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Session II B: Pursuing Environmental Goals Against the Wind *A Utility's Perspective*

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Value of the Electric Grid

- The Grid is, and will remain, highly valuable to customers and other users
- Integration of load with supply for New England
- Enables functioning markets over a broad geographic area
- Allows for optimal development of both centralized and distributed resources
- Can be the backbone for reducing carbon dioxide emissions from the transportation sector

Modernization of the Grid and Regulation

- The Grid is changing as users' needs change
 - Expansion of distributed generation and adoption of new technologies
 - Adoption of EVs
 - Is the distribution ISO coming?
- Regulation of the Grid needs to keep pace
 - Decoupling revenue from sales is a great start
 - New rate structure for new product and service offerings
 - Send appropriate economic signals to all grid users

Renewable Cost Trends for Connecticut

Cost of Clean Energy Programs



Graph from Connecticut Department of Energy and Environmental Protection

Investing in De-Carbonization

- For maximum cost-effectiveness, go big
 - Actual results demonstrate that economies of scale are very real
- Investment in the clean energy resources is only part of the investment needed
 - The Grid will need modernization and expansion to meet carbon dioxide reduction goals
 - Conventional generation will provide balancing and reliability for the foreseeable future, and needs appropriate compensation through market mechanisms

Distributed Generation

- Distributed clean generation is a key part of the long-term goal of reducing carbon dioxide emissions
- However, economic signals should be accurate and avoid hidden subsidies
 - Net metering shifts costs from participating customers to all other customers
 - Excessive premiums harm non-participating customers
 - Cost responsibility needs to be aligned with users' actual power and energy requirements

Expansion of Distributed Generation at UI

