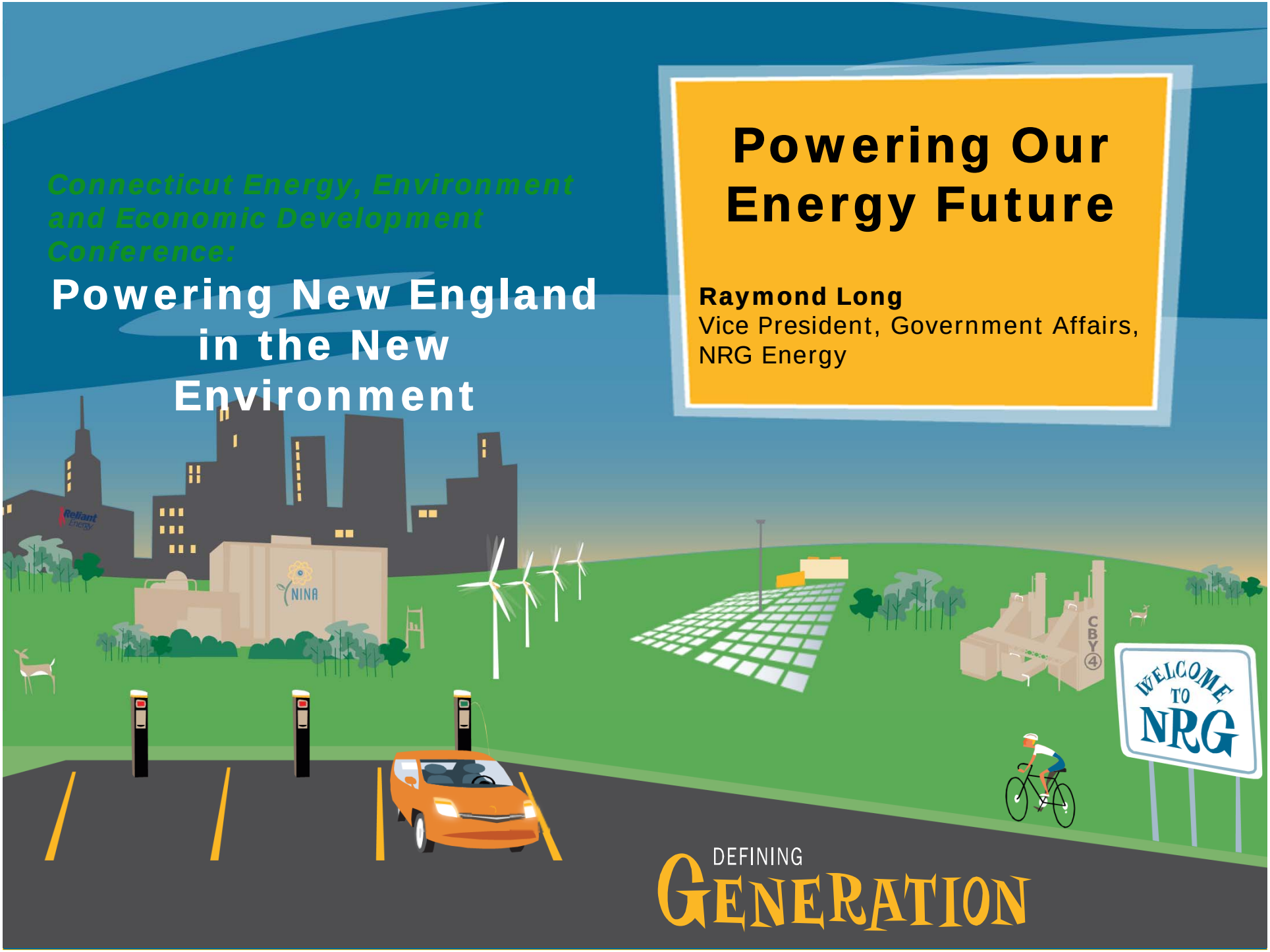
Connecticut Energy, Environment and Economic Development Conference:

Powering New England in the New Environment

Powering Our Energy Future

Raymond Long
Vice President, Government Affairs,
NRG Energy



NRG's Vision

- Execute clean-power generation projects
  - Solar
  - Wind
  - Biomass
- Maximize existing generation by repowering with natural gas and renewable fuels
- Replicate NRG's pioneering electric vehicle business model in other markets
- Expand retail energy platform into NE markets

The Fundamental Issues

Everyone wants:

- Reliable power
  - Problem: Aging infrastructure

    Solution: Appropriately-sited new generation with T&D upgrades as needed
- Stably-priced, low-cost electricity
  - Problem: High ratepayer costs

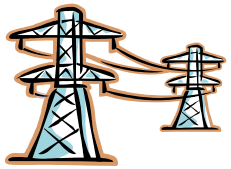
    Solution: Capacity market reforms, new generation, Marcellus shale gas opportunities
- Cleaner environment
  - Problem: Older generation, higher emissions

    Solution: LT contracts & markets that support repowering and new generation with renewables and cleaner fuels

Challenges

Imminent retirement of a substantial share of the aging fossil fleet in the near term:

9000MW region wide, nearly 1/3 of Connecticut generating capacity is reaching the end of its economic life - facing significant capital upgrade costs to remain in compliance with environmental requirements



Transitioning today's fleet into the new reality:

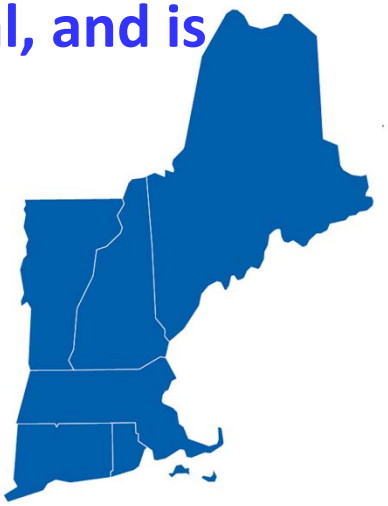
- How to ensure that the infrastructure we build best serves the region's consumers?
- How to plan locally/regionally in context of current markets - what structures and incentives are required?
- What mechanisms are needed for financing new generation?
- How to create a level playing field for reliability solutions? (current policy supports new transmission but not generation)

Transforming Power Generation

The retirement of older fossil generating capacity is real, and is likely to happen all at once

- Environmental pressures are mounting
- FCM floor price goes away

  …Retirement becomes the only realistic option.



The capacity surplus is not as robust as it may appear

- Made up of older capacity, imports and demand resources
- Will not continue with low FCM prices once the floor price goes away

In NE, the energy mix of the future will continue to revolve around natural gas

- Gas provides unmatched availability, dispatchability, efficiency with low capital costs
- Natural gas will be the anchor fuel for New England, augmented with renewables and the continued operation of the nuclear plants.

The Benefits of Repowering

Repowering is simply replacing aging electric generation infrastructure with new, efficient, low-cost generation that is good for the environment and the economy.

- New generation on existing sites:
  - Creates valuable construction and operations jobs
  - Keeps the economic benefits of these manufacturing enterprises local
- Existing sites are fully integrated into transmission grid
- Existing sites are well-accepted as a part of the community
- Natural Gas is among the lowest cost fuel sources in the Northeast
- Competitive RFP for LT contract ensures lowest cost projects are selected
- Contract for differences: state control; cost certainty, market revenues returned to ratepayers, regulated profits
- Proven track record in CT based on results of 2005 & 2007 Energy Acts

Over the next ten years, repowering in Connecticut could save ratepayers $5.9 billion using Combined Cycle Natural Gas vs. importing power from Canada. Using the same 10 year timeframe, cost savings for a Biomass Conversion would be almost $2 billion compared to the same amount of Canadian imported power.

Opportunities in Connecticut Today

Connecticut policy-makers have the opportunity to provide immediate benefits by facilitating replacement of older generation facilities through a competitive RFP process led by the DEEP.

- Montville Biomass, a fully permitted 42MW Class 1 resource could be generating renewable power by year end
- A partially constructed 530 MW high efficiency natural gas combined cycle unit in Meriden could be completed by 2015.
- Another 1200 MW of aging CT generating infrastructure could be replaced over time.

Q & A