## MAINE STATE LEGISLATURE

The following document is provided by the

LAW AND LEGISLATIVE DIGITAL LIBRARY

at the Maine State Law and Legislative Reference Library

http://legislature.maine.gov/lawlib



Reproduced from electronic originals (may include minor formatting differences from printed original)

## Maine Public Utilities Commission

# 2004 Annual Report on Electric Restructuring

Presented to the Utilities and Energy Committee December 31, 2004

#### **TABLE OF CONTENTS**

	2004 HIGHLIGHTS	4
I.	BACKGROUND	4
II.	CONSUMER PRICES	5
III.	RETAIL MARKET ACTIVITY	7
	Migration from Standard Offer – Medium and Large Customers	7
	Migration from Standard Offer – Residential and Small Commercial Customers	8
	Emergence of a Green Market	9
	Northern Maine Retail Activity	.10
	Retail Supplier Activity	11
IV.	STANDARD OFFER SERVICE	.12
	Overview of 2004	.12
	Solicitations	.13
	Consumer-Owned Utilities	.14
V.	STRANDED COSTS	15
VI.	GENERATION RESOURCES	.17
	Resource Mix Used to Serve Maine's Customers	.17
	Electricity Generated in Maine	.18
	RPS Issues	19
	Uniform Disclosure Labels	19
	Voluntary Renewable R&D Fund	.20
\ /II	DECIONAL ACTIVITY	20

## TABLE OF CONTENTS Continued

	Notable Trends and Events in the Past Year	21
	Standard Market Design	21
	Financial Issues for Generators	22
	RSC Formation	22
	RTO Formation	22
	Major Cases Currently Being Litigated at FERC	23
√III.	AFFILIATED COMPETITIVE PROVIDERS AND COMPLIANCE COSTS	24
IX.	ACTIVITIES IN OTHER STATES	25
	Appendix A Uniform Disclosure Label	26

## 2004 Annual Report on Electric Restructuring Presented to the Utilities and Energy Committee of the Maine Legislature

#### 2004 HIGHLIGHTS

- Large and medium C&I customers continue to exhibit a reasonable and steady level of migration to the retail generation supply market.
- Most residential and small commercial customers continue to obtain retail generation supply from standard offer service. However, the standard offer procurement process remains very competitive and thus residential customers receive the benefits of the competitive electricity market. In addition, a green market shows a modest gain in activity.
- Developers file two applications to increase transmission capacity between portions of Maine and the Canadian provinces.
- The number of retail suppliers serving Maine customers remains steady, with consumer purchases dispersed among many suppliers.
- Increases in the cost of wholesale electricity, largely caused by increases in natural gas prices, cause Maine's standard offer prices to increase.
- Proceedings to recalculate stranded costs are conducted for T&D utilities. One proceeding is concluded with no resulting change in rates.
- Well over 30% of Maine's supply needs are met with renewable and other eligible fuel resources.
- Wholesale generation supply costs in Maine remain the lowest in New England because of the locational features of New England's regional standard market design.
- The Commission files comments in the FERC's Locational Installed Capability (LICAP) proceeding and in other federal and regional proceedings that affect Maine.

#### I. BACKGROUND

During its 1997 session, the Legislature enacted P.L. 1997 (the Restructuring Act), ch. 306, codified at 35-A M.R.S.A. §3201-3217, which directed comprehensive restructuring of Maine's electric utility industry. Since then, the Public Utilities Commission (Commission) has disaggregated the vertically integrated electric utilities into delivery and generation functions, established the rates of transmission and distribution (T&D) utilities, established rules that govern the activities of competitive electricity providers and utilities, purchased standard offer service through competitive bid processes, monitored retail market development, and participated in regional wholesale market activities that affect Maine's electricity consumers. For large and medium customers, Maine's retail market has developed relatively smoothly and effectively in most respects. Small customers benefit from competition in the wholesale market through the standard offer.

Each year, pursuant to the Restructuring Act, the Commission submits a report to the Legislature's Joint Standing Committee on Utilities and Energy, describing Maine's retail market and activities the Commission has taken to comply with the restructuring statute. This report describes activities during 2004.

#### II. CONSUMER PRICES

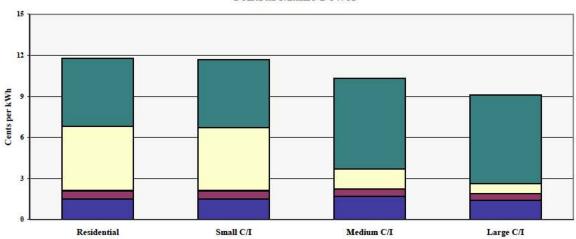
Electricity prices include four distinct components – transmission rates, distribution rates, stranded cost rates, and energy prices. The first three, bundled together, comprise the rate charged by the T&D utility. Transmission rates cover the cost of constructing and operating the transmission system and are regulated by the Federal Energy Regulatory Commission (FERC). Distribution rates cover costs incurred by the T&D utility to construct and operate the local distribution system and are regulated by the Commission. Stranded cost rates reflect the net, above-market costs for generation obligations that utilities incurred prior to industry restructuring, and are regulated by the Commission. Finally, energy prices are unregulated retail prices charged for generation service by competitive electricity providers that, in Maine's restructured environment, operate in the competitive market. Competitive electricity providers are licensed by the Commission. Consumers may obtain generation service directly from a competitive provider or through standard offer service that is obtained by the Commission through a competitive bid process.

Section III of this report describes activities in the retail market that influence retail energy prices and Section VII describes activities in the region that influence wholesale market procedures and prices. Section IV describes events associated with standard offer service. Section V describes events associated with stranded cost rates. Activities related to transmission and distribution rates are not discussed in this report.

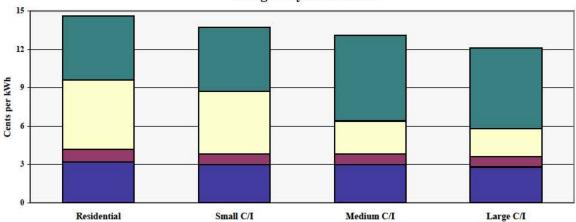
The charts on the following page display, as of December 2004, the components, on average, of the basic prices for various customer sizes in the territories of Bangor Hydro-Electric (BHE), Central Maine Power Company (CMP), and Maine Public Service Company (MPS). The displayed energy prices are the average standard offer rates; customers receiving generation from the open market may have lower or higher energy rates. In addition, many customers receive service under special rate contracts that have T&D prices below the basic approved utility rates. Finally, rates for large industrial customers that receive transmission level service are lower than rates for customers receiving distribution level service because the cost of serving customers at transmission voltage is lower than at distribution voltage. The charts show that stranded costs still represent a significant portion of customers' rates, while transmission rates have a relatively small impact on total rates.

### **Components of Electricity Rates**

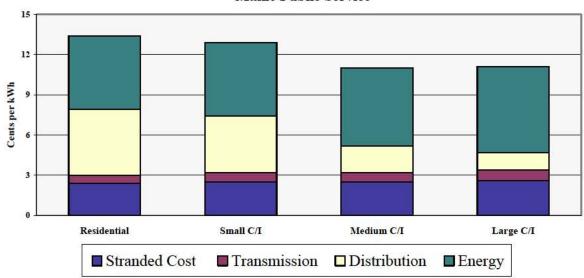
#### **Central Maine Power**



#### **Bangor Hydro-Electric**



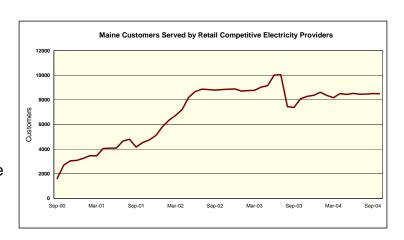
#### Maine Public Service



#### III. RETAIL MARKET ACTIVITY

During 2004, the retail market for Maine's medium commercial and industrial (C&I) and large C&I customers¹ continued to exhibit a reasonable level of competitive activity, and bidding for standard offer service was healthy. In addition to attracting a significant number of bidders, the standard offer process resulted in different providers winning the bids during each of the solicitations in 2004. The market continued to offer minimal competitive choice for residential and small commercial customers, but a low standard offer price obtained in previous years contributed to relatively low overall electricity prices. The current arrangement for residential and small commercial standard offer service for BHE and CMP will terminate in 2005, and the Commission has conducted a bid process to obtain residential and small commercial standard offer service for a term beginning March 1, 2005. The results of that process are described in Section IV.

As shown on the graph to the right, customers showed steady migration to the open market throughout the first two years of restructuring. After an adjustment in mid-2003 caused by the withdrawal of one competitive provider from the retail market, participation in the retail market remained steady at approximately 8000-9000 customers, representing 85%-88% of Maine's electrical use.



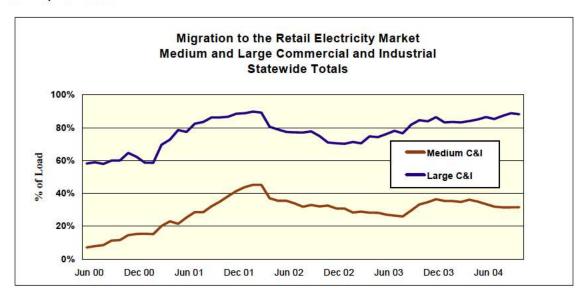
#### **Migration from Standard Offer – Medium and Large Customers**

Since the beginning of restructuring, the vast majority of large customers and a substantial number of medium customers have chosen to participate directly in the retail market. When customers' supply contracts expire, they may choose between a return to standard offer service or an open market contract, based on their expectation of future market prices and their desire for price predictability.<sup>2</sup> While migration to and from the competitive market<sup>3</sup> is influenced

<sup>&</sup>lt;sup>1</sup> Commission rules establish three standard offer classes: residential and small commercial, medium commercial and industrial (C&I), and large C&I.

<sup>&</sup>lt;sup>2</sup> To avoid significant disruption to standard offer service load requirements, Commission rules require large and medium customers that take standard offer service after being in the competitive market to remain on the standard offer for a year or pay an opt-out fee. Customers may petition the Commission for exemption from the fee, and a significant number have done so. The Commission generally grants such requests where there is no evidence that the customer is "gaming" the process.

to some extent by the relationship between standard offer and non-standard offer prices, the prevailing trend is for customers to remain in the open market once they have left the standard offer. The graph below shows migration among medium and large customers, and reflects the overall trend toward migration to the open market.



In 2003, the Commission concluded that medium and large class standard offer prices should track wholesale prices closely and accordingly has accepted bids for 6-month terms since that time. Because of market fluctuations, prices for BHE and CMP medium and large standard offer customers increased generally between 8% and14% in March 2004 and between 2% and 7% in September 2004. Prices for customers in the retail market are established by their individual contracts, and medium and large customers seeking longer term price certainty have an incentive to buy in the retail market.

## Migration from Standard Offer – Residential and Small Commercial Customers

Acquisition and service costs for small customers are significant, and no substantial retail market has developed. However, because Maine's standard offer providers are chosen through competitive bidding based on price, all residential and small commercial customers are purchasing generation from competitive market suppliers, and vigorous competition among bidders for standard offer service in BHE and CMP territories has resulted in attractive standard offer service rates for smaller customers through 2004. Competition among standard offer service bidders remained vigorous in CMP and BHE territory during the 2004 bidding process, although recent price increases in the

<sup>&</sup>lt;sup>3</sup> Standard offer service providers are chosen through a competitive bid process, so all customers receive service through a competitive market. For convenience, non-standard-offer providers are often referred to as competitive providers.

wholesale market, primarily driven by increases in natural gas prices, will result in higher standard offer prices in 2005.

For a number of years, the northern Maine market deviated from this pattern, with as many as 15% of MPS's smaller customers migrating to the competitive market. However, during 2003, a competitive provider in northern Maine ceased to offer service to new customers, and customers subsequently began returning to standard offer service. During 2004, the percentage of residential and small MPS customers obtaining generation in the open market remained steady at about 7%. In CMP and BHE territories, fewer than one percent of customers have left standard offer service.

The table to the right shows the number and percentage of residential and small commercial customers<sup>4</sup> in CMP, BHE and MPS service territories that were receiving competitive market electric supply in December 2004.

110010101	Residential and Small Commercial Customers that have Left Standard Offer				
	<u>number</u>	percentage			
СМР	2346	0.4%			
BHE	496	0.4%			
MPS	2671	7%			

#### **Emergence of a Green Market**

During 2003, "green" products, featuring hydroelectric and biomass generation, became available through residential and public sector aggregation groups. During 2004, additional green supply options were developed, including products containing wind generation and low-impact hydroelectric generation, and by the end of 2004, six green generation products and a variety of "green tag" products<sup>5</sup> were available to Maine consumers. These activities have continued a modest but steady gain in recognition and customer support. Over 5,000 customers currently purchase green power products, and a number of well-known businesses, as well as the State of Maine, have publicly announced green purchases.

In addition, in 2003, a group of organizations developed the Maine Green Power Connection (the Connection). According to its mission statement, the Connection exists to build interest in and market support for environmentally beneficial electricity products. The Connection has created a web page<sup>6</sup> that

<sup>&</sup>lt;sup>4</sup> Residential and small commercial customers comprise the "small" standard offer class and their migration rates are combined for tracking purposes.

<sup>&</sup>lt;sup>5</sup> A green tag purchases the credits that a supplier receives based on the fuel source of its generation. Since these tags are used to satisfy renewable portfolio requirements in Maine and other states, their purchase promotes green power by reducing the supply of tags available to meet those requirements.

<sup>&</sup>lt;sup>6</sup> See <u>www.mainegreenpower.org</u>. By the end of 2004, 35 organizations had joined the collaborative.

enables consumers to learn about environmentally benign generation practices and to enroll in the products available in Maine.

Finally, in September 2004, in response to a legislative directive<sup>7</sup> to inform consumers of the benefits of electricity generated in the State and the opportunities for purchasing such generation, the Commission launched the Clean Energy Maine campaign. Funded jointly by the State Energy Program and Efficiency Maine and managed by the Maine Energy Investment Corporation, Clean Energy Maine resulted in an expanded Maine Green Power Connection promotional effort through its web site, informational brochures, and radio announcements. The Commission is monitoring the level of green purchases to determine if this campaign results in an increase in green market participation.

#### **Northern Maine Retail Activity**

The northern Maine region includes the service areas of MPS and three consumer-owned utilities: Houlton Water Company, Van Buren Light and Power District, and Eastern Maine Electric Cooperative. In contrast to the rest of Maine, which is electrically part of the ISO-NE region, northern Maine is electrically part of the Canadian Maritimes region. The Maritimes region also includes the electric loads and generation of New Brunswick, Nova Scotia, and Prince Edward Island. Load and generation in northern Maine are connected to the rest of Maine and New England only by transmission through New Brunswick. Northern Maine load is supplied by a combination of generating plants located in-region and in New Brunswick. The Northern Maine Independent System Administration (NMISA) administers the bulk power and transmission systems for the region.

There have been only two suppliers active in the northern Maine retail market since retail access began – Energy Atlantic (EA) and WPS Energy Services, Inc. (WPS-ESI). Energy Atlantic no longer accepts new customers in northern Maine and WPS-ESI has been the primary standard offer service provider in all rate groups since restructuring began. Thus, the retail market in northern Maine is considerably less competitive than the market in the remainder of the State. While it does not appear that this has resulted in higher prices for consumers, it is a subject of concern.

Measures that would make northern Maine part of a larger market (e.g., a transmission line connecting northern Maine to the New England grid or an open market in New Brunswick) may result in increased interest in the region by competitive electricity providers. During 2004, MPS announced plans to increase the capacity of generation that could flow between MPS and New Brunswick by increasing the transmission capacity between the two regions from 200 to 250

\_

<sup>&</sup>lt;sup>7</sup> P.L. 2003 ch. 665.

<sup>&</sup>lt;sup>8</sup> Collectively, the customers of the four northern Maine utilities consume approximately 7% of the kWhs purchased in Maine.

MWs.<sup>9</sup> This would improve the ability of generation located in southern New England and New Brunswick to reach northern Maine, thereby potentially increasing the number of suppliers willing to serve the northern Maine market. The Commission is reviewing the MPS proposal.

In addition, BHE has filed for permission to build a second tie-line between New Brunswick and the ISO-NE grid. The proposed tie-line would increase the north-to-south capacity from 700 to 1000 MWs and the south-to-north capacity from 100 to 400 MWs. Under BHE's proposal, the tie-line would run through northern Maine but would have no connection to the grid in northern Maine. The line could, however, advantage northern Maine by allowing more electricity to flow between New England and New Brunswick. Furthermore, the new line would provide the opportunity for future construction to link the line with the northern Maine grid.

Some parties have also raised the concern that existing generation facilities may be insufficient to maintain a reliable system in northern Maine. The Commission is currently considering this matter.

#### **Retail Supplier Activity**

During 2004, the number of suppliers of retail electricity licensed to serve customers in Maine remained steady at 23 to 25.<sup>10</sup> During 2004, 13 suppliers (including standard offer suppliers) actively served customers, including a few that obtained a supplier's license to serve themselves directly from the wholesale market. Two suppliers sold virtually all the power purchased at retail in the residential market, while all suppliers sold power to medium and large non-residential customers to some degree. CMP and BHE's C&I markets show a relatively healthy dispersion of sales among all suppliers. Approximately three-fourths of the suppliers served 5% or more of the load in one or more customer group. As discussed above, only one supplier provides retail services in MPS's territory.

There is some level of consolidation among suppliers in the form of single entities owning multiple supply subsidiaries. However, this situation has not appeared to harm the vitality of Maine's retail market. The Commission will continue to monitor this and all market conditions that affect Maine's consumers.

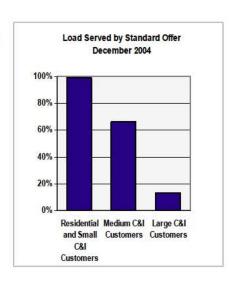
<sup>9</sup> Currently, approximately 90 MW of transmission capacity is available on a firm basis.

<sup>&</sup>lt;sup>10</sup> The Restructuring Act authorizes the Commission to license suppliers before they may provide generation service to customers. In some instances, a licensed competitive electricity provider owns its own generation, while in others, the supplier purchases its generation through the wholesale market. In addition, the Commission licenses aggregators and brokers, who assist customers in obtaining generation but do not supply the generation themselves. Twenty-three aggregator/brokers and twenty-five competitive electricity providers are currently licensed.

#### IV. STANDARD OFFER SERVICE

#### Overview of 2004

During 2004, the portion of Maine's electric load that receives standard offer service remained steady at slightly over 60%. By customer class, standard offer service supplies about 66% of the load of medium C&I customers and 13% of the load of large C&I customers in Maine, as shown by the graph on the right. Standard offer service continues to supply virtually all residential and small commercial customers, as has been the case since retail access began. The same is basically true in other states that have restructured. By T&D service area, standard offer service supplies about 60% of the load of CMP customers, 69% of the load of BHE customers and 49% of the load of MPS customers



The standard offer suppliers during 2004 and corresponding prices are summarized below. The prices shown here are averages; actual prices for the medium class may vary by month and for the large class by month and time of day. For more detailed prices, please see the Commission's web page at <a href="http://www.state.me.us/mpuc/new%20standard%20offer/standard\_offer\_rates.htm">http://www.state.me.us/mpuc/new%20standard%20offer/standard\_offer\_rates.htm</a>.

#### Average Standard Offer Prices in 2004

	Residential/Small Commercial		Medium C&I		Large C&I	
	Price ¢/kWh	Supplier	Price ¢/kWh	Supplier	Price ¢/kWh	Supplier
CMP						
Jan - Feb	4.95	Constellation	5.57	FPL	5.74	Select
Mar - Aug	4.95	Constellation	6.33	Constellation & Calpine	6.36	Constellation & Independence
Sept - Dec	4.95	Constellation	6.59	Independence	6.48	Independence & Select
BHE						
Jan - Feb	5.0	Constellation	5.62	FPL	5.43	Select
Mar - Aug	5.0	Constellation	6.19	Calpine	5.88	Calpine & Independence
Sept - Dec	5.0	Constellation	6.65	Independence	6.26	Independence & Select
MPS						
Jan - Feb	5.80	WPS	5.85	WPS	6.25	WPS
Mar - Dec	5.46	WPS	5.81	WPS	6.40	WPS

#### **Solicitations**

The Commission held several solicitations for standard offer service during 2004. These solicitations were competitive and successful, resulting in retail standard offer suppliers and market-based prices for all customer classes. Suppliers continue to become more comfortable with Maine's retail standard offer service model, as the level of participation in our solicitations reflects.

The first solicitation of the year was for standard offer service for the CMP and BHE medium and large classes for the term beginning March 2004. The Commission issued RFPs in November 2003, seeking bids for two alternative terms, one for six months and one for one year. The six-month term would achieve the Commission's goal of ensuring that standard offer prices do not deviate from market prices for a substantial period of time, thereby encouraging migration to the open market. 11 Seeking a bid for a one-year term was a prudent protection against the possibility that a six-month term might be viewed by suppliers as inadequate because of recent significant wholesale price fluctuations. Suppliers submitted indicative bid prices in December 2003. Staff, utilities, and suppliers negotiated and resolved non-price terms and, in January 2004, suppliers submitted final binding bids. After evaluating the final proposals, the Commission designated Constellation Power Source Maine LLC as the provider of 80% of the standard offer requirements for the CMP medium and large classes, Calpine Power America - Maine, LLC (Calpine) as the provider of 20% of the CMP medium class standard offer requirement, and Independence Power Marketing (Independence) as the provider of 20% of the CMP large class requirement. For BHE's service territory, the Commission designated Calpine as the provider of 100% of the medium class standard offer requirements and 80% of the large class requirements, and Independence as the provider of 20% of the large class requirements. A six-month term from March 1 through August 31. 2004 was chosen.

The average prices for standard offer service during the March-August period based on the final bids are shown below:

Standard Offer - Term Beginning March 1, 2004

	СМР	ВНЕ
Medium C&I	6.3 ¢/kWh	6. <del>2 ¢/k</del> Wh
Large C&I	6.4 ¢/kWh	5.9 ¢/kWh

<sup>&</sup>lt;sup>11</sup> The Commission first accepted a six-month bid in March 2003. Six-month standard offer terms seem to work well for both non-standard offer suppliers, who have told us that a shorter term helps them attract customers, and standard offer suppliers, who have told us that the shorter term mitigates load and market risk but is not so short as to discourage their participation.

The second standard offer solicitation of the year was again for the CMP and BHE medium and large classes, for the term beginning September 2004. The Commission issued an RFP in early June 2004 and, after receiving indicative bids, negotiating contract and other non-price terms, and receiving final bids, designated Independence to serve the medium classes and 80% of the large classes, and Select Energy Inc. to serve 20% of the large classes. The term was again set at six months (September-February) and the average prices were set as shown below:

Standard Offer - Term Beginning September 1, 2004

<u>P</u> <u>BHE</u>
<u></u>
kWh 6.3 ¢/kWh

The third solicitation, for the provision of standard offer service for the CMP and BHE residential and small commercial classes for the term beginning March 2005 began with the release of RFPs in September 2004. In this solicitation, the Commission stated its intent to consider a standard offer procurement approach under which it would secure portions of the required supply at different times to minimize the possibility of large price swings. For example, under a three-year, staggered approach, one-third of the supply would be secured each of three years. To implement this approach, the RFP requested proposals for: a one-, two- and three-year term, each for one-third of the class; a one-, two-, three-, four-, and five-year term, each for one-fifth of the class; and a one-year term for the entire class. Bidders were allowed to combine standard offer proposals with proposals to purchase the capacity and energy from CMP's purchased power contract entitlements. Initial bids were received in October, and the process was extremely competitive.

On December 14, 2004, the Commission accepted bids that resulted in prices of 6.95 cents/kWh for standard offer supply in CMP's territory and 7.1 cents/kWh in BHE's territory, for the period March 1, 2005 through February 2006. These prices reflected the fact that prices in the wholesale energy market had risen substantially in the three years since standard offer supply was last procured for this group of customers. The wholesale price increases were driven in large part by increases in the price of natural gas, which fuels a significant number of electric generating plants in New England. While the new standard offer prices would by themselves mean an average increase of 17% in the all-in rate of CMP's residential and small commercial customers and of 14% for the same group of customers of BHE, it is possible that those increases will be somewhat mitigated by reductions in the stranded cost component of their bills, which would also take effect on March 1, 2005. To what extent that occurs

<sup>&</sup>lt;sup>12</sup> At the time this report was printed, names of the winning bidders were not released, to allow these suppliers to complete supply arrangements.

will be known when pending stranded cost cases for the two utilities are completed.

The Commission adopted the three-year staggered approach by also accepting bids for a portion of the standard offer load for the 12-month periods beginning March 1, 2006 and March 1, 2007. The Commission will procure the remainder prior to the start of each period. This approach will help moderate volatility in standard offer prices resulting from future changes in wholesale prices.

The fourth solicitation, for the provision of standard offer service to CMP and BHE medium and large non-residential customers beginning March 2005, began with the release of RFPs in November 2004. Initial bids were received in December, and the process is ongoing.

No solicitations were held to acquire standard offer service for MPS customers because WPS-ESI is currently designated the standard offer provider for a 34-month term ending on December 31, 2006.

#### **Consumer-owned Utilities (COUs)**

COUs carry out bid processes to procure standard offer service in their territories. The following table displays their current standard offer prices:

S

Utility	Price	Supplier
Eastern Maine Electric Cooperative	5.79 c/kWh	WPS
Houlton Water Company	5.387¢/kWh	WPS
Van Buren Light and Power	6.13 ¢/kWh	WPS
Fox Islands Electric Cooperative *	4.05 ¢/kWh	Exelon Power
Madison Electric Works *	6.604 ¢/kWh	Select
Swans Island Electric Cooperative *	3.5 – 5.7¢/kWh	Select
Kennebunk Light and Power Co. *	3.88 ¢/kWh	Exelon Power
Monhegan Electric	Exempt	
Matinicus Plantation Electric Co.	Exempt	
Isle au Haut	Exempt	

<sup>\*</sup> Rate is approximate. It may vary monthly and is subject to a monthly true-up adjustment to reflect the actual costs of supply.

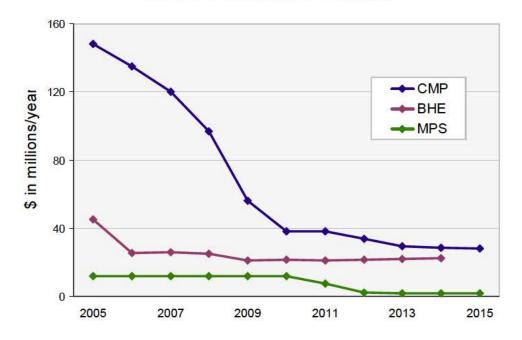
#### V. STRANDED COSTS

The Restructuring Act allows CMP, BHE and MPS to recover stranded costs in the rates they charge for delivery service. Stranded costs reflect the net, above-market costs for generation obligations that utilities incurred prior to industry restructuring. For example, stranded costs include the difference between payments the utilities must make pursuant to pre-existing purchased power contracts (primarily with qualifying facilities (QFs)) and the current market value of that power. Stranded cost rates are re-set for CMP, BHE and MPS every two to three years. The adjustments coincide with the sale terms of the utilities' QF entitlements, because the amounts received from the entitlement sales offset stranded costs and are a significant component of total stranded cost rates.

During 2004, the Commission completed a proceeding that established MPS's stranded cost rates for the period between March 1, 2004 and December 31, 2006, to coincide with the period of MPS's sale of qualifying facility entitlements. The proceeding concluded with a stipulation, approved by the Commission, under which MPS's stranded cost rates did not change from their level before March 1, 2004. The Commission is currently conducting a proceeding that will re-set CMP's and BHE's stranded costs on March 1, 2005.

The most significant changes in stranded costs will occur when utilities' QF contracts expire. BHE's stranded costs will decline significantly in 2006, while CMP's will decline throughout the second half of the decade. Projections of stranded costs are shown in the chart below.

#### **Annual Stranded Cost Projections**



The major components of each utility's stranded costs over the year March 2003 – February 2004 (for CMP and BHE) and March 2004 – February 2005 (for MPS) are set forth below:

СМР	
QF contract costs	\$254.3 million
Entitlement sale revenue	<u>-102.3</u>
Net QF stranded costs	\$152.0
Closed nuclear plants	24.5
QF contract buyout	1.7
HQ tie-line	4.5
VT Yankee	1.4
Total stranded costs	\$184.1 million

<u>BHE</u>	
Net QF stranded costs	\$28.3 million
QF contract buyouts	20.3
Seabrook	3.7
<u>Other</u>	<u>-3.7</u>
<b>Total stranded costs</b>	48.6 million

7.0 million 1.6
1.0
2.0
2.8
3.3
-3.2
0.3
11.8 million

Until recently, stranded costs also included, as an offset, the proceeds from the utilities' generation asset sales (referred to as the Asset Sale Gain Account).

In 2001 and 2003, the Commission approved reductions through February 2005 of the stranded cost component of delivery rates for some of BHE's and CMP's medium and large customers to mitigate the impact of significantly increased market generation prices.

#### VI. GENERATION RESOURCES

#### **Resource Mix Used to Serve Maine's Customers**

The Restructuring Act establishes a 30% resource portfolio standard (RPS) that requires electricity suppliers (including standard offer suppliers) to supply 30% of their Maine load from "eligible resources." The Act defines eligible resources to be generating units whose capacity does not exceed 100 megawatts and that produce electricity from tidal, fuel cells, solar, wind, geothermal, hydroelectric, biomass, or municipal solid waste in conjunction with recycling, that qualify as small power producers under federal regulations, or that are efficient cogeneration units.

Hydro

Biomass

As shown in the chart below, during 2003,<sup>13</sup> between 30% and 35% of Maine's load was supplied by eligible resources. Virtually all eligible supply was provided by hydro, biomass, or MSW, with a small fraction provided by eligible fossil fuels, wind, or solar.

## 25% 20% 15% 10% 5% 0%

MSW

Coal

#### **Resources Serving Maine's Customers in 2003**

The source of generation that fulfills the 30% RPS may come from a variety of locations. The generation that suppliers assign to load in Maine may be generated in Maine, in another New England state, in Canada, or (less frequently) in the Middle Atlantic states. Since 2002, competitive providers in the ISO-NE territory have operated under a "tradable attribute" certificate system known as the Generation Information System (GIS). The GIS allows suppliers to trade electricity attributes (e.g., fuel source and emissions levels) separately from the energy commodity. Suppliers in the ISO-NE area demonstrate compliance with Maine's 30% RPS through GIS certificates. This process reduces supplier compliance costs and allows for accurate verification.

System

Oil

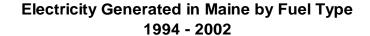
Unreported Natural Gas

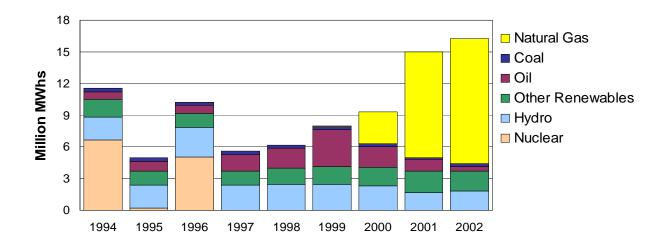
Nuclear

#### **Electricity Generated in Maine**

In recent years, five electric generating plants fueled by natural gas have been built in Maine. This phenomenon is the result of both electric restructuring and the completion of new natural gas transmission facilities within the State. Publicly available information summarizes the resources used in each state to generate electricity (which may in turn be sold in other states), and shows the dramatic change in Maine's generation mix.

<sup>&</sup>lt;sup>13</sup> The Commission will receive information about suppliers' 2004 resource mix when suppliers file their annual reports in June 2005.





#### **RPS** Issues

During 2002, a dispute arose between some qualifying facilities and utilities over which entity has the rights to GIS certificates associated with ongoing power purchase contracts. The Commission concluded that the utilities have the rights to the certificates and that the certificates therefore should be transferred to the entitlement purchaser. However, the FERC considered the issue as it relates to utilities and GIS certificates nationally, and disagreed with the Commission's conclusion. The matter is currently pending in federal court.

During 2004, the Legislature enacted a law that exempts suppliers from complying with the 30% RPS when supplying electricity to customers in designated Pine Tree Zones. Pine Tree Zones are State-designated economic development areas in which new and expanding businesses may receive economic incentives prescribed by law. As yet, no supplier has reported that it is using this exemption.

#### **Uniform Disclosure Labels**

The Restructuring Act directs the Commission to ensure that comparative information regarding electricity supply is disseminated to customers. The Commission implemented this directive by designing a uniform information disclosure label that contains a supplier's resource mix and emissions information. Residential and small commercial customer suppliers must provide a disclosure label to their customers quarterly, and suppliers to larger customers must provide the label upon request. Labels for standard offer providers may be

found on the Commission's web page. A representative label is contained in Appendix A.

#### **Voluntary Renewable R&D Fund**

The Restructuring Act directs the Commission to establish a program to allow electricity customers to make voluntary contributions to fund renewable resource research, development, and demonstration projects. To date, customers have donated in excess of \$160,000 through one-time or monthly contributions through their electricity bills. The State Planning Office, which administers the program, has contracted with the Maine Technology Institute (MTI) for distribution of the funds to take advantage of MTI's existing grant process infrastructure and to leverage other grant funds. In 2004, MTI provided funding for a Chewonki Foundation and Hydrogen Energy Center project to develop an energy system using hydrogen generators, storage, and fuel cells. The project is being funded through a variety of sources, including \$40,000 from the Voluntary Renewable R&D Fund.

#### VII. REGIONAL ACTIVITY

With the restructuring of the electricity market, Maine has become part of a broader regional market for wholesale electricity. The existing electric transmission system allows generation within roughly 1,000 miles of the state to compete to serve Maine customers and allows Maine's generators to compete for load over a similar area. The Legislature anticipated this and in 1997 enacted 35-A MRSA §3215, which directs the Commission to participate in regional and national activities to protect "the interests of competition, consumers of electricity, or economic development of the state."

The New England electric market is, and will remain for the foreseeable future, a hybrid of competitive and regulated elements. The fundamental goal is to develop and maintain a workably competitive wholesale generation market that will provide the benefits of strong competition among suppliers while simultaneously producing a reliable electric system and acceptable prices.

The market operates under a set of rules approved by the Federal Energy Regulatory Commission (FERC). New England's Independent System Operator, ISO New England (ISO-NE), is the day-to-day operator of the electric grid and the generation markets. ISO-NE, in turn, operates under contract with the New England Power Pool (NEPOOL), a New England organization comprised of generators, competitive electricity providers, T&D utilities, municipal electric systems, and representatives of end-use customers. NEPOOL or ISO-NE files changes to market rules for approval by FERC. These changes are developed through NEPOOL committees, each of which is chaired by ISO-NE. In some cases, these filings have close to unanimous support. In others, there is a wide range of conflicting positions. While the Commission is not a NEPOOL

member, it often takes an active role in the committees. The Commission also intervenes and takes positions at FERC on matters affecting the competitiveness of the wholesale electric markets, reliability, or prices paid by Maine electricity consumers.

This section of the report outlines the changes in the market over the past years and describes the Commission's regional and national activities.

#### **Notable Trends and Events in the Past Year**

Standard Market Design. The past year was the first full year under "Standard Market Design" (SMD), implemented on March 1, 2003. Under SMD, the energy market comprises two separate markets. In the Day Ahead market, which covers energy transactions for the following day, buyers and sellers can, but are not obliged to, lock in financial positions. Then, in the real time market, any deviations between the Day Ahead market and the actual outcomes are cleared. This allows market participants to hedge against unexpected events such as extreme weather or the unexpected loss of supply resources, either of which can drive prices very high very quickly<sup>14</sup>.

Of particular importance to Maine consumers is the locational aspect of SMD. Under SMD, customers in different regions in New England pay different prices. This happens for two independent, but related, reasons. First, SMD recognizes "transmission constraints." This means that, if there is more low cost generation in a region than can physically be exported, the energy price in that region will decline to reflect the surplus supply, while prices in the transmission import constrained or "congested" area are likely to increase to reflect the limited generation supply. Second, SMD changes the way transmission losses are charged 15. Under SMD, marginal line losses are charged to customers. In exporting regions such as Maine, the "losses" can be negative, meaning that the effect of losses is to reduce the price paid for electricity.

The new SMD market has resulted in significantly lower wholesale energy prices in Maine compared to the rest of New England. Over the period, Maine wholesale energy prices were about 0.48 cents per kilowatt-hour below the regional average. New Hampshire costs were second lowest at 0.14 cents per kilowatt-hour below average over the same period. Connecticut costs were the highest, at 0.14 cents per kilowatt-hour above the average.

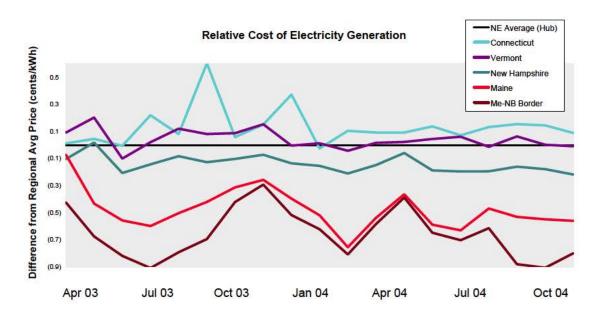
Savings of this magnitude are in the range of \$50 million per year, a significant level for Maine. Furthermore, it is likely that Maine wholesale prices

<sup>&</sup>lt;sup>14</sup> Before SMD, the market was a simple real-time market and left market participants vulnerable to unexpected events.

<sup>&</sup>lt;sup>15</sup> Any time electricity is transported, a portion of the electricity is lost. The loss percentages can range from less than 1% to 10% or more, depending primarily on the amount of current flowing over the line.

will continue to be lower than those elsewhere in New England for some, time at least until there are major new investments in the generation and transmission systems in the region.

The following chart compares wholesale electricity prices in various New England locations.



<u>Financial Issues for Generators</u>. A number of firms owning generation have experienced serious financial problems, some of them resulting in bankruptcy filings. This has at least two implications: it suggests that market prices have been low, relative to these firms' expectations when they entered the market; and it indicates that the risk of financing new generation will affect New England's portfolio of generation resources which in turn will affect the composition of the wholesale electric markets.

RSC Formation. The FERC has increasingly articulated the need to have problems such as regional reliability issues addressed by entities closer to the problem. The FERC has thus encouraged the formation of Regional State Committees (RSCs) to address reliability and other matters. In New England, the Governors of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont filed a Joint Petition for Declaratory Order to Form the New England States Committee on Electricity ("NESCOE") on June 25, 2004. Governor Baldacci appointed Kurt Adams as Maine's representative to the new RSC. The Commission is working closely with the Governor's office in the development of and participation in NESCOE.

RTO Formation. ISO-NE decided to restructure into a Regional Transmission Organization (RTO) consistent with direction provided by the FERC. ISO-NE currently operates under an interim agreement with NEPOOL,

which has been extended several times, most recently until December 31, 2004. The ISO has indicated that the organization has had more difficulty focusing on long-term objectives because its existence has been periodically threatened as the contract approaches its expiration date. The ISO views one purpose of RTO formation as giving the ISO the stability needed to ensure that it can function independently.

Another reason for the ISO's interest in RTO formation is to codify the ISO's operational authority over the transmission facilities of the transmission owning utilities. While the Restated NEPOOL Agreement provides for ISO authority over such facilities, many specific aspects of this operational authority are not set forth in that document. A third reason for RTO formation is to solidify the ISO's authority to propose changes to the market rules to FERC rather than sharing this authority with NEPOOL.

On October 31, 2003, the Transmission Owners and ISO-NE jointly filed a petition at FERC to form an RTO. The Maine Commission and the New England Conference of Public Utilities Commissioners (NECPUC) have filed comments at FERC, seeking to have FERC condition its approval upon certain changes being made to the RTO proposal. Many of NECPUC's proposed changes, which the Commission believes strengthen the independence of the RTO while ensuring an appropriate level of openness and responsiveness to concerns raised by those affected by the RTO's actions, were adopted by FERC.

#### Major Cases Currently Being Litigated at FERC

While there are numerous ongoing cases in which the Commission either through NECPUC or individually has participated by submitting comments to FERC and participating in the NEPOOL committees, the Commission has taken a lead role or shared leadership with other state commissions in the following two cases that are set for hearing at FERC.

• Locational Installed Capability (LICAP). FERC has ruled that New England should adopt a LICAP mechanism to ensure there is enough generation capacity to provide reliable service throughout New England. On September 1, 2004, ISO-NE filed a proposal with FERC to implement such a mechanism. The Maine Commission is a party to this case and has submitted testimony in opposition to portions of the ISO-NE filing. The Commission's primary concern is that the proposal made by ISO-NE will be very expensive but will not be effective in attracting new resources that may be needed to maintain reliable service.

More specifically, under the ISO-NE proposal, which is premised on the assumption that the proceeds from the sale of electricity alone will not induce new generators to enter the market, electricity customers would make LICAP payments to generators. The theory is that the combination of the electricity proceeds and LICAP payments is needed to secure new generation, which in

turn will reduce the likelihood of a blackout due to insufficient capacity and the likelihood of a price spike due to tight supplies.

The Maine Commission has two primary concerns with this approach. First, the gross payments to generators from Maine alone could run from about \$50 million per year to almost \$500 million per year, depending on market conditions. The Commission believes this is simply too high. Second, there is no assurance that any payments that are made will, in fact, improve reliability or reduce price spikes.

This litigation is likely to continue through at least the first half of 2005.

• Request for Increased Return on Equity (ROE). On November 4, 2003, BHE, CMP, NSTAR Electric & Gas Corporation, New England Power Company, Northeast Utilities Service Company, The United Illuminating Company, Vermont Electric Power Company, Central Vermont Public Service Corporation, and Green Mountain Power Corporation (collectively, the New England Transmission Owners) filed a request for approval for a significant increase in the return on common equity component of the regional and local transmission rates under the Regional Transmission Organization for New England (RTO-NE) open access transmission tariff. The Commission took a lead role in developing NECPUC comments protesting the proposed increase, most aspects of which have been set for hearing. One part of the increase was granted by FERC and is expected to be subject to a court challenge. The Commission is also taking an active role in helping to develop testimony in the FERC hearing.

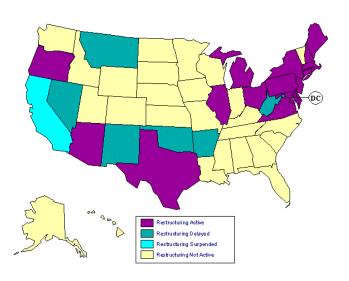
#### VIII. AFFILIATED COMPETITIVE PROVIDERS AND COMPLIANCE COSTS

The Restructuring Act requires T&D utilities and their marketing affiliates to comply with comprehensive standards of conduct and market share limitations. These limitations are intended to prevent utility marketing affiliates from obtaining any undue market advantage by virtue of their corporate relationship with T&D utilities. The Act requires the Commission to determine and report the actual and estimated future costs of implementing these requirements.

During 2004, there were no issues associated with standards of conduct. CMP does not have a marketing affiliate. In 2002, BHE formed a marketing affiliate, Emera Energy Services, Inc. (EES), but EES does not market services in BHE's territory. MPS's marketing affiliate, Energy Atlantic, no longer serves customers in Maine. The Commission, BHE, and MPS foresee that their costs will continue to be moderate in the future.

#### IX. ACTIVITIES IN OTHER STATES

The Restructuring Act directs the Commission to report on activities relating to changes in the regulation of electric utilities in other states. No significant activity regarding implementation of competition has occurred in the past two years. As shown in the map to the right, <sup>16</sup> 17 states and the District of Columbia allow retail competition for electricity supply. Of the remaining states, 26 are not currently carrying out restructuring activity, six have studied but are delaying restructuring, and California has suspended restructuring.



<sup>&</sup>lt;sup>16</sup> Source: Energy Information Administration. West Virginia is no longer active.

## Appendix A Uniform Disclosure Label

All residential and small commercial customers receive labels with formal and content similar to the following label, which was applicable to residential and small commercial standard offer service throughout 2004:

## RESIDENTIAL AND SMALL NON RESIDENTIAL STANDARD OFFER SERVICE CONSUMER INFORMATION ABOUT YOUR ELECTRICITY SUPPLY

November 2003

Electricity suppliers in Maine must, by Maine law, provide fact sheets, or "uniform disclosure labels" from time to time to educate consumers about their electricity service. Your electricity is *delivered by* Central Maine Power Company, but the <u>electricity itself</u> is supplied by:

Your Electricity Supplier is: Constellation Power Source Maine, LLC.

This fact sheet provides consumer information about the price, power sources and air emissions of service provided by this electricity supplier.

Power Sources (October, 2002 – September, 2003) This supplier provided electricity with the following resources:				
	Supplier's Mix	New England Mix		
Sources meeting Maine's 30 resources requirement	)% renewable and	l efficient		
Biomass Municipal Waste Fossil Fuel Cogeneration Fuel Cells Geothermal Hydro Solar Tidal	8 5 % 5 6 % 7 4 % 0 0% 0 0% 11 3% 0 0% 0 0%	NA 00% 00% 95% 00%		
Wind  Other Choices Nuclear Gas Oil Coal	0 0%  26 7 % 23 9 % 8 6 % 8 0 %	0 1% 27 0 % 29 4 % 13 7 % 15 1 %		

#### <u>Air Emissions</u> (October, 2002 – September, 2003)

This table compares air emissions from this supplier's electricity mix to average emission levels from all New England power sources.

	Supplier's Mix (lbs/MWh)	
Carbon Dioxide (CO <sub>2</sub> )	774.6	This is <b>0.7%</b> less than the New England Average
Nitrogen Oxide (NO <sub>x</sub> )	1.8	This is 20% more than the New England Average
Sulfur Dioxide (SO <sub>2</sub> )	2.6	This is 33% less than the New England Average
Notes: lbs/MWh = pounds per Megawatt-hour 1 Megawatt-hour = 1,000 kilowatt-hours		

#### Additional Information and Required Notes:

#### Notes:

Power Sources—Maine law requires retail electricity providers to supply no less than 30% of their total annual kilowatt-hour sales with electric energy generated from eligible resources 
Either a renewable fuel or an efficient process, such as cogeneration, must be used to generate the electricity used to satisfy this requirement. Co-generation sometimes uses fossil fuels, such as gas, coal or oil, and is considered to be efficient because the process yields both electricity and thermal energy 
Emissions—Carbon Dioxide (COs) is released when certain fuels are burned. It is considered a greenhouse gas and a major contributor to global warming 
Nitrogen Oxides (NOx) form when certain fuels are burned at high temperatures. They are considered contributors to acid rain and ground-level ozone (or smog) 
Sulfur Dioxide (SO2) is formed when fuels containing sulfur are burned. Major health effects associated with SO2 include asthma, respiratory illness and aggravation of existing cardiovascular disease. The production of electricity can produce other harmful emissions and have other environmental impacts. Environmental impacts differ among individual power plants

If you have questions or need further explanation, please contact Constellation Power Source Maine, LLC toll-free at 1-888-808-3826 or the Maine Public Utilities Commission, toll-free, at 1-877-782-3228. Additional information can also be found at http://www.maine.gov/mpuc.