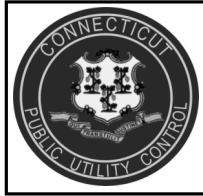


## Primary Challenges and Policy Priorities for Connecticut



*Anne C. George, Commissioner*  
Connecticut Department of Public Utility Control

Energy in the Northeast Conference – Law Seminars  
October 19, 2007



## Connecticut's Energy Challenges

- Price
- Reliability
- Environmental/ Siting

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## Strategies to Meet Energy Challenges

### Supply Side

- Transmission upgrades
- More generation capacity
- Incentives for long-term capacity
- Increased fuel diversity
  - Natural gas over-reliance
  - RPS
  - Climate Change

### Demand Side

- Energy efficiency, conservation
- Demand/load response
- Distributed generation
- Rates initiatives
  - TOU and Seasonal
  - Metering

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## CT Transmission Upgrades

### Southwest CT Upgrades create a 345-kV loop

- Phase 1 - Bethel to Norwalk
- Phase 2 – Middletown to Norwalk
  - Phase 2A – Glenbrook-Norwalk Cable Project
    - 115-kV underground cable

### New England East-West Solution (NEEWS)

- 345-kV line connecting CT with western MA and RI
- New & modified 115-kV and new 345-kV to assist power transfer from eastern CT to western & southern CT

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## CT Supply Enhancements

### DPUC Long Term Capacity RFP

- Issued RFP on 9/15/2006 for diverse resources: generation, demand response, conservation and energy efficiency projects to reduce impact of FMCCs & other costs
- Selected 4 projects totaling 787 MW
  - 620 MW CCGT in Middletown, 66 MW oil-fired peaker plant (SWCT), 96 MW gas-fired peaker (SWCT), 5 MW in statewide energy efficiency project
- Will provide \$417 million in energy benefits, \$441 million in capacity benefits over 15 years
- Will reduce pollutant emissions (NO<sub>x</sub>, SO<sub>2</sub>, CO<sub>2</sub>) ≥ billion tons over 15 years

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## Fuel Diversity

- Over reliance on natural gas in New England – 39% of fuel mix
- CT fuel mix reliance on Natural Gas
  - 20% in 2006; 50% by 2015 (*CSC Forecast*)
- CT RPS – Class I, II, III
  - 7.5% in 2007 increasing to 27% in 2020
  - Class III expanded in 2007 - in addition to C&I CHP with 50% efficiency rating, includes systems that recover waste heat or pressure from C&I processes and all EE program savings after 1/1/06
- Project 150
  - CT legislation requires long-term contracts by distribution companies for 150 MW of CT Class I renewable energy
  - CT Clean Energy Fund
- CT Climate Change Action Plan – RGGI participant

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## CT Energy Efficiency & Demand Response

- **EE Programs for Residential, C&I and Low-Income in 2006 year:**
  - \$71 million budget → increases to \$ 85 million in 2007 (with add'l \$35 million from other sources/programs)
  - 328 million kWh and \$60 million in energy costs saved
  - \$4 saved for every \$1 spent
  - 311 MW reduction in peak demand
  - Reduced emissions (NO<sub>x</sub>, SO<sub>x</sub>) by 422 tons, CO<sub>2</sub> by 181,000 tons
  - EIA Near-term Measures - \$7.5 million supplemental \$\$\$
- **Demand/ Load Response Programs**
  - CT has 664 MW enrolled, which is 47% of ISO-NE LRP
  - EIA Near-term Measures - \$5 million supplemental \$\$\$

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## Customer-Side Distributed Generation

CT Current DG Program Status – as of 9/2007

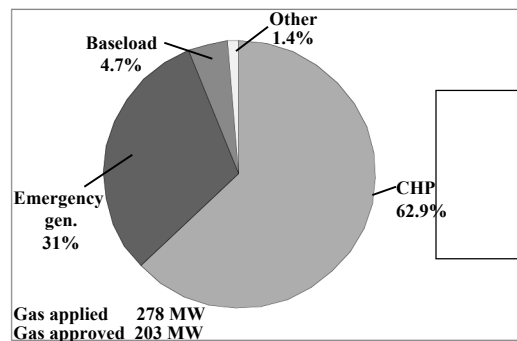
### Total applied

- 236 applications
- 413 MW

### Total approved

- 155 projects
- 281 MW
- \$112 million plus

### Types of Approved Projects



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## CT Rates Initiatives

- **Time-Of-Use Rates – to be implemented per PA 05-01**
  - **Mandatory time-of-use rates**
  - **Voluntary real-time or variable peak pricing rates**
- **Seasonal Rates - mandatory**
- **Advanced Metering**
  - **Rate design changes may require investment to upgrade distribution companies' current metering, billing and meter data storage capabilities**

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## Integrated Resource Planning

- **Electric companies must submit annually to CEAB per CGS § 50 51-53, 62, 63:**
  - **3-, 5-, and 10-year energy and capacity requirements**
  - **Plans for stabilizing annual electric growth**
  - **Impact of environmental standards**
  - **Energy security and economic risks of potential energy resources**
  - **Lifetime cost and availability of potential resources**

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# Questions

