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# **The Importance of Publicly Available Power Plant Information**

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## Simple view

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- Three “outputs” of electric industry
  - Electricity for consumers
  - Profit (and other economic activity) for industry
  - Environmental impact
- Tradeoffs among the three

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## Power plant data – a basic building block

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- EIA is a central, national, consistent, source of high quality data
  - Efficient for regulators to rely on central data collection
  - Extends beyond individual state's authority
  - Efficient for respondents to supply data
- EPA's E-GRID (Emissions and Generation Integrated Resource Information Database).
  - Emissions profiles and resource mix data, according to user's needs
  - EIA data comprises 7 of 18 data sources
  - Data from 1996-98
- Power system models (e.g. Prosym)
  - Unit-specific inputs based on EIA data
  - Control region modeling
  - Transmission planning



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## Regulatory uses of EIA data

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- EPA Acid Rain Program
  - Initial inventory of electric utility sources
  - Design of system for allocating allowances among affected sources
  - Open, public process
  - Reconciliation process (net generation, generation efficiency, sales)
  - Comparison of measured emissions (CEMs) and filling in data gaps
  - Evaluating program effectiveness
- State verification of the NO<sub>x</sub> budget program
  - Thermal output and fuel consumption data are used in allocating NO<sub>x</sub> allowances
  - EIA data used to verify data submitted by regulated facilities
- Other market-based programs
  - Additional discussions on SO<sub>2</sub>, NO<sub>x</sub>, Mercury
  - Unit-specific operations data necessary for credibility of program design and allowance allocations



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## More regulatory uses of EIA data

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- Estimating emissions of air pollutants
  - Updating emissions inventories and emissions budgets
  - Development of new regulations/updating existing regulations
  - Public EPA databases (National Emission Trends, E-GRID)
  - EIA data supplements data collected by EPA
- Development of Emissions Performance Standards (“EPS”)
  - Standards for emissions per kwh
  - EIA data used to verify compliance with EPS
- Development of Renewable Portfolio Standards
  - Baseline resource mix
  - EIA data on regional and state resource mix informs baseline



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## Retail competition – *informed* customer choice

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- Information disclosure
  - Fuel and emissions of retail sales
  - E-GRID provides reliable, central, standard source
- Power Scorecard
  - Measures performance of retail “product” on eight environmental criteria
  - Relies on EIA and E-GRID
- Verification of marketing claims

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# Analysis of the electric industry - examples

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- Understanding evolving markets
  - Market power analysis
  - Asset valuation
  - Allowance markets
- Analysis of trends and regulatory impact
  - Grandfathering report – analysis of market distortions due to exemption of older facilities from CAA
  - NESCAUM study of air emission reduction opportunities - midwest emissions and NE ozone
  - Evaluation of DSM investments and avoided electricity costs for all MA utilities
- Exploring alternative scenarios
  - Energy Innovations – ASE, ACEE, NRDC, UCS
  - Repowering the Midwest
  - Clean South
- Cost allocation between regulated and non-regulated subsidiaries

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## Data is more critical now than ever

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- Period of transition
  - Transition to competitive wholesale and retail markets
  - Transition of regulation to market-based approaches
- Emphasis on competition and customer choice, rather than regulation, to discipline markets
- Evidence of market flaws and market power exercise
- On-going need to identify and measure successes and shortcomings – understand what's going on



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## Conclusions

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- EIA data is a cornerstone of regulation, policy analysis, market analysis
- Greater confidentiality will not affect ability of competitors to get the information
- Greater confidentiality will affect those who can't buy information or use alternative sources
- EIA proposal would severely undermine a wide range of public policy goals including wholesale and retail competition, environmental quality, and consumer protection.

