



# **Review of CPS Energy Generation Strategy**

**Doyle N. Beneby  
President and Chief Executive Officer**

**August 29, 2011**

# CPS Energy Vision 2020 Goals

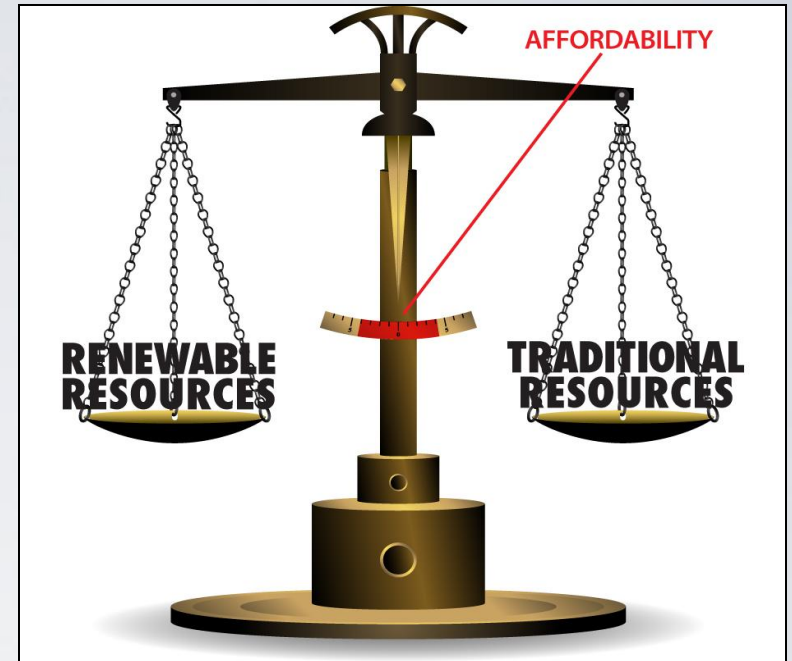
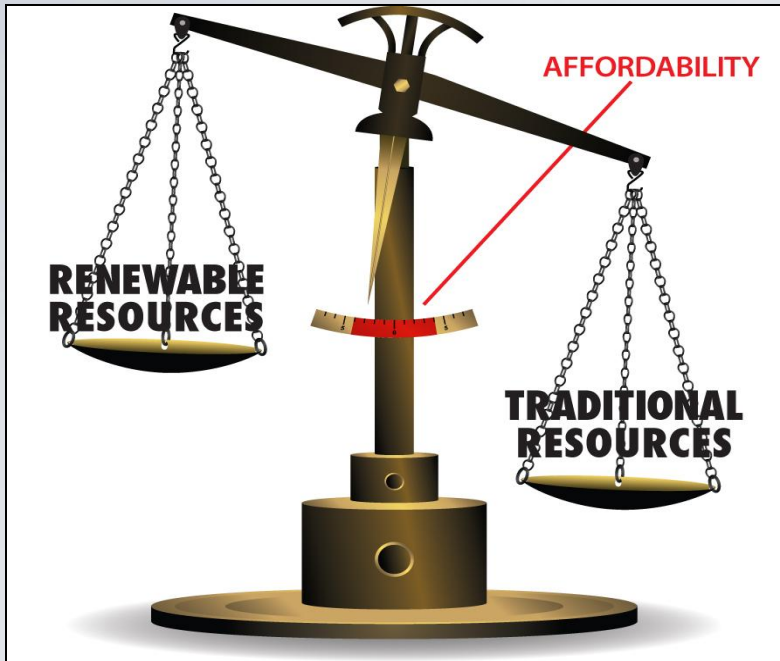
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- Vision 2020 is a long-range strategic plan that focuses on our vision of transitioning from a company that is highly dependent on low-cost power from traditional generation sources to a company that provides competitively priced power based on a diverse generation portfolio
- CPS Energy will uphold its commitments to environmental responsibility and economic viability – **and still provide reliable, competitively priced energy, today and tomorrow**

**20% renewable energy capacity in power generation mix**

**65% of generation low-carbon**

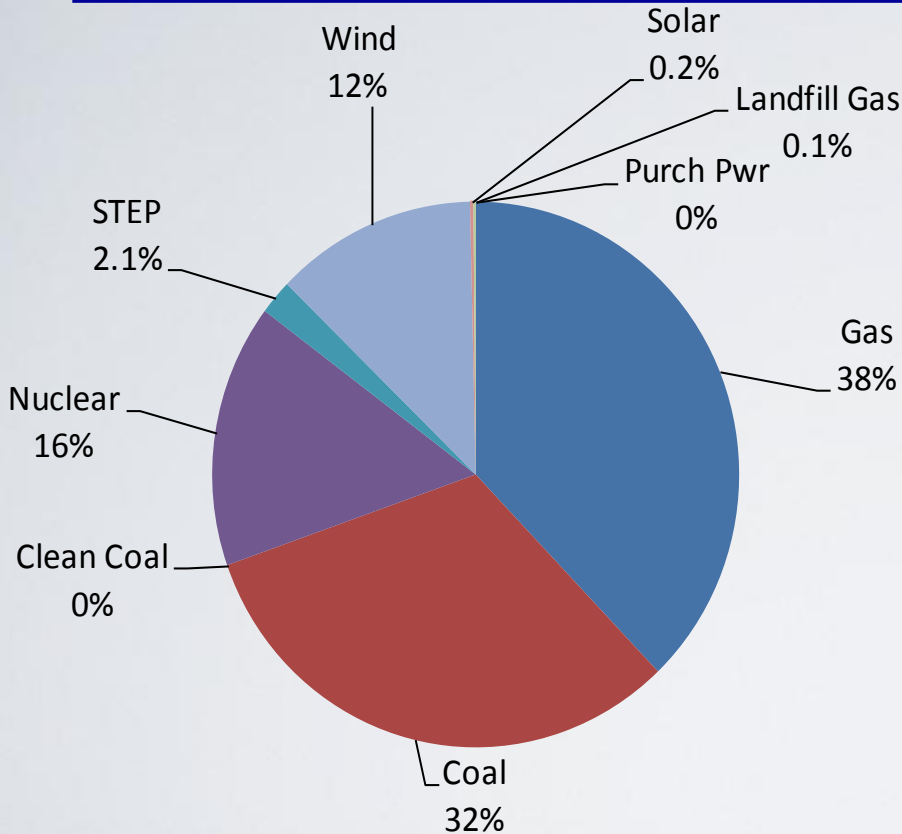
# Affordable Renewable Energy



- CPS Energy's heavily weighted low-cost traditional resource capacity gives it the flexibility to pursue renewable energy in an affordable way
- As the renewable technology market matures and prices drop, the opportunity for scaled up renewable sources will become more realistic

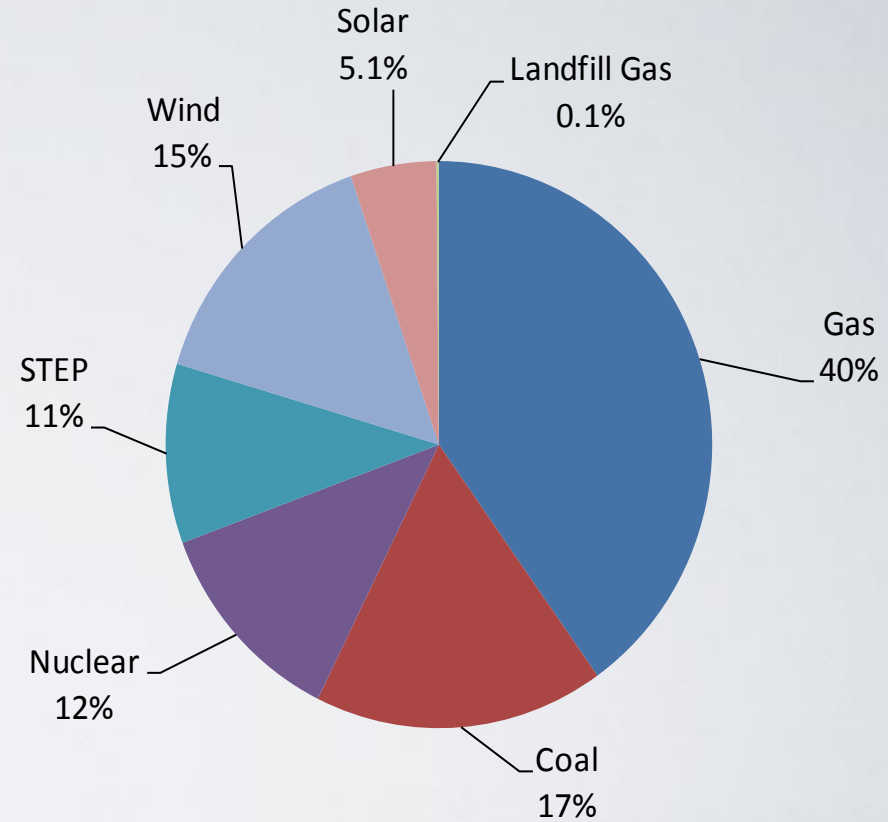
# CPS Energy Capacity Portfolio

**2010 Capacity**



Traditional sources = 85.6%  
 Renewable sources = 12.3%  
 Demand Reduction, Purchases = 2%

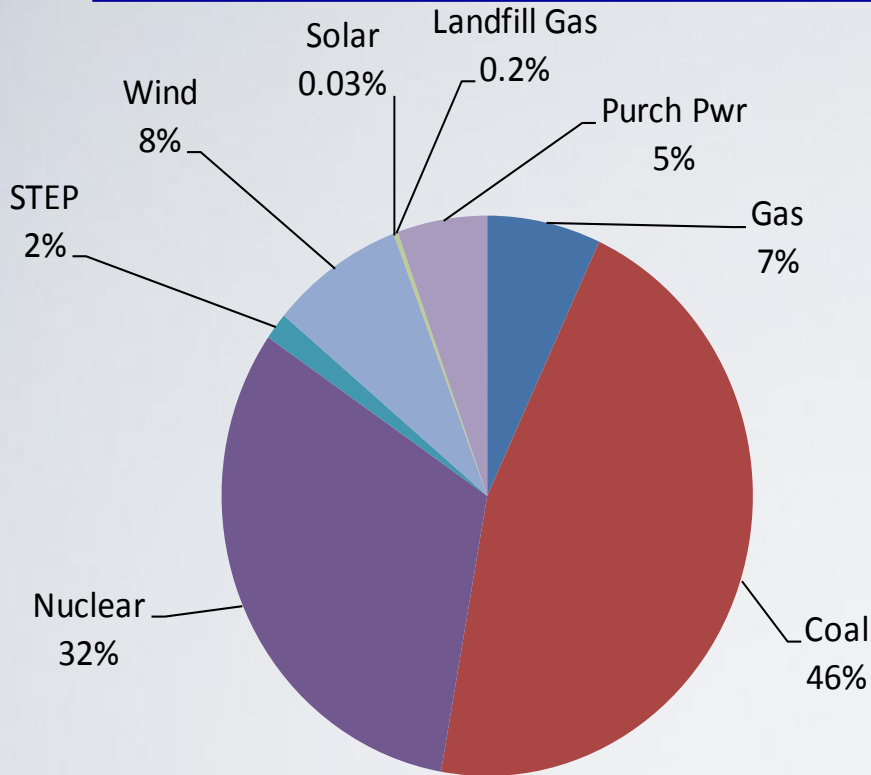
**Projected Capacity 2020**



Traditional sources = 69%  
 Renewable sources = 20%  
 Demand Reduction, Purchases = 11%

# CPS Energy Generation Portfolio

**2010 Generation**



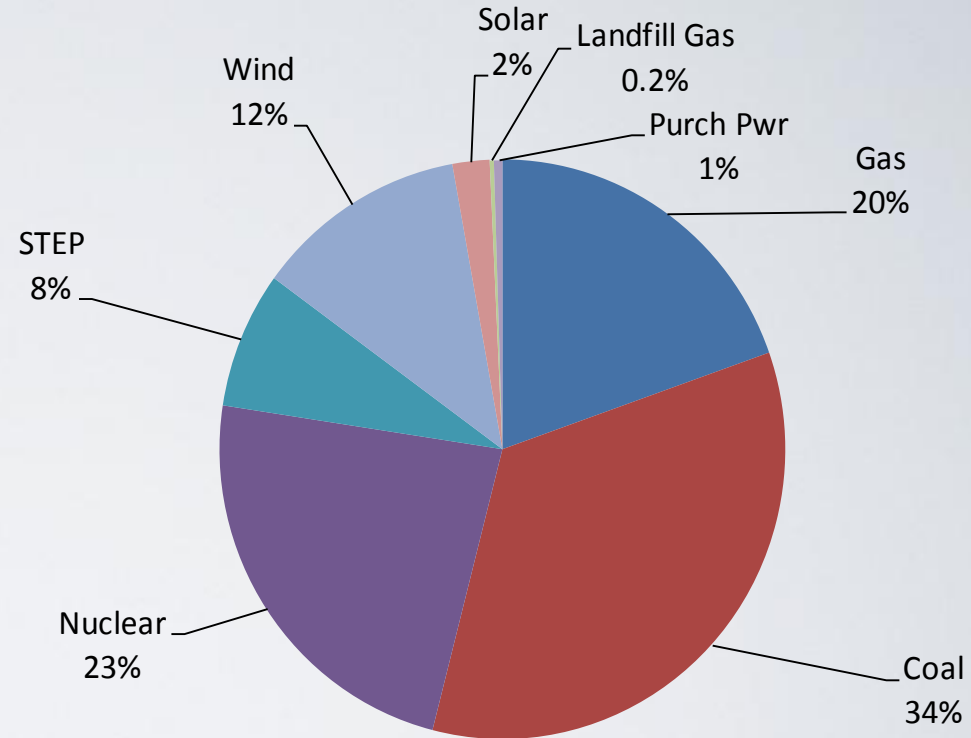
**Total Generation = 26,316,425 MWh**

Traditional sources = 85%

Renewable sources = 8.23%

Demand Reduction, Purchases = 7%

**Projected Generation 2020**



**Total Projected = 32,994,919 MWh**

Traditional sources = 77%

Renewable sources = 14.2%

Demand Reduction, Purchases = 9%

# Hedging Against Risk

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- **Minimizing Three Major Future Risks to our Rate Payers**

- Environmental risks

- Technology risks

- Fuel risks

- **The CPS Energy Approach**

- Decision to defer the scrubber (FGD) at Deely plant (\$565m)

- Decision to deactivate and mothball Deely units 1&2 by 2018

- Minimize environmental risks

- Reduce the amount of the next rate increase

# Early Retirement of Coal

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## Flue-Gas Desulfurizer (Scrubber) Deferral Decision

“Beneby also dangled the likelihood that without the scrubbers, “Dirty Deely” — as the units are known — could be retired many years earlier than if CPS spent the estimated \$565 million on the environmental controls.

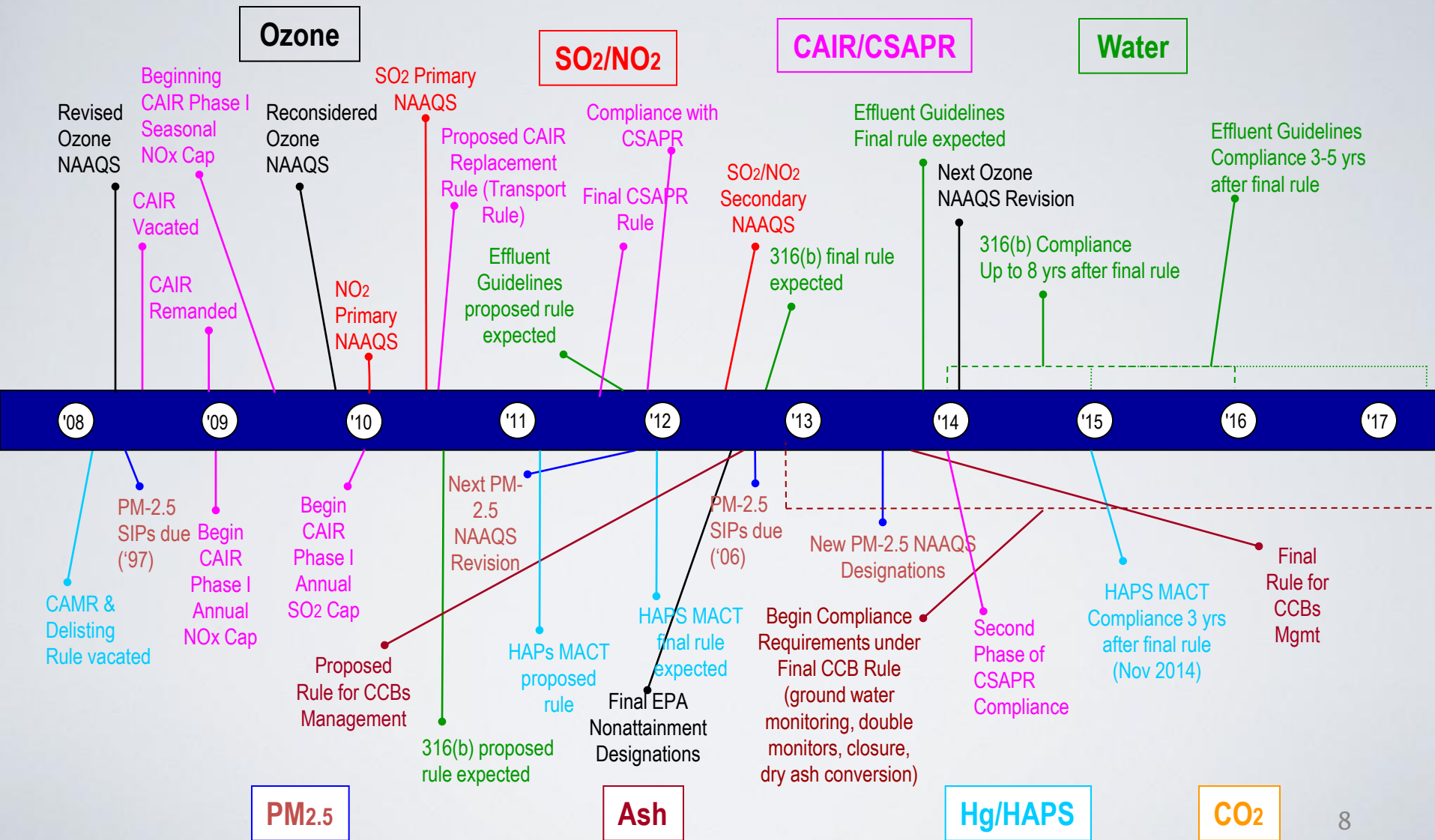
“Councilman Reed Williams said he's impressed that delaying the scrubbers means saving ratepayers money in the short run, while still meeting the utility's environmental obligations.

“Beneby said the utility would, in the meantime, spend \$78 million on lower-sulfur coal to be burned at the Deely units, which would lower sulfur dioxide emissions by 15 percent to 30 percent.”

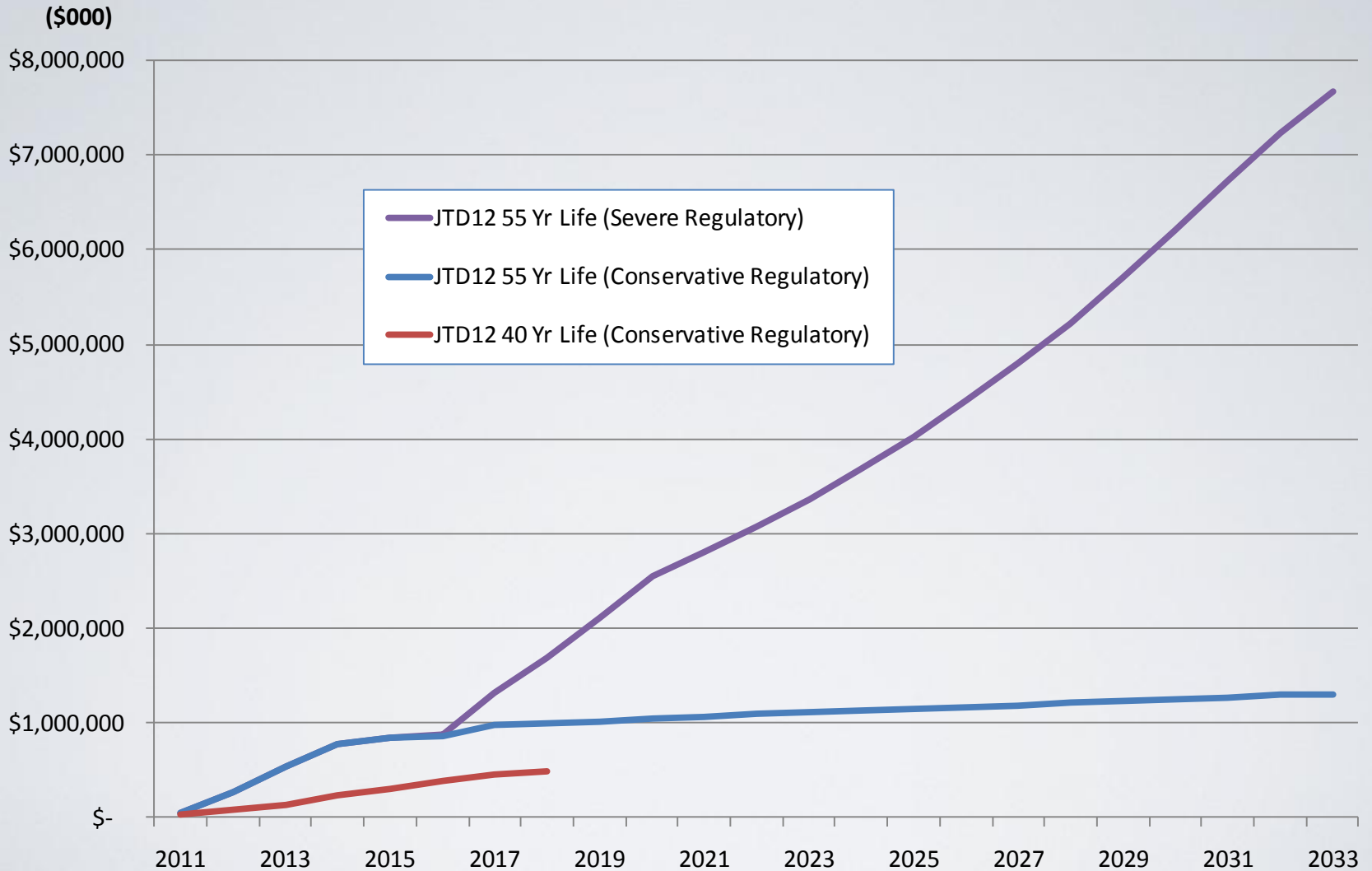
*-San Antonio Express News December 16, 2010*



# Timeline for Environmental/Regulatory Requirements for the Utility Industry



# Deely Cost Projections



# Nuclear Opportunity



## • Timeline of Recent Events

- March 1: “NRG has CPS' ear again”–*San Antonio Express News*
- March 11: “Powerful Quake and Tsunami Devastate Northern Japan”–*New York Times*
- March 21: “CPS Energy Indefinitely Suspends Discussions with NRG Energy”-*CPSE Release*
- March 27: “South Texas Project Development Slowed to Await Guidance on Nuclear Generation Regulatory Requirements”–*NRG Release*
- April 20: “NRG will no longer invest in STP expansion” –*San Antonio Express News*

## • Current Update on Impact in Japan – STP 3&4

- Project activities have been scaled back in support of NRC licensing and DOE loan guarantee pending clarity about NRC’s 90-day safety review associated with event at Fukushima
- Despite NRG’s announcement in April 2011 that it would stop all spending on project, NINA continues to receive support from Toshiba in its pursuit of a license
- NINA continues to respond to NRC requests for additional information regarding license for project

# Natural Gas Opportunity

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- **CPS Energy is evaluating options to build, purchase or repower existing units**
- **Nine viable NGCC/Simple-cycle projects in Texas**

“Doyle Beneby, president and chief executive of municipally owned utility CPS Energy, said at the Electric Power 2011 conference in Chicago that low natural gas prices have made investments in nuclear power and coal plants less affordable.

“The growth in Texas wind power has led to the idling of natural gas plants that cannot compete with the cheap renewable energy, Beneby said. One reason CPS is seeking to buy combined-cycle gas plants is because they are selling cheaply following wind power oversupply in west Texas.

“In Texas there are a lot of combined-cycle natural gas plants sitting idle because prices are so low,” Beneby said. “We have so much wind it has put combined-cycle gas plants on the sidelines.”

*-Argus*



# Clean Coal (Solid Fuel) Opportunity

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- **CPS Energy has signed an MOU with Summit Texas Clean Energy for 200MW over 25 years**
- **TCEP will be the first U.S.-based power plant that combines both IGCC and 90-percent carbon capture and storage technologies**
- **TCEP will be located in West Texas just outside Odessa in Ector County**

“The U.S. Department of Energy applauds CPS Energy for its progressive energy stance that includes voluntarily phasing out old coal plants and replacing them with cleaner, low-carbon technologies such as the Texas Clean Energy Project, a DOE-sponsored, breakthrough, clean-coal power project.”

*- Tom Sarkus, Director, Project Financing & Technology Deployment Division, National Energy Technology Laboratory*

# Solar Opportunity

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- **Solar RFP for 50+ MW released in January 2011**
  - 111 proposals submitted
  - 32 companies/groups
- **Addendum for up to 400 MW released in June to the same respondent group of 32 companies**
  - Shortlisted responses early August
  - Selection to be announced September 7<sup>th</sup>
  - Evaluating proposals based on:
    - Company financial strength
    - Pricing
    - Capital investment and jobs
    - Technology
    - Experience

# CPS Energy Progress

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**New Energy Economy = Creating economic opportunity  
powered by clean energy and energy efficiency**

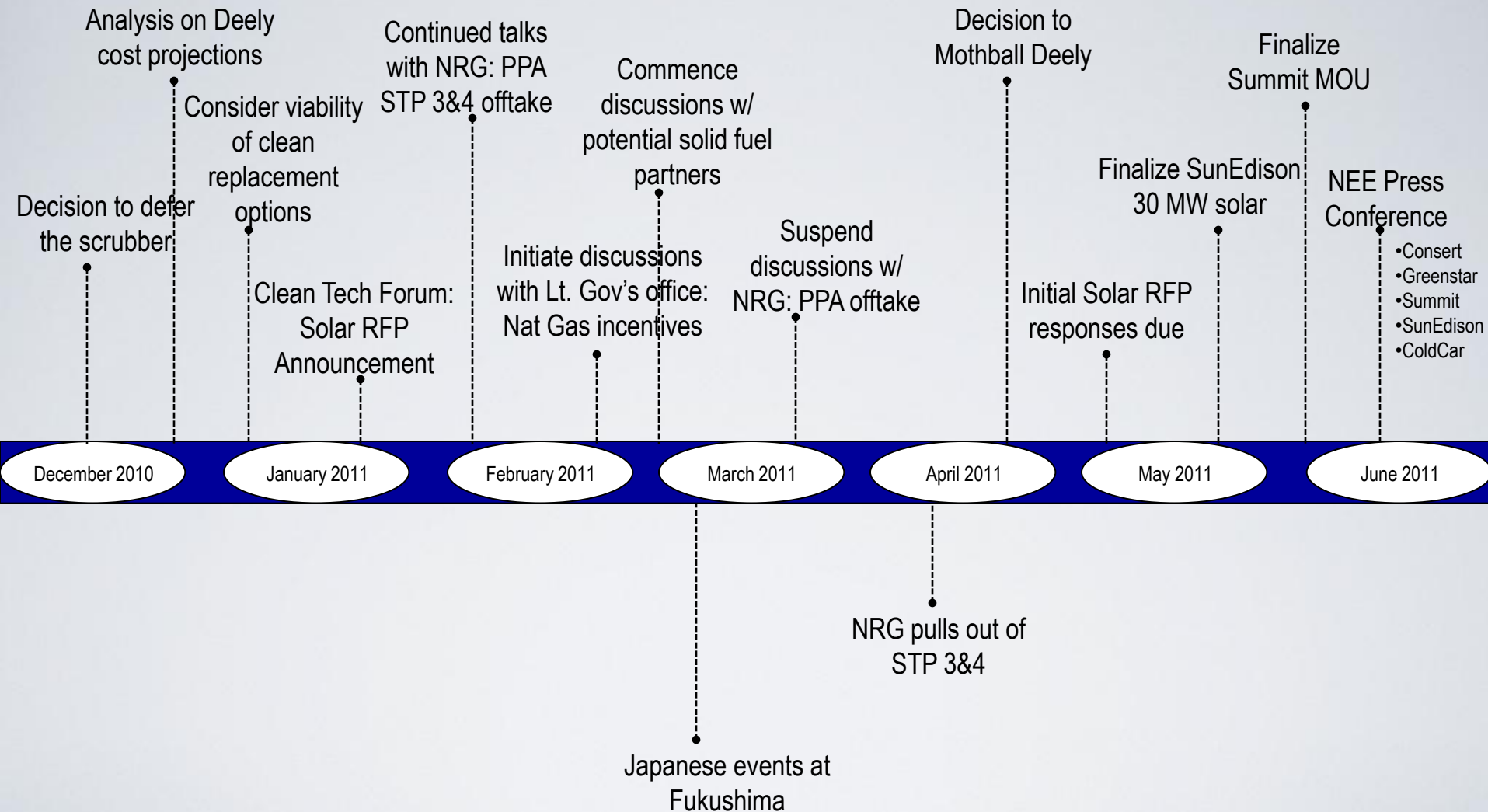
## **June 20<sup>th</sup> Announcement**

- Five clean technology companies, six clean technologies and economic development and educational components
  - Consert/Home Area Network
  - Greenstar/LED lights
  - ColdCar/Electric refrigerated trucks
  - Summit/Clean coal, 90% carbon capture
  - SunEdison/Solar

# Real Price of Renewables / Avoided Costs

Fuel Type	Capacity	Generation	Dispatch	Risk Hedge
Coal	17%	34%	Baseload Peak	Partial CO2 tax, partial EPA regs
Nuclear	12%	23%	Baseload Peak	CO2 tax, market price fluctuations
Natural Gas	40%	20%	Baseload Peak	Nat gas price spikes , CO2 tax and EPA regs
Wind	15%	12%	Peak	CO2 tax, EPA air regs, Clean Water Act , market price fluctuations
Solar	5.1%	2%	Peak	CO2 tax, EPA air regs, Clean Water Act , market price fluctuations
Demand Reduction	11%	8%	Peak	CO2 tax, EPA air regs, Clean Water Act , market price fluctuations

# CPS Energy - Timeline of events



# Conclusion

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- **San Antonio is positioning itself to be at the forefront of the New Energy Economy in the U.S.**
- **CPS Energy will take old (higher-emitting) coal plants out of the fuel mix and replace with affordable low-carbon resources**
- **This approach is not only more affordable versus the “status quo case”, but it also reduces emissions in San Antonio by an amount equal to 1 million cars off the road by the year 2020**
  - SOx reduced by 91%
  - Mercury reduced by 58%
  - NOx reduced by 30%
  - CO2 reduced by 25%