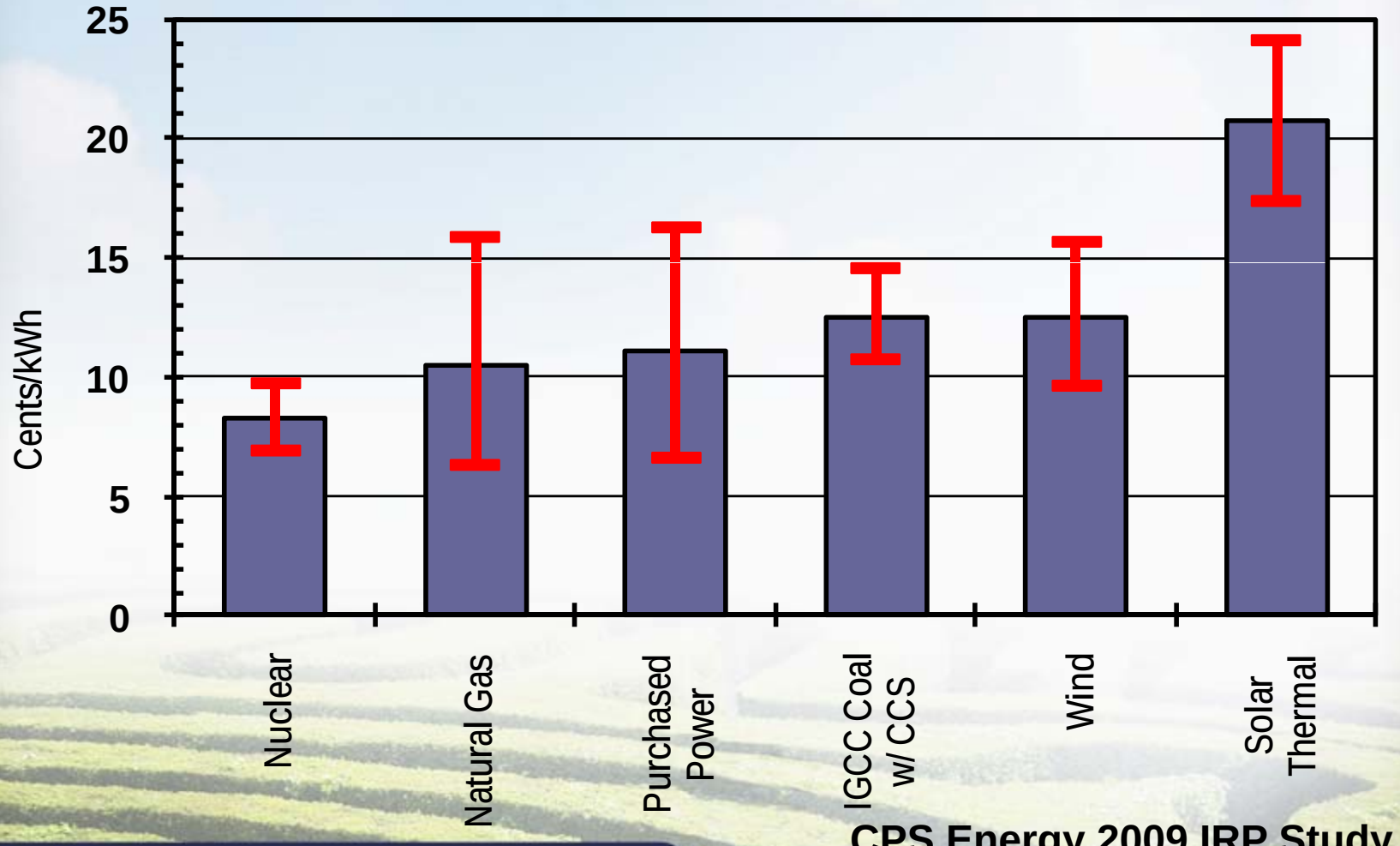
Blue Wing Solar Project

- Developer – Juwisolar
- Equity Owner – Duke Energy
- Off-Take – CPS Energy
- Scheduled COD – Dec. 2010
- Capacity – 14.4 MW
- Deal Structure – 30 yr PPA
- Solar Technology – Thin Film
- Location – San Antonio, TX

Challenges for Renewable Energy

- Cost / Financing
- Intermittency / Forecasting
  - Financial Risk in ISO Markets
- Transmission Congestion Risk

Cost of Renewable Energy is Dropping, But Still More Expensive

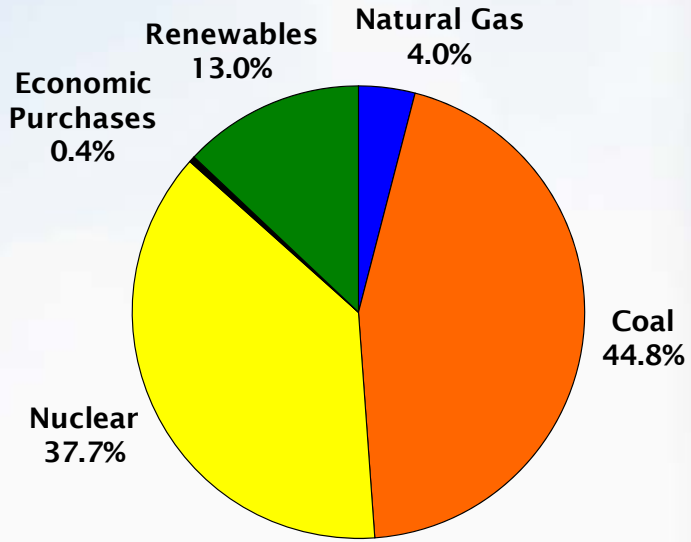


CPS Energy 2009 IRP Study

Overcoming the Cost Hurdle for Renewable Energy

Renewable energy's cost premium can be overcome by:

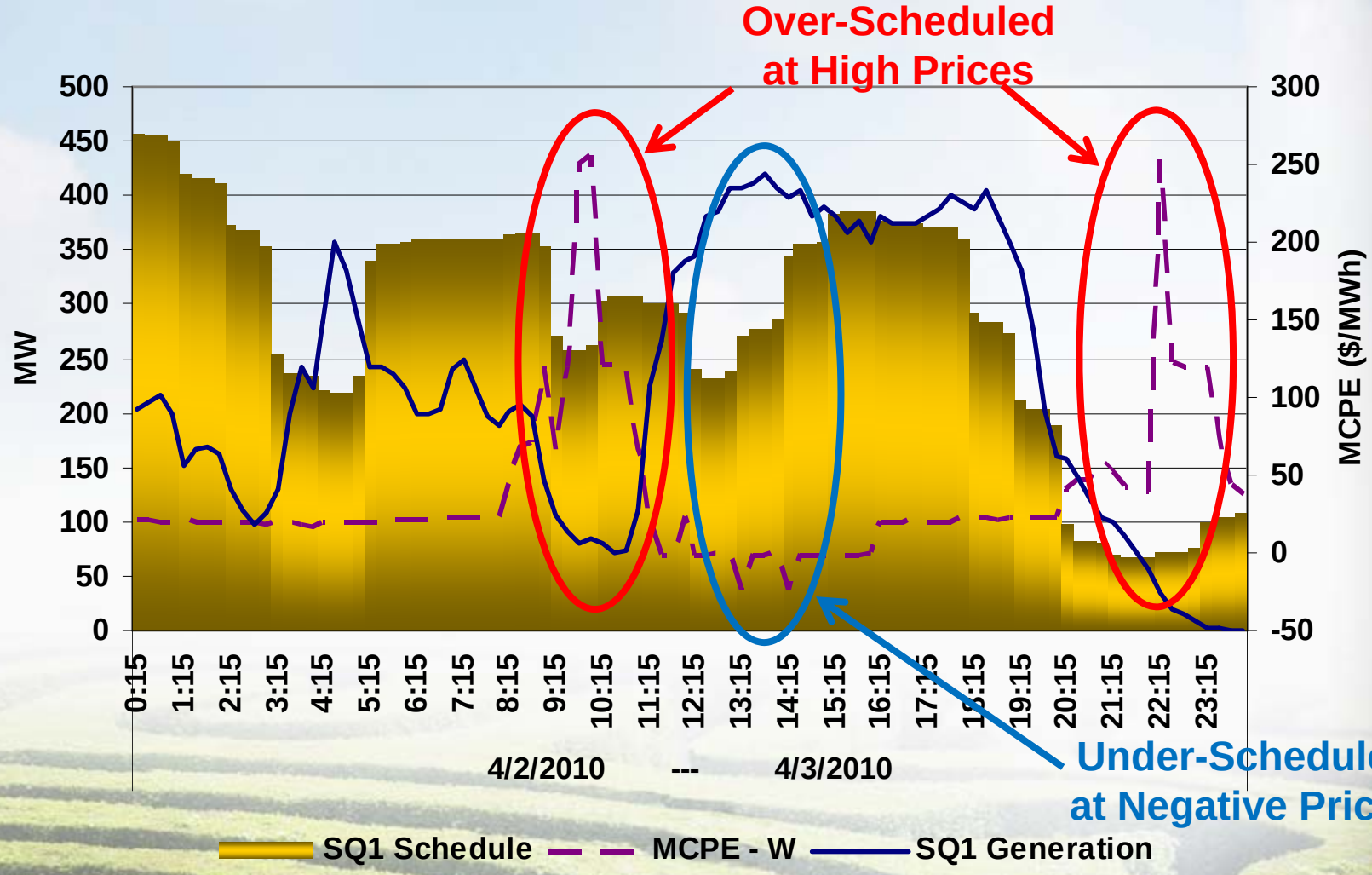
- **Cost averaging with less expensive resources in a larger portfolio**
- **Retail demand for "Green Power" at premium pricing**
- **Regulatory requirements such as Renewable Portfolio Standards (RPS) or Feed-in-Tariffs (FIT)**



CPS Energy's 2010 Forecast Energy Mix For Retail Electric Sales (MWh)

Wind Energy Forecasting is a Challenge

Financial Risk Worn by "Wind Takers" in ISO Markets



Top Uncertainties for New Energy Development & Plant Upgrades

- Natural Gas Prices
- Greenhouse Gas Legislation
- Cost and Availability of Capital

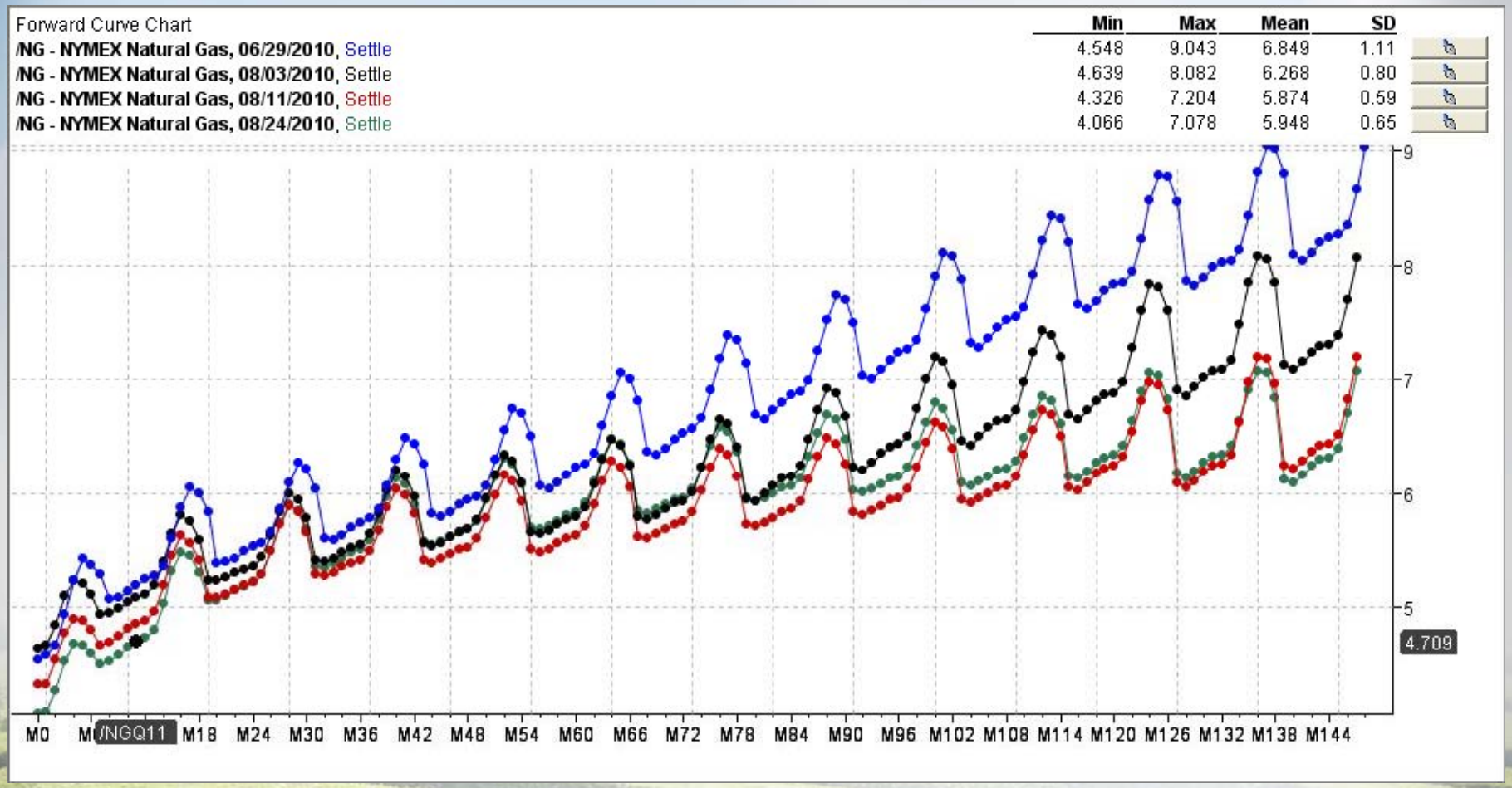
Natural Gas Prices are the Biggest Unknown

Increasing Risk Duration →

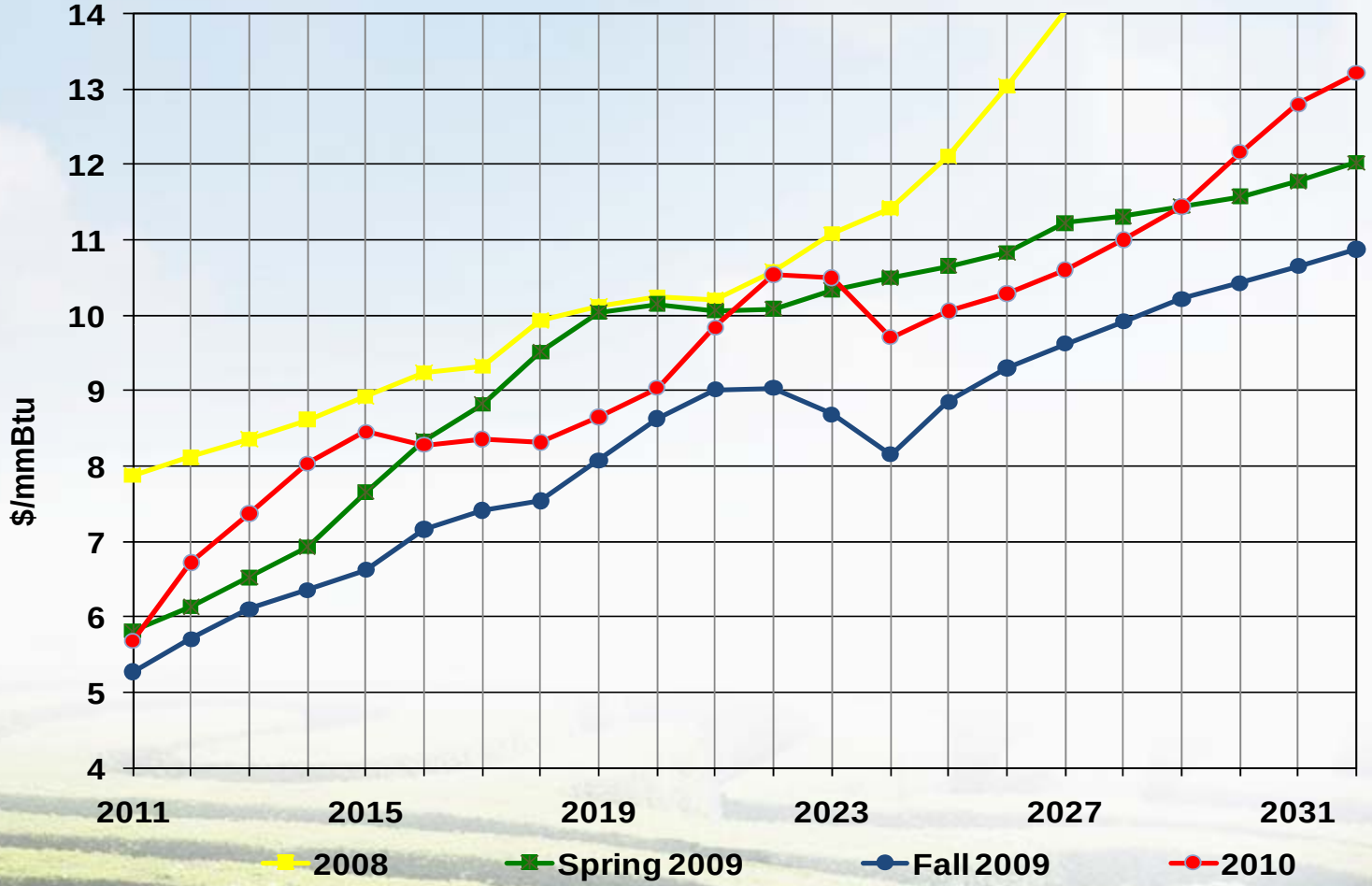
	Capital	Technology	Carbon	Fuel Cost
Nuclear				
Natural Gas				?
New Coal w/CCS				

Relative Risk Legend | High Risk | Medium Risk | Low Risk

Weak Economy + Surplus of Shale Gas = Lower Gas Prices



High Degree of Uncertainty in Long-Term Gas Price Forecasting



CPS Energy IRP Studies

Key Factors for "Retrofit vs. Retire" Decisions for Existing Coal-Fired Plants

- Expected remaining plant life and utilization factors
  - Natural gas prices/wholesale electric prices
  - Wind energy build-out
  - New environmental regulations/constraints
  - Other standard variables (efficiency, condition, etc.)
- Carbon pricing impact on CO_2 emissions
- Capital requirements for other regulatory upgrades and efficiency/reliability upgrades

CPS Energy's Analysis of JT Deely Plant Shows Favorable Economics

	Deely 1	Deely 2
Capacity (MW)	430	430
COD	1976	1977
Fuel	PRB Coal	PRB Coal
PM Control	Baghouse	Baghouse
SCR for NOx	No	2011
FGD for SOx	No	No

Analyzed retrofitting Deely 1 & 2 with FGD scrubbers and the 2nd SCR vs. retiring the plant early and building a new natural gas H-class combined cycle plant

- **Significant positive NPV under current long-range forecast for natural gas prices**
  - **Break-even natural gas price is more than 30% below the Dec-2009 forecast for 2015-2035**
- **Significant positive NPV even under Waxman-Markey "High CO_2 Price" scenario**
  - **$30-$109/ton vs. EPA forecast of $10-35/ton vs. CBO forecast $15-53/ton (2012-2030)**
- **Significant positive NPV even with 27 GW of wind energy build out in Texas by 2018**
  - **ERCOT forecasts 19 GW of wind**