Business Test #1: Financial Stress

- Wall Street Banks: NO loans for nuclear – costs too risky
- If Federal Loan Guarantee awarded on $5.2 Billion CPS estimate, but CPS share actually costs $9 Billion – *where* will CPS get the extra money?
- Project so large – projected *cost overruns alone* can exceed CPS entire $3.1 Billion Net Worth
- Effect on Bond Ratings: *Moody's June 2009:* "Moody's is considering taking a more negative view for those issuers seeking to build new nuclear power plants".
- Wall Street Term for Nuclear *(Moody's):* **"Nuclear's Bet The Farm Risk"** *(June 2009 Special Comment)*
- $282 Million/yr from CPS to City of San Antonio --- Not just "Betting the Farm" , ALSO "Betting the City"

Business Test #2: Is Decision Rushed?
CPS Says New Capacity Not Needed till 2020

- Over 10 Yrs Ahead of forecast need
- Driven by Fed Loan Guarantee Application
- Plant not even fully subscribed
- Is it even *wise* to be *first* (i.e. test case) nuclear?
- If *ever* a time to *avoid* major spending on a speculative 10 yr forecast, it is *this next 10 yrs*
- *Everything* about how we use energy changing in next 10 yrs – Smart Grid, efficiency, renewables
- Customers just getting started on cutting demand
- New building codes soon
- *Nothing* is "Business as Usual" right now
- Like being forced to sign now to spend billions on new Hummer plant to sell Hummers in 10 years
- Nuclear long lead time forces hand right now

Could Demand Go Flat?
What Happens to Plan if Customers Choose To Save?

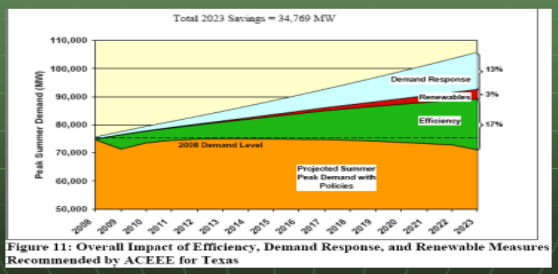


Figure 11: Overall Impact of Efficiency, Demand Response, and Renewable Measures Recommended by ACEEE for Texas

Source: American Council for Energy Efficient Economy 2007 Report

Business Test #2: Is Decision Rushed?
There is a Lot More Time

- Only 3-5 Yr lead times for Natural Gas, Solar Thermal/Gas, Wind w/Storage
- Can defer committing to new power plant till ~2015 (for 2020 need)
- Let efficiency & Smart Grid take hold
- Let new technologies be proven
- Corporate customers can do "green" plans
- When time comes to build, use proven technologies – not "First in U.S."

Business Test #3: Match Customer Need -- or "Solution in Search of a Problem"?

- Half of 40% purchase not even needed by CPS
- Forecast 2020 shortfall is PEAK capacity not baseload
- Peak demand -- only few hours per day/yr
- Nuclear -- runs 24/7, much NOT needed
- Building a baseload plant to fill Peak Load
- Added in huge chunks -- like buying 4 new cars and sticking 2 in garage till kids grow up
- WHO WILL PAY for unneeded excess output?

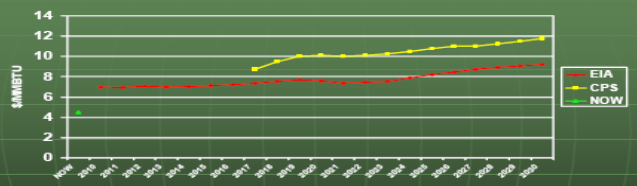
Business Test #3: Match Actual Needs

- Load-following plants meet needs best
- Cheaper to build: $1,200 - $4,000/MW
- Smaller units – buy size you need
- Dispatchable plants that also run 24/7 when needed (i.e. can fill baseload needs)

Load-Following Plants Now Commercially Available:

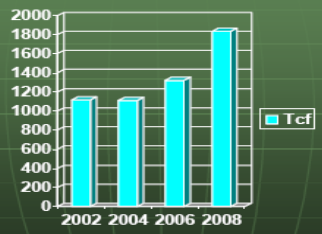
- Wind/Compressed Air Storage/Natural Gas plants
- Solar thermal/natural gas hybrid plants
- Geothermal Power Plants
- Combined Cycle Gas Turbines

Business Test #4: Market Assumptions Valid?
Natural Gas Price Assumptions



- CPS ignoring "800 lb. gorilla in ring" – cheap natural gas
- CPS assumes > $10/Million BTU gas
- TODAY -- around $4/Million BTU gas
- EIA Forecasts ~ $7 extended, <$9 per Million BTU to 2030
- DIRECTLY AFFECTS ERCOT PRICE PAID FOR CPS KWH

"Game Changer" - U.S. Natural Gas Supply Greater than Expected



Source: Potential Gas Committee/CO School of Mines

Business Test #5: Sufficient Revenues?

- San Antonio won't need all nuclear kWh's
- Revenue forecasts assume outside sales
- Can outside sales cover nuclear costs?

AN EXPERT OPINION:

- "There is no hope whatsoever for CPS to recover half of a 40% ownership share in this project with wholesale sales into ERCOT at anything close to current gas prices. By my calculations, they'd lose at least 5 cents/kWh on every kWh, which would of course fall immediately on retail ratepayers." -- Jim Harding, former director of Power Planning & Forecasting, Seattle City Light

Business Test #5: Sufficient Revenues?

- CPS raising rates to cover nuclear costs
- Customers can *cut* kWh use w/efficiency, generating own power
- Almost all nuclear costs *fixed*
- If customers don't buy kWh, CPS does *not* save costs, has to raise rates *further*
- Spiral of rate increases – *poor customers w/o ability to cut use hurt the most*

Business Test #6: Cost Assumptions

- CPS says 2 plants to cost $13 Billion w/financing **($4,815/kW** = CPS $5.2 B)
- Florida P&L estimate **$5,426-$8,071/kW**
- **Actual 2009 bid – Ontario – about $10,000/kW**
- CPS own report admits nuclear cost **could go up another 50%** (*Assumptions for 2009 Resource Plan Analysis", Jun 29, 2009)
- Nuclear industry historical record **2-4 X** original estimates (U.S. Energy Information Administration)

Example of "Counting The Costs" – To COMPLETE a Nuclear Mega-Project

"Overnight" Cost:	$ 3,671/kW
Escalations in Costs:	$ 2,505/KW
Cost of Capital:	$ 2,256/kW
"All-In" Costs	$ 8,432/kW*

Total Cost for 2,700 MW 2-Unit New Nuclear Facility

$22.8 Billion

X 40% CPS SHARE = **$9.1 Billion**

*Based on CPS "Overnight" Cost, CPS Avg. Weighted Cost of Capital, and nuclear cost escalations only ONE HALF 2002-2007 Average

Summary of Tests of Nuclear Project as Business Proposal

- #1 – Huge "Bet the Farm Risk" for CPS, and City of San Antonio City Budget
- #2 – Decision rushed ~5 yrs ahead of other options
- #3 - Poor match with actual needs
- #4 – Natural gas now cheap competitor
- #5 – Losses on sales, spiral of rate increases likely
- #6 - Costs exposed to substantial increases during long construction.

A Prudent Way Forward

1. Choose wisely to *use* the ~5 more yrs before need to commit
2. Invest Smartly NOW– in Smart Grid, Energy Efficiency and Demand Response
3. Continue PV, solar hot water rebates to cut peak
4. True "Plan A" begins with *better utilizing* what you are *already doing*: 1200 MW of renewables by 2020 already planned
5. Modest extra cost for storage/load shifting can "firm up" those 1200 MW of renewables so then can *use* them to meet Peak Load
6. If still more needed, invest in smaller, modular plants to minimize financial stress