

From Sand to Demand: Economy-wide Opportunities in the Solar Future

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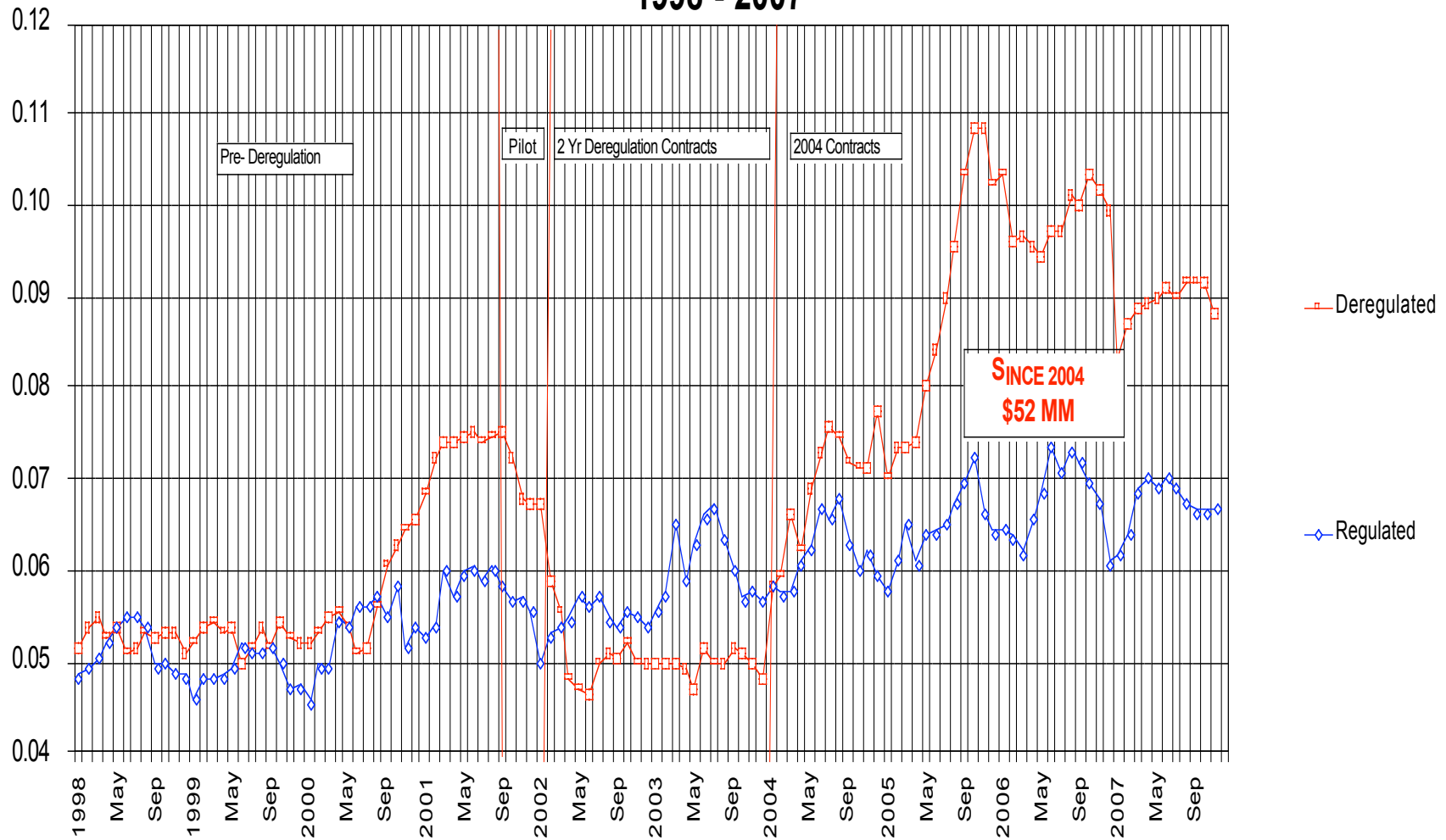
Background

- H-E-B is headquartered in San Antonio, and is in its 103rd year of operation.
- H-E-B now operates over 300 retail stores in Texas and northern Mexico, and also operates 6 food manufacturing and distribution campuses.
- Sales are over \$13 billion annually.
- Utility expenses run \$130 million annually, of which about \$113 million is for electricity.

H-E-B's Utility Context

- We aggressively manage our electric supply purchases. Our large load and high load factor yield pricing that is as good as it can be, for now.
- We aggressively manage our electric demand. We are spend \$millions on lighting, controls, and equipment upgrades.
- Our expenses are still unacceptable over the long-term. Our conservation efforts are barely keeping pace with ever-rising electric rates.

Deregulated vs Regulated Electricity Cost per kWh 1998 - 2007



H-E-B's Renewal Energy

- Today, 35% of H-E-B's energy in Austin is wind; 10% in San Antonio, with 35% of all future stores.
- These stand-alone pricing products have fuel costs that are fixed over the contract length.
- They are sound financial hedges, as a part of our portfolio.
- We do not purchase any significant solar or other non-wind renewables, due to costs that are still too high.
- We are participating in a point-of-use wind turbine R&D project at our Weslaco Distribution Center.
- We are participating in fuel cell tests for industrial material handling equipment.

What to Do?

- Customers need more energy choices.
- At the grid level, customers need absolute reliability.
- Choices need to make financial sense, over the long-term.
- Customers need renewable costs to come down.
- Customers need for the state to help bridge the start-up gap for renewable energy. Our existing incentives programs are not competitive with the leading states.

What About Solar?

- Central plant solar can somewhat complement central plant wind.
- Distributed solar could be widely applied at point-of-use if system costs can come down. H-E-B has lots of available roof space.
- PPA's are attractive to many customers, but again the rates have to be competitive.

Bottom Lines

- It's all about the customer, aka ratepayer!
- Renewable energy deserves a place in everyone's power portfolio.
- Texas can remain the nation's energy capital, long after oil and gas are depleted. We should embrace that opportunity, for the benefit of all who live and work here.