

Electricity Generation Customer Choice and Competition

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*Brenda Stoner
Commonwealth of Pennsylvania
Department of Revenue*

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Overview

- Electric industry restructuring in Pennsylvania
- The impact of electric competition on electric industry tax collections
- Dynamic revenue effects of electric competition
- Conclusions

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Electric Industry Restructuring in Pennsylvania

- Act 138 enacted in 1996 to implement electricity generation customer choice and competition
- Over \$1 billion in state revenues at stake from electric utilities (6% of General Fund)
- Five major revenue sources include Gross receipts tax, Corporate net income tax, Capital stock tax, Sales & use tax, and Public utility realty tax
- Revenue neutral reconciliation (RNR) process adopted to avoid state revenue losses

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The RNR Formula

- Designed to maintain General Fund revenues throughout the transition period
- All tax payments in the five “affected taxes” by utilities and new retail entrants are tracked
- Total cash receipts in the current year are compared to rate-adjusted base year cash receipts (FY 95-96)
- RNR tax rate is an add-on (+/-) to GRT

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Effects of Restructuring on Tax Revenues

- Unbundling
- Loss of Nexus Addressed by Act 138 and Act 4
- Definitional issues
- **Asset valuation**
- **Prices** Addressed by the RNR
- **Profitability**
- Economic growth Focus of study by DOR

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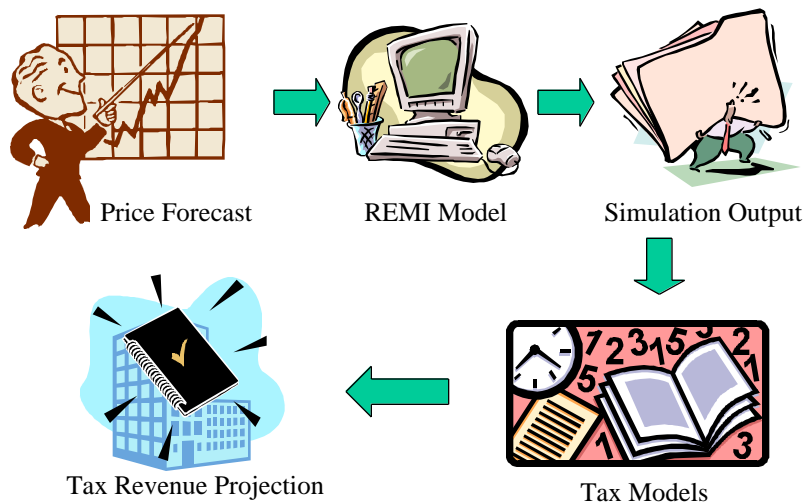
The Mandate

“On August 1, 2000, August 1, 2001, and August 1, 2002, the Department shall deliver a report to the General Assembly and the Governor that shall describe the dynamic economic effect upon the affected taxes due to electric utility restructuring. It is the purpose of this report to provide the General Assembly and the Governor with information to determine whether it is appropriate to consider modifying the [RNR] calculation ... to reflect additional revenues, if any, resulting from the dynamic economic effects upon the affected taxes.” *Title 66, Section 2810(c)(3)*

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Study Methodology



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Electricity Prices

- Current prices are “certified” PUC data
- Regulation Forecast
 - Assumed flat price in real dollars
- Competition Forecast
 - Based on DOE-EIA forecast for PJM area
 - NEMS – National Energy Modeling System
 - Forecast trend applied to actual PA prices

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REMI Model

- Regional Economic Models, Inc.
 - Over 1,000 economic policy variables
 - 53 industry sectors
 - 94 occupations
 - 202 age/sex cohorts
- REMI is widely used for policy analysis
 - Energy and natural resources
 - Economic development
 - Environmental policies
 - Taxation and budget

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Economic Findings

- The economic simulations suggest that electric competition by 2005 causes:
 - Real GSP increase of \$2.3 b. (0.5%)
 - Total employment increase of 40,700 full-time and part-time jobs (0.5%)
 - Nominal personal income increase of \$1.8 b. (0.4%)
 - Consumer price decrease of 0.5%
 - Population growth of 56,000 persons (0.5%)

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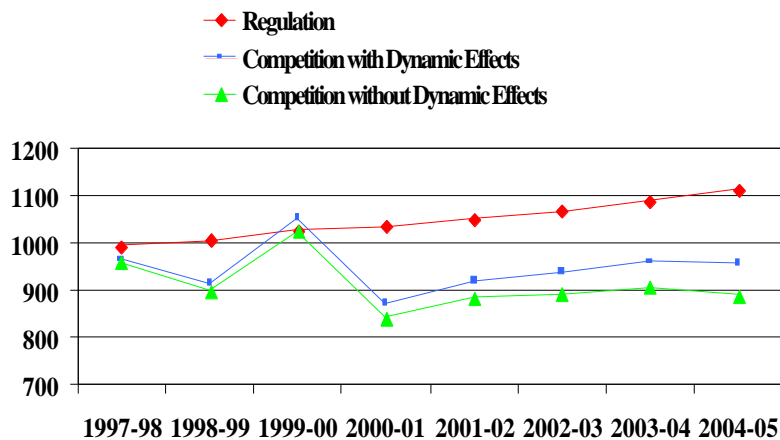
Tax Revenue Findings

- Dynamic revenue gains rise to \$69.2 million by 2005
 - PIT and Sales tax gains of \$56.6 million
 - Corporate tax gains of \$12.6 million
 - Not accounted for in the RNR
- Revenues under regulation scenario greater than competition scenario in most years, even when dynamic effects are considered
 - Revenues fall \$155.6 million short in 2005

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Tax Collections Under Regulation and Competition



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Conclusions

- The RNR is largely working as intended, but is affected by many practical details
- Findings are still considered preliminary
- Future study necessary to evaluate price impacts and economic effects over the long-term

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