

Good Company Associates/ Texas Advanced Metering Coalition

Public Utility Commission of Texas
Competitive Metering Workshop
Docket No. 26359
Sept. 17, 2002

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THE KEY QUESTION:

- Which will help to make the Texas electricity market work?
 - COMPETITIVE METERING? (Competition was seen merely as a means to an end.)
 - ADVANCED METERING? (It is the catalyst for new products and services that will promote market efficiency.)
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LEGISLATIVE INTENT

- In 1999, other markets had very little experience with competitive metering.
 - Competitive metering was promoted as a logical and inevitable component of electricity market restructuring
 - “Competitive metering” and “advanced metering” became synonymous
 - Input to SB7 process muddled the two terms
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- ADVANCED METERING enables time-based electricity rates
 - Price signals = Demand elasticity
 - This helps make the market work
 - Counterweight to supply-side market power -- demand participation reduces opportunities for market manipulation
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- ADVANCED METERING Benefits:
 - Expands the playing field for competition among REPs
 - New market entrants unlikely to win a price war based entirely on flat rates
 - Catalyst for new products and services (Old meters = black rotary phone)
 - Energy management technologies
 - Gateway systems
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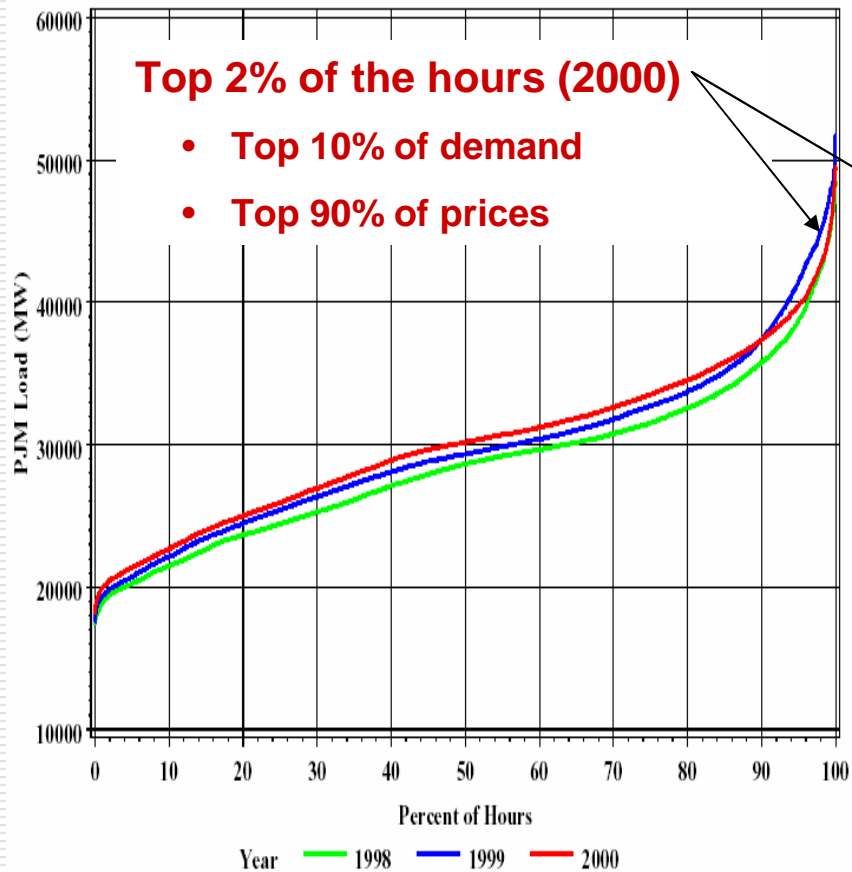
ADVANCED METERING

Demand participation benefits:

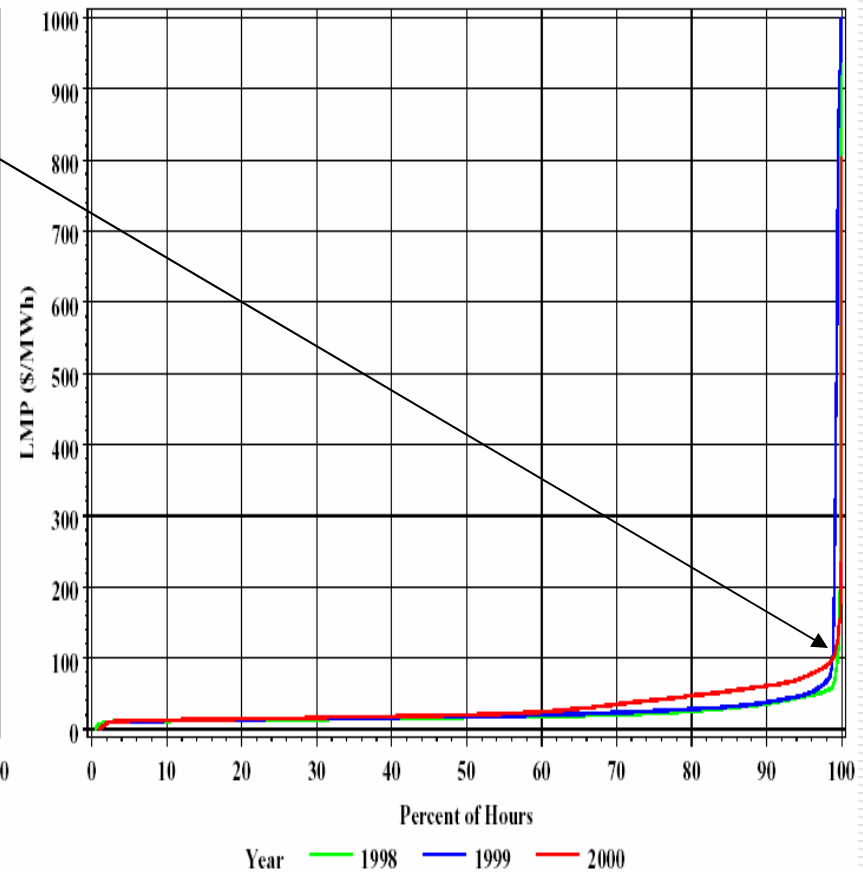
- Reduces wholesale price volatility
 - Elasticity helps tame the “hockey stick”
 - 20% TOU participation can = 5% overall reduction in wholesale prices (Hirst)
 - Part of system reliability portfolio
 - Real-time pricing and critical-peak pricing are demand response resources
 - Measures DLC contributions
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PJM Hourly Load Duration Curve
1998, 1999, and 2000



PJM Price Duration Curves
1998, 1999, and 2000



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ADVANCED METERING

Demand participation benefits:

- Improves asset utilization
 - Increases the 53% ERCOT capacity factor
 - Extends life of existing infrastructure
 - Environmentally responsible resource
 - New system capacity with zero emissions
 - Reduces reliance on peakers, especially during ozone action days
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□ ADVANCED METERING

Automatic meter reading (AMR) benefits:

- Timely access to consumption data improves customer participation levels
 - Reduced meter reading costs
 - Sophisticated outage detection
 - Theft & tamper detection
 - Unaccounted for energy optimization
 - Reduced truck traffic & pollution
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- ❑ MYTH: Small customers will not respond to price signals
 - Puget Sound Energy
 - ❑ <5% opt-out rate; >90% favorable rate
 - ❑ 5% peak reductions; ~4% usage reductions
 - Laredo Project (CSW)
 - ❑ 95% voluntary participation
 - ❑ 10% bill reductions
 - ❑ Demand drops averaged 1kw per household
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SO.....

Advanced Metering 

Competitive Metering 

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- Competitive Metering in other states:
 - California: market imploded
 - Pennsylvania: surrendered in August
 - Arizona, Virginia: more white flags
 - Georgia: disincentive to upgrades
 - Atlanta Gas Light killed AMR project
 - Massachusetts: pulled plug last minute
 - New York: reworking the model
 - NYSERDA financing TDU upgrades
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- Why Competitive Metering Won't Reach Smaller Customers
 - Bad underlying economics:
 - Economy of scale
 - Installation costs increase by 6-8 times (from <\$25 mass deployment to >\$150 individual)
 - Chicken & egg with time-based rates
 - Splintered benefits (multiple entities)
 - Risk of stranded costs
 - Utilities enjoy longer amortization periods and more favorable borrowing rates
 - Added marketing costs (\$50+ per customer)
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- The Advanced Metering picture in the current Texas Market
 - LaaRs and BULs (IDR): <5
 - LaaR/BUL Prospects (IDR): 50? 500?
 - >1MW C&I (IDR): 6,000
 - >200kw C&I (some IDR): 40,000
 - Small commercial (no IDR): 700,000
 - Residential (no IDR): 7,000,000
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- SB7 Competitive Metering Language
 - 150 words (from a total of 51,000)
 - Very little detail compared to overall electricity market structure
 - Indicates lack of experience from other states
 - Suggests PUC should have considerable flexibility in interpreting this phase of the law
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SB7 Competitive Metering Language

Indeterminate start date for residential sector

Current & foreseeable market conditions compound the problem

- CR market share declined in June & July in Oncor & Centerpoint service areas
- Less than 3% in all but one service area
- Will we ever reach 40%?

Legislative uncertainty begets market uncertainty

Uncertainty has killed the Texas advanced meter market since 1999

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- SB7 language forcing Commission to act for commercial sector
 - Competitive metering for large (>1 MW) industrials may bring market benefits
 - They want it
 - Faster access to revenue data
 - Cheaper & better metering services
 - Enabler for dynamic price competition
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- Remember legislative intent
 - New technology, products & services will encourage market efficiency and creativity
 - Central goal of any industry deregulation
 - Customers' opportunity to save money by responding to price signals should not be limited to large industrials
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- Commission decisions:
 - Where should regulation end and competition begin?
 - What size customers?
 - Which metering functions?
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- To realize the vision of SB7:
 - Competition does not have to extend to the meter itself
 - Meters are just the catalyst/enabling technology
 - Plenty of room for competition at the wholesale level (advanced metering is not one size fits all)
 - TDSPs are most cost-effective entities to provide mass market meter upgrades
 - Let new competitive entities fill the void in technologies and energy management services that can transform the market
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- Competitive metering recommendations:
 - Design the market for large industrials to have a high probability of success
 - “Opt in” system
 - 1 MW eligibility threshold
 - Collect data to measure market success:
 - No. of active meter service providers
 - No. of customers opting in
 - No. of advanced meters installed competitively
 - No. of customers choosing time-based rates
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- Competitive metering recommendations:
 - TDSPs remain default providers:
 - For meter reading & information services during ERCOT transition
 - For large industrials not opting in
 - For all small customers
 - PUCT retains regulatory authority over TDSP metering services
 - Includes cost recovery approval for upgrades
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- Recommendations:
 - Open docket to define advanced metering properties and certify products for all customer classes
 - ANSI standards
 - ERCOT:
 - Prepare to transition profile system to accommodate actual consumption data from all customer categories
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- Recommendations:
 - ASAP begin requiring advanced meters on all new construction
 - C&I
 - Residential
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- Recommendations:
 - Establish timeline for phased installation of IDR meters down to 50 kw level in C&I sector
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- Recommendations:
 - Establish timeline for deployment of advanced meters for residential customers
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Thank you.

Good Company Associates

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