2010-11 CEAB
Renewable Portfolio Standard
Review Study

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Connecticut RPS Review Study

What It Was

- ❑ A Review of the CT RPS commissioned and undertaken by the CEAB in its advisory capacity
- ❑ Prompted by a recommendation in the 2010 IRP
- ❑ Designed to clarify uncertainties about –
  - Long-term RPS goals and objectives
  - Impact on cost of energy now and in the future
  - Implications for economic development, energy security and environmental policy
- ❑ Intended to provide guidance to policy makers

Connecticut RPS Review Study

Process - Chronology

- ❑ April 2010 - IRP recommended study as a result of extensive discussion of RPS design & projected impacts

- ❑ May, 2010 CEAB formed subcommittee to pursue study – Included Tracy Babbidge, Joel Gordes, and Tim Cole

- ❑ August, 2010 RFP for consultant issued

- ❑ October, 2010 Informal agreement with CCEF to collaborate on project. David Goldberg joined team.

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Process - Chronology

- January, 2011 – Team from Center for Energy, Economic, and Environmental Policy (Rutgers University) selected to conduct study
  - February, 2011 Contract signed

- February, 2011 MOU with CCEF.
  - Bob Grace of Sustainable Energy Advantage retained as informational resource on regional and national RPS established.

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Process - Chronology

- ❑ **April 4, 2011 – SEA webinar on regional RPS background and policy**

  Available at: http://www.box.net/shared/8mbm1f7ot1

- ❑ **April 11, 2011 All-day stakeholder process – Over 130 attendees – Almost 40 panelists / presenters – Cross-sector representation**
  - **Elected & appointed public officials + policy makers**
  - **Renewable energy developers, operators & investors**
  - **Public Utilities**
  - **Advocates and activists**
  - **Regional stakeholders**

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Process - Chronology

- ❑ **April 21, 2011 – Deadline for supplementary written input – Submissions by ~ 20 stakeholders**

  Available at: http://www.box.net/shared/8mbm1f7ot1

- ❑ **May 31, 2011 – Draft Report circulated for comment – formal responses received from 10 stakeholders**

- ❑ **July 20, 2011 – Final Report Delivered**

  Available at: http://www.box.net/shared/8mbm1f7ot1

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- **April 4, 2011 – SEA webinar – "Connecticut's RPS Policy Report: A Common Starting Point"**
  - **Designed to frame the issues and context – "get everyone on the same page." – Covered:**
    - **RPS Policy & Economics**
    - **CT & NE RPS & Related Policies**
    - **CT & NE RPS Experience to Date**
    - **CT & NE RPS Looking Forward**

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- **SEA webinar – continued**
  - **Issues addressed included**
    - **Variability in approaches & objectives**
    - **Design**
    - **Procurement**
    - **Cost & competitiveness – now vs. future**
    - **Best practices**
    - **RECs and REC market features & behavior**
    - **Specific features of CT RPS Classes / comparison with other NE states**

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- **SEA webinar – Issues addressed – continued**
  - **Limitations of RPS strategy – financing challenges – states pursuing other options –**
    - **Long term contracting, feed-in tariffs, solar tiers, etc.**
  - **Historic volatility of CT Class I REC prices due to unpredictable policy interventions**
  - **Classes II & III flat or declining**
  - **Limited RE options in CT – geographic factors**
  - **Etc., etc.**

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- **Final Report – Contents**
  - **Review of policy context, goals and strategies**
  - **Recommendations and findings**
  - **Economic impact analysis**
  - **Review of state, regional, and national RPS**
  - **Summary of stakeholder input**

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- **Final Report – Recommendations & Findings**
  - **Recommendation A:**

Connecticut should clearly define its economic development, environment / public health, and energy security goals, determine the relative priorities of each, and establish a process by which it can evaluate the extent to which current or future policies achieve those goals and evaluate associated tradeoffs.

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- **Final Report – Recommendations & Findings**
  - **Selected findings for recommendation A:**
    - **RPS promotes non-renewable technologies**
    - **Goals are unclear**
    - **Relative importance of goals (economic, environmental, energy security, etc.) unclear**
    - **Distinction between goals and approaches unclear**
    - **Need quantifiable metrics to define goals and assess impact**

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- **Final Report – Recommendations & Findings**
  - **Recommendation B:**

Connecticut needs to study other approaches besides its RPS to determine whether those approaches can better achieve its goals, and then compare these alternative approaches explicitly to its RPS, taking into account that new approaches may introduce some uncertainty into the renewable industry.

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- **Final Report – Recommendations & Findings**
  - **Selected findings for recommendation B:**
    - **Competition within classes not between classes – Approaches classified by policy maker preferences, not market viability**
    - **Some long-term objectives may not be achievable via RPS – assigning risk mainly to developers**
    - **Need to explore distributing risk among developers, ratepayers, financing**

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- **Final Report – Recommendations & Findings**
  - **Recommendation C:**

Connecticut should have a formal ongoing CT RPS review and evaluation cycle that will provide a review timeline, analysis, and proposed changes to the CT RPS for consideration. This would arm policymakers and stakeholders with updated information and analysis needed to evaluate implications of changes to RPS and related policies.

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- **Final Report – Recommendations & Findings**
  - **Selected findings for recommendation C:**
    - **History of repeated changes to RPS design**
    - **Uncertainties about federal policy, commodity prices (natural gas), technological advances, macro-economics**
    - **Fragmentation of energy policy responsibilities among multiple agencies**
    - **Lack of formal multi-year RPS review process stakeholders can factor into decision making**

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- **Final Report – Recommendations & Findings**
  - **Recommendation D:**

Foundational studies need to be conducted routinely to assess the technical and economic potential of RPS- eligible resources, the economic impact on Connecticut's economy of the current CT RPS and proposed changes, and the associated environmental / public health and energy security impacts; so that policymakers may make informed decisions regarding the tradeoffs among goals.

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- **Final Report – Recommendations & Findings**
  - **Selected findings for recommendation D:**
    - **Comprehensive resource potential, economic impact, and cost-benefit analyses lacking.**
    - **Because indigenous RE options are limited, other in-state options need further exploration – EE, fuel cells, CHP, etc.**
    - **Economics of procuring lower cost RE out of state vs. higher cost in-state opportunities needs detailed study.**

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- **Final Report – Recommendations & Findings**
  - **Recommendation E:**

Connecticut should undertake detailed and systematic analyses of the interactions between its RPS, policies that cap air emissions such as the Regional Greenhouse Gas Initiative (RGGI), and regional wholesale electricity and transmission expansion policies to understand the interactions between these various policies.

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- **Final Report – Recommendations & Findings**
  - **Selected findings for recommendation E:**
    - **Lack of clear alignment between RPS and other state and regional policies – potential for contradictory interactions – Examples:**
    - **RPS reductions in air emissions absent cap on emission allowances may yield no benefit if allowances offset RPS gains**
    - **Complex interactions between REC prices, wholesale energy markets and capacity costs need more analysis**

Connecticut RPS Review Study

Take Aways

- Whatever we do, predictability and consistency are essential.
- We need to define what goals and objectives we aim to achieve through the RPS.
- For some goals and objectives RPS is not the answer.
- We need better foundational analyses and quantitative metrics.
- Adaptability to change needs to be built into RPS policy.

Closing Remarks

- **You would not know from these comments that CT has a viable RPS program that has made headway toward achieving its targets. It does. The SEA webinar provided a succinct and nuanced picture of this.**
- **When we embarked on this study, the energy policy environment was clearly dramatically different than it is now. It appears already that our recommendations are on DEEP's radar screen.**

Closing Remarks

- **This study can serve as a foundation for the RPS-related initiatives called for by PA 11-80**

Questions?

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