# 2010

# Report to the New England Governors on Coordinated Renewable Procurement



New England States Committee on Electricity

Identifying cost-effective, clean energy resources through competitive processes 7/12/2010

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### Report to the New England Governors on

### Coordinated Renewable Power Procurement

Executive Summary



In September 2009, the New England Governors adopted the *New England Governors' Renewable Energy Blueprint* (Blueprint).<sup>1</sup> The Blueprint, together with associated technical analysis conducted by the ISO-New England, Inc., referred to as the *Renewable Development Scenario Analysis*, describes the significant renewable resource potential in and around New England. The Blueprint also identified potential means available to the states to facilitate its development.

The Blueprint found that New England has a significant quantity of untapped renewable resources, on the order of over ten thousand (10,000) Megawatts combined of on-shore and offshore wind power potential, as well as other low-carbon resources. Developing far less than the maximum potential would enable New England to meet its renewable energy goals and reduce reliance on carbon-emitting generation resources. More aggressive development of generation resources - with corresponding transmission infrastructure investment - would enable New England to export clean power to neighboring regions.

The Blueprint further observed that New England has the essential elements in place to help bring cost-effective, secure, low-carbon resources to market.<sup>2</sup> Among them are a long

<sup>&</sup>lt;sup>1</sup> The Blueprint may be accessed at this link: http://www.nescoe.com/uploads/September Blueprint 9.14.09 for release.pdf

<sup>&</sup>lt;sup>2</sup> Other activity in the region evidences broad interest in facilitating development of the renewable resources in and around New England, some of which have emerged since the Governors' adoption of the Blueprint in September, 2009. For example, Northeast Utilities and NSTAR Electric together with Hydro Quebec have proposed a joint project to construct an HVDC line that would utilize a long-term contract that bundles transmission and energy costs into a combined, delivered-energy product. Separately, as one of several solutions being considered for the region, some transmission owners indicate they are discussing transmission alternatives for solving the region's need for renewable energy

history of collaborative working relationships between the New England states and the Eastern Canadian provinces on complex energy and environmental matters; a common interest in carbon reduction; considerable recent experience successfully siting significant transmission facilities; and, substantial authority associated with competitive solicitations and contracts for generating resources. New England also shares aggressive Renewable Portfolio Standards and goals, and a history of programmatic support to facilitate renewable development.

To facilitate renewable resource development, the Blueprint identified potential opportunities for regional coordination in two areas: procurement of renewable power and siting reviews of interstate transmission facilities required to deliver renewable power to load centers.

The Governors adopted the *New England Governors' Renewable Energy Blueprint Resolution*, which provided the following direction:

**BE IT FURTHER RESOLVED** that the New England Governors authorize their regulatory and policy officials to use the Blueprint as a resource to help support development of New England's renewable resources in their public advocacy, rulemaking, policy development and other initiatives; and

**BE IT FURTHER RESOLVED** that the New England Governors authorize their regulatory and policy officials to review the availability of renewable resources in the region, including those identified in the Blueprint, and to consider potential mechanisms for the joint or coordinated but separate competitive procurement of renewable resources, and to report the results of such a review to the Governors within the next twelve months.

In addition, a *Renewable Energy Resolution* was adopted by the New England Governors and the Eastern Canadian Premiers. It provided:

**BE IT FURTHER RESOLVED THAT** the New England Governors and Eastern Canadian Premiers wish to provide clarity to renewable energy producers and through the NICE (Northeast International Committee on Energy), will initiate a meaningful dialogue between the states and provinces on the types of contract structures, pricing mechanisms and regulatory approvals that may offer the best opportunities for success in the New England and Eastern Canadian electricity marketplaces; and

resources (specifically, facilitating the development of new onshore wind resources). Four utilities – National Grid, Northeast Utilities, NStar and The United Illuminating Company – are conducting analyses and having discussions, and report that others are considering participating in the future. The four utilities indicate that they have identified the following goals and desired outcomes for a potential project concept: provide the region's energy policy makers and generation developers with conceptual ideas to develop and interconnect renewables in New England; explore integrated approaches that would make a significant contribution toward reaching regional RPS goals, with shared benefits across multiple load areas at a more attractive combined cost for renewable energy generation and transmission; complement ISO-New England's planning efforts and the New England states' programs (e.g., for RPS and RGGI); be part of the portfolio of regional solutions to address climate change including demand side management, off shore wind, solar, biomass and on shore wind; and, remove the barriers that many locationally constrained renewable resources are facing today, without increasing the total costs customers would otherwise bear. New England's evaluation of coordinated procurement opportunities does not preclude consideration of these and other approaches that may prove to be cost-effective options for consumers. **BE IT FURTHER RESOLVED** that this dialogue will consider potential terms and conditions for the procurement of regional power and a sample regional Request for Proposal for the procurement of renewable power (including energy, capacity, reserves, etc.) that could serve as a model for future solicitations.

This *Report to the New England Governors on Coordinated Renewable Procurement* (Report) provides information about potential mechanisms related to coordinated competitive procurement of renewable resources.<sup>3</sup> In addition, this Report discusses some potential terms and conditions and regulatory approval process approaches concerning renewable procurement.

In general, coordinated or joint renewable power procurement could aggregate demand for renewable power and enhance buying power; stimulate the market for renewable resources; and, provide value to renewable project developers by creating larger revenue streams than might otherwise be possible. Using cooperative competitive processes may, therefore, facilitate development of cost-effective, low-carbon renewable electric generation in and around the region.

Coordinated procurement is, however, inherently complex. Across New England, power is procured by different entities, through difference

processes, on different schedules, and pursuant to different evaluation criteria. Some of these differences result from state statute while others result from regulatory practice or preference. Another complexity is that each state has its own definition of renewable resources eligible for Renewable Energy Credits.

Using cooperative competitive processes may facilitate development of cost-effective, low-carbon renewable electric generation in and around the region.

Despite such complexities, these differences do not preclude some degree of coordination. For

example, the states generally have flexible authority in connection with procurement levels and timing; all states' evaluation criteria include a focus on cost; and, all states consider wind, solar, biomass, landfill gas and small hydro to be renewable. The five New England states that have a Renewable Portfolio Standard also recognize landfill gas as renewable. These commonalities, coupled with the region's collective interest in facilitating renewable resource development and experience implementing regional programs such as the Regional Greenhouse Gas Initiative, provide a solid basis for pursuing renewable procurement opportunities.

<sup>&</sup>lt;sup>3</sup> In furtherance of the Resolutions, the New England states formed a State Renewable Procurement Work Group to examine associated issues. Members of the Work Group included Denis Bergeron, Faith Huntington and John Kerry of Maine; Hans Mertens of Vermont; Lynn Fabrizio and Tom Franz of New Hampshire; Nicholas Ucci of Rhode Island; Shaela Collins, Nathan Phelps and Benjamin Davis of Massachusetts; Cindy Jacobs of Connecticut; and Heather Hunt of NESCOE. NESCOE Managers and various representatives of New England Governors' offices regularly participated in related discussions.

This Report includes:

- A comprehensive assessment of power procurement practices across the six New England states. This information will inform competitive procurement coordination mechanism discussions with Electric Distribution Companies and other stakeholders, including Canadian interests;
- General terms and conditions of region-wide procurement that may be considered preferable from the states' perspective;
- Discussion of a process approach to coordinated procurement that may address some of the primary obstacles to regional coordination; and,
- > Identification of other coordinated procurement obstacles and potential solutions.

In sum, the approach set forth in the discussion that follows contemplates:

- Development of a model regional RFP for renewable resources based on terms and conditions mutually agreeable to the six New England states that maximizes the region's ability to assess projects that may serve consumers most cost-effectively that:
  - Includes a competitive all-in delivered price
  - Reflects flexible provisions in areas such as contract term length, resource type and locations and pricing structure to enable procuring entities to consider the broadest set of resource options that could benefit consumers
  - Is subject to state-by-state modification as necessary to enable compliance with state statutory requirements
- Establishment of an RFP and bid evaluation schedule and evaluation process to accommodate coordination across the six New England states
- Formation of a New England Renewable Procurement Team, consisting of entities such as the Electric Distribution Companies and state agencies that administer procurement to enable coordination
- Formation of a State RFP Coordinating Liaison Council, consisting of state entities other than the regulatory authorities that review and approve proposed contracts to provide state perspective to the New England Renewable Procurement Team and to bidders in the early phases of the RFP process

This Report reflects the preliminary perspective of the six New England states. Continued consideration of coordinated regional procurement requires considerable consultation with various New England stakeholders. This includes Electric Distribution Companies, renewable developers, municipal electric providers and electric aggregators representing competitive suppliers that may be interested, Canadians through the Northeast International Committee on Energy and others as appropriate.<sup>4</sup> Particularly important are the

<sup>&</sup>lt;sup>4</sup> As a point of reference, the Western Governors Association identified coordinated procurement several years ago as a component of that region's renewable development effort, referred to as the Western

Electric Distribution Companies<sup>5</sup> that implement procurement in five of the six New England states, including issuing RFPs, conducting detailed financial analysis, negotiating with bidders, submitting recommended contracts to their respective public utility commissions for consideration and acting as contractual counter-parties. The Electric Distribution Companies' expertise, input and cooperation is essential to the development of a coordinated process.

The examination of procurement processes across New England underscores the region's experience with and commitment to competitive markets and processes to select the most cost-effective resources. Combining competitive processes and regional coordination could facilitate development of cost-effective, low-carbon resources in and around the region and reduce reliance on carbon-emitting generation in a way that may not be possible through separate, state-by-state procurement.

Renewable Energy Zone project. Work on coordinated procurement is now part of the western states' Department of Energy-funded interconnection-wide planning. The west contemplates a process whereby a consultant will interface with state regulatory authorities and load serving entities simultaneously to assess procurement schedules, barriers to coordination and so forth in order to inform a draft paper that will be the basis for further discussion by load serving entities and regulatory authorities. While New England conducted state discussions at the outset to gauge preliminary interest and points of view, the western states' approach underscores the need to engage in detailed discussions with electric distribution companies and others as appropriate.

companies and others as appropriate. <sup>5</sup> In this document the term electric distribution company, or EDC, is used to refer to load serving entities or electric utilities.

# Report to the New England Governors on Coordinated Renewable Power Procurement



This Report to the New England Governors on Coordinated Renewable Procurement (Report) comprehensively assesses competitive procurement practices across the region to inform dialogue about contract structures and coordination mechanisms; sets forth some potential terms and conditions for coordinated procurement; and, identifies a process approach that may address some primary obstacles to coordination, as well as some other obstacles and potential solutions.

In setting forth the New England states' preliminary views on this complex subject, the states hope to inform discussions with the region's stakeholders, including Electric Distribution Companies, renewable developers and Canadian interests, on means to identify and secure renewable resources able to serve consumers most cost-effectively.

#### I. NEW ENGLAND POWER PROCUREMENT OVERVIEW

The New England states have general statutory authority and practical experience with processes for soliciting and contracting for generation resources. As noted in the Blueprint, an initial review of such authority suggests sufficient mechanisms - and commonality of purpose - exist across New England to enable some degree of procurement synchronization.

Coordinated or joint renewable power procurement could aggregate demand for renewable power and enhance New England's buying power; stimulate the market for renewable resources in New England; and, provide value to renewable project developers by creating larger revenue streams than might be possible through single-state procurement. Harmonizing procurement could strengthen the region's ability to facilitate development of those low carbon resources able to serve customers most cost-effectively. The Blueprint offered several observations in connection with current procurement, including:

- Every New England state has statutory authority to approve long-term contracts for capacity, energy and/or renewable energy credits (RECs).
- Across New England, procurement is generally executed through competitive solicitations.
- Typically, competitive procurement is implemented by electric distribution companies, subject to the review and approval by the states' public utility commissions. In some states, such as Maine, state entities act on the state's behalf. In essence, however, the states are the ultimate arbiter of whether and what resources are awarded contracts.
- > The states generally have authority to determine appropriate contract term lengths.
- A common goal reflected in each New England state's authority to approve long-term contracts relates to securing low cost, cost-effective or cost-stabilizing power.

This Report includes the New England states' first comprehensive regional assessment of what entities procure what resources, when, and how. Detailed information about power procurement in New England is provided in Attachment I. In short, across New England, power is procured by different entities, through different processes, on different timeframes, for different contract term lengths, and for varying percentages of load. Table I provides an illustrative summary view.

#### Table I. Illustrative Procurement Processes

ME-CMP&BHE

ME- MPS

	-	
Illustrative	Procurement	Processes

Residential and \$mail Commercial Customers										
Term	usually 1 year	3 yrs staggered	1 to 2 years	1 year staggered	6 months	MIX	6 or 9 months	IRP		
Portion of load	100 %	33%+33%+33%	100 %	50 % + 50 %	100 %	56 % own	95%, 5% spot	100 %		
Solicitation date	Not fixed	November	November							
Bld date	Not fixed	January	January							
Contract start	Not fixed	March 1	March 1	Varies by EDC	May & Nov	As needed	Apr & Oct			
Flexibility	DPUC can order	Schedule & load	Schedule & load	Schedule & load	Schedule & load	Schedule & load	Schedule & load			

Massachusettes NH-Unitil & Grid

NH - PSNH

Rhode Island

Vermont

Large Commercial	and Industrial Cus	tomers	
Term	usually 1 year	6 months	1 to 2

Connecticut

Term	usually 1 year	6 months	1 to 2 years	3 months	3 months	MIX	3 months	IRP
Portion of load	100 %	100 %	100 %	100 %	100 %	56 % own	100 %	100 %
Solicitation date	Not fixed	Nov. & May	November				No, Fe, My, Au	
Bld date	Not fixed	January & July	January				De, Mr, Jn, Se	
Contract start	Not fixed	March & Sept	March 1	Varies by EDC	Fe, My, Au, No	As needed	Ja, Ap, Jy, Oc	
Flexibility	DPUC can order	Schedule & load						

#### RPS Compliance

Responsibility	EDCs	SO Supplier	SO Supplier	EDCs	EDCs	EDCs	EDC	Utilities
Term	In standard offer	In standard offer	In standard offer	Flexible	Flexible	Flexible	Fexible	
Portion of load	In standard offer	In standard offer	In standard offer	Flexible	Flexible	Flexible	Flexible	all 2005-12 growth
								_
Solicitation date	In standard offer	In standard offer	In standard offer	Flexible	Flexible	Flexible		
Bid date	In standard offer	In standard offer	In standard offer	Flexible	Flexible	Flexible		
Contract start	In standard offer	In standard offer	In standard offer	Flexible	Flexible	Flexible	Apr & Oct	

Other Renewables

Target	150 MW Clean	Benefit ratepayers	Benefit ratepayers	3% of load	Specified annual	Specified annual	90 MW by 2014	Feed in tariff for
_	Energy Fund				requirement	requirement		50 MW
Term	Up to 15 years	up to 10 years, longer with public interest finding	up to 10 years, longer with public Interest finding	10-15 years	Up to 15 done	Up to 15 done		10-25 years
Other					Must be synchronous with	Must be synchronous with		SPEED Is procurement

Another level of complexity is that each state has its own definition of renewable resources eligible for Renewable Energy Credits. All six states recognize wind, small hydro, solar, landfill gas and biomass. All five states that have a Renewable Portfolio Standard (RPS) also recognize ocean power. Table II illustrates those resources eligible for RECs in the five New England states that have an RPS as well as the resources Vermont considers renewable.

		STATE						
		СТ	MA	ME	NH	RI	VT	
	Small Hydro	х	x	x	x	х	x	
	Large Hydro						x	
	Wind	х	x	x	х	х	x	
RESOURCE TYPE	Solar	x	x	x	x	x	x	
	Waste	x		x (w/recycling op)			x	
	BioMass	x	x1	x	x	x	x	
	Landfill Gas	х	x	x	x	х	x	
	Demand	x (class 3)					x	
	Ocean	х	х	x	x	х		
	Efficiency	x (class 3)					x	

#### Table II. Eligible Renewable Resources

<sup>1</sup> Massachusetts recently completed a biomass study. Massachusetts will conduct stakeholder process in which it will consider the study results and current regulations.

Despite the differences, the states generally have flexibility with respect to: power procurement schedules; the percent of load procured at any point in time; and, authority in connection with long-term contracts with renewable resources. This is the case both where the state through the public utility commission staff issues RFPs for power and where the EDCs issue RFPs and submit proposed contracts to public utility commissions for review and approval. This flexibility provides opportunity to coordinate procurement of renewable resources across EDC territories and state boundaries.

Importantly, any renewable products (i.e., energy, capacity or RECs) procured through a regional process could be used according to different states' needs or preferences. For example, regional procurement could be used by one state or EDC as a means to secure power to serve standard service customers. For others, regional procurement could be a means to secure products to comply with RPS requirements, with associated energy and capacity resold into the wholesale spot market.

## A. Prior Procurement Coordination Experience Suggests Intra- and Interstate Coordination is Feasible

The New England states and the EDCs serving customers in New England have not recently attempted to coordinate power procurement to any significant degree. Nevertheless, recent, albeit limited coordination experience shows some degree of coordination is feasible.

With respect to intrastate coordination, the Maine Public Utility Commission issues RFPs for two of its three EDCs at the same time. While it requests separate bids for each service

area and customer class, Maine allows cross-class and cross-service areas contingencies such that a bidder may offer a bid to provide service in one EDC territory that is contingent upon it being selected to provide service in the other EDC territory. With respect to interstate coordination, in New Hampshire, National Grid's default service RFP schedule aligns with the schedule of another New Hampshire EDC and with National Grid's Massachusetts' RFP schedule through joint RFPs. These practices and experiences suggest that EDC territories and state boundaries are not a bar to coordinated procurement.

#### **B. New England Procurement Practice Summaries**

The following sections provide a high level summary of various types of power procurement across the region. More detailed information is in Appendix I.

#### **1. Standard Service Procurement**

With respect to power procurement for residential standard service, basic or default service across New England (i.e., generation service for customers who have not elected to take generation service from a competitive electric supplier), with the exception of Maine, the New England EDCs procure between one-third and the entire load for terms ranging from six months to several years. In general, these procurement processes take place one or two times per year.

With respect to large commercial and industrial customers, New England's EDCs (except Public Service of New Hampshire) procure the entire load for terms ranging from three months to a year. This procurement generally takes place between one and four times per year.

One exception to the above is Maine, where the PUC, rather than the EDC, procures standard service for all customers. Another exception is Public Service of New Hampshire, which by statute supplies all standard service in its territory from its own generating assets and through supplemental power purchases. The EDCs in Vermont, which are still vertically integrated, do not procure standard service per se but they procure power for customers under traditional rate of return regulation. Vermont nevertheless has authority with respect to EDC procurement.

Despite differences, every state appears to have flexibility with regard to both the timing and percent of load procured for both residential and large commercial and industrial classes.

#### 2. Renewable Portfolio Standard Compliance and Associated Procurement

With respect to RPS compliance, states generally achieve compliance through EDCadministered procurement. An exception is Maine, where the PUC administers standard service procurement and standard offer suppliers are required to comply with the Maine RPS.

In Connecticut and Maine, RECs are generally procured together with standard service. Connecticut appears to have flexibility with this means of procurement. Connecticut EDCs also have specific authority to propose long-term REC contracts. Rhode Island has a flexible system whereby the EDC conducts stand-alone REC solicitations and REC solicitations tied to energy procurement.

In New Hampshire and Massachusetts, the EDCs have discretion to purchase RECs for RPS compliance either through standard service procurement or separately. In practice, the EDCs take different approaches.

Vermont does not have an RPS requirement, but requires all load growth that occurs between 2005 and 2012 to be met with power contracted with renewable generators. The renewable power procured must offset Vermont load. Vermont has a legislatively created procurement agent to execute and manage this renewable power procurement.

The following graphs and table illustrate RPS requirements across New England and over time. RPS requirements are complex; for example, various states have different RPS classes with different types of resources. These graphs are presented for illustrative purposes.



#### Graph I. New England Renewable Portfolio Standards for New Supply

Source: ISO-NE

Graph I notes:

- Vermont is not included because it does not have an RPS.
- Massachusetts' percentage represents only its Class I RPS.



Graph II. Renewable Portfolio Standard, State by State, Over Time

Source: Sustainable Energy Advantage, Inc.

Graph II Note:

• Because Vermont does not have an RPS, this graph assumes 1% in 2013, increasing 1% per year.

#### Table III. Projected RPS for "New" Renewables Beyond 2008

Line #	State	2009	2012	2016	2020
1	Connecticut Class I	1,865	2,818	4,449	6,509
2	Massachusetts Class I	2,037	3,438	5,184	6,676
3	Rhode Island "new"	168	385	836	1,280
4	New Hampshire Classes I and II <sup>(b)</sup>	58	378	918	1,501
5	Maine Class I	235	600	1,114	1,285
6	Total "new" RPS targets (from Table 7-6, line 3) <sup>(c)</sup>	4,363	7,618	12,501	17,251
7	2008 "new" RPS	3,624	3,624	3,624	3,624
8	Incremental "new" RPS beyond 2008 <sup>(d)</sup>	739	3,994	8,877	13,628

#### Projected New England RPSs for "New" Renewables Beyond 2008 (GWh)(a)

(a) The projection is based on the ISO's 2009 state electric energy use forecast deducting 5% for noncompetitive LSEs in CT, and similarly, 14% for MA and 0.6% for RI. Modest growth requirements in the "existing" and "other categories are not included here.

(b) New Hampshire's Classes I and II will go into effect in 2008 and 2010, respectively. However, NH's Class 1 requirement starts at 0.5% in 2009.

- (c) The numbers may not add to the totals shown because of rounding.
- (d) This assumes existing renewable projects in New England met the 2007 requirements for "new" renewable resources.

Source: ISO-NE Regional System Plan 2009, page 8.6

#### 3. Other Renewable Procurement – Long Term Contracts

As discussed in the Blueprint, the New England states have flexible authority to authorize long-term contracts with renewable resources provided such contracts meet applicable state standards.

Massachusetts, New Hampshire, Vermont and Connecticut<sup>7</sup> appear to have authority to approve long-term contracts with renewable resources of any duration or type.

Connecticut also allows its EDCs to enter long-term contracts (15 years) for RECs. Any RECs procured in this manner have to be used to meet standard service RPS requirements and

<sup>&</sup>lt;sup>6</sup> ISO-NE's 2009 Regional System Plan is accessible at this link: <u>http://www.iso-ne.com/trans/rsp/2009/rsp09\_final.pdf</u>

<sup>&</sup>lt;sup>7</sup> Connecticut first determines whether there is a resource need in its IRP process.

costs are recoverable through generation service charge rates. To date, Connecticut EDCs have not requested approval of a REC contract under this authority.

Maine administers procurement for long-term contracts for capacity and energy from renewable resources, with an EDC as the counter party. There is no load target. The objective is to acquire capacity and energy on terms that benefit ratepayers.

Rhode Island's EDC has to enter long-term contracts for 90MW. The energy and capacity has to be sold into the spot market or the EDC can resell it to customers with approval from the Rhode Island Public Utility Commission.

#### 4. Integrated Resource Planning

Connecticut, Vermont and New Hampshire have varied Integrated Resource Planning (IRP) processes. None of them appears to limit flexibility with respect to procurement. Connecticut's IRP statute provides added flexibility to the state.

#### 5. Distinguishing Procurement-Related Features

The following are a few distinguishing features of procurement across New England:

- In Maine, suppliers do not have a wholesale power contract with an EDC; rather, the standard offer service rights and obligations are established by PUC order.
- In the context of Maine's standard offer service, suppliers provide "full requirements" service directly to retail load that has to meet RPS compliance obligations.
- In New Hampshire, Public Service of New Hampshire, the only EDC in the state that owns generating assets, is required by statute to supply all default service offered in its retail electric service territory from its generation assets and through supplemental power purchases, subject to approval by the New Hampshire Public Utility Commission.
- Vermont EDCs are vertically integrated.
- Vermont has a procurement agent for renewable power, referred to as the Sustainably Priced Energy Enterprise Development (SPEED) Administrator. The SPEED Administrator was created by legislation and works under contract with the Vermont Public Service Board. The SPEED Administrator reports progress to the Vermont Public Service Board and the legislature.

#### II. POTENTIAL ELEMENTS OF & APPROACH TO COORDINATED RENEWABLE POWER PROCUREMENT: SOLUTIONS TO PRIMARY OBSTACLES

A primary challenge associated with coordinated power procurement is that multiple entities across New England issue RFPs for power, evaluate bids and negotiate with power project owners. Each uses distinct solicitation instruments and evaluation processes. In recognition of these primary challenges to coordination, New England's preliminary view of means to execute coordinated procurement includes the following elements:

- Development of a model regional Request for Proposal based on terms and conditions mutually agreeable to the six New England states;
- Formation of a procurement entity to enable coordination across EDC territories and state lines;
- > A mechanism to enable states' input early in the RFP process; and,
- > Identification of points in the solicitation process amenable to coordination.

#### A. A Model Regional Request for Proposal based on General Terms and Conditions Mutually Agreeable to the Six New England States

A model regional RFP reflecting renewable procurement terms, conditions and an evaluation process mutually agreeable to the six New England states could provide a cornerstone for coordinating procurement on a regional basis. A common solicitation instrument that requests consistent information from bidders and under materially similar A model regional RFP reflecting renewable procurement terms, conditions and an evaluation process mutually agreeable to the six New England states could provide a cornerstone for coordinating procurement on a regional basis.

terms and conditions should result in uniform baseline information from bidders to enable a coordinated bid evaluation process.

Even where the six states achieve broad agreement on the material terms and conditions of an RFP, use of one RFP instrument throughout New England does not appear possible without statutory changes in at least some states. Differences in state law would likely necessitate state-by-state modification of a model RFP to ensure its conformance to state statutory requirements. For example, Maine might modify a model RFP to reflect that the Maine PUC staff issues RFPs, evaluates bids and negotiates with bidders. State-by-state modifications to a model RFP could also account for resource eligibility variations across the states and statutorily required evaluation criteria.

Similar to the process New England used in the development of the Regional Greenhouse Gas Initiative (RGGI), if the region agreed to a model RFP, each state could: 1) adopt in material respects the model regional RFP's terms and conditions; and, 2) set a date certain by which to make RFP modifications required to comply with state law. A common

schedule for state-by-state modification would enable a coordinated procurement process to move forward on a synchronized timeframe.

The following are some model regional RFP elements that are generally and preliminarily considered preferable to the states, and could inform the basis for discussions with EDCs, renewable developers, Canadian interests and other stakeholders:

- A request for renewable projects that provide a competitive all-in delivered price to ratepayers.
- Establishment of a commercial operation date that encourages development of new renewable resources.
- A request for a detailed explanation of how renewable projects would provide benefits to the region. Some benefits to the region could include: increased resource diversity, which can contribute to price stability to the benefit of consumers; displacement of the region's fleet of carbon-heavy generating resources with low- or no-carbon resources in furtherance of the region's environmental objectives; and, advancement of renewable technology development.
- > Flexibility with regard to the following terms and conditions:
  - Contract length. Bidders could be allowed to submit bids for contract from, for example, ten (10) to twenty (20) years to give the region the maximum opportunity to consider varied proposals that may be in consumers' best economic interest.
  - Resource location. Bids could be accepted from projects in New England and neighboring regions such as Canada, provided a deliverability test ensures products can be valued in the New England market.

To the extent a state does not recognize resources located in certain regions, the model RFP could be modified accordingly or that state and/or the EDCs operating in that state could evaluate bids from projects in eligible locations.

 Pricing. Bidders could be allowed to offer pricing for capacity, energy and/or RECs. Prices could be allowed to be fixed or defined by formulas or indices. To the extent pricing is based on an index or formula, an RFP could direct bidders to provide a detailed example of how the formula would operate using historic index values.

To increase flexibility and consideration of proposals most able to serve customers cost-effectively, bidders could be allowed to submit multiple pricing proposals as long as they are mutually exclusive and not contingent on acceptance of another project.

- Resource type. States define renewable energy in different ways. A model RFP could invite the broadest range of resources defined as renewable in any New England state in order to identify all potential resources that could serve consumers most cost-effectively. Resources not considered renewable in any given state could be reflected in state modifications to the model RFP.
- A financial, rather than a physical arrangement. Several New England states have structured power procurement as a financial rather than a physical transaction. Financial transactions are generally considered advantageous. In general terms, a financial transaction can shield the EDCs from the operating risks that would arise if the EDC took title to the physical capacity rights and then resold them into the Forward Capacity Market. A financial transaction is also generally considered simpler to administer than a traditional physical purchase. In a financial transaction, the bidder rather than the EDC would remain responsible for matters such as bidding, scheduling, and replacing power in the event of a facility event. Financial transactions could also ease EDC concerns regarding accounting issues associated with long term contracts.

#### **B.** Formation of a Procurement Entity to Enable Coordination

Currently, different entities administer RFPs across the six New England states. In Massachusetts, Rhode Island and New Hampshire, the EDCs issue RFPs for power, evaluate bids and submit proposed contracts to PUCs for review and approval. In Maine, the PUC staff issues RFPs, evaluates bids and negotiates with bidders. Connecticut has experience with various approaches. The Connecticut DPUC issued an RFP for capacity resources, evaluated bids and approved contracts; a combination of the Connecticut Clean Energy Fund and the EDCs have solicited resources and recommended contracts with renewable resources to the DPUC for approval; and, the EDCs issue RFPs for standard service. In Vermont, the DPS represents the state in negotiations or proceedings for electric energy from outside the state and the SPEED Administrator acts as a procurement agent for certain purposes. Irrespective of what entity acts as the RFP administrator, the EDCs are generally the contractual counterparties.

To implement coordinated procurement in a way that enables procurement to continue to be executed through EDCs or a state entity as desired or required, one possible approach is to form a New England Renewable Procurement Team (Procurement Team). A Procurement Team could include: 1) the EDCs that procure power and submit recommendations to their respective PUC for



review and approval; and, 2) those state entities that administer RFPs directly. As described in the discussion of coordination opportunity below, the Procurement Team could work collaboratively during RFP administration and much of the bid evaluation. The formation of such a team could enable collaboration and information sharing yet preserve each team

member's ability to conduct independent analysis on bids, exercise their own judgment and recommend projects to their PUC for consideration.

Under this approach, EDC willingness to participate cooperatively would be critically important. If an EDC did not support a state's interest in coordinated procurement of renewable power, overcoming coordination challenges in a multi-state effort could be all the more complex. As noted, if the region continues to explore coordinated procurement, an important next step would be to work with the region's EDCs and other stakeholders as appropriate.

Because renewable procurement would be executed to advance state energy and environmental objectives, state perspective early in the procurement process could be constructive. To that end, in addition to formation of a Procurement Team to administer RFPs and to evaluate bids in a coordinated fashion, the New England states could form a State RFP Coordinating Liaison Council (State CLC). A State CLC could provide state perspective to the Procurement Team and bidders early in the RFP process and in the preliminary stages of bid evaluation.

Each state could elect to appoint a state entity to the State CLC that would not later have a decisionmaking role in the PUC's contract review and approval proceedings. Whether and what state entity participates on the State CLC could vary according to state preference. For instance, Connecticut could opt to assign DPUC Prosecutorial Staff who would later be separated from DPUC decision-makers; Massachusetts could elect to ask the Department of Energy Resources to fill that role; Vermont could rely on the input of Department of Public Service staff; New Hampshire and Rhode Island could decide to indicate preferences as appropriate to its EDCs in

Because renewable procurement would be executed to advance state energy and environmental objectives, providing state perspective early in a coordinated solicitation and bid evaluation process would be constructive.

advance of the issuance of an RFP and not assign a state entity to the State CLC; and, Maine could continue its current approach whereby Maine PUC Staff administers the RFP, evaluates bids and conducts initial negotiations with bidders.

The role of the State CLC should be fundamentally different from the role of the Procurement Team. For instance, members of the Procurement Team could be responsible for evaluation of the bids pursuant to the evaluation criteria set forth in the RFP, bid selection, negotiation and contracting and the preparation and filing of proposed contracts with their PUC for consideration. The State CLC could serve in a limited consultative role to the Procurement Team with respect to the RFP and bid evaluation process through development of a short list of bidders. Ultimately, when a member of the Procurement Team files a contract for review and approval with the PUC, the State CLC could submit to the PUC its assessment of the RFP process and opinion on the merits of the particular contract proposed for approval to inform the record.

At some point in time, the states and the Procurement Team could consider whether it would increase efficiency or create unnecessary complexity to have a regional organization such as NESCOE assist State CLC coordination at a high level.

#### **C.** Potential Coordination Process Opportunities

To execute coordinated procurement, the Procurement Team and the State CLC could:

- Issue simultaneously RFPs based on a model regional RFP for energy, capacity and/or RECS from renewable resources.
- Establish a common RFP schedule with regard to: RFP issuance; RFP Questions and Answers; bid submissions; evaluation phases; and, the timing of submitting recommendations to the state PUCs for their independent consideration.
- Administer the RFP jointly, by for example, working together on answers to bidder questions, clarifying follow-ups with bidders, and so forth.
- Jointly evaluate bids received based to the maximum extent possible on common evaluation criteria including a focus on securing low cost, cost-effective or cost-stabilizing power as well as any other mutually agreeable non-price criteria required or allowed under state laws.

An example of a multi-staged, coordinated bid evaluation process is as follows:

When bids are submitted, proposals could proceed through a three-stage review, evaluation and short-list selection process.

- Stage One could consist of a joint review wherein the Procurement Team in consultation with the State CLC determining whether the bids satisfy the RFPs' basic eligibility and other minimum requirements. Bids that pass that Stage One screening could proceed to Stage Two.
- Stage Two could consist of a combined price and non-price evaluation (for example, siting, operational viability, project team experience, etc.). This stage could result in the scoring and relative ranking of bids.
- In Stage Three, each member (i.e., EDC) of the Procurement Team could conduct an independent evaluation of bids to identify an initial short list of projects that may merit a long-term contract. To the extent one project is considered by more than one member of the Procurement Team, those members could compare their evaluations and share information. This stage could include issues such as project risk assessment and consideration of bids from a portfolio perspective with the goal of identifying projects that provide the greatest value and low-cost renewable energy. The Procurement Team could select the short list in consultation with State CLC as appropriate.

Subsequent to the selection of the short list, each member of the Procurement Team could have the primary role in any additional evaluation including selection of bids for contract negotiations; contract negotiations and/or finalization, and the filing of proposed contracts for review by PUCs.

Each state entity who participated on the State CLC could submit testimony to its PUC in the contract review proceeding to provide a point of view on the RFP process and the projects recommended for long-term contracts.

# III. OTHER POTENTIAL OBSTACLES TO COORDINATION AND POSSIBLE SOLUTIONS

Power procurement is complex. It requires a combination of analytical expertise and exercise of professional judgment. Coordinating procurement creates new issues and increases the complexity considerably.

Primary obstacles to coordinated procurement – the lack of an entity to implement procurement on a regional basis and the use of different RFP instruments and evaluation processes throughout the region – are discussed above, along with potential solutions.

Some other potential obstacles to coordinated procurement and possible solutions are as follows:

Resource Eligibility: To some extent, the states have different resource eligibility criteria. While all states recognize wind, biomass, small hydro, landfill gas and solar, and all states with an RPS also recognize ocean power, there are some meaningful definitional differences that could influence resource selection and potentially mitigate the effort to aggregate demand for renewable power. An example that illustrates the complexity introduced by definitional differences is that Vermont is the only New England state to recognize large hydro as renewable.

*Potential Solution:* A model RFP could be limited to those resources all states categorize as renewable, i.e., wind, solar, etc. This approach could, however, eliminate some states from considering cost-effective projects from resources that they, but not other states, define as renewable.

Another option is to structure the RFP to invite any resource that qualifies as renewable in any state and evaluate bids in close coordination to maximize the region's buying power. A possible outcome under this approach could be, for example, two states with the same renewable eligibility criteria pursuing contracts with one or two common projects and three other states pursuing contracts with a different common project.

EDC Positional Conflict: There is potential for some New England EDCs to have an interest in pursuing different and specific ways to meet New England's renewable resource goals. To the extent such an EDC would administer an RFP and evaluate bids, an EDC business interest could potentially influence the process or create from bidders' perspectives the appearance of a conflict.

*Potential Solution*: In this circumstance, the state CLC working closely with the Procurement Team throughout most of the RFP process and submitting testimony to their respective PUC at its conclusion could mitigate real or perceived conflict issues.

EDC Long-Term Contract Concerns: Given that EDCs would likely be the counter-party to long-term contracts with renewable resources that could result from a coordinated procurement, the states may need to account for some EDCs' expression of concern over issues associated with imputed debt and credit ratings.<sup>8</sup>

*Potential Solution:* There are a variety of ways for PUCs to address EDC concerns in this area when a contract is presented for review and approval. The PUCs could provide assurance to the EDCs that the issue will be considered upon the filing of contracts for review and approval. Additionally, structuring the procurement as a financial transaction may be helpful.

State Preference for In-State Renewable Development: Some states may have an interest in encouraging development of in-state renewable resources. For example, in connection with environmental objectives, a state may seek means to replace older, more polluting resources in a state's fleet with low or no-carbon resources.

*Potential Solution:* Coordinated procurement need not interfere with other state programs designed to encourage renewable development. Even in the context of coordinated renewable procurement, each state could continue the array of state programs that encourage development of renewable resources in a way that advances their energy and environmental objectives.

Further, in the context of a regional procurement effort, states would still retain discretion to determine whether proposed long-term contracts for renewable power meet their energy and environmental objectives. For example, if a state projected a certain level and type of

<sup>&</sup>lt;sup>8</sup> This issue is discussed in a white paper prepared by the Brattle Group for the Edison Electric Institute, which is accessible at the following link: <u>http://www.hks.harvard.edu/hepg/Papers/Brattle%20Imputed%20Debt%2025%20May%202008%20final</u>%20.pdf

renewable development occurring in its jurisdiction, the state could tailor decisions on renewable contracts accordingly.

Individual State Preferences Not to Be Involved in EDC Procurement Until the Receipt of Proposed Contracts: Some PUCs, due to process preferences or resource constraints, may prefer not to interact with EDCs on procurement-related matters until the EDC files a proposed contract for review. This preference could prevent a state commission from assigning a representative to the State CLC, described above.

*Potential Solution*: It is not imperative that each state assign a representative to the state CLC. For example, if desired, a state could communicate its preferences through a docketed review of the model RFP and associated adjustments to it, and allow the EDC to execute the evaluation phase without further state input. Alternatively, a state could elect to allow the EDC to modify the model RFP to conform to state requirements or preferences and proceed to submit a proposed contract.

#### IV. CONCLUSION

This Report reflects the New England states' initial assessment of issues associated with coordinated renewable procurement, including identification of some terms and conditions that may be generally conducive to procuring renewable power as well as some obstacles and potential solutions with regard to coordinating processes and related matters.

Large-scale renewable power procurement is complex and coordinating across EDC territories and state lines increases the complexity substantially. Nevertheless, the subject matter is so important to shared economic, environmental and energy security goals that every effort should be expended to determine the feasibility of such procurement. This Report is intended to inform and advance discussions with stakeholders about potential means to procure, through coordinated competitive processes, renewable resources able to serve consumers cost-effectively and reduce the region's reliance on carbon-emitting generation.

### Appendix I

### New England States' Power Procurement Processes





This assessment of procurement processes across New England is intended to facilitate understanding of current state processes and to advance discussion about obstacles and possible solutions to coordinated procurement.

#### A. CONNECTICUT



#### 1. Basic, Default or Standard Service Procurement

Connecticut's standard service procurement schedule is not fixed by statute or DPUC order. EDCs can procure in amounts and at times they deem necessary. The EDCs generally procure standard service every six months for full requirement service for one year contracts up to three years in the future.

*Flexibility:* The DPUC can order a different schedule and a different procurement amount prior to such procurement.

#### 2. RPS Compliance Procurement

The EDCs structure procurements so that RECs are built into EDC rates. Under current procurement practices, renewable power is not acquired in a separate procurement.

*Flexibility:* The DPUC has the flexibility to adjust the timing of renewable procurement for RPS compliance.

#### 3. Other Renewable Procurement

Pursuant to a 2007 DPUC Decision<sup>9</sup>, the EDCs are allowed but not required to enter into long-term contracts for RECs. This Decision defined long-term as not exceeding fifteen (15) years. The DPUC stated that any RECs obtained pursuant to long-term contracts have to be used to meet their standard service and supplier of last resort renewable portfolio standard requirements and that all costs associated with the long-term RECS will be recovered through generation service charge rates. The DPUC expressed strong support for a competitive REC procurement, but did not preclude negotiated contracts provided the EDCs submit sufficient documentation that meets a high burden of proof of favorable market conditions and ratepayer benefits. As of this date, no EDC has requested approval to enter a REC contract.

Pursuant to statute, the Connecticut Clean Energy Fund solicited 150 MW of renewable power from in-state resources. This program required an allocation of energy and costs among the two Connecticut EDCs.

#### 4. Integrated Resource Planning

Connecticut conducts an Integrated Resource Planning proceeding every two years.

Connecticut's EDCs prepares an IRP, which Connecticut's Energy Advisory Board reviews, modifies and approves and forwards it to the DPUC for its review and approval. The IRP provides guidance for the state's existing and new procurement programs. In its first IRP decision, the DPUC expressed interest in maximizing the consistency and coordination of standard service, provider of last resort and other procurement efforts with the IRP's needs assessment and procurement plan.

The proposed procurement plan provided to the DPUC for approval has to specify a number of items:

- the total amount of energy and capacity resources needed to meet the requirements of all customers
- the extent to which demand-side measures can cost-effectively meet these needs
- needs for generating capacity and transmission and distribution improvements

<sup>&</sup>lt;sup>9</sup> Docket No. 07-06-61, Decision dated July 30, 2007

- how the development of such resources will reduce and stabilize the costs of electricity to consumers
- the manner in which each of the proposed resources should be procured, including the optimal contract periods for various resources. (Emphasis added).

The procurement plan has to also consider, among other items:

- approaches to maximizing the impact of demand-side measures
- the extent to which generation needs can be met by renewable and combined heat and power (CHP) facilities (Emphasis added).
- the optimization of the use of generation sites and generation portfolio existing within the state;
- fuel types, diversity, availability, firmness of supply and security and environmental impacts thereof, including impacts on meeting the state's greenhouse gas emission goals;
- reliability, peak load and energy forecasts, system contingencies and existing resource availabilities;
- import limitations and the appropriate reliance on such imports; and
- the impact of the procurement plan on the costs of electric customers.

Flexibility: The IRP enabling statute provides the DPUC authority in connection with associated procurement mechanisms.

#### **B. MAINE**



#### 1. Basic, Default or Standard Service Procurement

The Maine PUC issues RFPs for two of three EDCs, Central Maine Power (CMP) and Bangor Hydro Electric Company (BHE) at the same time, but requests separate bids for each service area and standard offer class.

For the residential and small commercial class, the Maine PUC administers a competitive procurement process annually. Typically, the Maine PUC procures one-third (1/3) of the load for a three year term beginning on March 1<sup>st</sup>.

The Maine PUC has accepted bids for the March 2010 term. It will issue an RFP in the fall of 2010 for the March 2011 term.

For the medium and large commercial and industrial class, the Maine PUC administers procurement processes every six (6) months for one hundred (100%) percent of the load. The six month terms run March to August and September to February. The Maine PUC will accept bids for the March 2010 in late January, 2010. It will issue next RFP in June 2010 and the subsequent RFP in November/December 2010.

For Maine's third EDC, Maine Public Service, the Maine PUC generally solicits standard offer service bids for residential, small commercial, and medium and large commercial and industrial classes on the same schedule for one hundred (100) percent of the loads. The terms begin in March. The term lengths are generally 1-2 years, depending on market conditions and bids received. The Maine PUC will issue the next RFP in fall of 2010 for the March 2011 term. It is likely that this RFP will be concurrent with the RFP for the other two EDCs' residential and small commercial load.

*Flexibility:* The Maine PUC has the flexibility to adjust standard offer procurement schedules and the percent of load procured.

#### 2. RPS Compliance Procurement

Standard offer suppliers have to comply with the RPS, i.e. there is no separate process at the state level to procure RECS separately from standard offer service procurement. Suppliers have discretion as to the timing of REC procurement as long as they comply with the RPS timeframes required by Maine rules. Maine does not have statutory flexibility to procure RECS separately from standard service procurement.

#### 3. Other Renewable Procurement

The MPUC is authorized to solicit long-term contracts through periodic competitive bid processes. Such solicitation is to occur no less often than every three years, unless the likely benefits to ratepayers from any contracts that might result from the solicitation process will not exceed the likely costs. Long-term contracts must be for capacity and associated energy with the primary purpose being to lower and stabilize electricity rates in Maine. Contracts can be for demand or supply resources and cannot exceed ten (10) years unless the MPUC finds a longer term to be prudent. One of Maine's EDCs would be the contractual counter-party.

Maine law establishes the following order of priority for choosing among capacity resources:

(1) New interruptible, demand response or energy efficiency capacity resources located in Maine;

(2) New renewable capacity resources located in Maine;

(3) New capacity resources with no net emission of greenhouse gases;

(4) New nonrenewable capacity resources located in Maine. The Commission shall give preference to new nonrenewable capacity resources with no net emission of greenhouse gases;

(5) Capacity resources that enhance the reliability of the electric grid of Maine. The Commission shall give preference to capacity resources with no net emission of greenhouse gases; and,

(6) Other capacity resources.

Maine law includes explicit policies to:

- (1) increase the share of new renewable capacity in Maine by 10% by 2017;
- (2) reduce electricity prices and price volatility;

(3) reduce greenhouse gas emissions; and,

(4) develop new capacity resources to mitigate the effects of federal or regional mandates.

The Maine PUC issued the first renewable RFP in late 2008, and bidders submitted bids in April 2009. The Maine PUC staff analyzed all bids and informed each bidder as to whether the analysis indicated the proposal was likely to provide ratepayer benefits. The Maine PUC negotiated with a short list of bidders; all other bidders were given the opportunity to submit a revised proposal. Typically, negotiations involve the bidder, which is generally the generation facility, the EDCs and the Maine PUC staff. The 2008/09 RFP process is ongoing with some of the bidders. The Maine PUC plans to renew the RFP in early 2010. There is no "load target"; rather, the Maine PUC's objective is to acquire capacity and energy on terms that would benefit Maine ratepayers.

#### 4. Previous Efforts to Coordinate Procurement

For standard offer service, the Maine PUC tends to coordinate RFPs in terms of timing, which Maine indicates may benefit the smaller loads. The Maine PUC has not combined the loads of multiple utilities into a single class with a single price. The load and system characteristics across utilities are sufficiently different to produce price variances, and to date the Maine PUC has not been inclined toward that type of cross-subsidy. Maine allows cross-class and cross-service area contingencies, however. For example, a bidder can submit a BHE standard offer bid that is contingent upon a CMP standard offer bid.

For long-term contracts with renewable resources, Maine issues a single solicitation for all EDCs. Bidders can propose one or more of the EDCs as the counter-party. For example, the first proposal the Maine PUC accepted resulted in contracts with both CMP and BHE from a single generating facility. In the Maine PUC's view, when multiple EDCs are involved with a deal, the negotiations are somewhat more complicated, but can produce a better result due to the sharing of technical, legal and financial expertise of each utility.

#### 5. Distinguishing Feature

In Maine, suppliers do not have a wholesale power contract with an EDC; rather, the standard offer service rights and obligations are established by Commission order.

#### C. MASSACHUSETTS



#### 1. Basic, Default or Standard Service Procurement

The table below shows the Massachusetts' EDCs' procurement schedules and percent of load.

Massachusetts Electric Distribution Company Procurement Schedules									
Company/ Class Description of Procurement Procurement Period									
Unitil									
Residential, Sm & Med. C&I	50% of Load for 1 year, Staggered	Dec	-May	Jun	Nov				
Large C&I	100% of Load for 3 Months	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov				
National Grid <sup>10</sup>		I		I					
Residential, Sm C&I	50% of Load for 1 year, Staggered	Nov-Apr		May-Oct					
Med & Lg C&I	100% of Load for 3 Months	Nov-Jan	Feb-Apr	May-Jul	Aug-Oct				
NSTAR		1		I					
Residential, Sm C&I	50% of Load for 1 year, Staggered	Jan-Jun		Jul-Dec					
Med & Lg C&I	100% of Load for 3 Months	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec				
Western Mass. Elec. Co.									
Residential, Sm C&I	50% of Load for 1 year, Staggered	Jan	-Jun	Jul-	Dec				
Med & Lg C&I	100% of Load for 3 Months	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec				

<sup>&</sup>lt;sup>10</sup> National Grid's Massachusetts procurement is coordinated with its procurement for its New Hampshire customers.

The Massachusetts Department of Public Utilities' (DPU) procurement policy for basic service limits contracts to one year in order to balance price stability for customers with price efficiency, i.e., aligning basic service rates with prevailing market prices.

*Flexibility:* The Massachusetts DPU has the ability to change procurement schedules and the percent of load described above.

#### 2. RPS Compliance Procurement

EDCs have the discretion to purchase RECS for the purpose of complying with their RPS requirements either through the Basic Service supply procurement process or separately from that process. The table below shows the strategy adopted by each EDC.

<u>Company</u>	Basic Service	<u>Separately</u>	Either
National Grid <sup>11</sup>			X
NSTAR		X	
WMECo	X		
Unitil		X	

Each EDC develops its own strategy, including timing and method, for complying with RPS requirements. Therefore, EDCs may choose to purchase RECs at any time for current or future RPS compliance. In sum, RPS compliance in Massachusetts may occur through: 1) contracts for RECs<sup>12</sup>; or 2) spot market purchase of RECs, which can be either a) periodic procurements; or b) basic service procurements. These methods can be combined to achieve RPS compliance. The DPU has approved RPS compliance in basic service on a case-by-case basis.

*Flexibility:* The DPU affords considerable discretion to the EDCs and has the ability to adjust the manner in which the EDCs currently procure RECS for renewable procurement of RPS compliance.<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> National Grid issues basic service RFPs that invite bids both with and without RPS compliance. To compare the bids, the EDC estimates the cost of complying with RPS requirements outside of such procurements and selects the bids which achieve the lowest cost/most value for customers.

<sup>&</sup>lt;sup>12</sup> Only one EDC does this, and any contracts for RECS must be approved by the DPU.

<sup>&</sup>lt;sup>13</sup> The DPU does not have the authority to adjust when RECS or Alternative Compliance Payments are due for RPS compliance as that is the purview of the Department of Energy Resources (DOER).

#### 3. Other Renewable Procurement

Massachusetts has several sources of authority to approve long-term contracts. The DPU can approve a long term contract of any duration or type if proposed by an electric distribution company to meet basic service needs or to reduce the delivered price of power. In addition, recent legislation has required Massachuetts' EDCs to solicit long-term contracts for the purchase of renewable power, and companies can submit for DPU approval contracts of any duration to meet their obligations under the Renewable Portfolio Standard ("RPS").<sup>14</sup>

Massachusetts has authorized its electric distribution companies to enter into long-term contracts with renewable energy resources and developers in order to facilitate the financing of renewable energy generation within the Commonwealth of Massachusetts (Commonwealth), its waters, and adjacent federal waters.<sup>15</sup> A long-term contract is for a term of ten (10) to fifteen (15) years and requires approval by the DPU. The contracts can be for energy, RECs or both.<sup>16</sup> EDCs are not required to enter long-term contracts that would, in the aggregate, exceed 3% of total annual energy demand from all distribution customers in their service territories.

Between July 1, 2009 and June 30, 2014, each of Massachusetts' EDCs must conduct at least two (2) solicitations for long-term contract proposals from renewable energy projects or resources within the Commonwealth, its waters, and adjacent federal waters. The distribution companies may elect to solicit additional proposals during this period.

In conducting solicitations, Massachusetts' EDCs must:

- coordinate with the Massachusetts DOER in developing timetables and methods for solicitations and contracting;
- consider participating in a DOER-administered solicitation process prior to conducting their own solicitations; and
- consider multiple contracting methods, such as long-term contracts for RECs, energy, or both.

The electric distribution companies may consider additional methods of soliciting proposals, such as public solicitations, or individual negotiations.

Long-term contracts must be with renewable energy generation sources that have a commercial operation date after January 1, 2008 and be qualified by DOER as eligible to participate in the RPS.

In approving any proposed long-term contracts, the DPU must find that the proposed contracts:

<sup>&</sup>lt;sup>14</sup> Massachusetts' RPS program was established by statute. See M.G.L. c. 25A, § 11F.

<sup>&</sup>lt;sup>15</sup> Section 83 of chapter 169 of the Acts of 2008, An Act Relative to Green Communities. The DPU has suspended this geographic limitation, as discussed below.

<sup>&</sup>lt;sup>16</sup> The MDPU issued regulations related to such contracts. See 220 C.M.R. § 17.00.

- provide enhanced electricity reliability within Massachusetts;
- contribute to moderating system peak load requirements;
- are cost-effective to Massachusetts electric ratepayers over the term of the contract;
- create additional employment in Massachusetts,<sup>17</sup> where feasible; and
- are cost-effective mechanisms for procuring renewable energy on a long-term basis.

After purchasing renewable energy, RECS, or both, Massachusetts EDCs can retain RECs for the purpose of meeting their RPS requirements; sell the energy into the wholesale electricity spot market, and sell the purchased RECs through a competitive bid process; or, select an alternative approach.

The long-term contract provision described above does not limit consideration of other short- or long-term contracts for power and/or RECs submitted by an electric distribution company to the DPU for approval.

In Massachusetts, the obligation to solicit long-term contracts is separate from the obligation to meet RPS requirements. The EDCs may propose such long-term contracts to meet applicable annual RPS requirements but may meet RPS requirement by other means (e.g., simply purchasing RECs or paying the alternative compliance payment).

The DPU currently allows long-term contracts for: 1) the procurement of RECs to meet an EDC's REC procurement strategy; and, 2) the procurement of renewable energy and/or RECs to provide customers with the option of "green products."

The DPU has recently implemented the long-term contracts provision of the 2008 Green Communities Act. In those proceedings, the DPU approved the timing and method of each of the solicitations.<sup>18</sup> Resulting contracts require DPU approval.

More recent activity and associated modification in these matters is as follows:

• On April 16, 2010, TransCanada Power Marketing LTD (TransCanada) brought a civil action in United States District Court for the District of Massachusetts (Central Division) against various state officials, including the commissioners of the DPU, arguing, among other things, that Section 83 of chapter 169 of the Acts of 2008, an Act Relative to Green Communities, (Section 83), the long-term

<sup>&</sup>lt;sup>17</sup> The DPU has suspended this geographic limitation, as discussed herein.

<sup>&</sup>lt;sup>18</sup> In the first case, DOER was to work with the distribution companies to conduct a statewide request for proposals (RFP) process for renewable energy and RECS for approximately 1.5 percent of annual load for a period of 10-15 years. The DPU approved a 185-day timetable and method for this solicitation process. In the second case, the DPU approved a memorandum of understanding pursuant to which Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid (National Grid) would solicit a proposal from, and potentially execute a long-term contract with, Cape Wind Associates, LLC (Cape Wind).

contract regulations at 220 C.M.R. §§ 17.00 <u>et seq.</u>, and the statewide RFP issued on January 15, 2010, discriminate against out-of-state generators in violation of the Commerce Clause of the United States Constitution.

- On June 1, 2010, TransCanada filed a motion for a preliminary injunction in the court proceeding seeking to enjoin the defendants from (1) enforcing Section 83 and regulations 220 C.M.R. §§ 17.00 et seq. to the extent they provide that long-term contracts for renewable energy must be entered with generators located in Massachusetts, and (2) proceeding with or approving any contract solicited under the RFP that was issued on January 15, 2010.
- On May 10, 2010, National Grid filed a petition<sup>19</sup> for approval by the DPU pursuant to Section 83 and 220 C.M.R. §§ 17.00 <u>et seq.</u> of two long-term contracts executed between National Grid and Cape Wind.
- On June 9, 2010, the DPU suspended the application of the geographic location requirement contained in Section 83.<sup>20</sup> In D.P.U. 10-58, the DPU issued emergency regulations that amended 220 C.M.R. §§ 17.00 et seq. by allowing solicitations for long-term contract proposals that are not limited to within the Commonwealth of Massachusetts, its state waters, or adjacent federal waters. The DPU also suspended and removed the words "in the Commonwealth of Massachusetts" from the employment requirement in 220 C.M.R. § 17.05(1)(c)(4). The DPU directed the EDCs and DOER to re-open the statewide RFP to allow out-of-state generators to submit bids.

*Flexibility:* The DPU has the authority to approve a long-term contract of any duration or type.

<sup>&</sup>lt;sup>19</sup> The Department docketed this matter as <u>Massachusetts Electric Company and Nantucket Electric</u> <u>Company</u>, D.P.U. 10-54.

<sup>&</sup>lt;sup>20</sup> See Long-Term Contracts for Renewable Energy, D.P.U. 10-58 (2010).

#### **D. NEW HAMPSHIRE**



#### 1. Basic, Default or Standard Service Procurement

In New Hampshire, EDC procurement processes were established through settlement agreements (Unitil and National Grid) with regulatory approval and through negotiated short and long-term contracts and spot market purchases (PSNH).

Two EDCs, Unitil and National Grid, are required by statute to procure default energy service through competitive bids in the market. These EDCs have procured default service through requirements contracts that vary from three (3) months to two (2) years. Those contracts are subject to review and approval by the New Hampshire Public Utility Commission (NHPUC).

**Distinguishing Feature**: PSNH, the only EDC in New Hampshire that owns generating assets, must supply all default service offered in its retail electric service territory from its generation assets and through supplemental power purchases, subject to approval by the NHPUC. The NHPUC reviews the reasonableness and prudence of the supply costs PSNH files to support its default service rate; it does not approve the individual supplemental power contracts. PSNH's supplemental procurement portfolio consists of short-term and long-term contracts, as well as spot-market purchases.

Unitil solicits default service power supply through semi-annual solicitations for requirements contracts with six (6) month terms for residential and small commercial customers, and quarterly solicitations for requirements contracts with three (3) month terms for large commercial and industrial customers.

National Grid solicits default service power supply through competitive solicitations every six (6) months for residential and small commercial customers and quarterly for its medium and large commercial and industrial customers.

National Grid's default service RFP schedule mirrors that of Unitil. National Grid's Massachusetts and New Hampshire schedules are linked through joint RFPs.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Upcoming procurement schedules are available at: www.nationalgridus.com/energysupply/upcoming\_procurement.asp

Delivery start dates and approximate corresponding RFP issuance dates are as follows:

Large Customers

February 1 (RFP November 1) May 1 (RFP February 1) August 1 (RFP May 1) November 1 (RFP August 1) Small Customers

May 1 (RFP February 1) November 1 (RFP August 1)

By statute, PSNH must meet its default service needs from its own generation assets and, if necessary, through supplemental power purchases. PSNH currently meets customer load needs through its own generation, short-term contracts at fixed prices, long-term procurement contracts tied to a specific resource (*i.e.*, Lempster Wind), and spot market purchases as needed to meet demand on a day-to-day and hour-to-hour basis.<sup>22</sup> PSNH negotiates contracts for energy supply on an as-needed, case-by-case basis.

**Flexibility:** The NHPUC approves proposed procurement practices and contracts through its orders. The statute permits flexibility in the NHPUC's approval of terms and conditions of such contracts. The NHPUC also has flexibility to adjust the percent of load procured.

#### 2. RPS Compliance Procurement

New Hampshire EDCs are required to obtain a specified portion of their annual energy needs from renewable energy resources, either through direct procurement, RECS, or alternative compliance payments to the State's renewable energy fund.

Procurement practices vary among the EDCs; renewable energy may be procured both independently and in combination with non-renewable energy sources.

Pursuant to a settlement agreement with Unitil, two (2) RFPs are conducted each Compliance Year to meet REC requirements. REC RFPs are conducted separately from the company's default service power supply RFPs, and RECS are applied to meet the combined requirements of Small and Large Customer Groups.

Through a settlement agreement, National Grid has agreed that as part of its default service power supply solicitations, it would also request bids for compliance with the RPS for

<sup>&</sup>lt;sup>22</sup> PSNH reported that in 2008 it supplied 56 percent of on-peak energy requirements, 71 percent of off-peak energy requirements and 59 percent of total capacity requirements through its own generation, independent power producer contracts, and long-term entitlements (including Hydro-Quebec interconnection capacity credits). Forty-four (44) percent of on-peak and 29 percent of off-peak energy requirements were met through spot market and bilateral energy purchases. Forty-one (41) percent of capacity needs were fulfilled through supplemental purchases from other market participants and ISO-NE administered capacity auctions.

each RPS renewable resource class. The company also issues an independent RFP to purchase RECS approximately twice a year for any RPS requirements that have not been met through default service RFPs. In addition, the independent RFPs will request approximately 50 percent of future unmet RPS requirements for all customers.

PSNH maintains an integrated portfolio of renewable resources. Its current renewable energy supply mix includes hydroelectric, wood and wind resources obtained through intermediate and long-term contracts tied to specific resources (*e.g.*, PineTree biomass and Lempster wind); construction of a wood-fired boiler at its Schiller plant; PSNH-owned solar PV generation; and incremental generation at its Smith Hydro facility that qualifies for New Hampshire RECS. PSNH also owns several small hydroelectric projects not eligible for RECS under New Hampshire's RPS requirements.

Three New Hampshire REC RFPs were issued in 2009 as follows: January 27, 2009; May 13, 2009; and, October 27, 2009. The next is expected to be issued in June 2010.

*Flexibility:* The NHPUC has discretion to adjust the timing of renewable procurement. By statute the NHPUC may authorize one or more EDCs to coordinate or delegate renewable power procurement processes.

#### 3. Other Renewable Procurement – Long Term Contracts

New Hampshire's EDCs are permitted but not required to solicit and enter long-term contracts for renewable resources. Such contracts are reviewed by the NHPUC on a case-by-case basis. EDCs may enter into long-term contracts either through direct negotiations or an RFP solicitation.<sup>23</sup>

These multi-year agreements with renewable energy sources for RECS may be in conjunction with, or independent of, purchased power agreements from such sources. In order to approve such contracts, the NHPUC has to determine that they are substantially consistent with statutory factors, such as cost-effectiveness, diversity of resources, the promotion of competitive market innovations and solutions, and economic development benefits to New Hampshire. The NHPUC reviews renewable power contracts for reasonableness and consistency with statutorily-defined state energy policies including the need to "meet the energy needs of the citizens and businesses of the state *at the lowest reasonable cost while providing for the reliability and diversity of energy sources…*" (Emphasis added). The NHPUC also has to determine the extent to which such procurements are likely to create a reasonable mix of resources, in combination with the electric distribution company's overall energy and capacity portfolio, in light of the state's energy policy and either the integrated least cost resource plan, or

<sup>&</sup>lt;sup>23</sup> PSNH has entered into long-term contracts negotiated with Pinetree Power, Inc. (2 years; 15 MW biomass), Pinetree Power-Tamworth, Inc. (2.5 years; 20 MW biomass), and Lempster Wind, LLC (15 years; 24 MW). Each contract included energy as well as REC procurements. Unitil and National Grid do not currently have long-term contracts for renewable resources.

a portfolio management strategy for default service procurement that balances potential benefits and risks to customers.

There are no statutorily mandated time lines or time limitations on power purchase contracts.

Power purchase contracts are not required to be sourced from within New Hampshire. However, the purchase of RECS "to meet reasonably projected renewable portfolio requirements and default service needs" in conjunction with or independent of renewable power purchase contracts have to be substantially consistent with "economic development and environmental benefits for New Hampshire."

*Flexibility:* The NH PUC approves long term contracts between the EDCs and renewable resources and through its approval authority may adjust the terms of such contracts.

#### 4. Integrated Resource Planning

By statute, EDCs are required to file Least Cost IRPs at least biennially for review and approval by the NHPUC. PSNH has filed biennially, but pursuant to its 2007 filing, it was granted an extension for its next filing to September 30, 2010.

**Flexibility:** The NHPUC has authority to adjust procurement schedules. The NHPUC is required to evaluate "potential environmental, economic and health-related impacts of each proposed option." With financial costs, reliability and environmental, economic and health-related impacts on a relative par, the NHPUC is directed by statute to adhere to the following priority considerations: 1) demand-side management; 2) renewable energy sources; and, 3) all other energy sources.

#### E. RHODE ISLAND



#### 1. Standard, Default or Basic Service Procurement

For large commercials and industrial customers, Rhode Island's EDC, NGrid, conducts four (4) separate procurements for three (3) month full-requirements contracts. The procurements take place in February, May, August, and November. The procurement cycles began in November 2009 for the three (3) month period January 1, 2010 through March 31, 2010. Rates change monthly based on the contract price. Renewable Energy Credits (RECs) to meet NGrid's 2010 RPS obligations are procured separately.

For residential and small and medium commercial customers, the Rhode Island Public Utilities Commission (RIPUC) allowed NGrid to contract for ninety-five (95) percent of load through full requirements service contracts for the 9 month period between January 1, 2010 and September 30, 2010. The remaining five percent (5) is to be procured from spot market purchases.

The RI PUC also allowed NGrid to procure half (50%) of its load in the fall of 2009 for the six (6) month period from October 1, 2010 through March 31, 2011. The remaining half (50%) was split in half again: the RI PUC allowed NGrid to solicit 25% of its load in the fall of 2009 provided pricing was attractive. Pricing was favorable so NGrid procured this amount, or 25% of its entire load. NGrid will procure the final 25% in mid-2010. The rate charged would be based on the weighted monthly average of the monthly prices for the initial 9-month period, then set every six months based on the 6-month weighted average of the full requirements contracts. After 2010, rates will change in April and October each year.<sup>24</sup>

*Flexibility:* The RI PUC has authority to adjust the procurement schedule and to adjust the percent of load procured at any given time.

#### 2. RPS Compliance Procurement

With RI PUC approval, NGrid conducted stand alone solicitations for RECS for ninetyfive (95) percent of load for the nine (9) month period from January 1, 2010 through September 30, 2010 load and half (50%) of load for the six (6) month period from October 1, 2010 through

<sup>&</sup>lt;sup>24</sup> For more information, see RIPUC Docket 4041: http://www.ripuc.org/eventsactions/docket/4041page.html.

March 31, 2011.<sup>25</sup> This matches the same energy procurement periods described above under standard offer.

For the remaining load, NGrid is to solicit REC prices separately and bundled with energy to determine the most cost-effective procurement. NGrid also has the right to review REC pricing on unsolicited offers and act on those offers when such pricing is cost-effective. The RIPUC has found that this flexibility between stand-alone solicitations and those tied to energy procurement have allowed NGrid to procure RECS in a cost-effective manner, and below the Alternate Compliance Payment (ACP) level.

*Flexibility:* The RIPUC has the same flexibility with respect to RPS compliance as described above for standard serviced procurement.

#### 3. Other Renewable Procurement

Rhode Island facilitates development of new renewable energy resources by authorizing long-term contracts between them and electric distribution companies. Rhode Island's goals, as defined by state law, are to stabilize long-term energy prices, enhance environmental quality, create jobs in Rhode Island in the renewable energy sector, and facilitate the financing of renewable energy generation within the state or adjacent state or federal waters.

The RIPUC has to adopt regulations to require all approved projects, regardless of their location, to provide other direct economic benefits to Rhode Island, such as job creation and increased property tax revenues.

Specifically, beginning July 1, 2010, Rhode Island's electric distribution companies must solicit proposals annually from renewable energy developers and enter into long-term contracts for the purchase of capacity, energy and RECS from newly developed renewable energy resources. Long-term contracts are defined as not less than ten (10) and not more than fifteen (15) years, or longer with RIPUC approval.

The electric distribution companies will propose a timetable and method of soliciting proposals from renewable energy developers and the execution of the contracts. The timetable is to result in the electric distribution company having capacity under contract within four (4) years of the date of the first solicitation. The projects under contract need not be operational within four (4) years. The process will include an annual public solicitation and may also include individual negotiations.

NGrid will be required to enter into long-term contracts for ninety (90) MW in capacity, of which 3 MW must be solar, *in-state* generation by 2014. An EDC does not have to enter into long-term contracts that would, in the aggregate, exceed ninety (90) megawatts, but may do so

<sup>&</sup>lt;sup>25</sup> The RI PUC approved NGrid's 2010 RES Procurement Plan in Docket 4041.

voluntarily if the RIPUC agrees. NGrid will be required to meet the following annual benchmarks, provided acceptable, commercially reasonable proposals have been received:

- 22.5 MW contracted by 12/30/2010 (25% of the total required amount)
- 45 MW contracted by 12/30/2011 (50% of the total required amount)
- 67.5 MW contracted by 12/30/2012 (75% of the total required amount), and
- 90 MW contracted by 12/30/2013 (100% of the requirement).

NGrid must submit its solicitation methodology to the RIPUC for approval. Each longterm contract must be reviewed and approved by the PUC. The RIPUC will approve proposed contracts if it determines the contract is commercially reasonable; the requirements for the annual solicitation have been met; and the contract is consistent with the purposes of the enabling statute.

All energy and capacity purchased must be immediately sold by the electric distribution utility into the wholesale spot market. Or, with RI PUC approval, NGrid may resell the energy and capacity to customers. The NEPOOL-GIS certificates purchased under the long-term contract have to be sold through a competitive bid process, or with RIPUC approval, the certificates may be used to meet the NGrid's RES obligations. In other words, the electric distribution companies may, but will not be required to use the energy, capacity and other attributes purchased for resale to customers and/or to use the RECs to meet their RPS obligations.

As long as the electric distribution company has entered into long-term contracts, they will not be required to enter into power purchase contracts with renewable generation projects for power or RECs with terms of more than three (3) years to meet RPS requirements.

NGrid has filed with the RIPUC information on the company's procurement plans for 2011 and beyond.

#### F. VERMONT



#### 1. Standard, Default or Basic Service Procurement

Vermont EDCs are vertically integrated and do not have Standard Service procurement process like that in states where EDCs have divested generating assets. Vermont EDCs have the obligation to procure power for their customers under traditional rate of return regulation. The EDCs decide on a schedule they consider appropriate.

Vermont EDCs frequently purchase power in a cooperative manner. Generally, two of Vermont's larger EDCs negotiate and extend the offer to the others, who may accept it or not. Vermont considers this approach to have worked well.

Vermont has Integrated Resource Planning (IRP). The IRP is to be updated every three (3) years, and it covers a twenty (20) year period. The IRP does not include procurement schedules. Rather, it describes least cost strategies and the EDCs have discretion to alter the strategy at any time.

#### 2. RPS Compliance Procurement

Vermont has a requirement associated with its Sustainably Priced Energy Enterprise Development (SPEED) programs, which requires that all load growth from 2005 to 2012 be met with power contracted with renewable generators. RECs are not a necessary component of the procured power. The point of the program is to offset load growth with new power from renewable resources and power procured in connection with SPEED must offset Vermont load. SPEED is Vermont's form of RPS. There is no specific timing associated with compliance with this requirement, except for the 2012 in statute.

#### 3. Other Renewable Procurement – Contract for Renewable Power

Vermont has authority to enter into contracts for renewable (or any) power. There is no timetable or other requirements shaping that procurement.<sup>26</sup>

The Vermont Department of Public Service (DPS) represents the state in any negotiation, arrangement or proceeding for the procurement of electric energy from outside of Vermont or electric energy generated in Vermont to contract for power and its resale to the electric distribution companies for distribution within the state. Such arrangements are subject to approval of the Public Service Board and the Governor. However, the DPS can only contract for

<sup>&</sup>lt;sup>26</sup> The State of Vermont currently purchases 15 MW from NYPA.

purchases from sources inside Vermont if a seller so requests and if the DPS determines that the power purchase and resale furthers the state's needs.

Any proposed purchase in excess of five (5) years is subject to the Vermont Public Service Board's (PSB) approval.

The DPS may, if the PSB and Governor approve, enter contracts to resell power outside Vermont, if such resale is incidental to and in furtherance of the state's needs. The DPS, with the approval of the PSB, is authorized to enter into contracts for the transmission of such energy from the place of purchase to the points of resale.

#### 4. Distinguishing Feature

Vermont has a procurement agent for renewable power, referred to as the SPEED Administrator. The SPEED Administrator was created by legislation and works under contract with the Vermont Public Service Board; it reports progress to both that Board and the legislature. That entity aggregated power purchases under the remaining PURPA contracts (50-60MW), as well as under Vermont's new Feed in Tariff, and distributes those costs and benefits to all utilities in Vermont on a load ratio share.

The new Feed in Tariff offers rates that are cost based for different classes of customers and is for fifty (50) MW statewide. The state created a program for this amount and it was oversubscribed on the first day.