

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

Annual Report on New Renewable Resource Portfolio Requirement



Report for 2022 Activity

**Presented to the
Joint Standing Committee on
Energy, Utilities and Technology**

March 25, 2024

Table of Contents

I. INTRODUCTION	2
II. BACKGROUND	3
A. Portfolio Requirements	3
1. Class I resources	3
2. Class IA resources	4
3. Class II resources	4
4. Thermal RECs	4
B. Implementing Rule	5
C. Renewable Energy Credits	5
III. IMPLEMENTATION AND COMPLIANCE	6
A. Available Resources	6
1. Class I	6
2. Class IA	8
3. Class II	10
4. Thermal	11
B. Total Retail Sales, Exemptions, and Obligations	11
C. Compliance	12
D. Cost to Ratepayers	13
E. Portfolio Requirement Percentage Suspension	14
F. Recommendations for Resource Development	15
G. Benefits and Costs of Class IA Requirement	15
IV. CONCLUSION	16
V. Appendix	17
A. RPS Requirements by Calendar Year	17

I. Introduction

During its 2007 and 2019 sessions, the Legislature expanded the State’s Renewable Portfolio Standard (RPS). In 2007, the Legislature enacted an Act to Stimulate Demand for Renewable Energy (2007 Act).¹ The 2007 Act added a mandate that specified percentages of electricity that supply Maine’s consumers come from Class I renewable resources. Legislation enacted in 2019, An Act to Reform Maine’s Renewable Portfolio Standard (2019 Act), created two new categories, Class IA resources and Thermal renewable energy credits (RECs), each with its own increasing requirement schedule.²

The Acts contain an annual reporting requirement on the status of Class I and Class IA renewable resource development and compliance with the portfolio requirement. Reports are due on March 31st of each year. The reporting provisions are identical and specify:

Annual Reports. ... the Commission shall submit a report regarding the status of Class I resources in the State and compliance with the portfolio requirement under paragraph A to the joint standing committee of the Legislature having jurisdiction over utilities and energy matters. The report must include, but is not limited to, a description of Class I resources available to meet the portfolio requirement under paragraph A, documentation of the loss of any existing renewable generation capacity in the State, the status of implementation of portfolio requirements under paragraph A, including any suspensions pursuant to paragraph B, and recommendations to stimulate investment in Class I resources.³

(This passage is identical to 35-A §3210(3-B)(C) except that references to Class I are instead to Class IA).

The reporting provision for Class IA resources further specifies:

If the commission has reliable information about benefits and costs of the portfolio requirements under paragraph A, over both the short and long terms with respect to the State’s economy, environmental quality or electricity consumers, the commission shall include that information in the report.⁴

The Commission includes in this report similar information on Class II and Thermal REC (TREC) resources and compliance.

Additionally, the 2019 Act allowed customers receiving service at transmission or subtransmission voltage levels who made an election prior to December 31, 2019, to exempt themselves from the Class IA and TREC requirements. This provision specifies that “[t]he commission shall review and report on the use of the election allowed under this subsection as

¹ P.L. 2007, Ch. 403 (codified at 35-A M.R.S. § 3210(3-A)).

² P.L. 2019, Ch. 477 (codified at 35-A M.R.S. § 3210).

³ 35-A §3210(3-A)(C).

⁴ 35-A M.R.S. § 3210(3-B)(C).

part of its annual report on Class IA resource portfolio requirements under subsection 3-B, paragraph C.”⁵

The Commission hereby submits its report to the Joint Standing Committee on Energy, Utilities and Technology to describe the status of Maine’s renewable resource portfolio. This report is based on the most recently filed Competitive Electricity Provider (CEP) annual compliance reports, which were filed in July 2023 for calendar year 2022. Therefore, this report generally presents information on implementation and compliance with the portfolio requirements for calendar year 2022.

II. Background

A. Portfolio Requirements

Maine’s RPS consists of four categories: Class I resources, Class IA resources, Class II resources, and TRECs. Each category has its own percentage requirement in each calendar year. The annual percentage requirements for each resource category can be found in Appendix A. The four resource categories are described in detail below.

1. Class I resources

The 2007 Act specifies the resource type, capacity limit and the vintage requirements for the Class I resource requirement. A new renewable capacity resource used to satisfy the Class I portfolio requirement must be of the following types:

- fuel cells;
- tidal power;
- geothermal installations;
- hydroelectric generators that meet all state and federal fish passage requirements;
- biomass generators that are fueled by wood, wood waste or landfill gas;
- anaerobic digestion of by-products of waste from animals or agricultural crops, food or vegetative material, algae or organic refuse;
- solar power installations; or
- wind power installations.

In addition, except for wind and solar power installations, the generating resource must not have a nameplate capacity that exceeds 100 megawatts (MW). Moreover, the resource must satisfy one of four vintage requirements. These are specified under 35-A M.R.S. § 3210(2)(B-4) as:

- 1) Having an in-service date after September 1, 2005;
- 2) An addition to an existing facility after September 1, 2005;

⁵ 35-A M.R.S. § 3210(10).

- 3) Renewable capacity that has not operated for at least two years or was not recognized as a capacity resource by the New England Independent System Operator (ISO-NE) or the Northern Maine Independent System Administrator (NMISA) and has resumed operation or has been recognized by the ISO-NE or NMISA after September 1, 2005; and
- 4) Renewable capacity that has been refurbished after September 1, 2005, and is operating beyond its useful life or employing an alternate technology that significantly increases the efficiency of the generation process.

2. *Class IA resources*

The 2019 Act added Class IA resources to the RPS. Class IA resources are a subset of Class I resources consisting of those resources that qualify as “new” under paragraphs 1, 2, and 4 but exclude those that qualify under paragraph 3 of Title 35-A M.R.S. § 3210(2)(B-4).

3. *Class II resources*

Maine’s original restructuring legislation, which became effective in March 2000, included an eligible resource portfolio requirement.⁶ The eligible resource portfolio requirement, now referred to as Class II, mandated that each retail competitive electricity supplier meet at least 30% of its retail load in Maine from “eligible resources.” Eligible resources are defined in statute as either renewable resources or efficient resources. Renewable resources are defined in statute as fuel cells, tidal power, solar arrays, wind power, geothermal installations, hydroelectric generators, biomass generators, and municipal solid waste facilities. Renewable resources may not exceed a production capacity of 100 MW. Efficient resources are cogeneration facilities that were constructed prior to 1997, meet a statutory efficiency standard and may be fueled by fossil fuels.

4. *Thermal RECs*

The 2019 Act added a TREC requirement to the RPS. A TREC is equivalent to one MW of electricity and represents 3,412,000 British thermal units (BTU). Thermal energy that may be used to generate TRECs comes from heat, steam, hot water, or another form produced directly by a facility using sunlight, biomass, biogas or liquid biofuel or produced as a byproduct of electricity generated by a Class I or Class IA resource. The facility must have begun operation after June 30, 2019. The energy must be delivered to an end user by an auditable means and be used to meet a need of the end user that would otherwise be met using another energy source.

⁶ 35-A M.R.S. § 3210(3).

B. Implementing Rule

Chapter 311 of the Commission’s rules implements the State’s RPS.⁷ The implementing rule establishes a certification process that requires generators to pre-certify facilities for Class I, Class IA, or TRECs and provides for a Commission determination of resource eligibility on a case-by-case basis.⁸ The rule also specifies that the Commission may revoke a certification if there is a material change in circumstance that renders the generation facility ineligible. Under the rules, a generator does not have to be located in Maine to be eligible as long as its power is used to serve load in New England.

In accordance with statute, the rule includes an alternative compliance mechanism that allows suppliers to make an alternative compliance payment (ACP) into the Energy Efficiency and Renewable Resource Fund in lieu of compliance with the portfolio requirement. The ACP rates vary by category. During the 2022 compliance period the ACP rates were as follows:

Table II-1: ACP Rates in 2022

Category	ACP Rate (\$/MWh)
Class I	50 ⁹
Class IA	50 ¹⁰
Class II	No ACP option
Thermal RECs	25 ¹¹

The implementing rules allow suppliers to satisfy or “cure” a compliance deficiency in one calendar year during the following calendar year. This cure provision only applies if the supplier has satisfied at least two-thirds of its calendar year requirement. In effect, this allows suppliers to defer up to one-third of their obligation to the following year. Additionally, a supplier may “bank” any excess renewable credits in a calendar year for use in the next calendar year. However, a supplier may not use banked credits to satisfy more than one-third of the requirement in any year.¹²

C. Renewable Energy Credits

Most of the compliance with Maine’s portfolio requirements occurs through the purchase of RECs. The New England Power Pool (NEPOOL) has established a REC trading and tracking mechanism referred to as the Generation Information System (GIS). This system allows for the trading of the renewable attribute of a MWh separately from the energy value of the MWh. The GIS serves to significantly simplify compliance by suppliers and verification by regulatory commissions and avoids double counting. Consistent with statutory direction, the Commission

⁷ Order Adopting Rule and Statement of Factual and Policy Basis, Docket No. 2007-391 (Oct. 22, 2007).

⁸ Chapter 311, § 3(C) for Class I and IA, § 5(B) for thermal RECs.

⁹ Chapter 311, § 3(D).

¹⁰ Chapter 311, § 3(D).

¹¹ Chapter 311, § 5(C).

¹² Chapter 311, § 8(A) and (B).

requires suppliers in ISO-NE to verify compliance with the portfolio requirement through the GIS.¹³ In Docket No. 2017-00050, the NMISA requested and was granted permission to use a tracking and verification system in northern Maine.

III. Implementation and Compliance

A. Available Resources

The implementing rules require generation facilities to be certified by the Commission as a Class I/IA or Thermal renewable resource before such facilities can be used to satisfy Maine's renewable resource portfolio requirement. Class II resources are not certified by the Commission but self-certify through NEPOOL GIS. Not all of the facilities that have been certified are in service and many of the facilities are also eligible for portfolio requirements in other New England states. Additionally, there are renewable generator facilities physically located in Maine that are not certified as Maine renewable resources.¹⁴

Currently, the Commission has nothing to report on the loss of any existing renewable generation capacity in the State.

¹³ The portfolio requirement statute states that the Commission shall allow competitive electricity providers to satisfy the portfolio requirements through the use of RECs if it determines that a reliable system of electrical attribute trading exists. 35-A M.R.S. § 3210(8). The Commission has determined that the GIS is a reliable system.

¹⁴ Based on data from NEPOOL-GIS Regulator Reports, 64% of the NEW (since 1/1/2019) solar generation physically located in Maine that registered with NEPOOL GIS only registered their RECs for sale outside the State of Maine.

1. Class I

As of January 5, 2024, there are 393 certified Class I facilities, with a total capacity of approximately 4,772 MW.¹⁵ As the table below shows, REC's from 66 facilities were used by suppliers to comply with the 2022 Class I resource requirement. Fifteen of the facilities are biomass, 26 are hydroelectric, one is fuel cell, 20 are solar, and 4 are wind. Fifty-eight of the facilities are located in Maine and contributed about 78.3% of the total Class I REC's. Most of the Class I REC's came from biomass facilities (58.5%), followed by wind (20.8%), and then hydroelectric (19.4%).

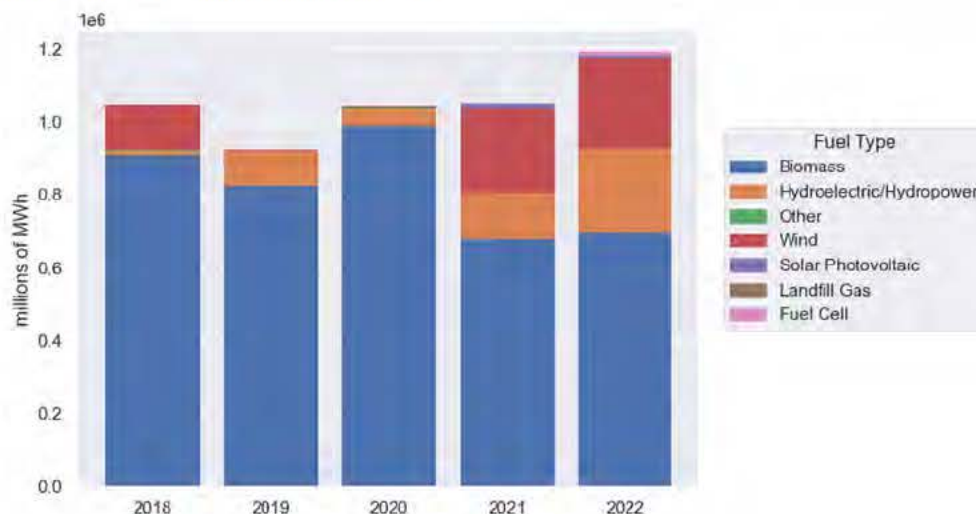
Table III-1: Class I Facilities and REC's by Fuel Source and Location

Fuel Source	State	Number of Generators	Number of REC's	% of Total REC's
Biomass	Maine	14	696,547	58.5
	Rhode Island	1	268	0.0
Fuel Cell	Maine	1	7,404	0.6
Hydroelectric/ Hydropower	Connecticut	1	1,512	0.1
	Maine	21	213,895	18.0
	Massachusetts	2	4,191	0.4
	Rhode Island	1	2,210	0.2
	Vermont	1	8,064	0.7
Solar Photovoltaic	Maine	20	8,251	0.7
Wind	Maine	2	13,324	1.1
	New Brunswick	1	235,159	19.7
	New York	1	455	0.0
Total		66	1,191,280	100.0

¹⁵ Information on the RPS Class I Renewable Resource Applications can be found at <https://www.maine.gov/mpuc/regulated-utilities/electricity/renewable-programs/rps>

The figure below shows how the fuel source mix of Class I RECs has changed over the last 5 years. The share of Class I RECs from biomass resources has declined over this time while hydroelectric and wind resources have contributed a growing share.

Figure III-1: Class I REC Fuel Source Mix, 2018-2022



2. Class IA

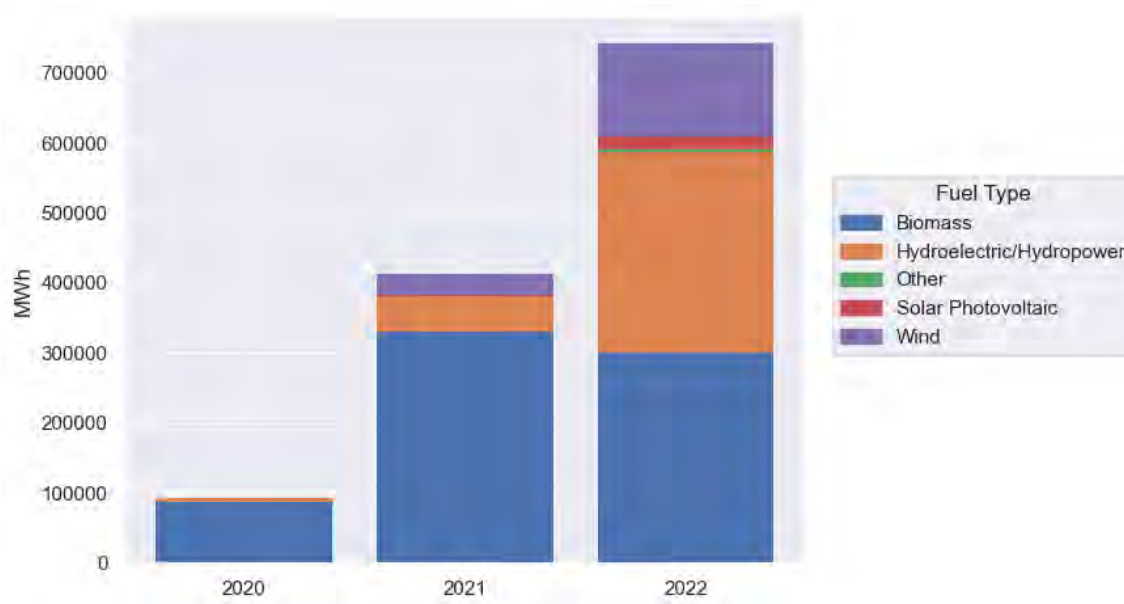
As the table below shows, RECs from 55 facilities were used by suppliers to comply with the 2022 Class IA resource requirement. Thirteen of the facilities are biomass, eighteen of the facilities are hydroelectric, nineteen are solar, and four are wind. Forty-eight of the facilities used to generate Class IA RECs in 2022 are located in Maine. Of the Class IA RECs, 73.9% came from facilities in Maine. The largest share of REC's came from biomass facilities (40.4%), followed by hydroelectric facilities (38.6%), then wind facilities (17.8%).

Table III-2: Class IA Facilities and RECs by Fuel Source and Location

Fuel Source	State	Number of Generators	Number of RECs	% of Total RECs
Biomass	Connecticut	1	4,066	0.5
	Maine	11	295,767	39.8
	New Hampshire	1	1,000	0.1
Hydroelectric/ Hydropower	Connecticut	1	22,429	3.0
	Maine	15	221,009	29.8
	Massachusetts	1	2,245	0.3
	New Hampshire	1	40,715	5.5
Other	Maine	1	3,100	0.4
Solar Photovoltaic	Maine	19	19,503	2.6
Wind	Maine	2	9,897	1.3
	New Brunswick	1	122,639	16.5
	New York	1	89	0.0
Total		55	742,459	100.0

The figure below shows how the fuel source mix of Class IA RECs has changed over the last 3 years since the category's inception. Biomass and hydroelectric resources have grown to contribute the majority of RECs, with wind resources contributing the next largest share. While the contribution of solar resources has been growing over this period, it still contributes a relatively small portion of Class IA RECs.

Figure III-2: Class IA REC Fuel Source Mix, 2020-2022



3. *Class II*

The following table shows the mix of resources used to satisfy Maine’s Class II renewable resource portfolio requirement during 2022. Most of the Class II resources supplying RECs in 2022 were hydroelectric generators (80.2%), and all other resources contributed less than 10% each. Seventy-seven of the facilities were located in Maine and contributed about 52% of the Class II RECs.

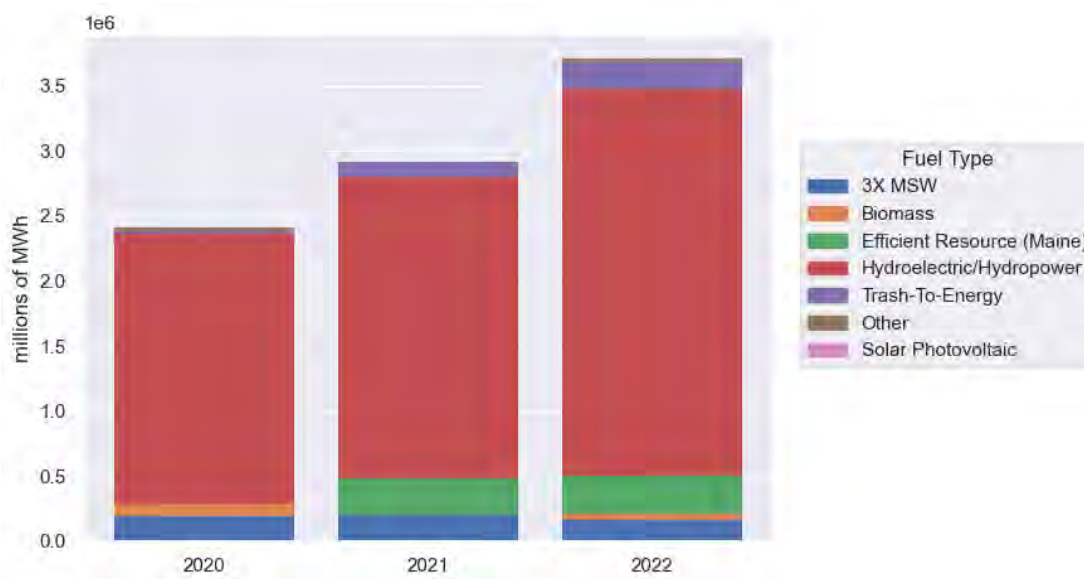
Table III-3: Class II Facilities and RECs by Fuel Source and Location

Fuel Source	State	Number of Generators	Number of RECs	% of Total RECs
3X MSW¹⁶	Maine	2	165,572	4.5
Biomass	Maine	5	36,548	1.0
	Massachusetts	2	6,808	0.2
Efficient Resource (ME)	Maine	7	297,503	8.0
Hydroelectric/Hydropower	Connecticut	3	42,673	1.2
	Maine	55	1,238,849	33.4
	Massachusetts	9	305,636	8.2
	New Brunswick	10	757,942	20.4
	New Hampshire	24	237,578	6.4
	Rhode Island	1	2,997	0.1
	Vermont	13	390,304	10.5
Other	Maine	5	17,552	0.5
	Massachusetts	1	5,107	0.1
Solar Photovoltaic	Maine	1	485	0.0
Trash-To-Energy	Connecticut	1	1	0.0
	Maine	2	172,272	4.6
	Massachusetts	3	10,414	0.3
	New Hampshire	1	20,632	0.6
Total		145	3,708,873	100.0

¹⁶ The 2019 Act established that a “300% multiplier is applied to the output of a generator fueled by municipal solid waste in conjunction with recycling that has obtained a solid waste facility license from the Department of Environmental Protection.” This provision was amended by Public Law 2023, ch. 361, which repeals the multiplier on January 1, 2027 (this section formerly repealed on January 1, 2025).

The figure below shows the change in the fuel source mix of Class II RECs over the last 3 years. Hydroelectric resources have contributed the majority of Class II RECs for all 3 years. Trash-to-energy resources have contributed a small but growing share. RECs from Municipal solid waste resources eligible for the 300% multiplier have been steady.

Figure III-3: Class II REC Fuel Source Mix, 2018-2022



4. Thermal

Calendar Year 2021 was the first year with a requirement for TRECs. The market for the TRECs is still forming. There was one certified facility able to generate and sell TRECs in 2021 and three by the end of 2022. As of January 2024, there are 39 TREC certified facilities all located in Maine with a combined capacity of 23.6 MW-equivalent useful thermal energy output.¹⁷

B. Total Retail Sales, Exemptions, and Obligations

For the 2022 compliance period, CEPs reported a total of 12,463,346 MWh of retail electricity sales. Pursuant to certain statutory provisions, some sales are exempt from the RPS. During 2022, 0.8% of sales were exempt from each class due to sales serving qualified Pine Tree Development Zone businesses established under Title 30-A. Another 3.4% were exempt from Class I, 24.6% were exempt from Class IA, and 21.3% were exempt from Thermal due to sales under legacy contracts entered into prior to September 2007 for Class I and prior to September 2019 for Class IA and TRECs. Additionally, 1,205,079 MWh (9.7%) of sales were to transmission/subtransmission customers exempt from the Class IA and TREC requirements per 35-A M.R.S § 3210(10).

¹⁷ NEPOOL GIS State Regulator GIS Generators Report.

After exempt sales are excluded, the remaining retail sales are multiplied by the applicable portfolio requirement percentage. The result, plus any deficiency carried forward from the previous year, equals the obligation for the compliance period. The obligation is the number of RECs that must be obtained to comply with the RPS. The table below shows exemptions and obligations for each category of the RPS during the 2022 compliance period.

Table III-4: Sales, Exemptions, and Obligations Summary

Retail sales (MWh)	11,711,045			
Sales incl. line losses (MWh)	12,463,287			
	Class I	Class IA	Class II	Thermal
Exemptions (MWh)	523,105	3,162,282	97,053	2,753,062
Retail sales subject to RPS (MWh)	11,940,177	9,300,902	12,366,229	9,710,220
Portfolio requirement (%)	10	8	30	0.8
Obligations (MWh/RECs)	1,194,313	744,462	3,709,872	80,983

Customers that participate in the State's Net Energy Billing kWh Credit program have their usage offset through subscriptions with renewable project sponsors. The usage that is offset by the subscriptions is not subject to and is essentially exempt from the RPS requirements. This is because project sponsors are not required to retire RECs and are free to sell these RECs into the market.

C. Compliance

For calendar year 2022, the vast majority of Class I RPS obligation was fulfilled by the retirement of RECs. Approximately 15.2% the obligation was satisfied using RECs obtained in 2021, and approximately 84.5%, was met using RECs obtained during 2022. The remaining obligation was either deferred to the following year or fulfilled by ACP.

Most of the Class IA RPS obligation was also satisfied using RECs. About 11.7% of the obligation was met with RECs obtained in 2021, and about 88% was met using RECs purchased during 2022.

Of the total 2022 TREC obligation, only about 23.2% was fulfilled using RECs. About 66.2% was fulfilled by ACP and 10.6% was deferred to the following compliance year.

Table III-5: Obligation Fulfillment Summary

	Class I	Class IA	Class II	Thermal
Obligation	1,194,313	744,462	3,709,872	80,983
Banked Last Year	181,799	87,257	478,163	876
Purchased This Year¹⁸	1,009,481	655,202	3,230,710	17,936
ACP	558	1,090	NA	53,617
Carry Forward Obligation	2,475	913	999	8,554

¹⁸ Excludes RECs purchased in the current year but banked for compliance in the following year.

D. Cost to Ratepayers

The cost to ratepayers of Maine's resource portfolio requirement is estimated by the cost of compliance reported by suppliers, primarily through their purchase of RECs. The commission understands that the cost of RECs paid by suppliers to generators and any ACP amount is passed on to ratepayers through their electric supply rates. Therefore, the cost of compliance with the RPS is a cost to ratepayers. During 2022, the cost of RECs used for compliance varied for each category. This cost includes RECs purchased in 2022 for compliance in 2022 and RECs purchased in 2022 to bank for compliance in 2023.

Table III-6: Cost of Compliance Summary

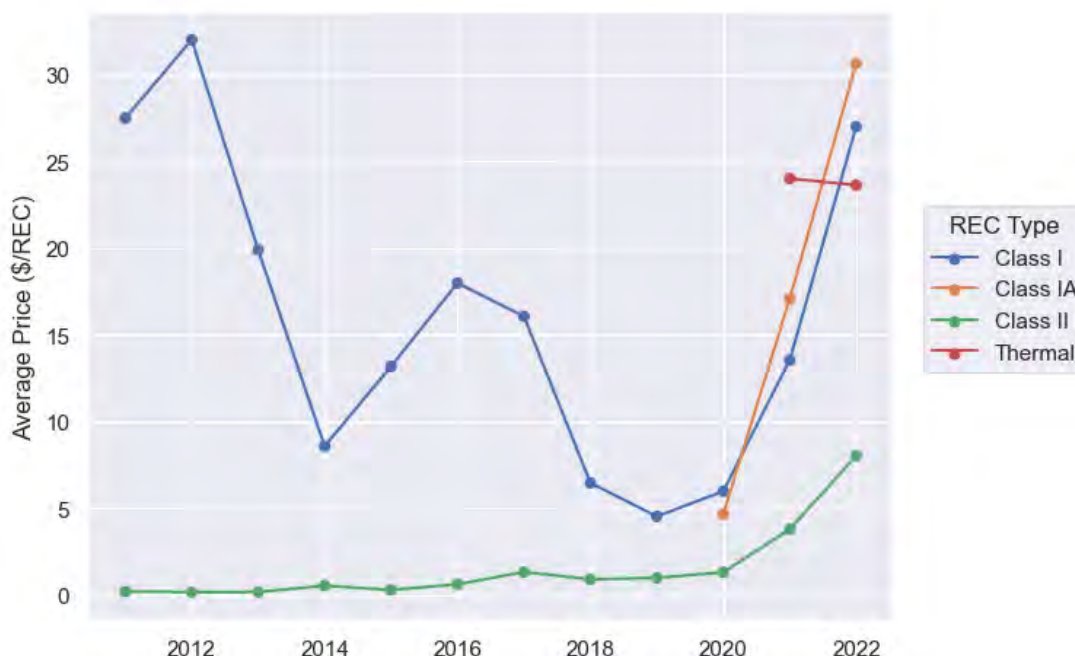
	Class I	Class IA	Class II	Thermal
Minimum Reported Cost (\$/REC)¹⁹	12.87	5.50	0	0
Maximum Reported Cost (\$/REC)	40.00	42.00	14.25	25.00
Weighted Average Cost (\$/REC)	26.98	30.61	8.01	23.61
Approx. Cost of RECs (\$ million)	32.3	23.3	30.5	0.4
ACP Total (\$)	27,900	54,500	NA	1,340,425
Total Cost of Compliance (\$ million)	32.4	23.4	30.5	1.8
Cost Per kWh (cents)	0.260	0.188	0.245	0.014

The total cost of RPS compliance in 2022 was \$88,051,069 or 0.706 cents per kWh. This cost includes about \$86.6 million spent on RECs and about \$1.4 million spent on ACPs.

¹⁹ CEPs sometimes procure energy and RECs as a bundle and report the REC cost as zero.

The figure below shows the change in the average cost of RECs paid by suppliers over roughly the last decade. The average price of Class I RECs was close to an all-time high in 2022 after a dip in the 2010's. Class IA RECs saw an all-time high average price in 2022 having increased every year since their inception. Class II average REC prices were also at an all-time high in 2022 after hovering at a low stable price in the 10 years leading up to 2020. In each year since 2020, the average price has increased substantially. The average price of TRECs declined slightly in 2022 but remained close to its 2021 introductory year average price. TREC prices will likely remain high, close to the ACP price of \$25, in the near future due to slow development of thermal energy resources.

Figure III-4: Average REC Price by Class, 2011-2022



E. Portfolio Requirement Percentage Suspension

The Acts allow the Commission to suspend scheduled percentage increases in the Class I and Class IA portfolio requirements if it finds that investment in new renewable resources has not been sufficient for suppliers to satisfy the requirement, the requirement has burdened electricity customers without providing the benefits from new renewable resources, or that there has been an over reliance on the ACP. As specified above, the vast majority of the compliance with the Class I and Class IA portfolio requirements occurred through the purchase of RECs at an average REC cost that is substantially less than the alternative compliance payment. Thus, it is clear that renewable resource development and operation has been sufficient for suppliers to satisfy the Class I and IA portfolio requirement without reliance on the ACP. Accordingly, the Commission did not act to suspend percentage increases in the portfolio requirement in 2022.

While there is no statutory allowance for the Commission to suspend the scheduled percentage increase for TRECs, there does appear to be a substantial shortage of them on the market, which

is driving the high percentage of the TREC requirement being met by the ACP. None of the facilities currently certified for Maine TRECs are certified as a renewable resource in any other state.

F. Recommendations for Resource Development

Maine's portfolio requirement operates in conjunction with the portfolio requirements in the other New England states to promote the development of renewable resources in Maine and New England.²⁰ The ISO-NE interconnection queue, which includes proposed generation projects that have initiated the review process for interconnection to the regional grid, includes a significant number of renewable projects.²¹ Although all of the projects in the queue may not be developed, there appears to be adequate renewable resource development in the region to meet the requirements of the RPS.

Because existing requirements and mechanisms in the region appear to be providing sufficient incentives for the continued operation and development of Class I/IA renewable resources to meet Maine's portfolio requirement, at this time, the Commission makes no recommendations regarding mechanisms to stimulate investment in Class I/IA renewable resources beyond those that already exist on the state, regional, and federal levels.

Thermal resources have been in short supply since the TREC requirement was established. It may be too early to determine whether existing incentives to develop thermal resources are sufficient to keep pace with the growing requirement. Over the next two to three years, if development of thermal resources remains slow, the Commission will consider recommendations for stimulating growth in the category.

G. Benefits and Costs of Class IA Requirement

At this time, the Commission has no information regarding the costs and benefits to the State's economy or environmental quality due to the Class IA requirement. However, the costs to consumers are directly quantifiable as the cost of the RECs and ACPs. The cost of RECs is also a direct benefit to the owners of renewable generation facilities, but estimating the flow of that benefit through the State's economy to determine the economic impacts of the RPS would require additional resources. However, in 2023 the Legislature enacted An Act to Promote Economic Reuse of Contaminated Land Through Clean Energy Development²² which included a provision that the Governor's Energy Office report on the impacts of the RPS including the benefits and costs on greenhouse gas emissions and the State's economy.

²⁰ Generally, newly developed renewable resources located within or adjacent to New England can be used to satisfy the various New England state's portfolio requirements.

²¹ MW values represent net generating capacity and are obtained from ISO New England Interconnection Request Tracking Tool at <https://www.iso-ne.com/system-planning/transmission-planning/interconnection-request-queue> In calculating these numbers, projects listed with an operational or withdrawn date before 3/1/2023 have been removed.

²² P.L. 2023, c 321.

IV. Conclusion

During 2022, Maine's electricity suppliers complied with the State's Class I/IA, Class II and Thermal portfolio requirements. The total cost of compliance was \$88,051,069 or 0.706 cents per kWh. The cost of compliance was about \$32.4 million for Class I, \$23.4 million for Class IA, \$30.5 million for Class II, and \$1.8 million for Thermal. For each of Class I, Class IA, and Class II, suppliers' obligations were mostly fulfilled by purchasing and retiring RECs which supported renewable generation facilities. For TRECs, suppliers fulfilled their obligations mostly by ACPs.

The growth of Class IA resources appears to have kept pace with the rising Class IA requirement as evidenced by the average price paid for RECs remaining well below the ACP rate. Record high market prices of Class II RECs have indicated a supply shortage for these RECs. With a static, perhaps dwindling, pool of Class II certified resources this problem would likely grow if not for recently passed legislation which instituted an ACP option for fulfilling Class II obligations.²³ The Class II ACP will first be an option for compliance with the 2023 RPS.

Thermal resources are growing slowly and there are substantially less TRECs than are required to fulfill suppliers' obligations. Compliance with the Thermal requirement is expected to continue to mostly take the form of ACPs rather than RECs, but the prevailing market price just below the ACP rate should provide incentive for growth in this category. It may take several more years for development of Thermal resources to take off. Existing incentives should be left unchanged before additional steps are taken to further stimulate the development of thermal resources.

²³ P.L. 2023, c 361, An Act to Amend the Portfolio Requirements for Class II Resources and Require Money Collected from Alternative Compliance Payments to Be Used for Financial Assistance.

V. Appendix

A. RPS Requirements by Calendar Year

Calendar Year	Class I	Class IA	Class II	Thermal RECs	Total Renewable Portfolio
2008	1%		30%		31%
2009	2%		30%		32%
2010	3%		30%		33%
2011	4%		30%		34%
2012	5%		30%		35%
2013	6%		30%		36%
2014	7%		30%		37%
2015	8%		30%		38%
2016	9%		30%		39%
2017	10%		30%		40%
2018	10%		30%		40%
2019	10%		30%		40%
2020	10%	2.50%	30%		43%
2021	10%	5%	30%	0.40%	45%
2022	10%	8%	30%	0.80%	49%
2023	10%	11%	30%	1.20%	52%
2024	10%	15%	30%	1.60%	57%
2025	10%	19%	30%	2%	61%
2026	10%	23%	30%	2.40%	65%
2027	10%	27%	30%	2.80%	70%
2028	10%	31%	30%	3.20%	74%
2029	10%	35%	30%	3.60%	79%
2030	10%	40%	30%	4%	84%
For each year thereafter	10%	40%	30%	4%	84%