Final 2015 Energy-Efficiency Forecast 2019-2024

ISO Staff

EE Forecast ISO New England Contacts

Eric Winkler, Ph.D., System Planning
ewinkler@iso-ne.com

David Ehrlich, System Planning
dehrlich@iso-ne.com

Eric Wilkinson, External Affairs
ewilkinson@iso-ne.com

Acronyms

- EE—Energy Efficiency
- EEFWG—Energy-Efficiency Forecast Working Group
- FCM—Forward Capacity Market
- PA—Program Administrator
- PAC—Participants Advisory Group
- RGGI—Regional Greenhouse Gas Initiative
- SBC—System Benefit Charge
- CSO—Capacity Supply Obligation (FCM)
- RSP—Regional System Plan
- CELT—10-year forecast of capacity, energy, loads and transmission

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Introduction

- This presentation contains the final EE forecast for the 2019-2024 period, which includes the FCA9 results
- The forecast estimates reductions in energy and demand from state-sponsored EE programs in the New England control area by region and state (CT, MA, ME, NH, RI, VT)
- Data used to create the forecast originates from state-sponsored EE Program Administrators and state regulatory agencies
- The forecast is informed by a stakeholder process facilitated by ISO New England's Energy-Efficiency Forecast Working Group

Introduction cont.

- The EE forecast is based on average production costs, peak-to-energy ratios and projected budgets of state-sponsored EE programs
- This forecast follows the same fundamental forecast process and methodology used in the three preceding forecast years starting in 2012
- Inputs to this final forecast consist of:
  - EE forecast methodology developed by the ISO
  - EE program data provided by EE Program Administrators
  - EE Forecast Working Group Stakeholder input provided at the December 17, 2014 meeting
  - Budget projections provided by NE regulators and Program Administrators

Introduction cont.

- The EE forecast is used in ISO studies looking beyond the FCM timeframe such as:
  - Long-term transmission planning studies
  - Economic planning studies
  - Other planning studies
- The Final EE forecast is incorporated into the CELT report and Regional System Plan
- The EE forecast is developed on an annual basis by the ISO with stakeholder input from the EEFWG and PAC

Introduction cont.

- EE forecast will not impact:
  - ICR/Local Sourcing Requirement/Maximum Capacity Limit
  - FCM auctions
  - FCM related reliability studies (qualification, de-list, non-price retirement)
  - Any System Operations analysis across the four-year FCM window
- In the near term (0-3 years), EE is integrated into the planning processes as qualified capacity delivered by regulated utilities through the ISO NE Forward Capacity Market and merchant EE providers

Introduction cont.

- The ISO posted a draft EE forecast on February 4, 2015 and provided an opportunity for formal public comment through March 6, 2015
  - Comments are posted at: http://www.iso-ne.com/eefwg
  - Background information is available at: http://www.iso-ne.com/eefwg
- The final EE forecast is presented in this MS Power Point
- A final EE forecast report will be available in MS Word Format that includes:
  - Background of the forecast development
  - The final forecast
  - A representation of measure data
- Both the Power Point and MS Word report will be available on the ISO EE forecast webpage http://www.iso-ne.com/system-planning/system-forecasting/energy-efficiency-forecast

FINAL 2015 ENERGY-EFFICIENCY FORECAST SUMMARY

Summary of 2015 Forecast

- Final forecast results are largely unchanged from the 2014 forecast results due to offsetting increases and decreases in forecasted EE production
- Program performance changes from the 2014 forecast include:
  - Production cost increased slightly, except for ME and MA, resulting in a decrease in energy reductions from equivalent budget $
  - Peak-to-Energy Ratios changed in multiple directions, decreasing in ME, NH and VT, while remaining mostly unchanged in CT, RI and MA
  - MA budget spending increased while ME, NH and VT decreased
- Results vary state by state
- Generally, energy remains flat for the region
- Generally, demand reductions from EE slows the peak growth rate in the region

EE FORECAST ASSUMPTIONS

EE Forecast Model General Assumptions

- Annual EE budgets provided by the Commissions or representatives on their behalf were used in the model and held constant in years after the latest approved budget
- Realization Rate and Percent Spent variables were combined into a single Budget Spend Rate adjustment
- Production cost baselines were derived from a three-year average of recent performance
- The production cost escalation rate was set at 5% per year
- Inflation rate was set at 2.5% per year
- Peak-to-Energy Ratios were derived from a three-year average of recent performance and held constant through forecast period*
- Current CELT/RSP energy forecast used in conjunction with SBCs to forecast SBC dollars

* Due to significant changes in Maine's three-year planned production information, provided by the EMT, as compared to the information provided for the 2014 Forecast, the rolling average for P/E and production cost was used in the 2015 Forecast

2015 Updated EE Forecast Model Implementation Assumptions

- 2014 CELT/RSP Energy Forecast
- 2014 CELT FCM CSOs and FCA9 Clearing Price for calculating budget $
- Production Cost: Updated with PA 2011-2013 average
- Production Cost Escalation Rate: Remains 5% + 2.5% inflation
- Peak-to-Energy Ratio: Updated with PA 2011-2013 average
- State Budget Data: ME, NH, VT, RI and CT submitted updated budgets
- Budget Spend Rate deduction: MA -10%, RI - 10%, and ME - 10%, based on average spend rates observed in PA data and large increases in budget $
- FCM revenue has no effect on overall budget in ME, VT, MA, and RI

Fundamentals of EE Forecast Model

1) MWh = [(1-BSR) * Budget $] / [$/MWh * PCINCR]

where:

Budget $ = an estimate of the dollars to be spent on EE ($)
(System Benefit Charge + RGGI + FCM + Policy)

BSR = budget spend rate (%)

$/MWh = production cost ($/MWh)

PCINCR = production cost increases (%)

2) MW = MWh * PER

where:

PER = peak-to-energy ratio (MW/MWh)

EE Forecast Model Budget Assumptions Regarding Forward Capacity Market

- FCM capacity clearing price was held constant at $9.95/kW-month,† the latest FCA clearing price for Capacity Commitment Period 2018-19
- ISO assumed that all achieved EE capacity would be bid into and clear in future FCA's‡
- The forecast calculated Capacity Supply Obligation was used to determine FCM contribution to budget

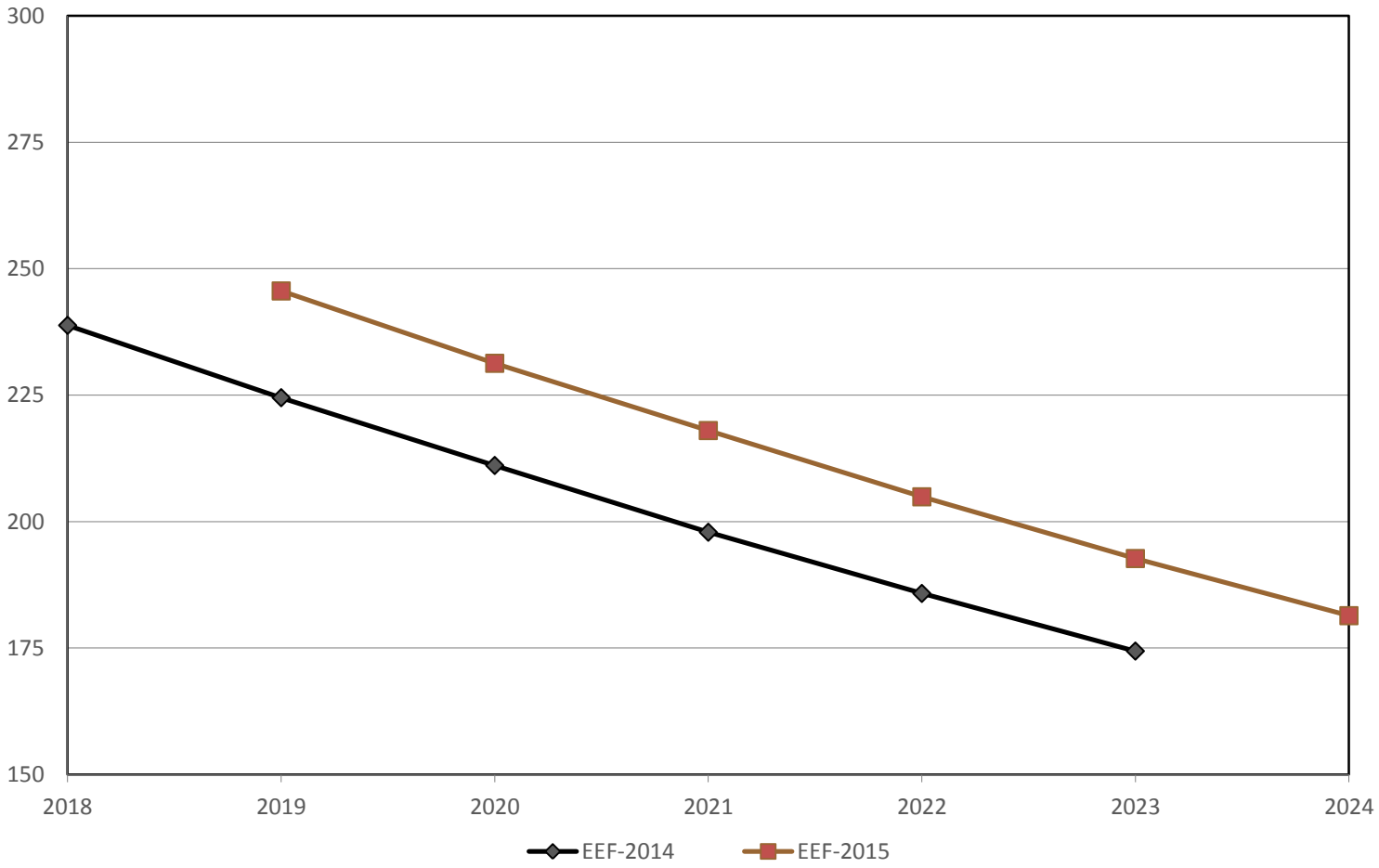
† FCA clearing price used is for modeling purposes only and should not be considered an indication of future clearing prices.
‡ The ISO assumption that all achieved EE capacity would be bid into and clear in future FCA's is only for modeling purposes and should not be considered an indication of any future FCA outcome.

COMPARISON OF FINAL 2015 AND 2014 EE FORECAST ENERGY AND DEMAND PLOTS

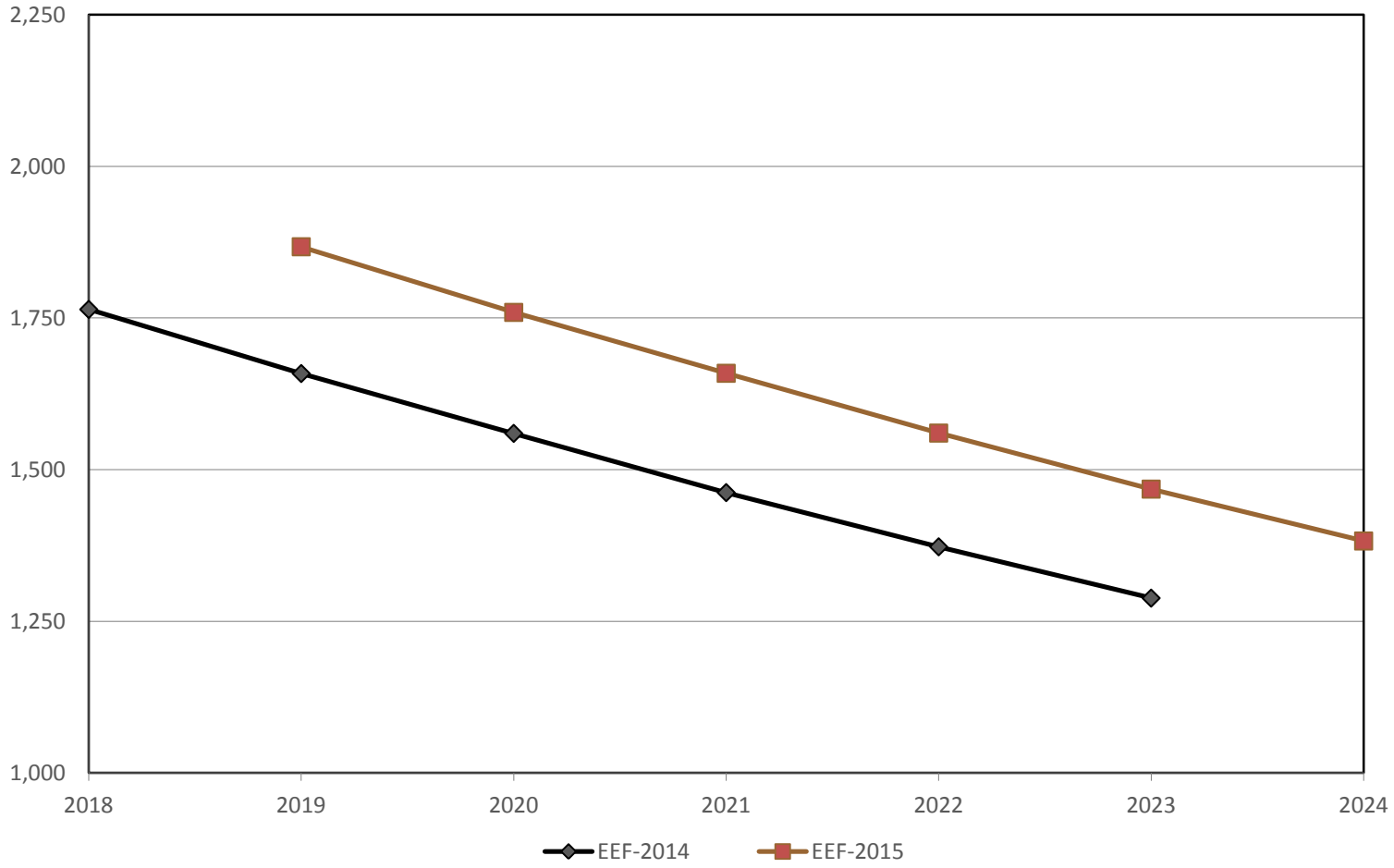
Comparison of EE Forecasts

	ISONE	ME	NH	VT	CT	RI	MA
PA Average Production Costs ($/MWh)							
2014 EE Forecast		337	320	317	353	380	394
2015 EE Forecast		162	370	334	377	403	392
PA Average Peak-Energy Ratio (MW/GWh)							
2014 EE Forecast		0.1410	0.1622	0.1409	0.1215	0.1546	0.1346
2015 EE Forecast		0.1047	0.1506	0.1332	0.1212	0.1597	0.1346
Total EE Dollars (1000s)							
2014 EE Forecast							
Total 18-23	5,737,385	312,000	226,937	375,924	1,284,898	470,827	3,066,797
Average	956,231	52,000	37,823	62,654	214,150	78,471	511,133
2015 EE Forecast							
Total 19-24	6,158,150	222,876	224,534	365,433	1,471,892	485,754	3,387,662
Average	1,026,358	37,146	37,422	60,906	245,315	80,959	564,610
Annual EE Energy Impacts (GWh)							
2014 EE Forecast							
Total 18-23	9,105	714	408	681	2,096	715	4,491
Average	1,518	119	68	113	349	119	749
2015 EE Forecast							
Total 19-24	9,696	791	349	628	2,246	696	4,986
Average	1,616	132	58	105	374	116	831
Summer EE Peak Impacts (MW)							
2014 EE Forecast							
Total 18-23	1,233	101	66	96	255	111	605
Average	205	17	11	16	42	18	101
2015 EE Forecast							
Total 19-24	1,274	83	52	84	272	111	671
Average	212	14	9	14	45	19	112

ISONE Energy Efficiency on Summer Peak (MW)



ISONE Energy Efficiency on Annual Energy (GWh)



EE PROGRAM DATA SUMMARY

PA Data Summary

	Budget $1000s	Total Costs $1000s	Achieved Annual Energy (MWh)	Dollars per MWh	Achieved Summer Peak (MW)	Dollars per MW	% Energy Achieved	% Budget Spent	% Peak Achieved	Peak to Energy Ratio MW/GWH
NE										
2009	357,939	352,374	933,803	377	149.8	2,352,646	83	98	94	0.160395
2010	524,416	500,979	1,371,179	365	191.5	2,616,574	103	96	95	0.139634
2011	665,087	518,865	1,575,303	329	200.4	2,588,875	90	78	75	0.127227
2012	745,761	648,848	1,723,357	377	221.4	2,930,061	98	87	86	0.128496
2013	726,651	706,010	1,822,458	387	253.1	2,789,903	108	97	105	0.138856
Avg 2011-13	712,499	624,574	1,707,039	366	225.0	2,776,194	99	88	88	0.131792
CT										
2009	102,183	73,412	222,501	330	34.1	2,150,156	60	72	63	0.153449
2010	143,544	144,938	405,043	358	49.9	2,907,363	113	101	105	0.123079
2011	129,909	119,426	381,974	313	43.1	2,769,483	93	92	87	0.112893
2012	120,177	121,826	308,428	395	40.2	3,032,727	131	101	124	0.130243
2013	97,955	121,612	271,480	448	33.3	3,648,327	139	124	130	0.122785
Avg 2011-13	116,013	120,955	320,627	377	38.9	3,111,342	114	104	109	0.121248
ME										
2009	0	13,806	55,176	250	6.5	2,127,603	662	0	472	0.117601
2010	0	16,846	74,180	227	7.7	2,198,392	101	0	102	0.103303
2011	0	22,817	152,664	150	18.3	1,248,321	117	0	100	0.119730
2012	0	23,713	143,532	165	12.5	1,904,493	101	0	114	0.086746
2013	0	24,279	141,978	171	15.1	1,604,008	0	0	0	0.106613
Avg 2011-13	0	23,603	146,058	162	15.3	1,543,830	109	0	107	0.104675
MA										
2009	183,782	192,362	424,652	453	69.9	2,751,526	81	105	99	0.164631
2010	294,315	253,086	619,638	408	91.4	2,769,183	99	86	90	0.147496
2011	432,796	283,898	777,100	365	100.6	2,823,156	86	66	67	0.129405
2012	508,988	400,607	980,105	409	125.3	3,198,071	88	79	75	0.127808
2013	499,734	438,951	1,108,907	396	160.1	2,742,348	93	88	92	0.144344
Avg 2011-13	480,506	374,485	955,371	392	128.6	2,911,341	89	78	79	0.134639

PA Data Summary, cont.

	Budget $1000s	Total Costs $1000s	Achieved Annual Energy (MWh)	Dollars per MWh	Achieved Summer Peak (MW)	Dollars per MW	% Energy Achieved	% Budget Spent	% Peak Achieved	Peak to Energy Ratio MW/GWH
NH										
2009	18,286	17,988	59,691	301	9.5	1,889,480	139	98	137	0.159488
2010	21,866	21,763	73,710	295	12.4	1,759,992	121	100	117	0.167759
2011	17,667	18,904	58,042	326	9.9	1,910,675	123	107	121	0.170458
2012	19,673	18,703	53,973	347	7.9	2,376,082	106	95	101	0.145835
2013	26,442	25,552	58,834	434	8.0	3,207,111	111	97	107	0.135421
Avg 2011-13	21,261	21,053	56,950	370	8.6	2,454,444	113	99	110	0.150614
RI										
2009	24,555	26,211	81,543	321	15.4	1,702,261	103	107	124	0.188828
2010	30,366	27,581	81,275	339	12.7	2,163,691	107	91	78	0.156838
2011	48,649	36,495	96,009	380	13.7	2,673,394	94	75	71	0.142185
2012	61,246	48,870	119,666	408	19.5	2,504,012	93	80	82	0.163091
2013	64,179	61,547	149,033	413	25.1	2,453,409	104	96	123	0.168327
Avg 2011-13	58,025	48,970	121,569	403	19.4	2,521,913	97	84	92	0.159727
VT										
2009	29,134	28,597	90,240	317	14.3	1,997,246	92	98	104	0.158666
2010	34,326	36,764	117,334	313	17.4	2,107,775	88	107	93	0.148653
2011	36,066	37,325	109,514	341	14.9	2,502,506	72	104	69	0.136192
2012	35,678	35,130	117,653	299	16.2	2,172,427	119	99	109	0.137447
2013	38,341	34,068	92,226	369	11.5	2,969,952	94	89	77	0.124379
Avg 2011-13	36,695	35,508	106,464	334	14.2	2,503,078	92	97	83	0.133243

EE FORECAST INPUT DATA

FCM and RGGI Dollars

RGGI Dollars ($1000s)							
	ME	NH	VT	CT	RI	MA	ISONE
Applied to EE Annually	0	2,600	0	12,000	4,300	30,000	48,900
FCM MW							
	ME	NH	VT	CT	RI	MA	ISONE
2018	181	83	119	422	198	1,153	2,156
FCM Dollars ($1000s, clearing price 9.55*)							
	ME	NH	VT	CT	RI	MA	ISONE
2018	20,735	9,516	13,660	48,335	22,671	132,178	247,095
FCM Dollars for EE ($1000s)							
	ME	NH	VT	CT	RI	MA	ISONE
2019	0	9,516	0	48,335	22,671	132,178	212,700
2020	0	9,516	0	48,335	22,671	132,178	212,700
2021	0	9,516	0	48,335	22,671	132,178	212,700
2022	0	9,516	0	48,335	22,671	132,178	212,700
2023	0	9,516	0	48,335	22,671	132,178	212,700
2024	0	9,516	0	48,335	22,671	132,178	212,700

* Auction clearing price for Rest-of-Pool

Energy Forecast

2014 RSP Energy Forecast (GWh)							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	12,875	13,210	6,975	36,290	9,220	68,055	146,625
2020	12,945	13,335	7,025	36,585	9,280	68,665	147,835
2021	13,020	13,455	7,070	36,885	9,340	69,285	149,055
2022	13,100	13,575	7,125	37,185	9,400	69,905	150,290
2023	13,175	13,700	7,175	37,495	9,455	70,530	151,530
2024	13,240	13,815	7,225	37,795	9,510	71,120	152,705
2014 RSP Energy Forecast - FCM Passive Demand Resources (GWh)							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	11,840	12,797	6,151	34,442	8,445	63,481	137,156
2020	11,907	12,920	6,199	34,731	8,503	64,078	138,337
2021	11,985	13,042	6,246	35,037	8,565	64,711	139,586
2022	12,065	13,162	6,301	35,337	8,625	65,331	140,821
2023	12,140	13,287	6,351	35,647	8,680	65,956	142,061
2024	12,202	13,400	6,399	35,941	8,733	66,533	143,207
SBC Eligibility	75	100	100	94	100	86	
SBC Eligible 2014 RSP Energy Forecast - FCM Passive Demand Resources (GWh)							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	8,880	12,797	6,151	32,238	8,445	54,594	123,104
2020	8,930	12,920	6,199	32,509	8,503	55,107	124,167
2021	8,989	13,042	6,246	32,795	8,565	55,652	125,288
2022	9,049	13,162	6,301	33,076	8,625	56,185	126,397
2023	9,105	13,287	6,351	33,366	8,680	56,722	127,511
2024	9,151	13,400	6,399	33,641	8,733	57,218	128,542

Energy Sales (GWh) and System Benefit Charge ($)

SALES (GWh)							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	8,377	12,072	5,803	30,413	7,967	51,504	116,136
2020	8,425	12,189	5,848	30,669	8,021	51,987	117,139
2021	8,480	12,303	5,892	30,938	8,080	52,502	118,196
2022	8,536	12,417	5,944	31,203	8,137	53,005	119,242
2023	8,589	12,535	5,991	31,477	8,189	53,512	120,293
2024	8,633	12,642	6,036	31,737	8,238	53,979	121,266
SBC Dollars ($1000s)							
	ME	NH	VT	CT	RI	MA	
SBC Rate ($/kwh)	0.00000	0.00180	0.00000	0.00300	0.00880	0.00250	
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	0	21,730	0	91,239	61,584	128,759	303,313
2020	0	21,940	0	92,006	60,531	129,969	304,445
2021	0	22,146	0	92,815	59,622	131,254	305,838
2022	0	22,350	0	93,610	58,788	132,512	307,259
2023	0	22,562	0	94,431	57,996	133,779	308,769
2024	0	22,755	0	95,211	57,268	134,948	310,182
Total	0	133,483	0	559,312	355,789	791,221	1,839,806

* Adjusted to reflect lower portion of budget coming from SBC due to higher FCM revenue

Impacts of New EE on Revenue Streams

Lost SBC Dollars ($1000s)							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	0	113	0	1,252	1,364	2,430	5,159
2020	0	219	0	2,421	2,640	4,695	9,974
2021	0	318	0	3,511	3,834	6,806	14,469
2022	0	411	0	4,530	4,952	8,774	18,666
2023	0	497	0	5,480	5,998	10,608	22,584
2024	0	579	0	6,368	6,976	12,318	26,240
Total	0	2,137	0	23,562	25,764	45,631	97,092
New FCM Dollars ($1000s)							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	0	1,084	0	5,799	2,534	14,997	24,414
2020	0	2,100	0	11,211	4,905	28,975	47,191
2021	0	3,049	0	16,264	7,125	42,005	68,443
2022	0	3,938	0	20,980	9,203	54,150	88,271
2023	0	4,770	0	25,383	11,146	65,471	106,770
2024	0	5,549	0	29,492	12,964	76,022	124,027
Total	0	20,490	0	109,129	47,877	281,620	459,116

Policy Dollars and Total Budgets

Policy Dollars ($1000s)*							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	38,768	0	56,230	77,500	0	315,370	487,868
2020	39,737	0	57,763	77,500	0	306,002	481,002
2021	40,731	0	60,572	77,500	0	297,270	476,073
2022	41,749	0	61,497	77,500	0	289,131	469,877
2023	42,793	0	63,124	77,500	0	281,544	464,961
2024	43,863	0	66,247	77,500	0	274,473	462,083
Total	247,641	0	365,433	465,000	0	1,763,790	2,841,864

Total Budgets ($1000s)							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	34,891	34,817	56,230	233,621	80,753	556,987	997,299
2020	35,764	35,937	57,763	238,632	80,790	560,186	1,009,071
2021	36,658	36,994	60,572	243,403	80,896	563,311	1,021,833
2022	37,574	37,994	61,497	247,896	81,008	566,277	1,032,246
2023	38,513	38,951	63,124	252,169	81,104	569,128	1,042,989
2024	39,476	39,841	66,247	256,171	81,203	571,773	1,054,712
Total	222,876	224,534	365,433	1,471,892	485,754	3,387,662	6,158,150

* Policy Dollars are funds not from SBC, RGGI and FCM revenues. Policy Dollars are present in states that set the SBC rate based on budget alone (VT and ME) and states that have a surcharge to cover the balance of the total budget (MA and CT).

Production Costs and Peak-to-Energy Ratio

Production Cost Multiplier (includes inflation)

	ME	NH	VT	CT	RI	MA
2013	1.000	1.000	1.000	1.000	1.000	1.000
2014	1.075	1.075	1.075	1.075	1.075	1.075
2015	1.075	1.075	1.075	1.075	1.075	1.075
2016	1.075	1.075	1.075	1.075	1.075	1.075
2017	1.075	1.075	1.075	1.075	1.075	1.075
2018	1.075	1.075	1.075	1.075	1.075	1.075
2019	1.075	1.075	1.075	1.075	1.075	1.075
2020	1.075	1.075	1.075	1.075	1.075	1.075
2021	1.075	1.075	1.075	1.075	1.075	1.075
2022	1.075	1.075	1.075	1.075	1.075	1.075
2023	1.075	1.075	1.075	1.075	1.075	1.075
2024	1.075	1.075	1.075	1.075	1.075	1.075

Production Costs $/MWh

	ME	NH	VT	CT	RI	MA
2013	162	370	334	377	403	392
2014	174	398	359	405	433	421
2015	187	428	386	436	466	453
2016	201	460	415	468	501	487
2017	216	494	446	503	538	524
2018	233	531	480	541	579	563
2019	250	571	515	582	622	605
2020	269	614	554	625	669	650
2021	289	660	596	672	719	699
2022	311	709	640	723	773	752
2023	334	763	688	777	831	808
2024	359	820	740	835	893	869

Peak-to-Energy Ratio (MW/GWh)

ME	NH	VT	CT	RI	MA
0.1047	0.1506	0.1332	0.1212	0.1597	0.1346

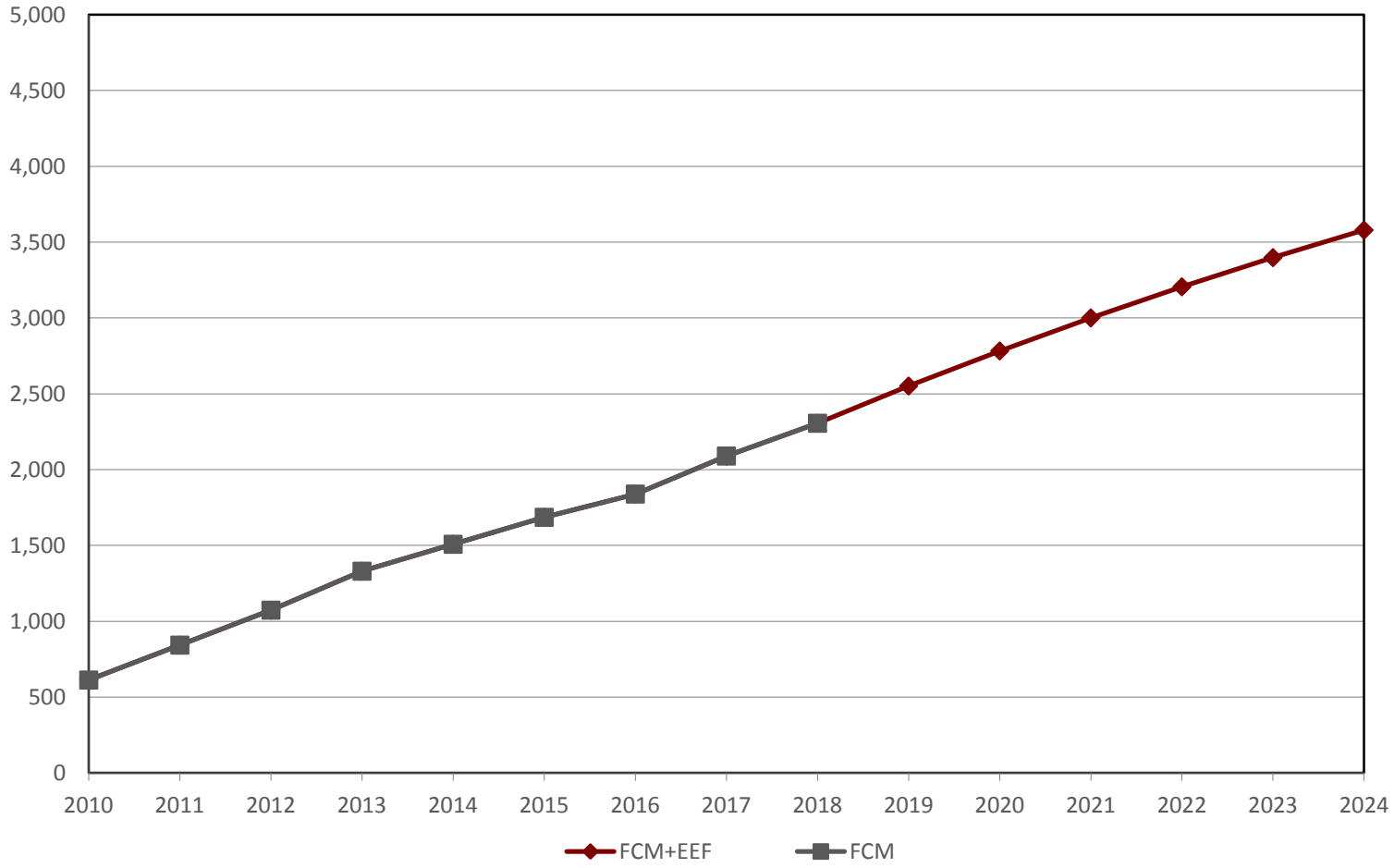
FINAL EE FORECAST RESULTS TABLE

Energy and Summer Peak EE Forecast Data

GWh Savings							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	148	65	116	426	138	976	1,867
2020	141	62	111	404	128	913	1,759
2021	134	59	108	384	119	854	1,659
2022	128	57	102	364	111	799	1,560
2023	122	54	97	344	104	747	1,468
2024	117	52	95	325	96	698	1,382
TOTAL 2019-24	791	349	628	2,246	696	4,986	9,696
AVERAGE	132	58	105	374	116	831	1,616
MW Savings							
	ME	NH	VT	CT	RI	MA	ISO-NE
2019	15	10	15	52	22	131	246
2020	15	9	15	49	20	123	231
2021	14	9	14	47	19	115	218
2022	13	9	14	44	18	108	205
2023	13	8	13	42	17	101	193
2024	12	8	13	39	15	94	181
TOTAL 2019-24	83	52	84	272	111	671	1,274
AVERAGE	14	9	14	45	19	112	212

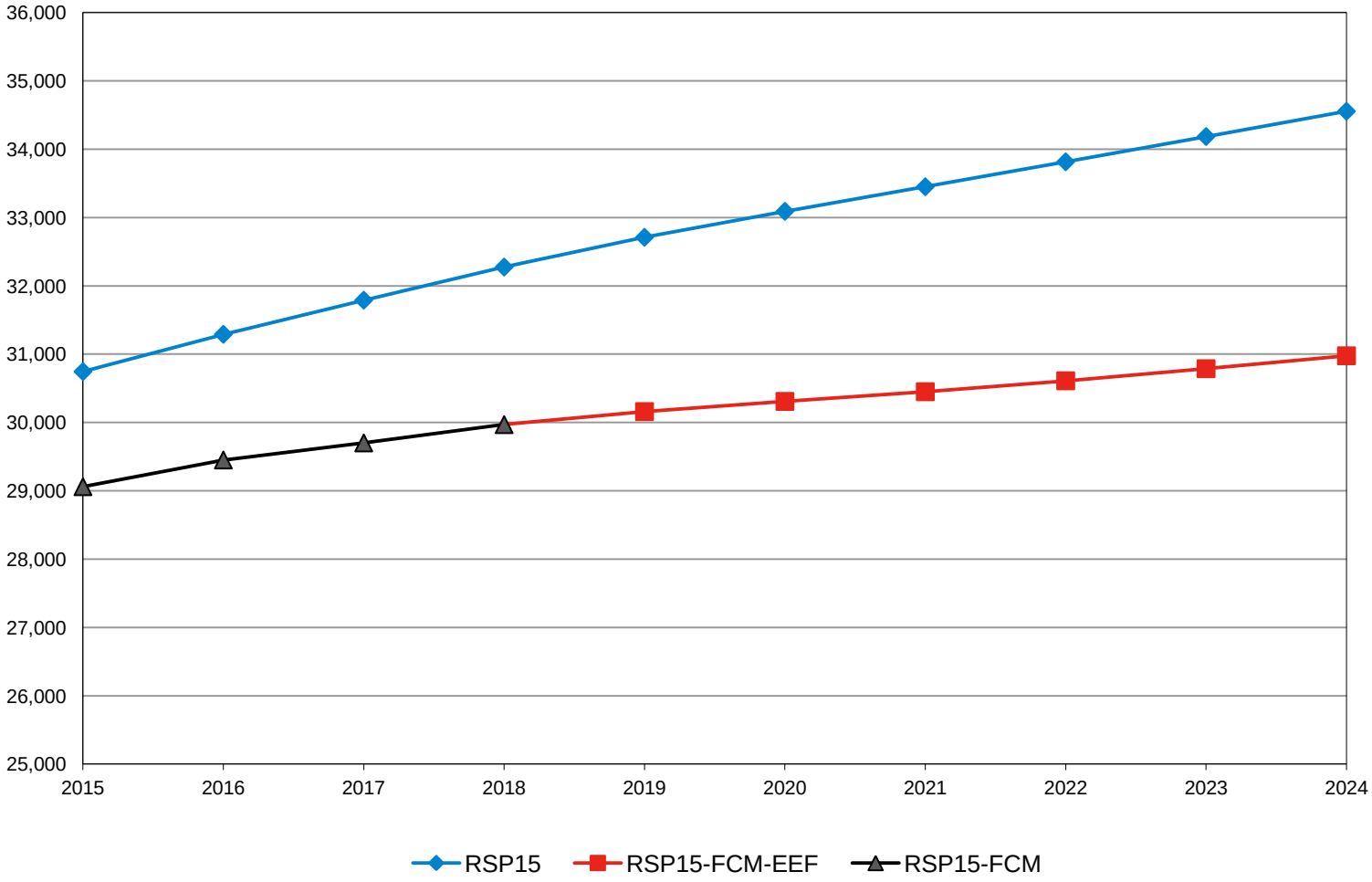
FINAL EE FORECAST DEMAND PLOTS

ISONE Energy Efficiency on Summer Peak (MW)

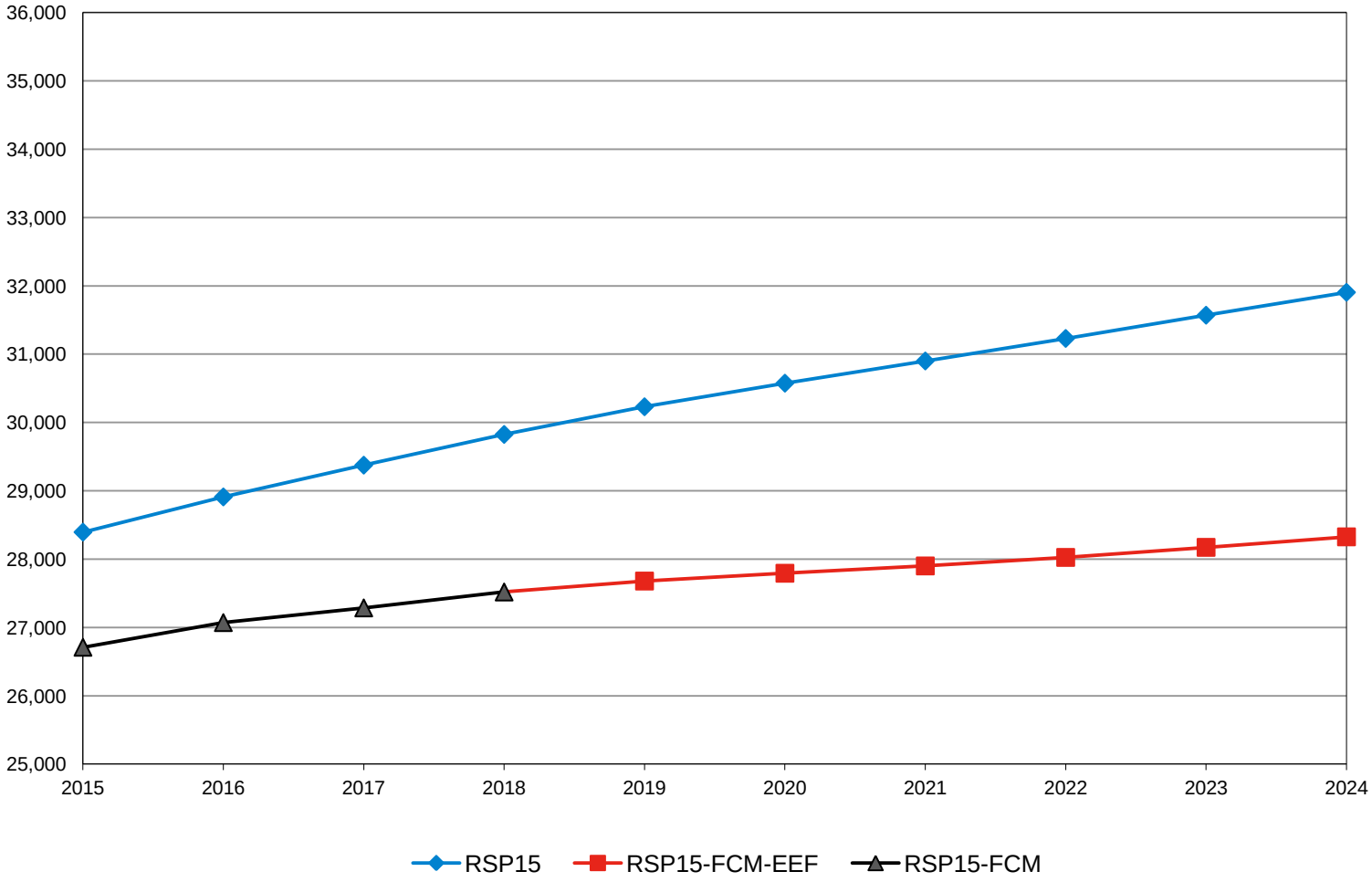


IMPACT OF FINAL EE FORECAST ON ENERGY AND SUMMER AND WINTER PEAK LOAD FORECAST

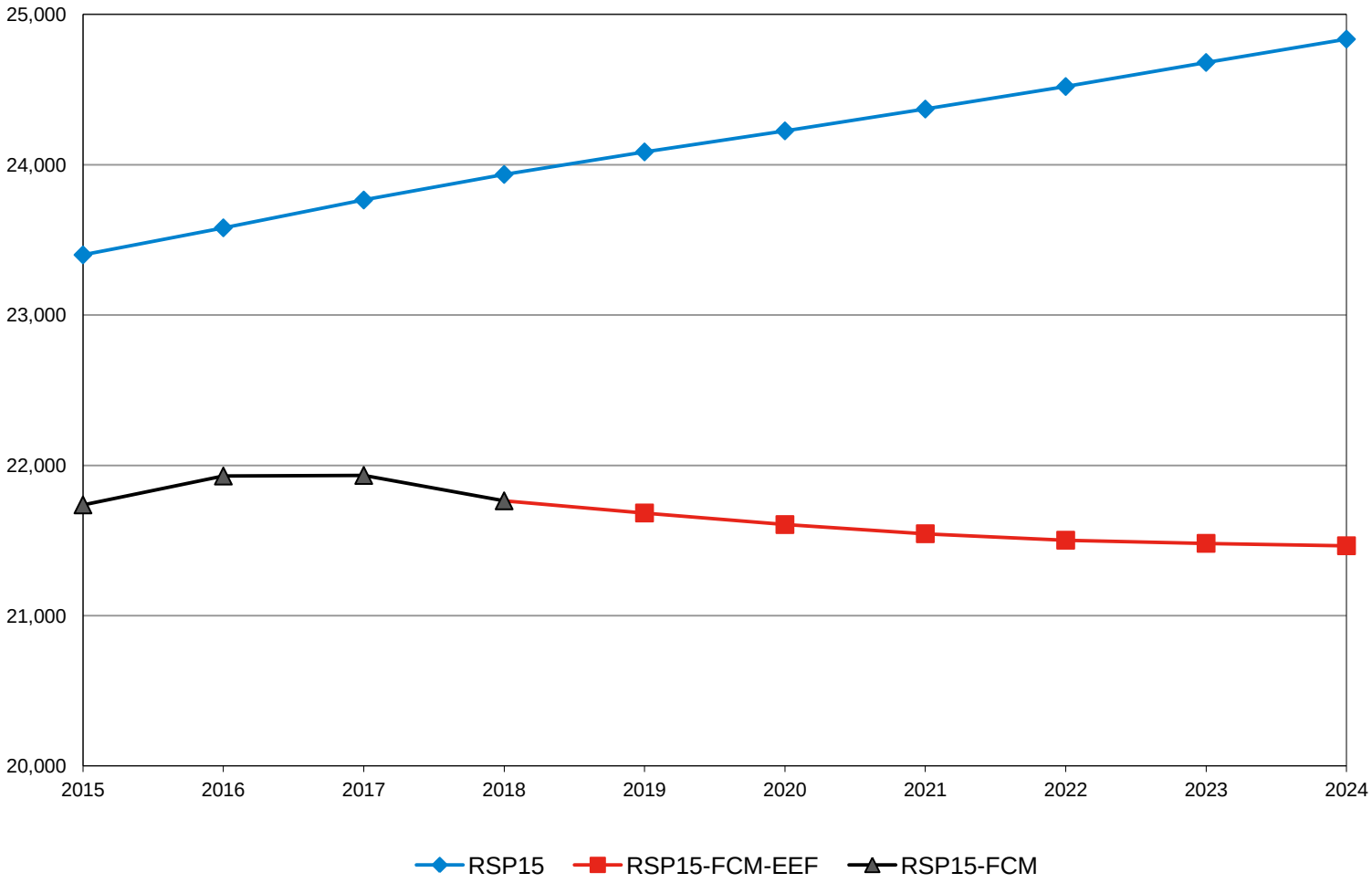
ISONE 90/10 Summer Peak: RSP15 Forecast (MW)



ISONE 50/50 Summer Peak: RSP15 Forecast (MW)

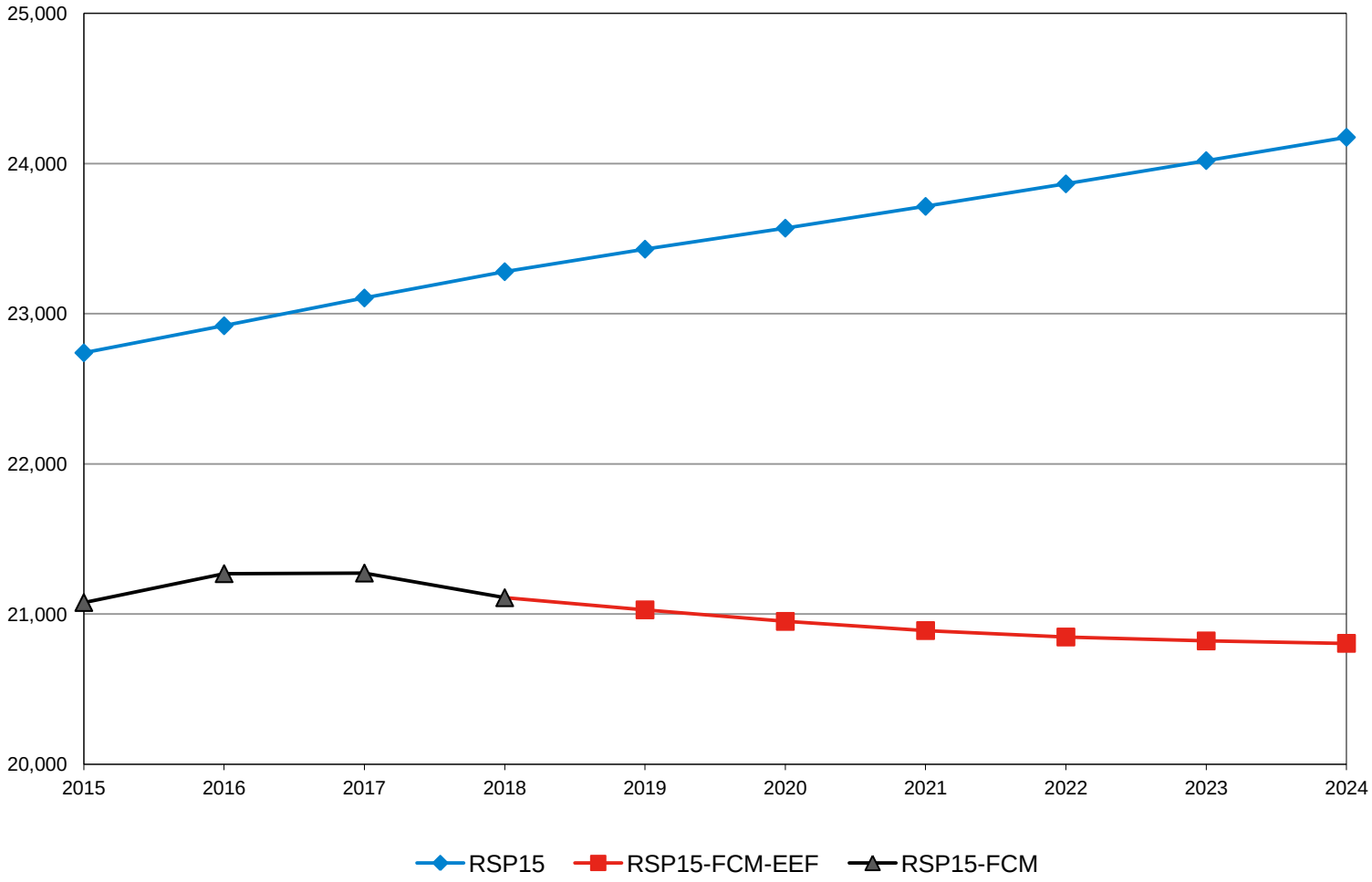


ISO-NE 90/10 Winter Peak: RSP15 Forecast (MW)



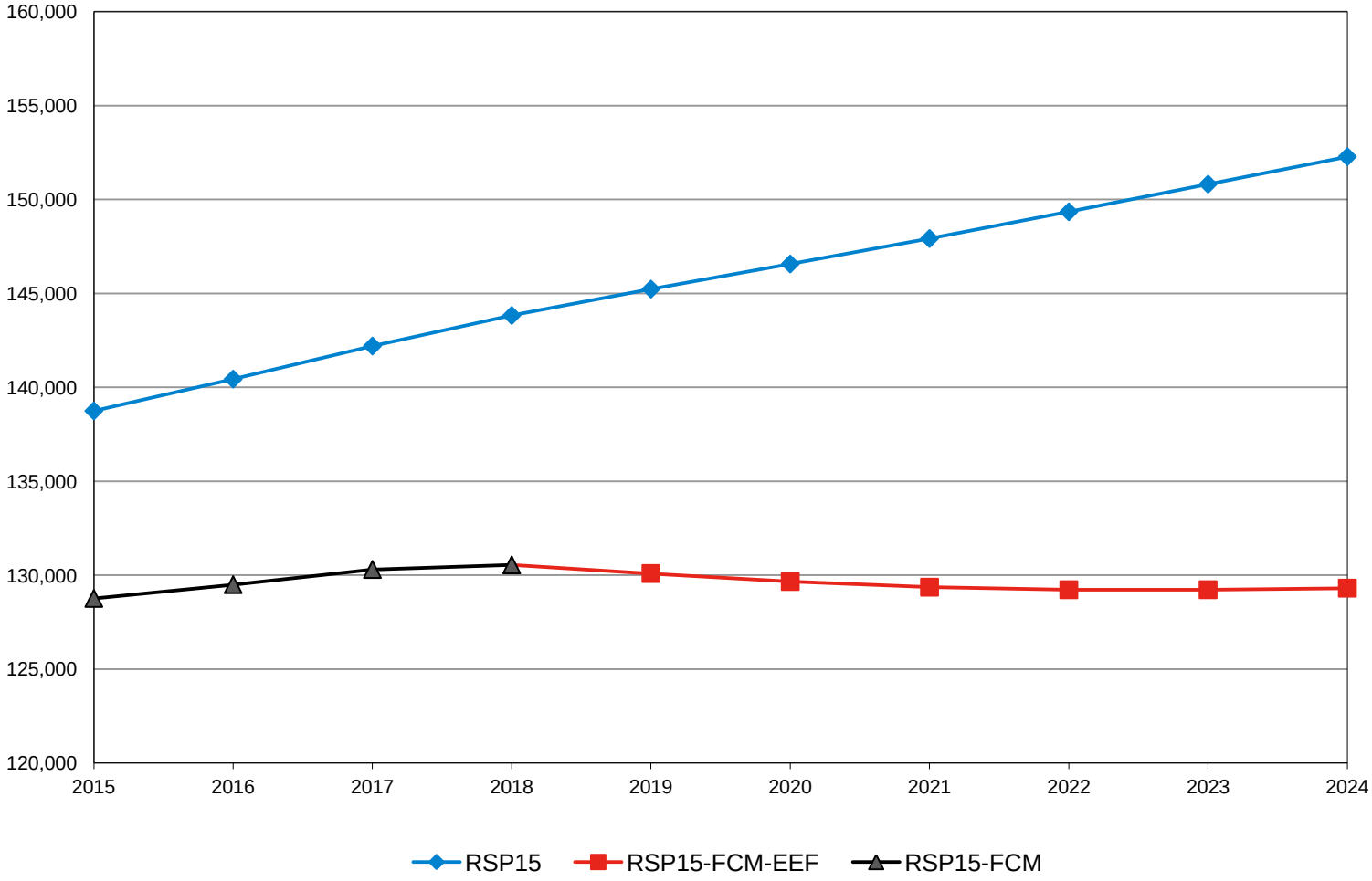
Note: Winter EE savings and reductions to the winter load forecast are based on the ratio of summer to winter FCM cleared capacity from FCA-9 and not PA performance data as reported for the 2015 EE forecast.

ISO-NE 50/50 Winter Peak: RSP15 Forecast (MW)



Note: Winter EE savings and reductions to the winter load forecast are based on the ratio of summer to winter FCM cleared capacity from FCA-9 and not PA performance data as reported for the 2015 EE forecast.

ISONE Annual Energy: RSP15 Forecast (GWh)

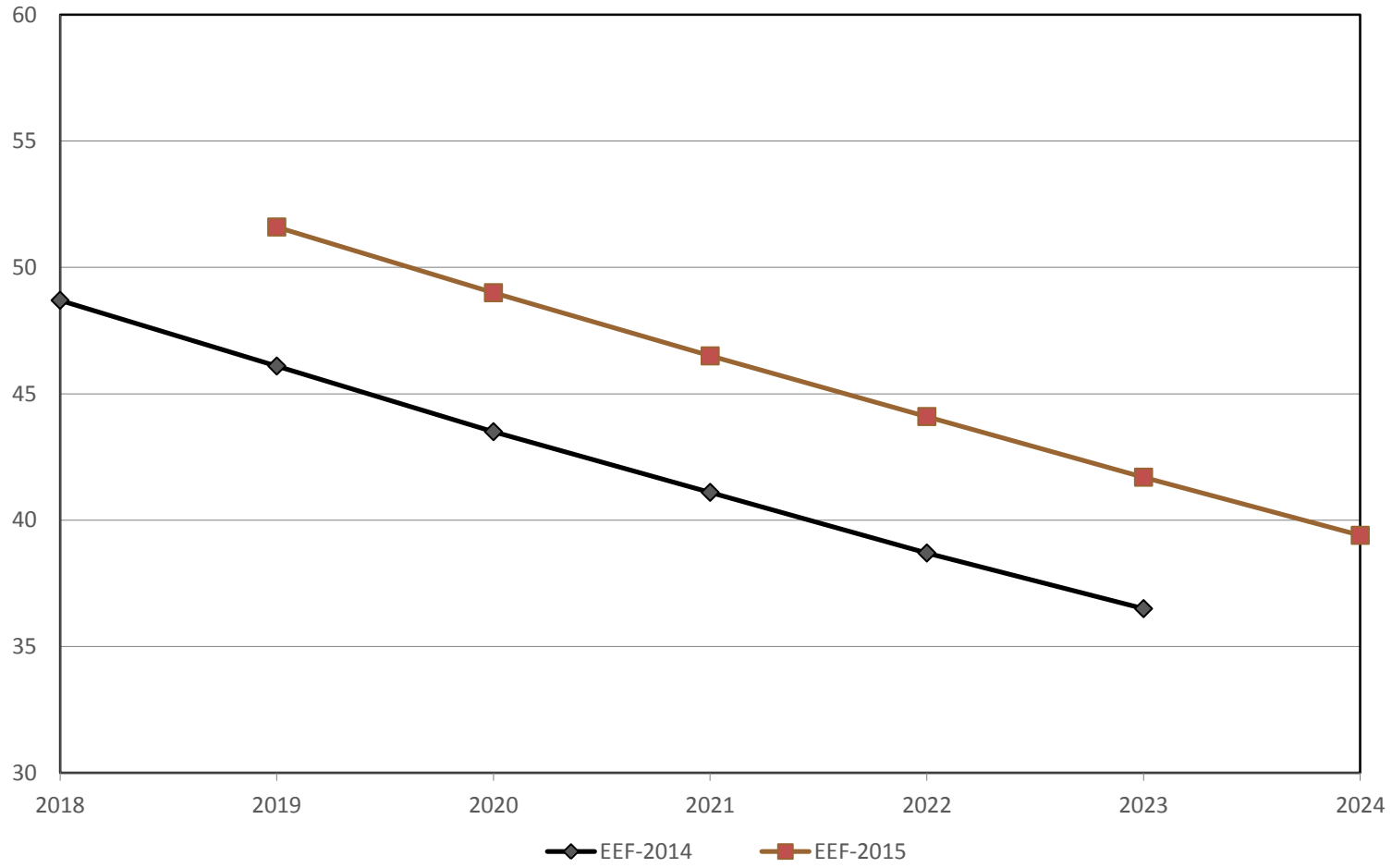


STATE FORECASTS

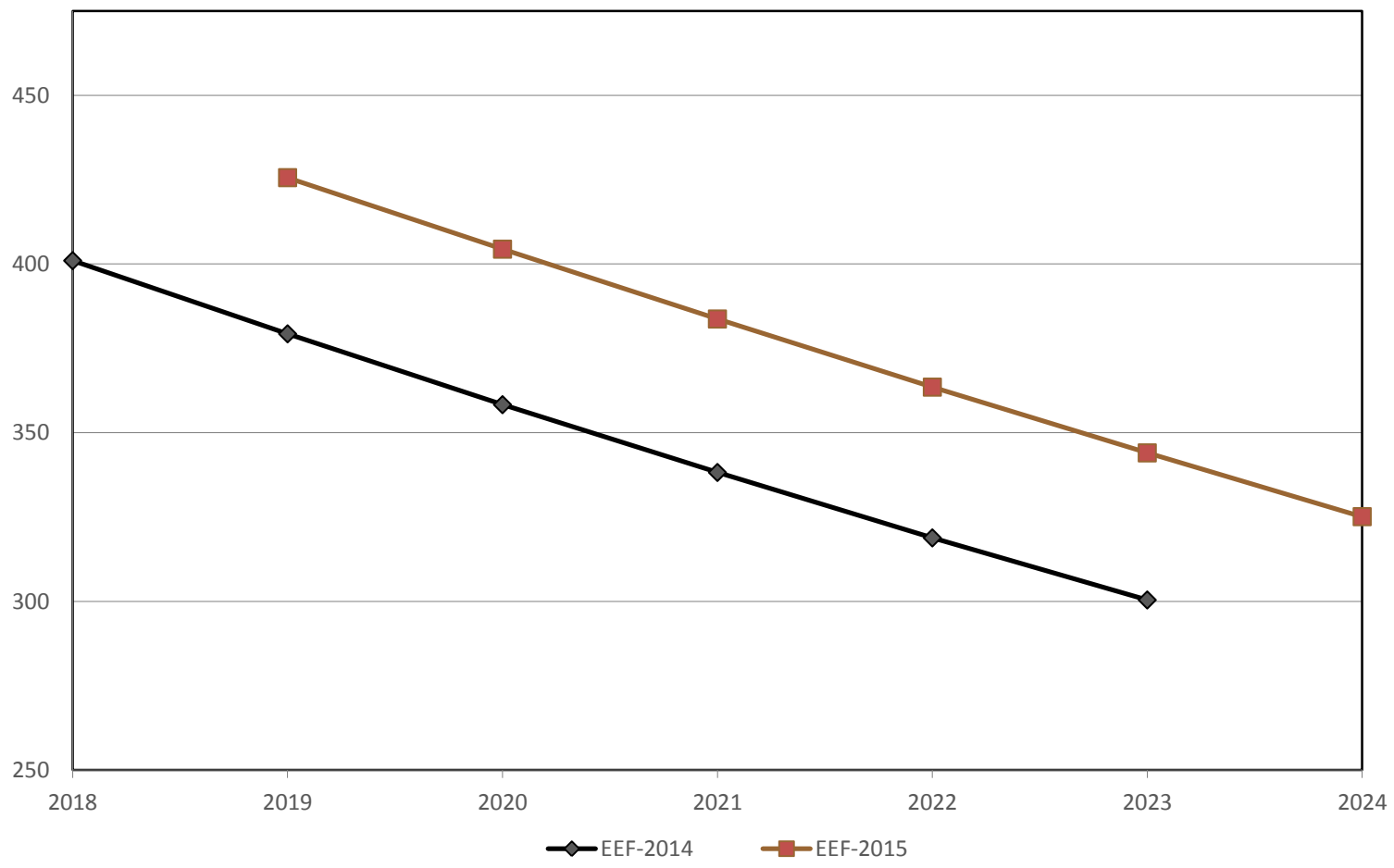
State-Level Assumptions - Connecticut

- Budget: Based on commission approved 2014 budget
- Budget Spend Rate: not applicable
- Production Cost: Based on average of 2011-2013 PA data
- Production Cost Escalation Rate: 5% + 2.5% inflation
- Peak to Energy Ratio: Based on average of 2011 -2013 PA data

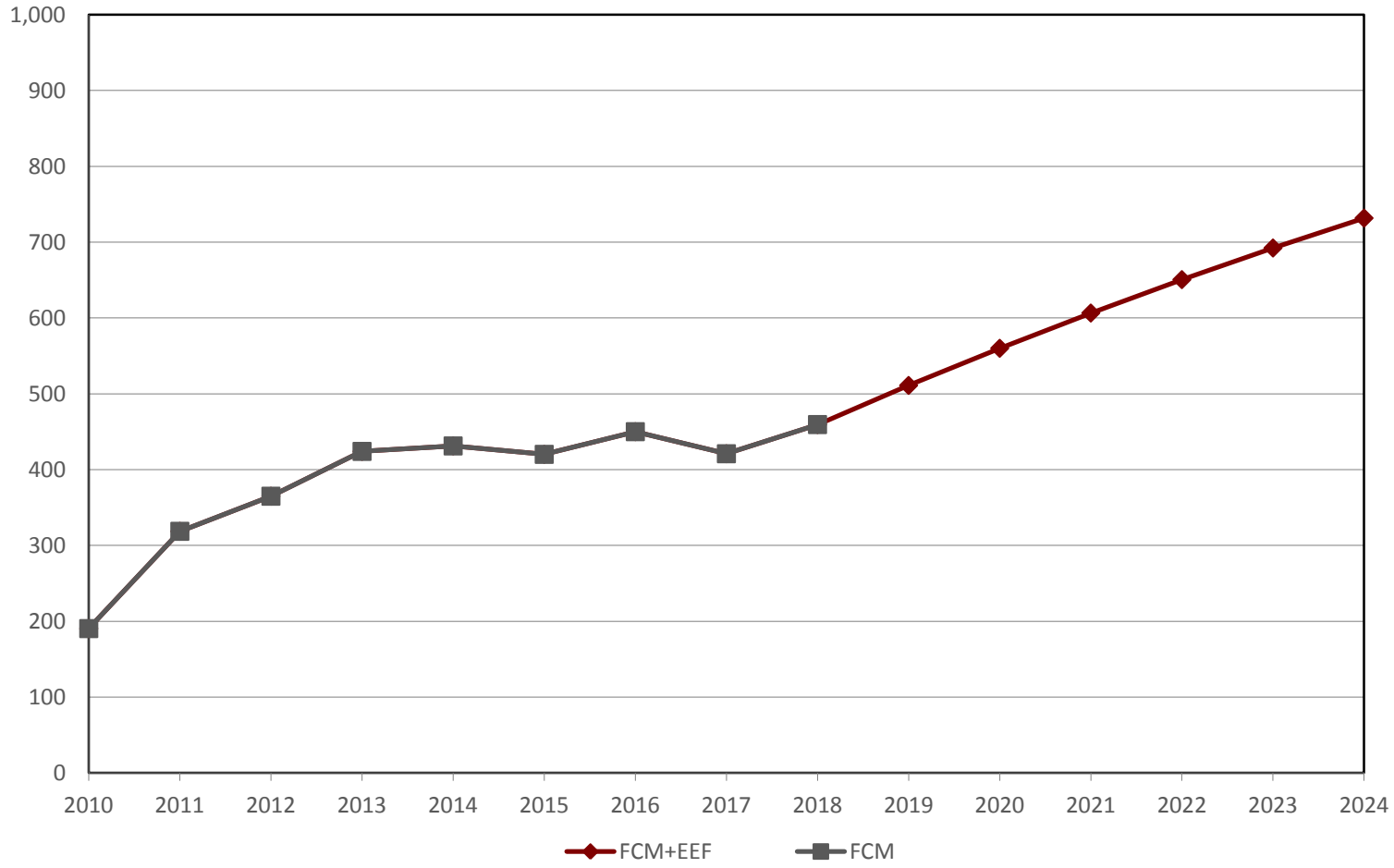
CT Energy Efficiency on Summer Peak (MW)



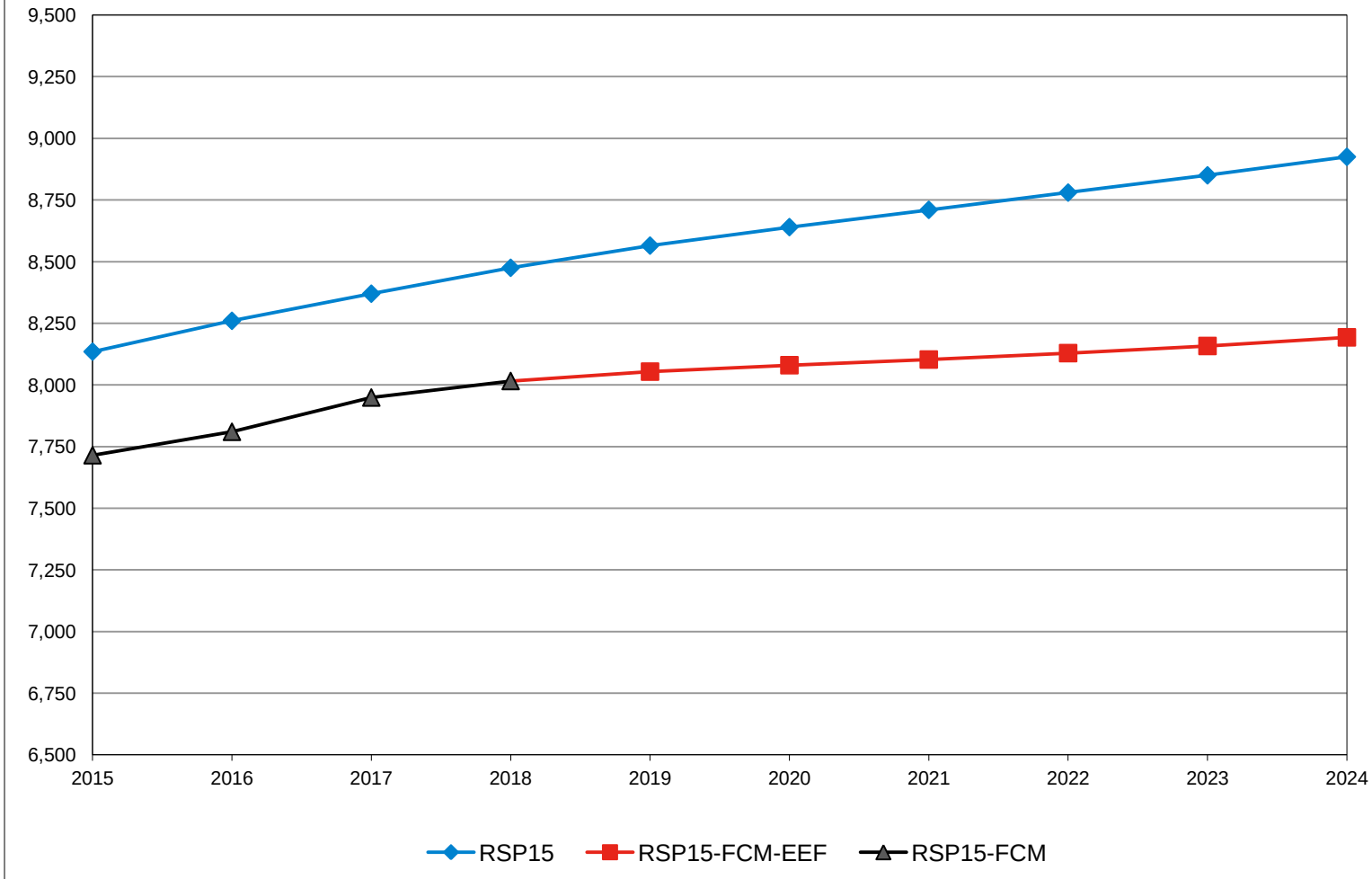
CT Energy Efficiency on Annual Energy (GWh)



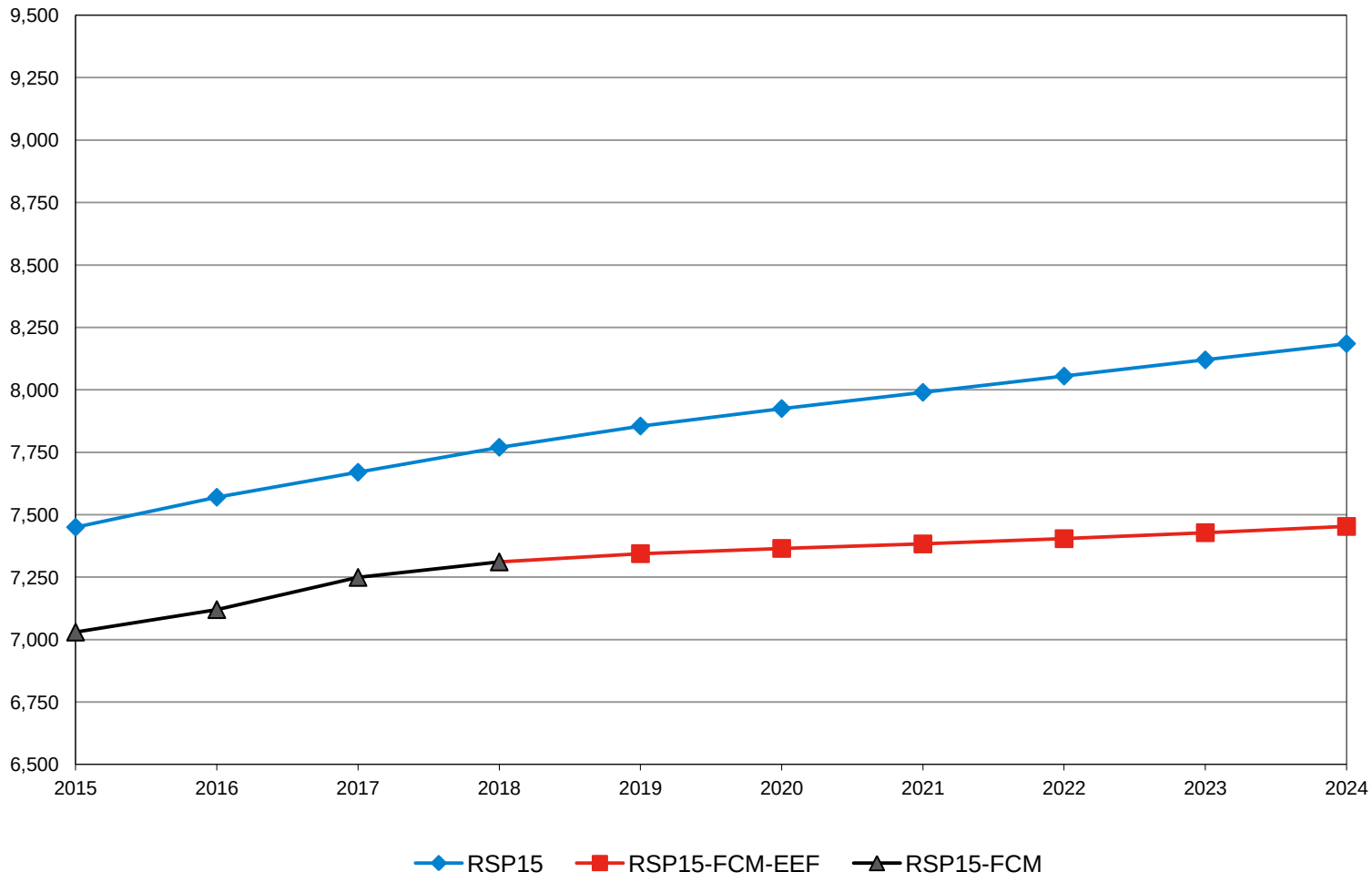
CT Energy Efficiency on Summer Peak (MW)



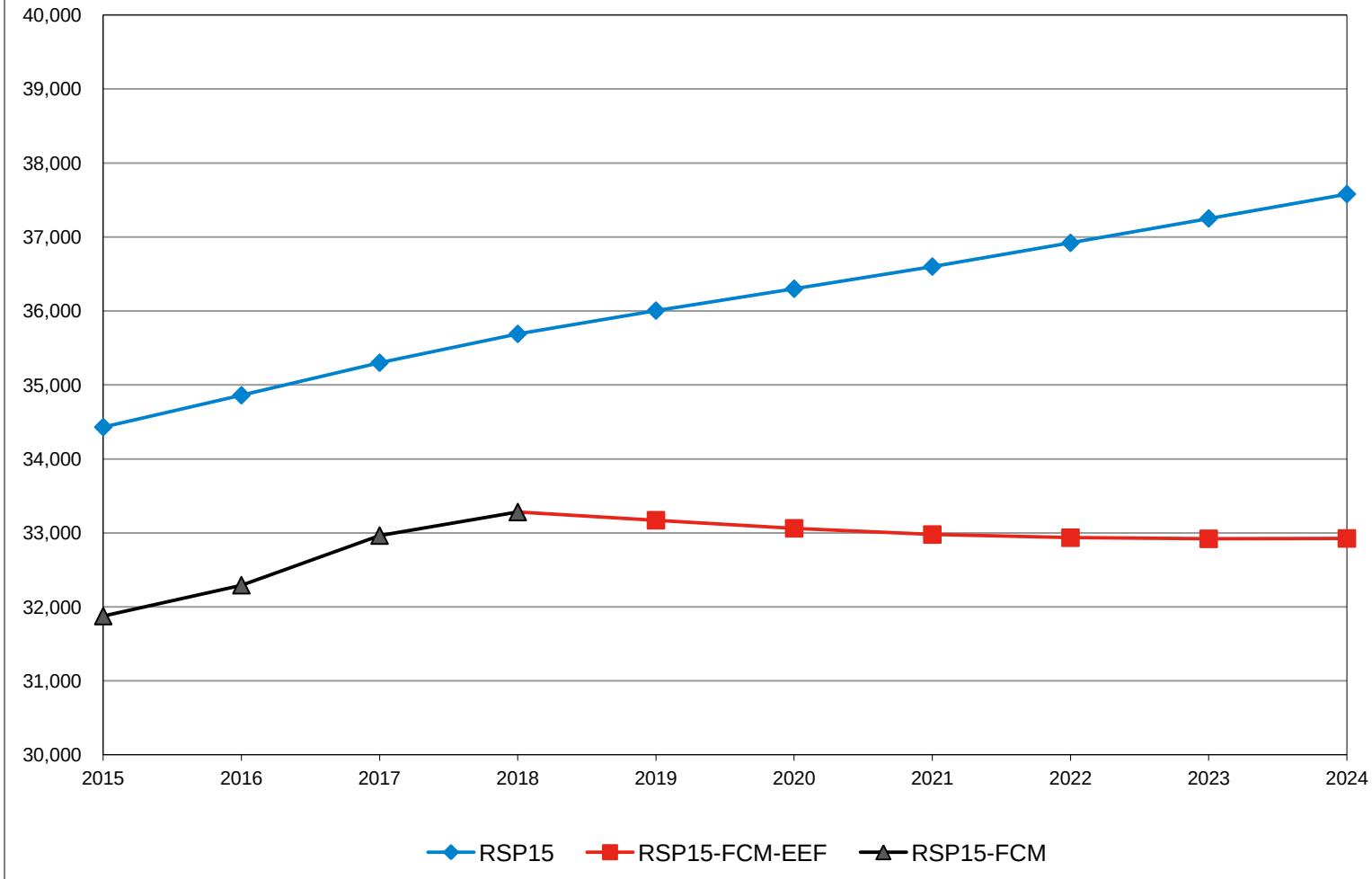
CT 90/10 Summer Peak: RSP15 Forecast (MW)



CT 50/50 Summer Peak: RSP15 Forecast (MW)



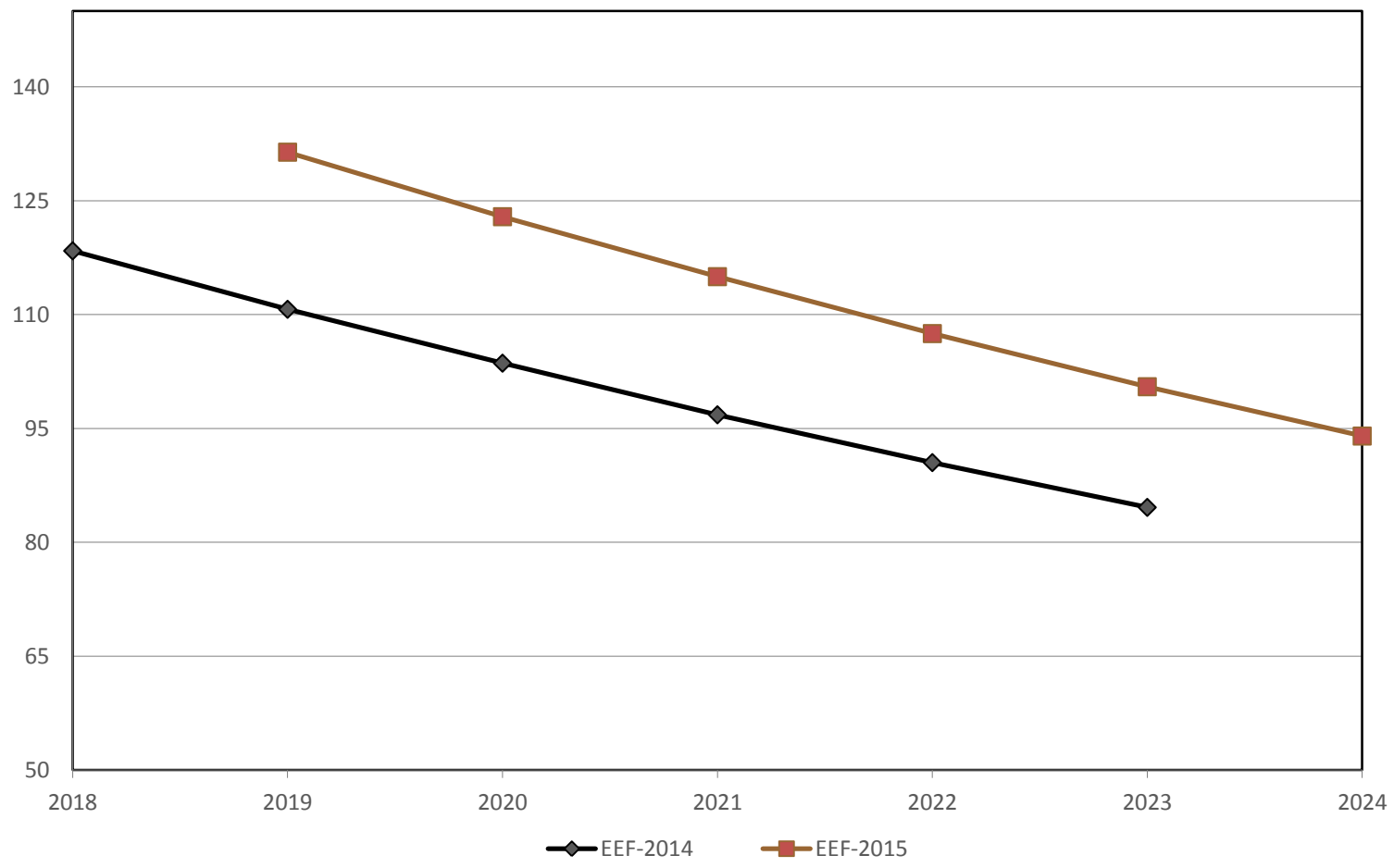
CT Annual Energy: RSP15 Forecast (GWh)



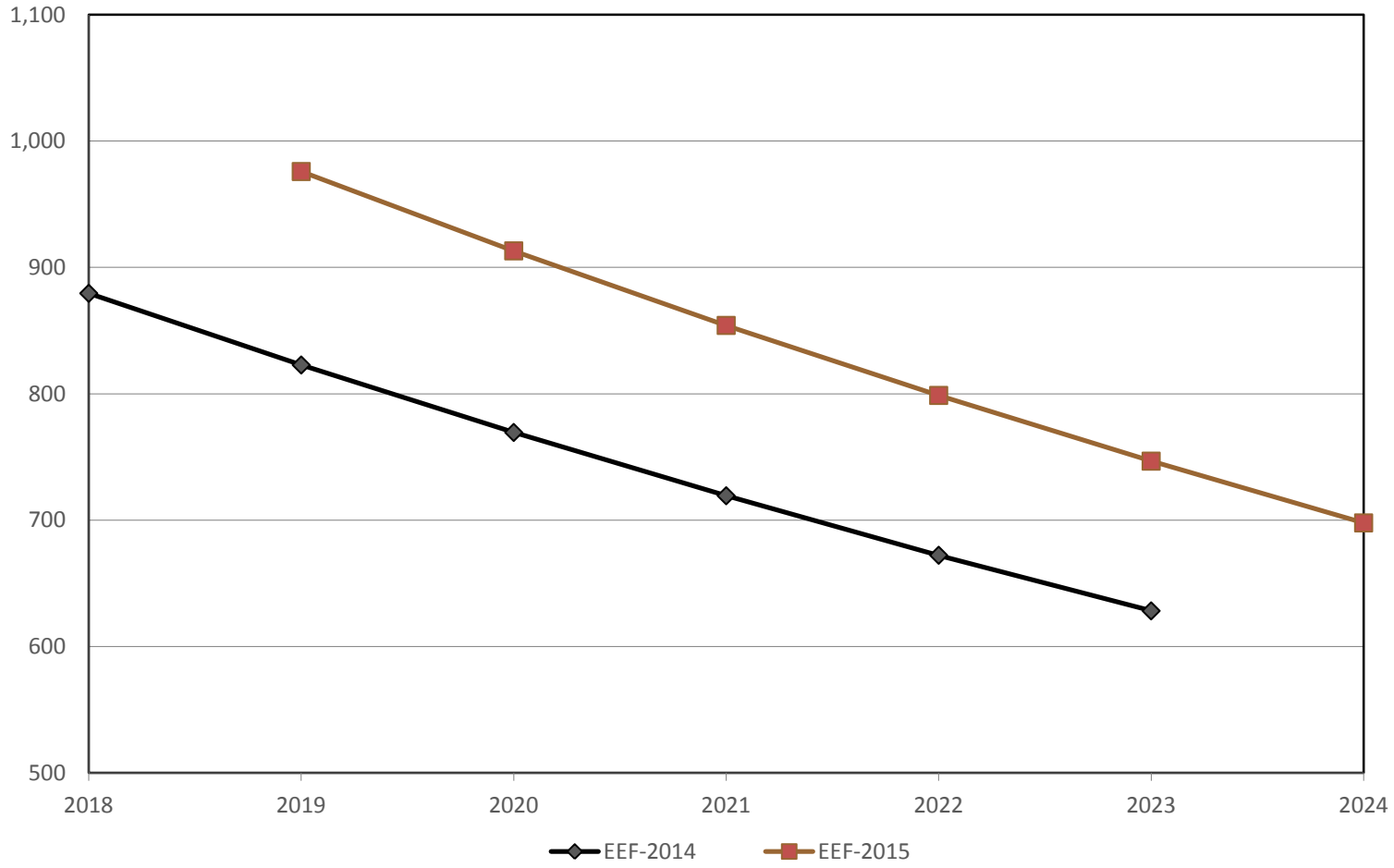
State-Level Assumptions - Massachusetts

- Budget: Based on commission approved 2013-2015 budget
- Budget Spend Rate: 10% (deduction)
- Production Cost: Based on average of 2011 -2013 PA data
- Production Cost Escalation Rate: 5% + 2.5% inflation
- Peak to Energy Ratio: Based on average of 2011-2013 PA data

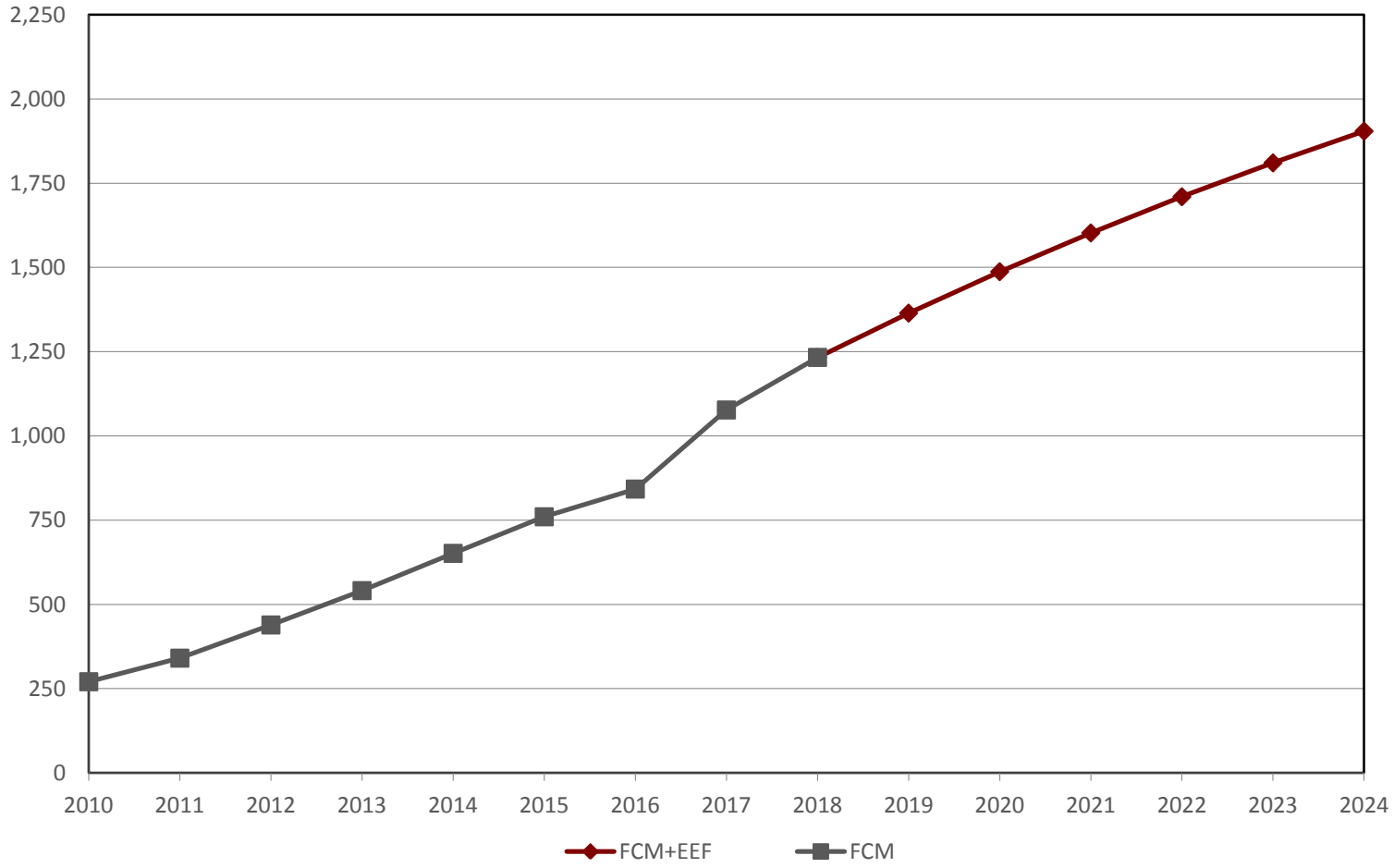
MA Energy Efficiency on Summer Peak (MW)



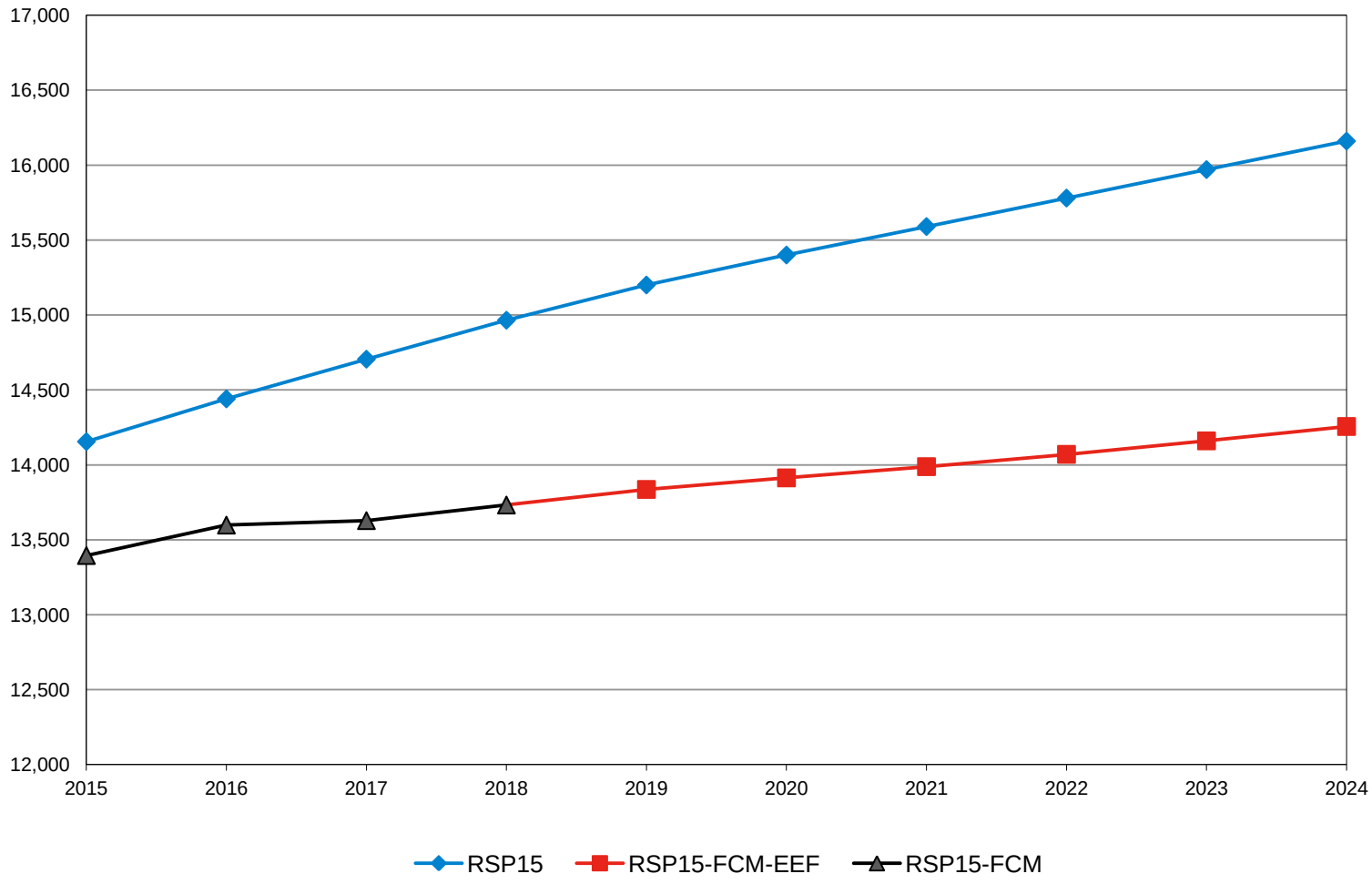
MA Energy Efficiency on Annual Energy (GWh)



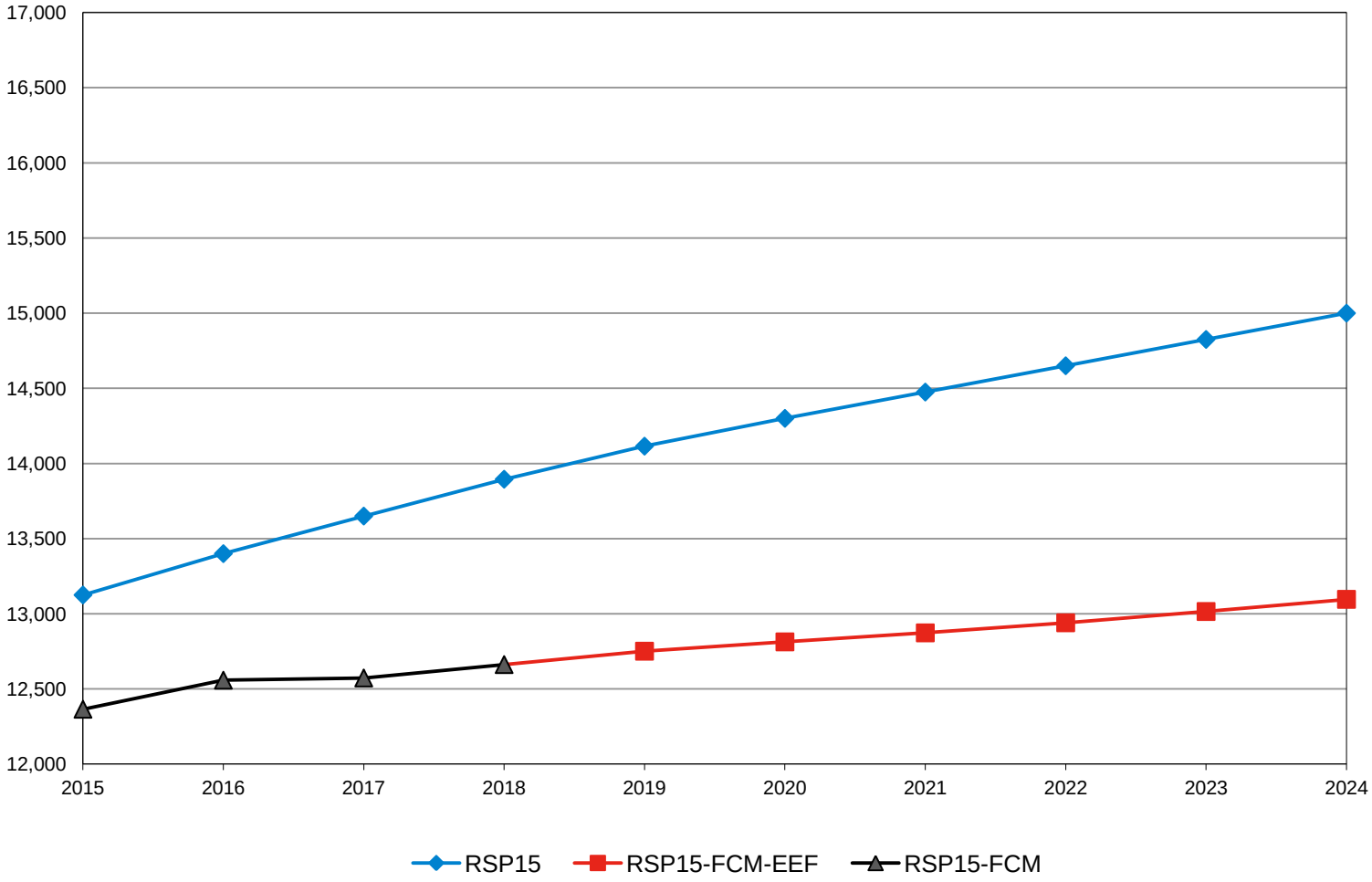
MA Energy Efficiency on Summer Peak (MW)



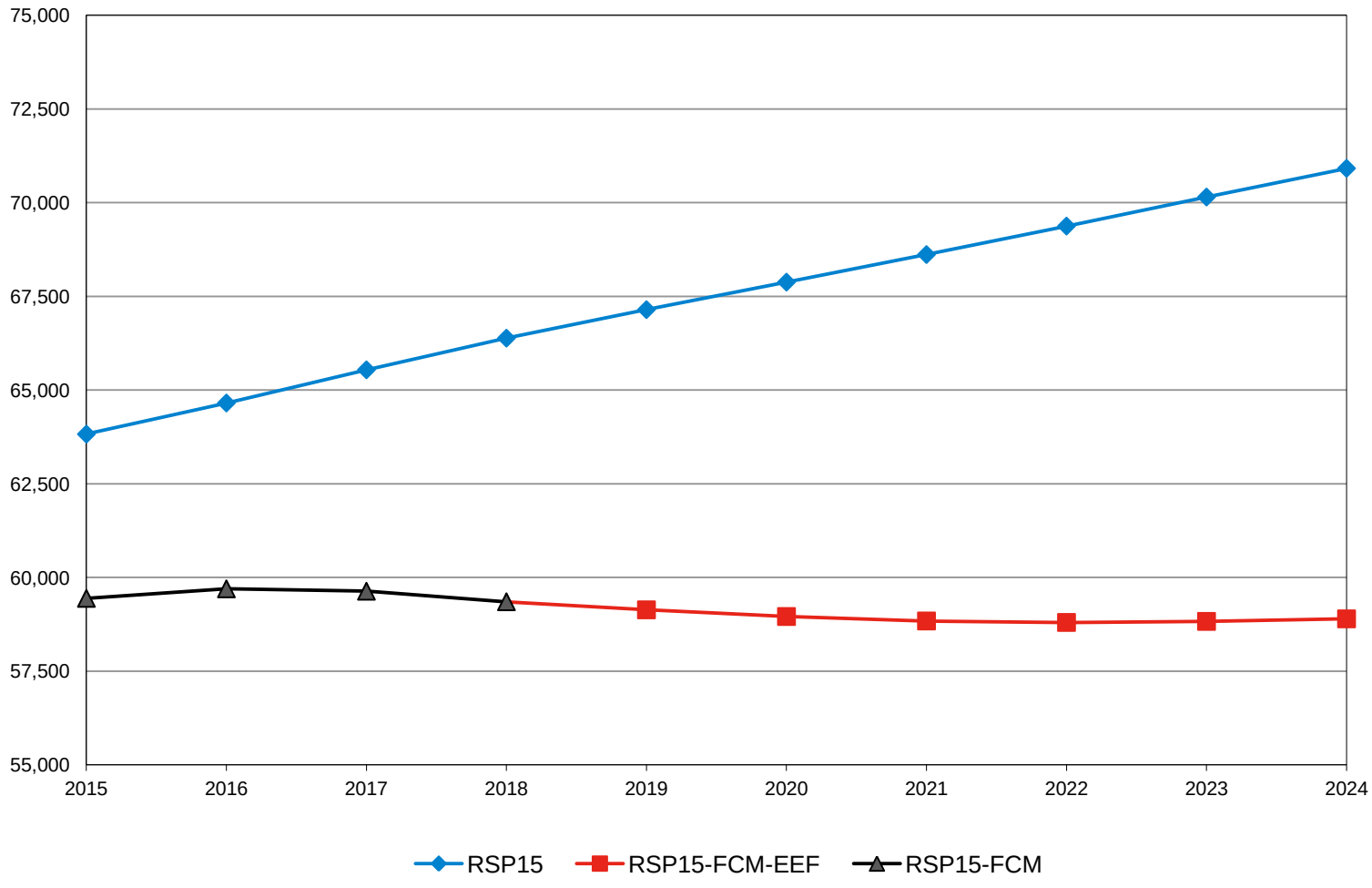
MA 90/10 Summer Peak: RSP15 Forecast (MW)



MA 50/50 Summer Peak: RSP15 Forecast (MW)



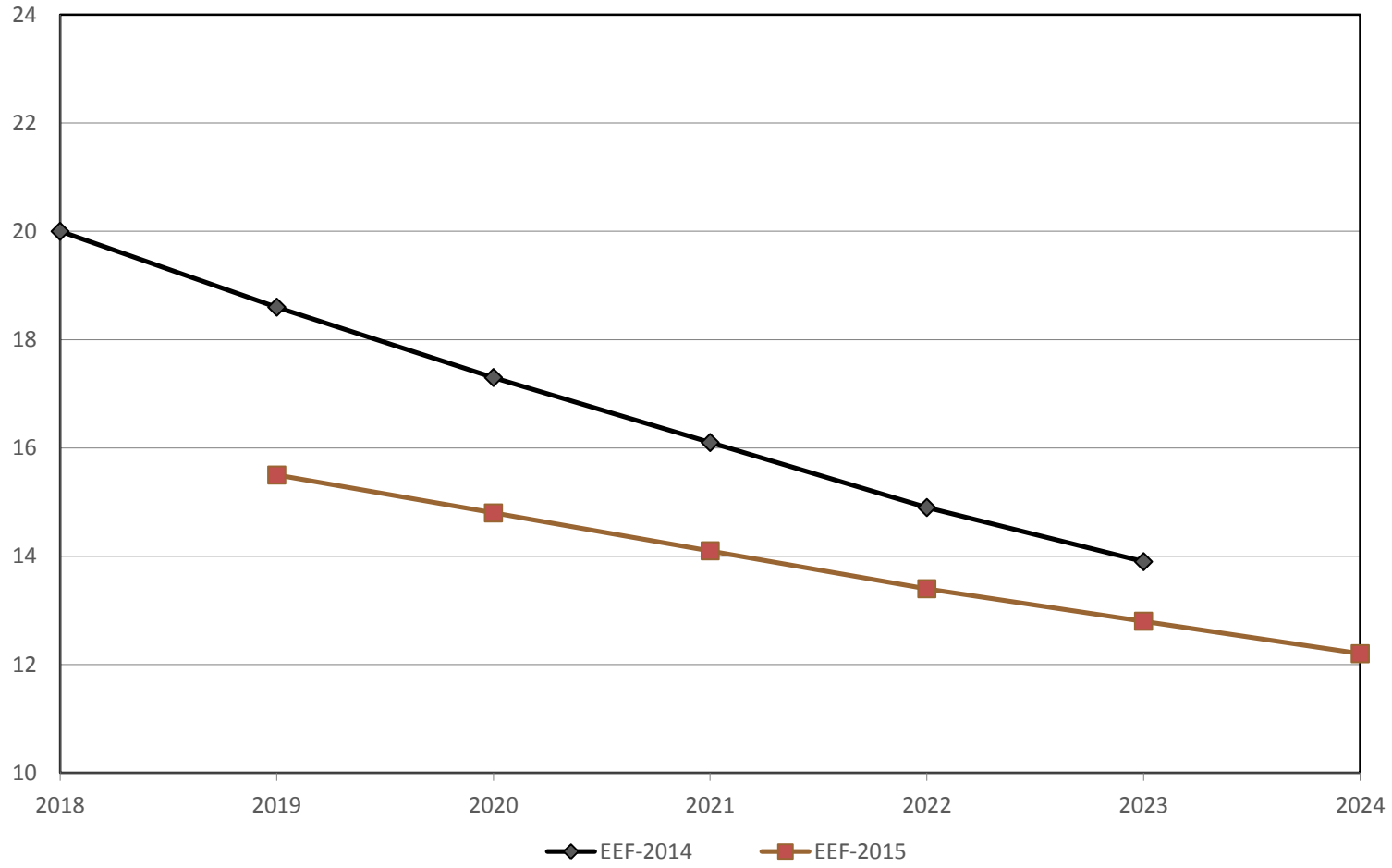
MA Annual Energy: RSP15 Forecast (GWh)



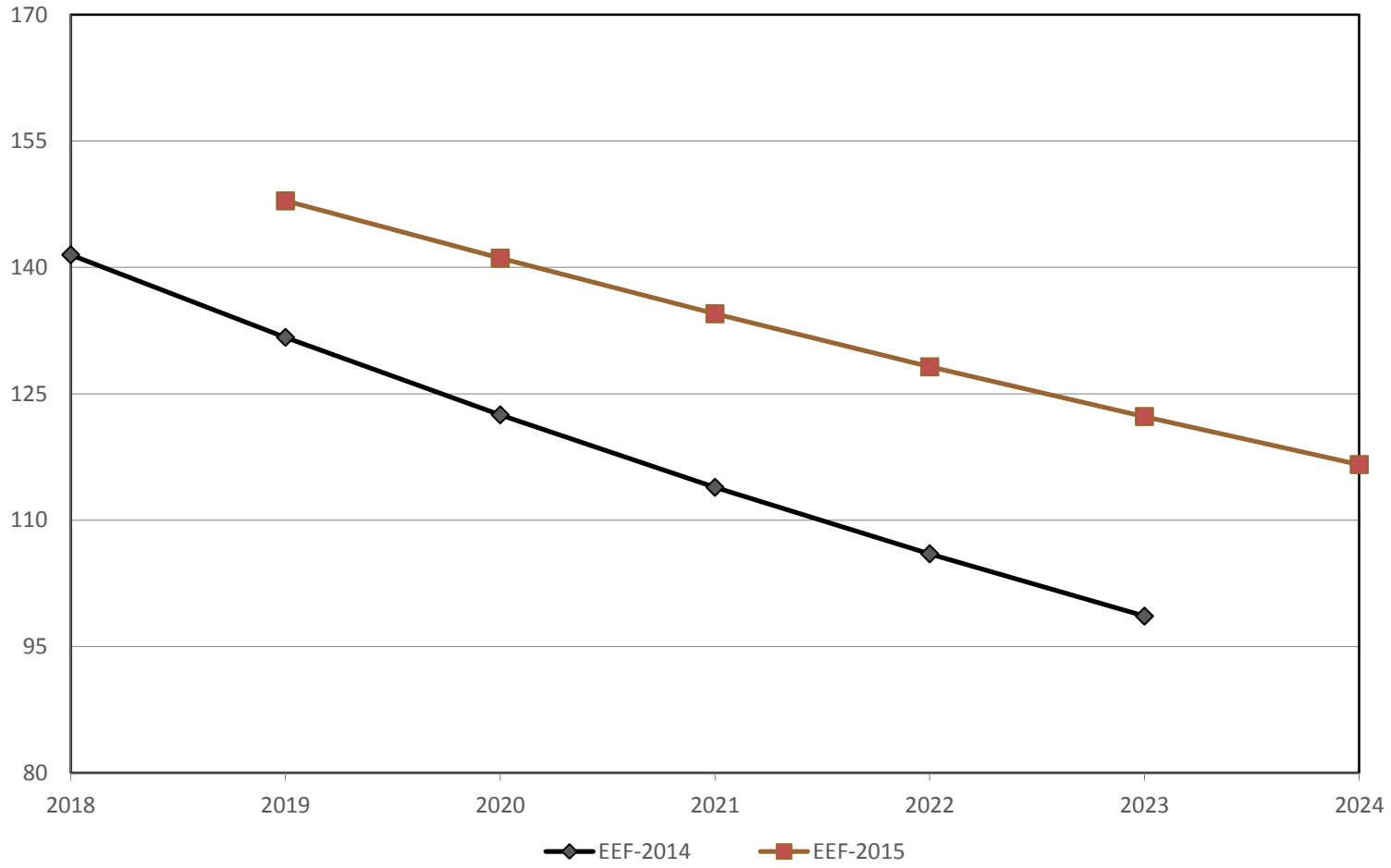
State Level Assumptions - Maine

- Budget: Based on commission approved 2014-2016 budget
- Budget Spend Rate: 10% (deduction)
- Production Cost: Based on average of 2011-2013 PA data
- Production Cost Escalation Rate: 5% + 2.5% inflation
- Peak to Energy Ratio: Based on average of 2011-2013 PA data

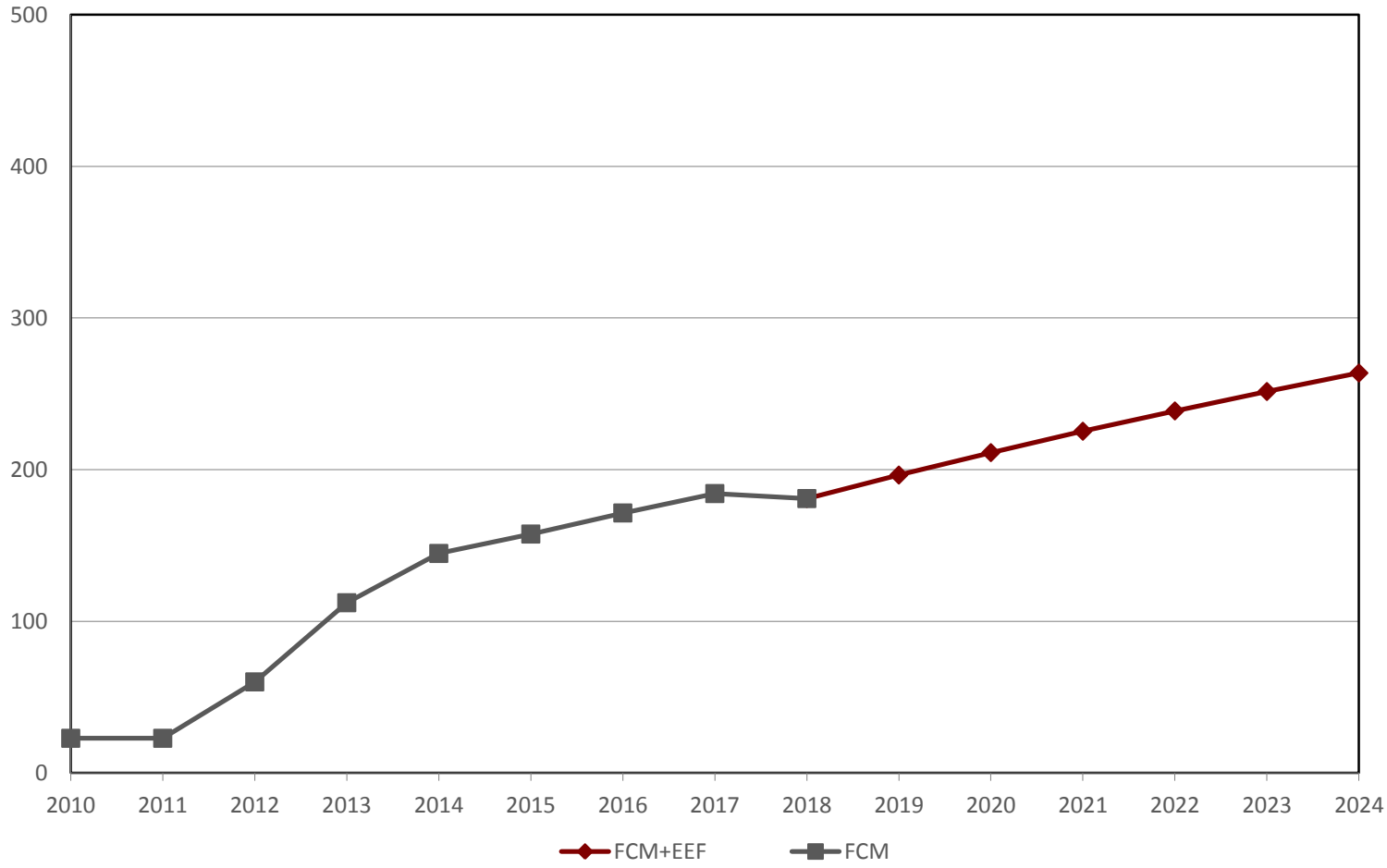
ME Energy Efficiency on Summer Peak (MW)



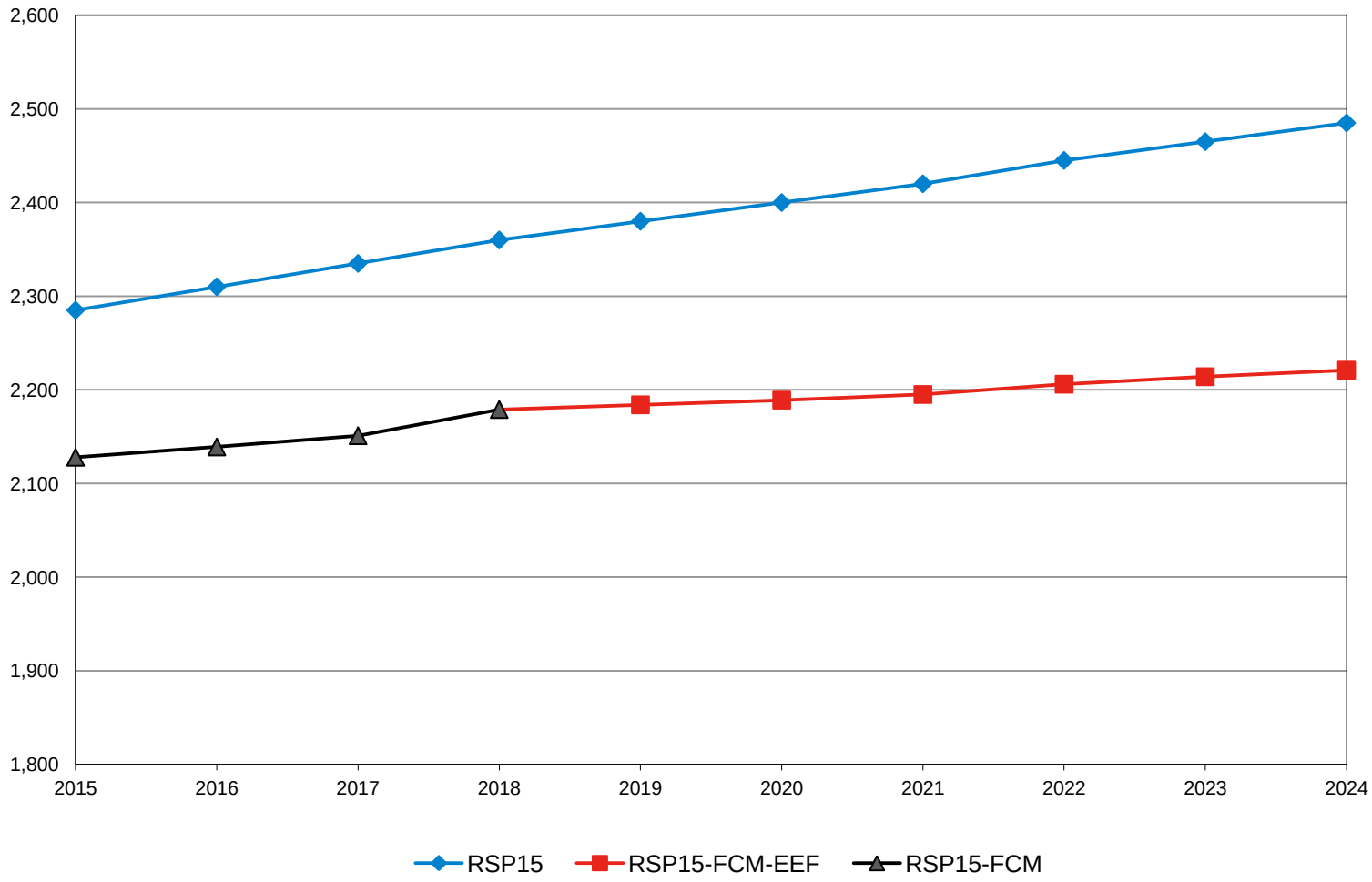
ME Energy Efficiency on Annual Energy (GWh)



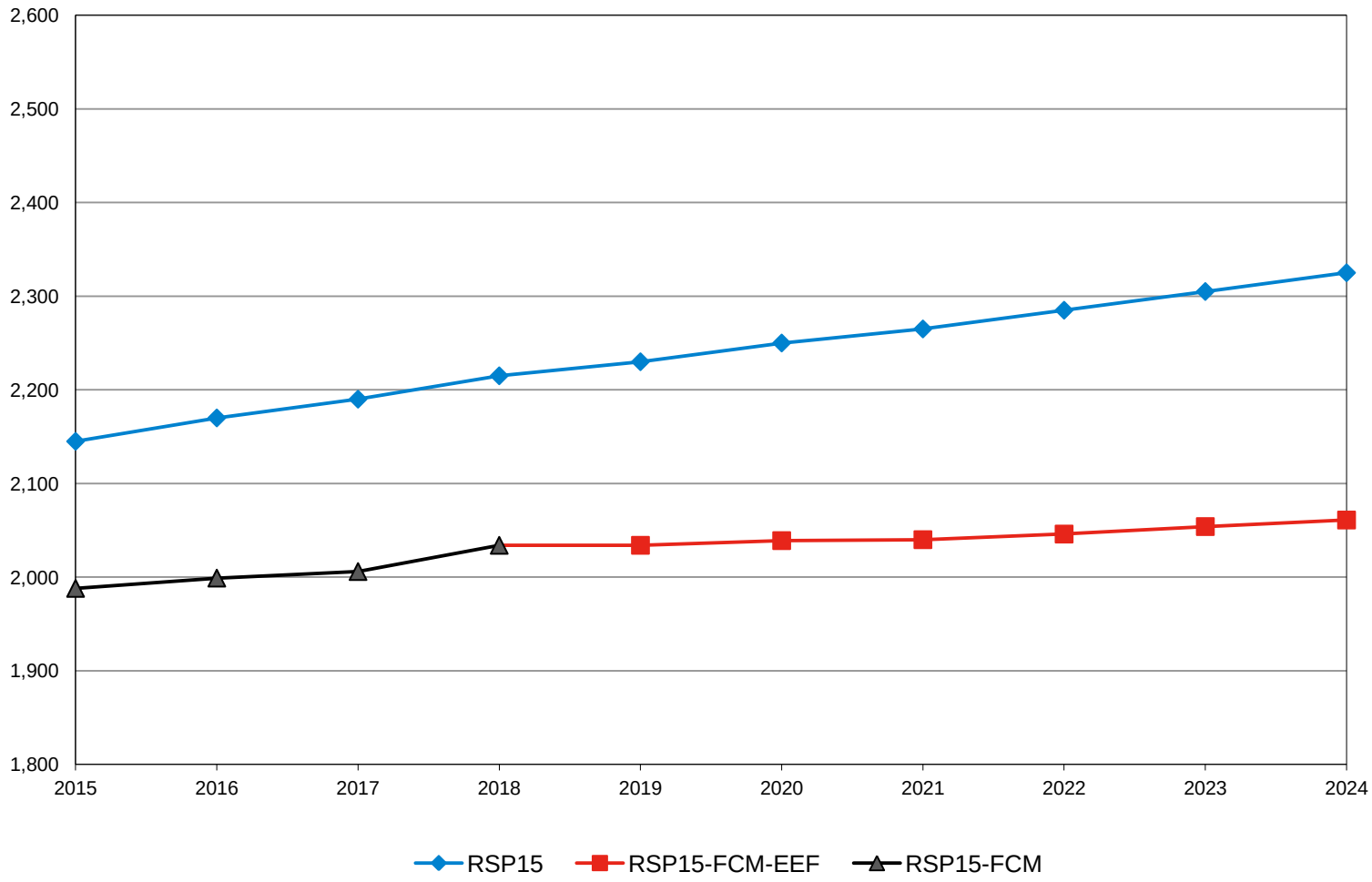
ME Energy Efficiency on Summer Peak (MW)



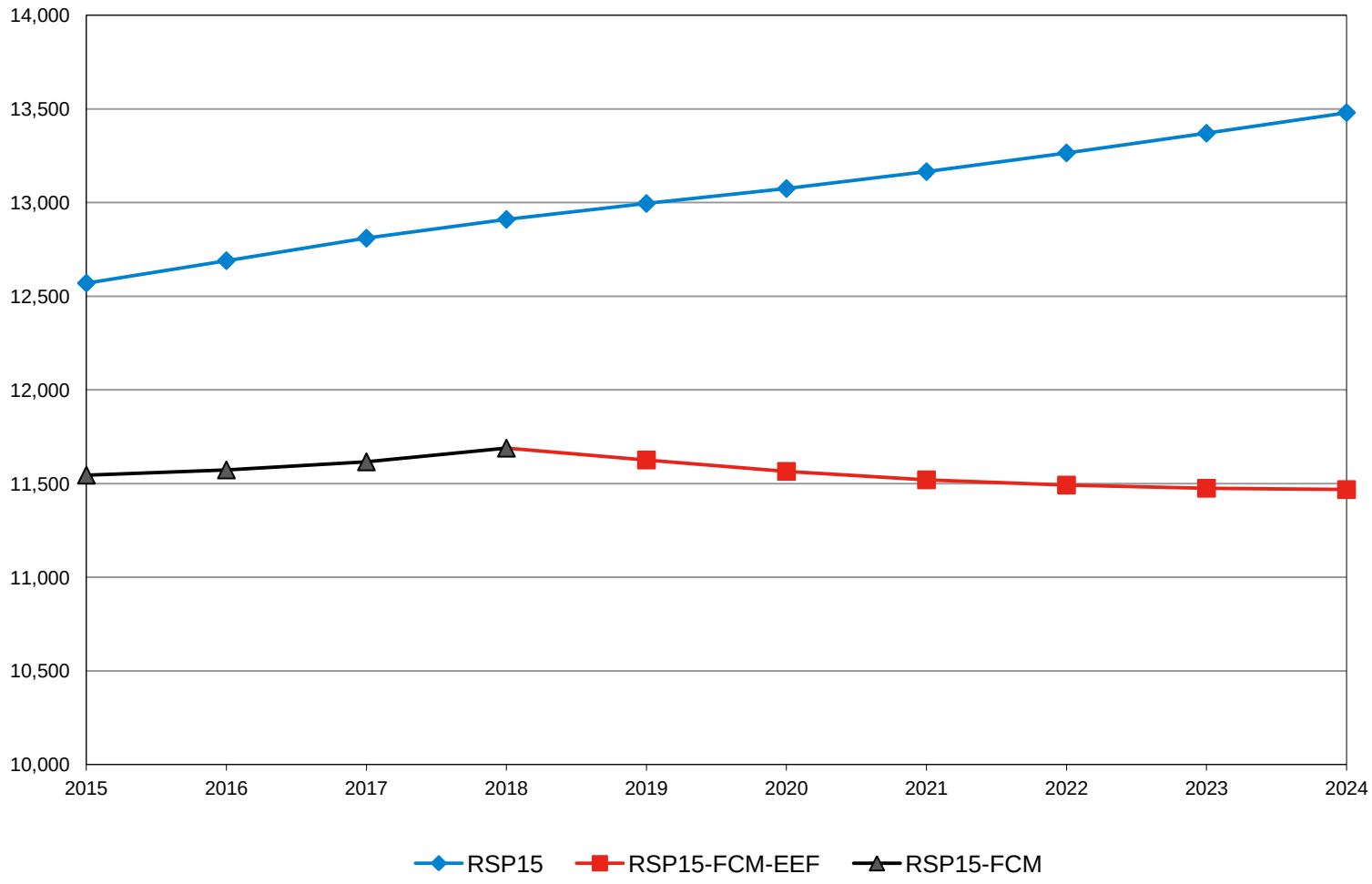
ME 90/10 Summer Peak: RSP15 Forecast (MW)



ME 50/50 Summer Peak: RSP15 Forecast (MW)



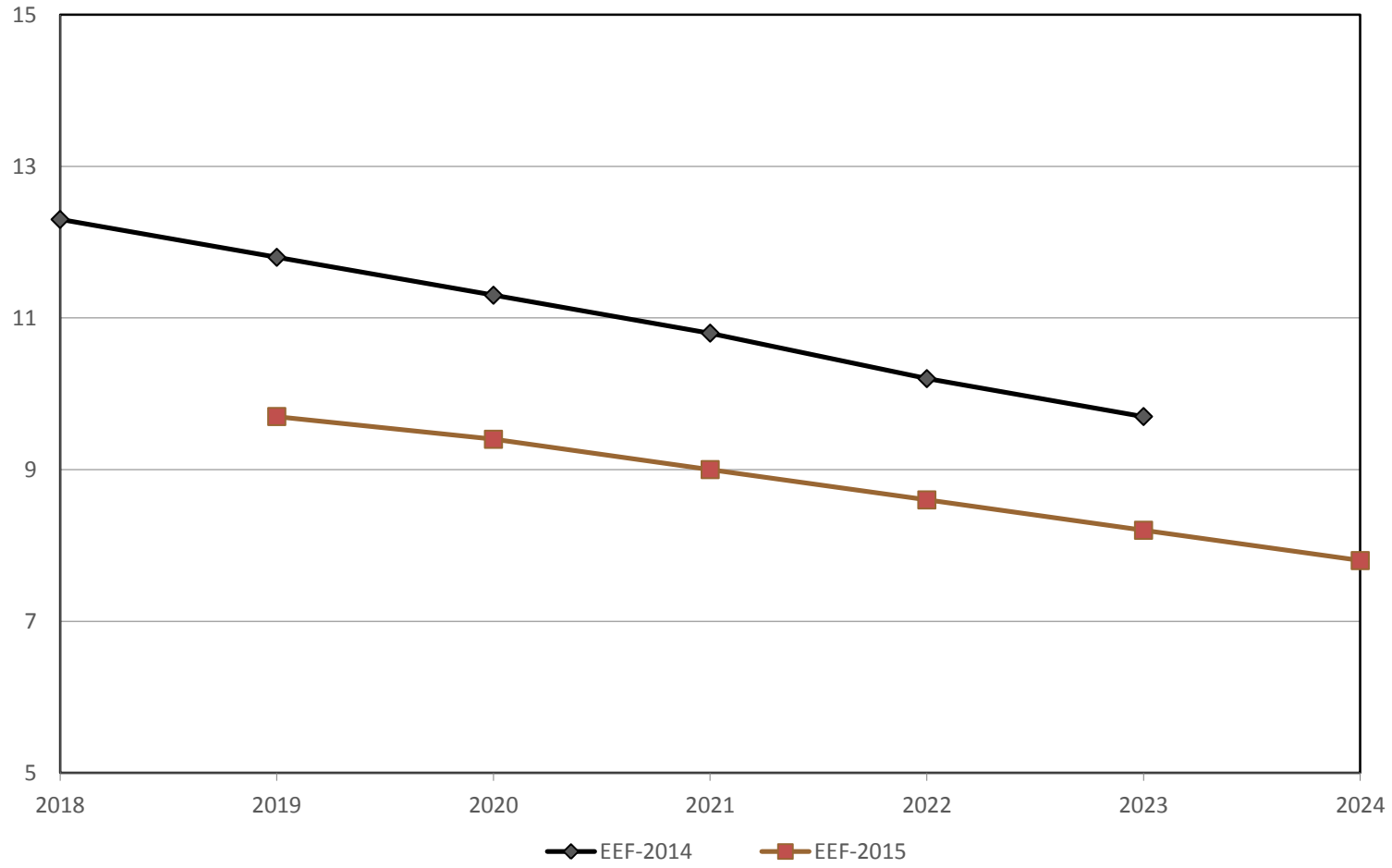
ME Annual Energy: RSP15 Forecast (GWh)



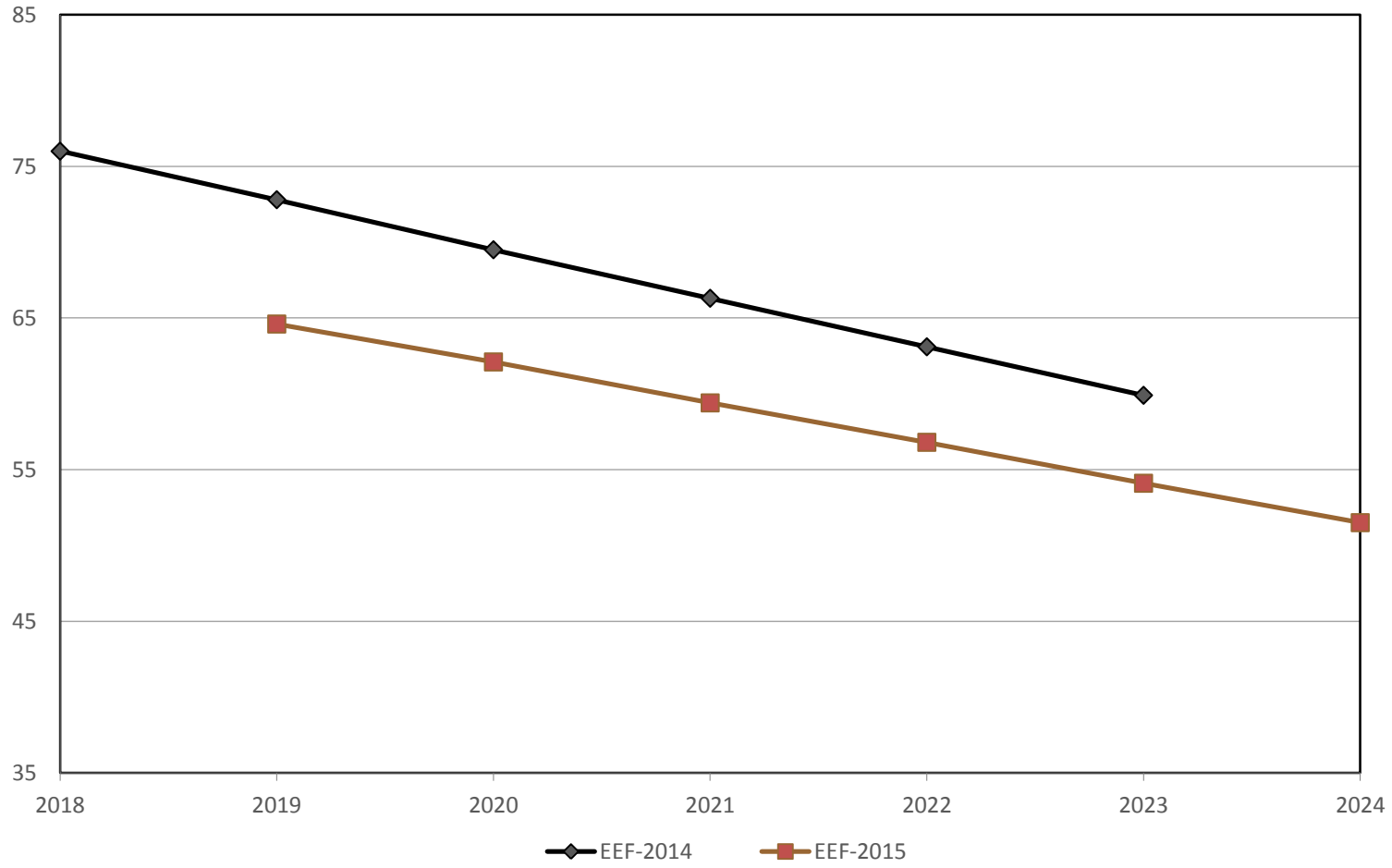
State-Level Assumptions - New Hampshire

- Budget: Based on commission approved 2015 - 2016 budget
- Budget Spend Rate: not applicable
- Production Cost: Based on average of 2011-2013 PA data
- Production Cost Escalation Rate: 5% + 2.5% inflation
- Peak to Energy Ratio: Based on average of 2011-2013 PA data

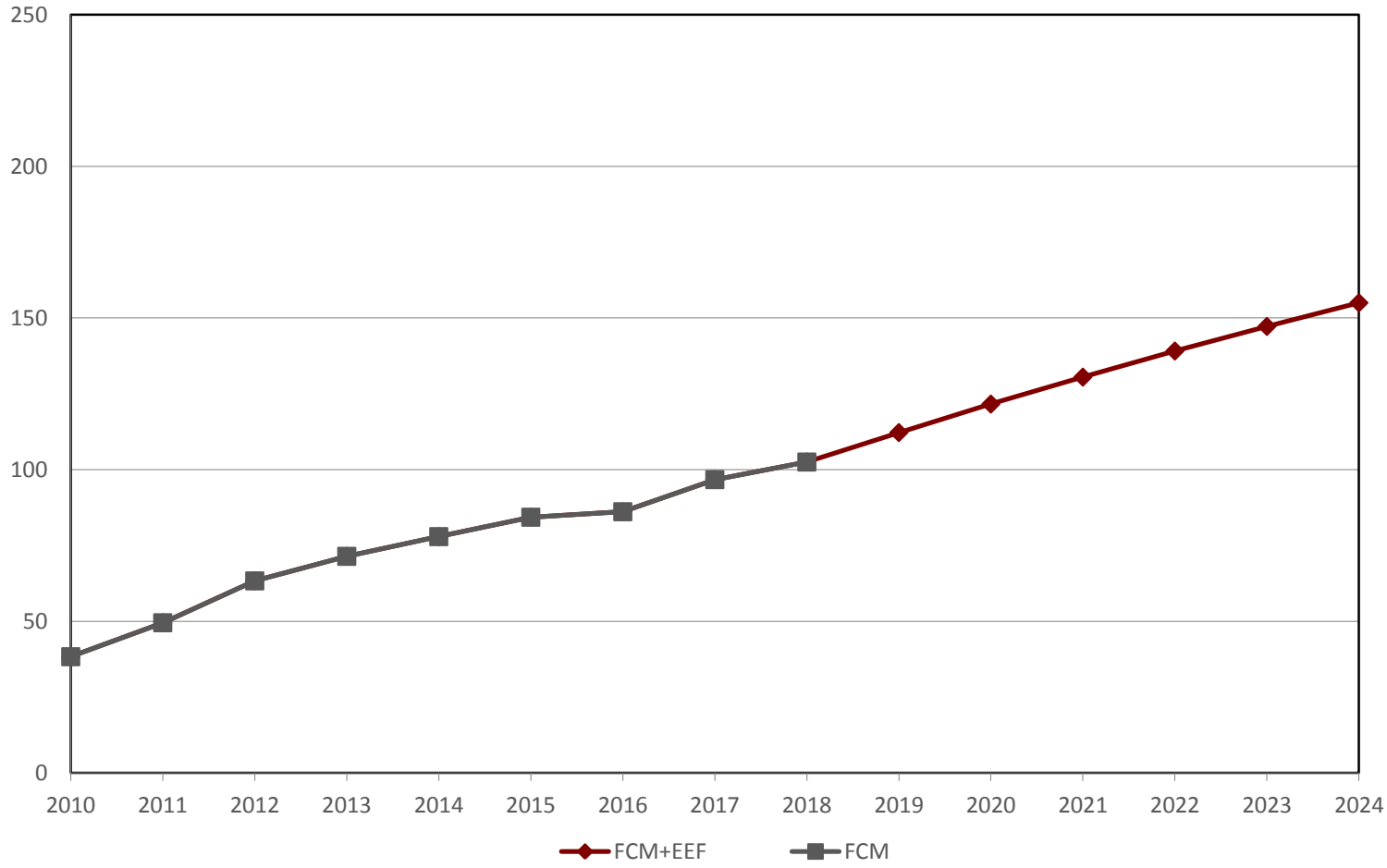
NH Energy Efficiency on Summer Peak (MW)



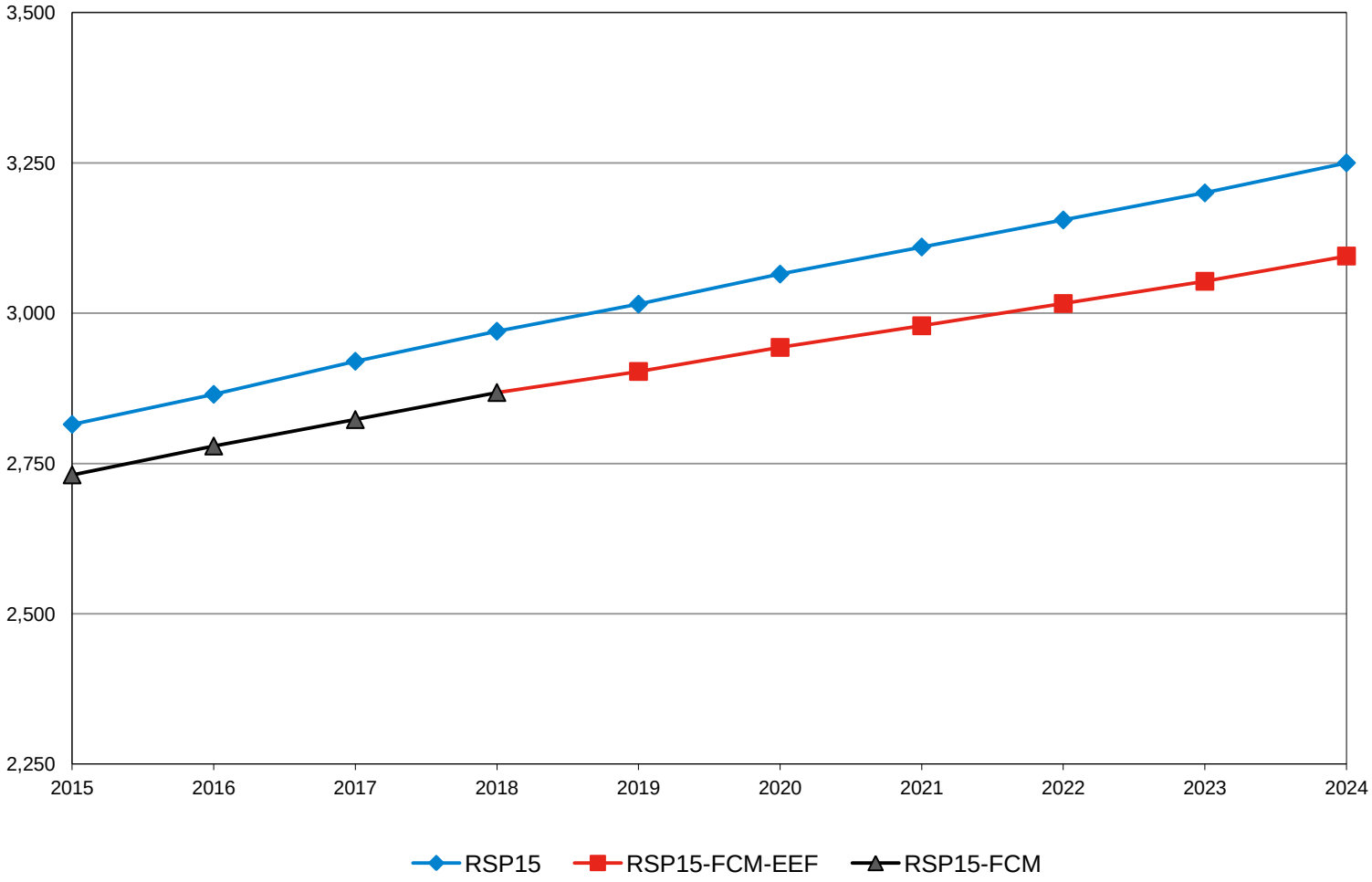
NH Energy Efficiency on Annual Energy (GWh)



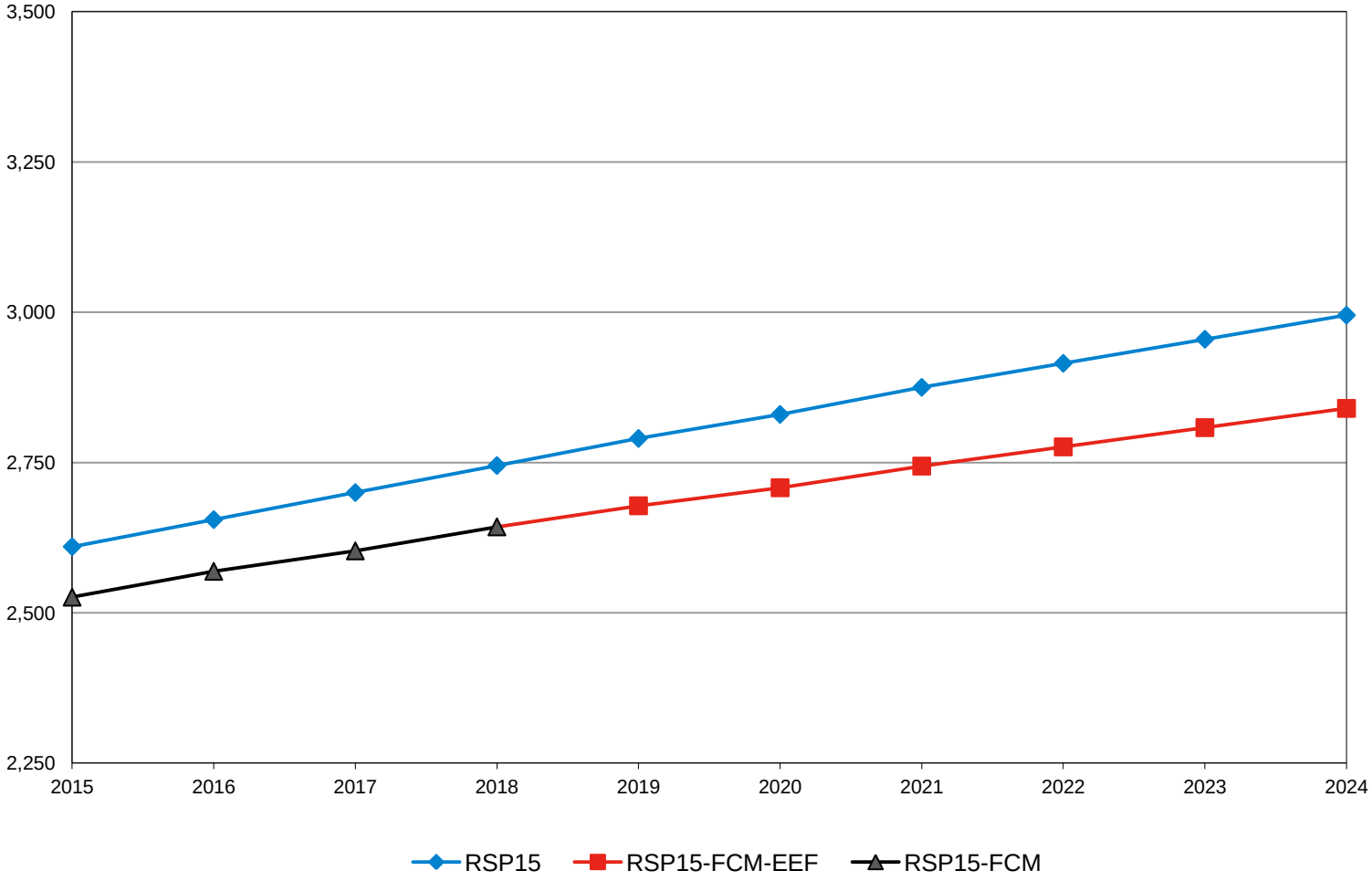
NH Energy Efficiency on Summer Peak (MW)



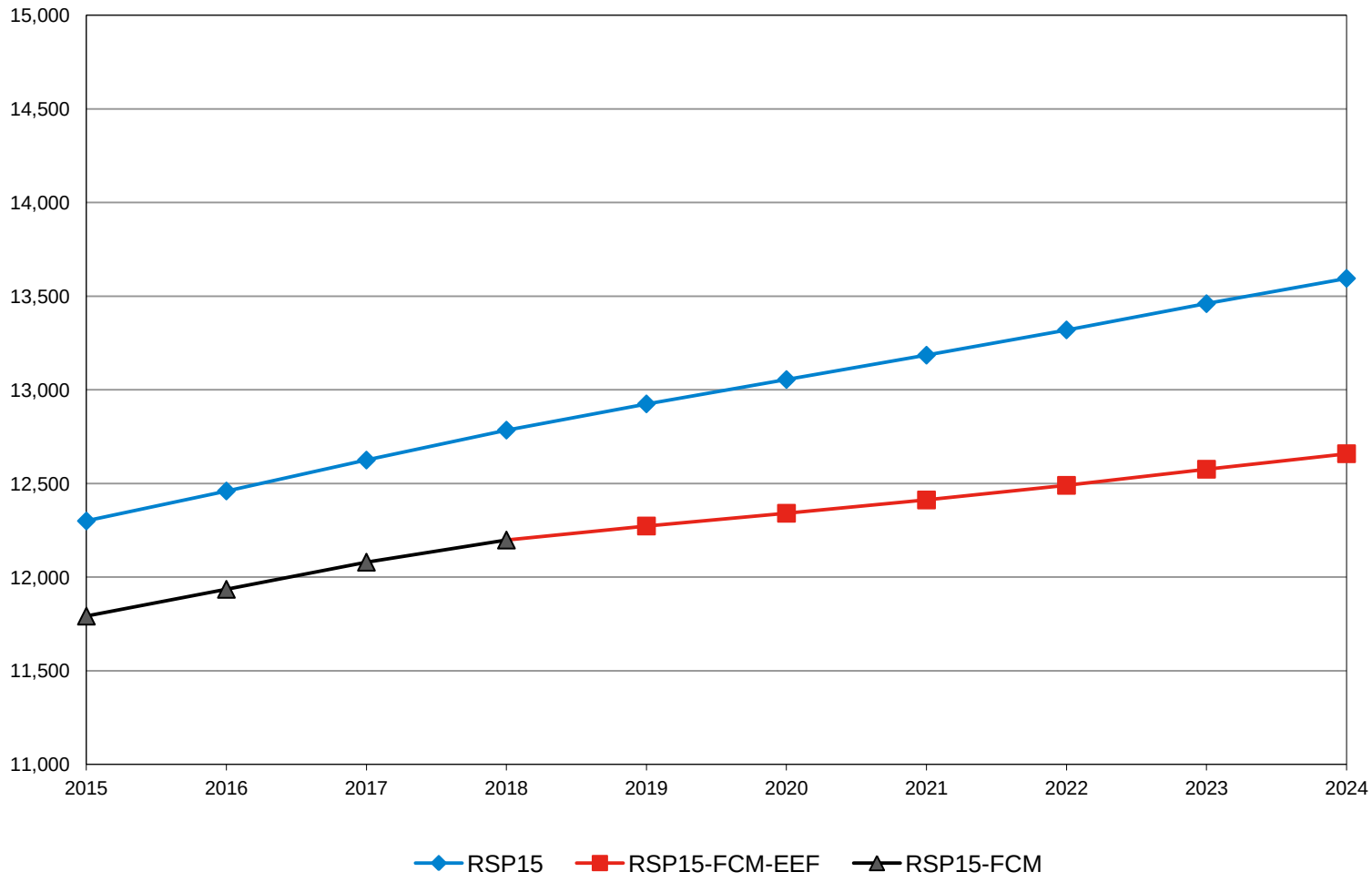
NH 90/10 Summer Peak: RSP15 Forecast (MW)



NH 50/50 Summer Peak: RSP15 Forecast (MW)



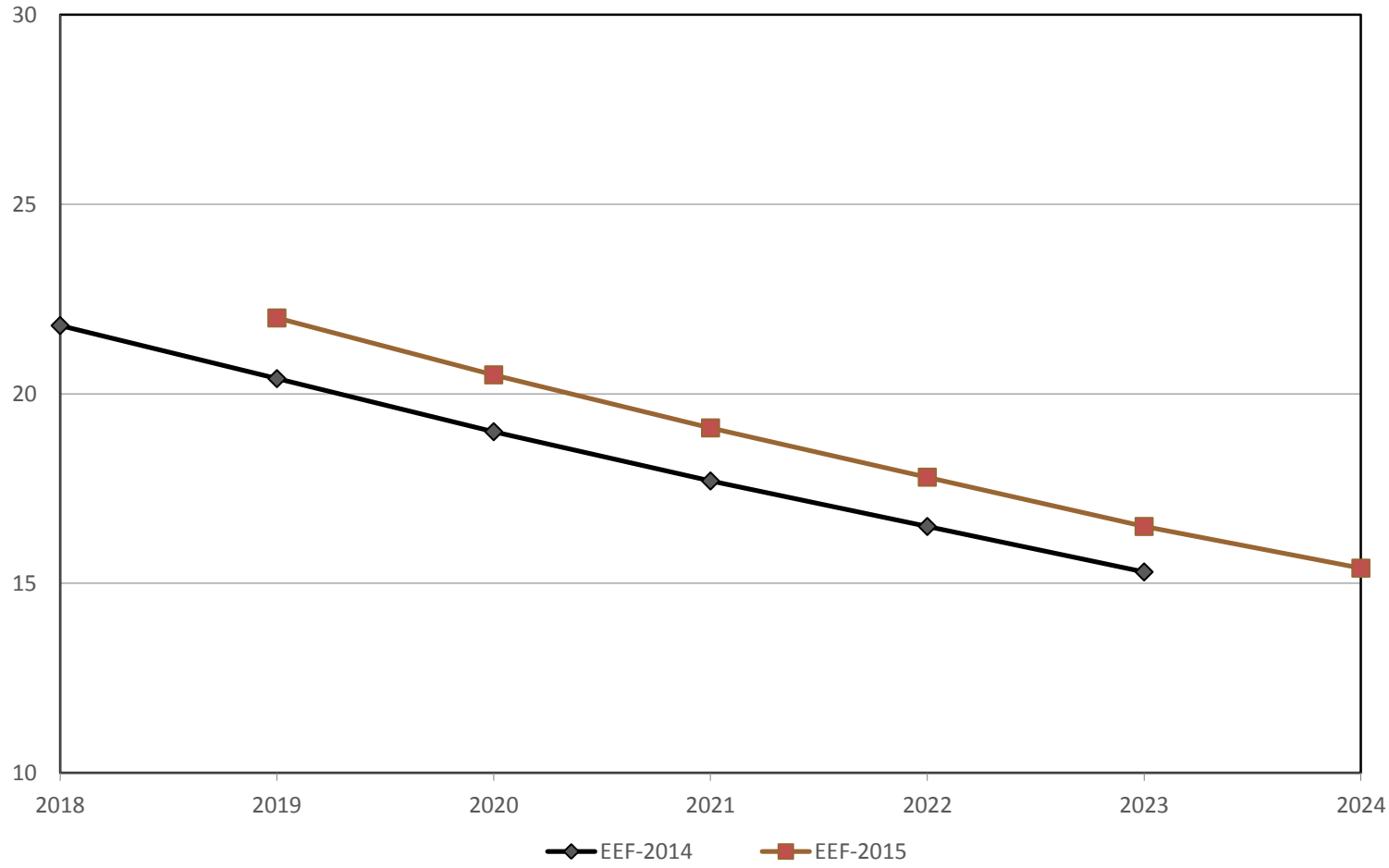
NH Annual Energy: RSP15 Forecast (GWh)



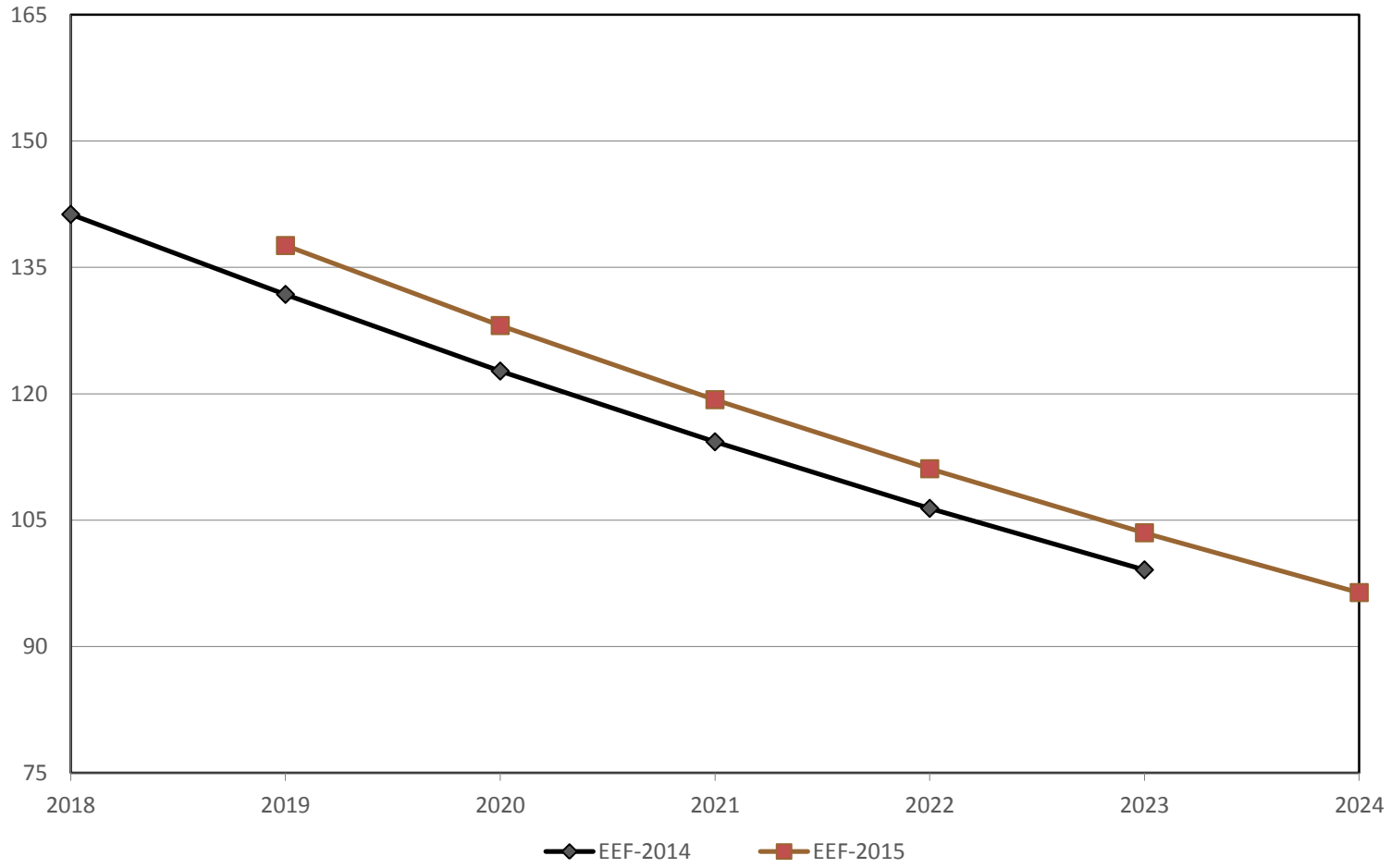
State-Level Assumptions - Rhode Island

- Budget: Based on commission approved 2015-2016 budget
- Budget Spend Rate: 10% (deduction)
- Production Cost: Based on average of 2011-2013 PA data
- Production Cost Escalation Rate: 5% + 2.5% inflation
- Peak to Energy Ratio: Based on average of 2011-2013 PA data

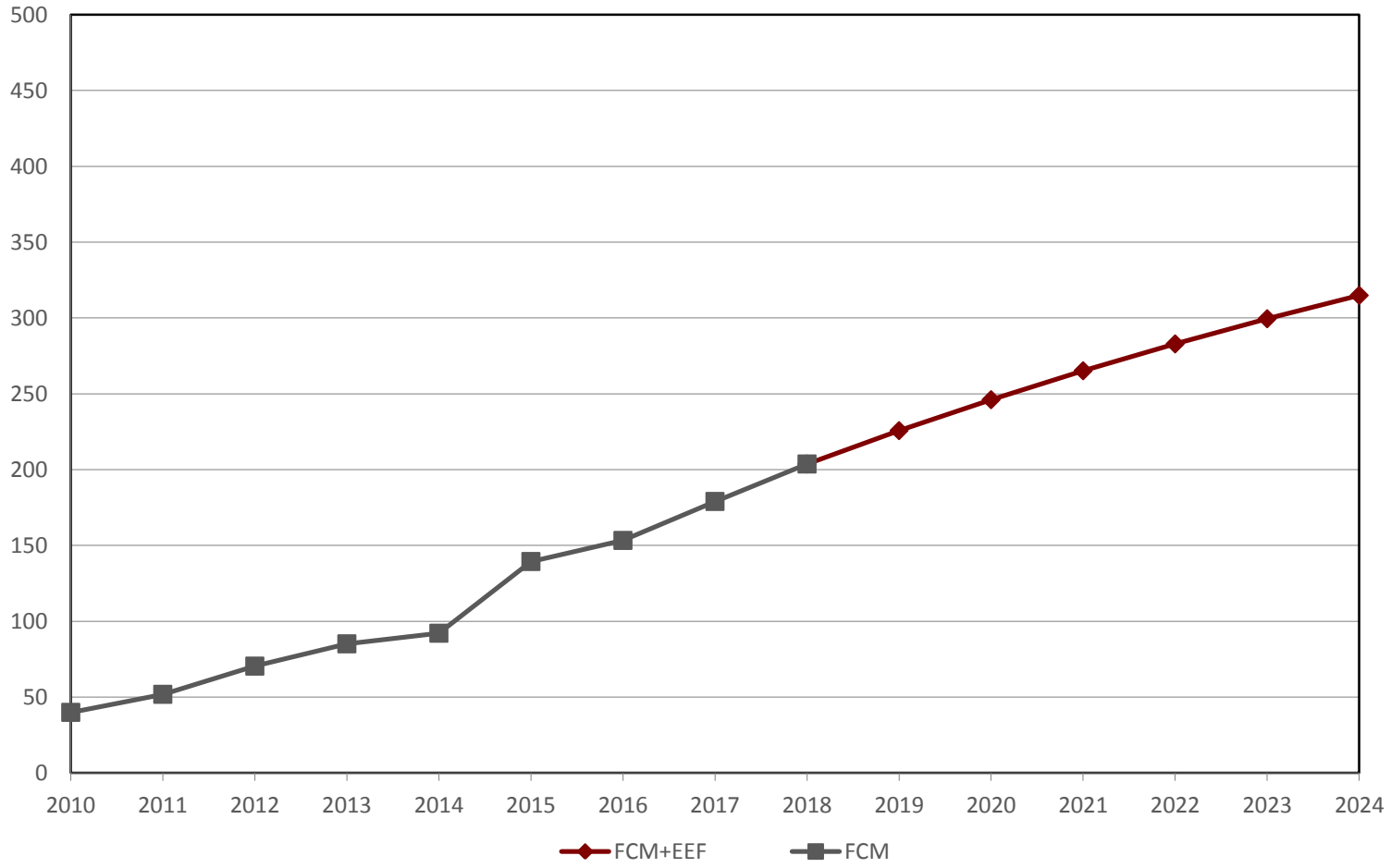
RI Energy Efficiency on Summer Peak (MW)



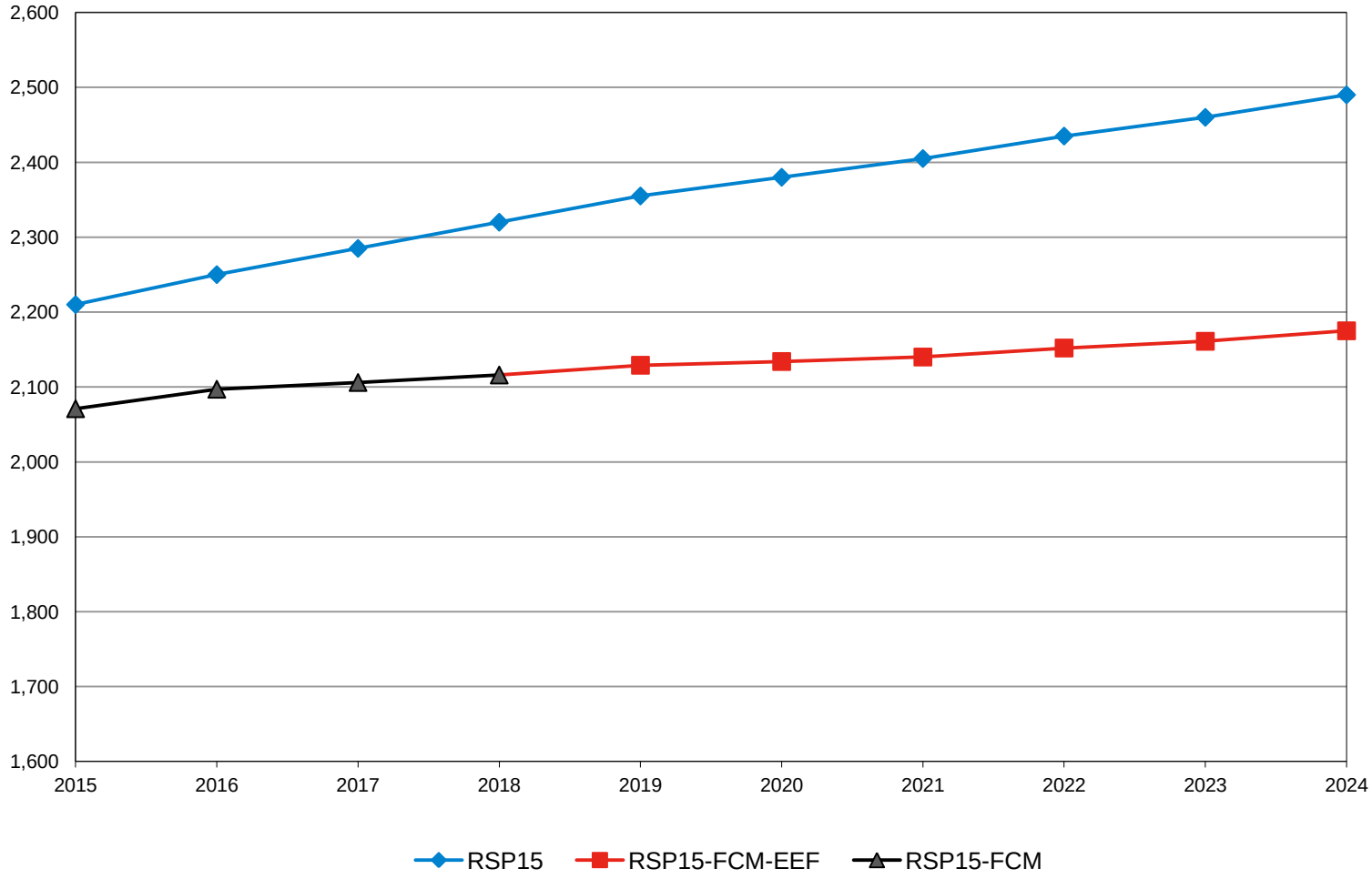
RI Energy Efficiency on Annual Energy (GWh)



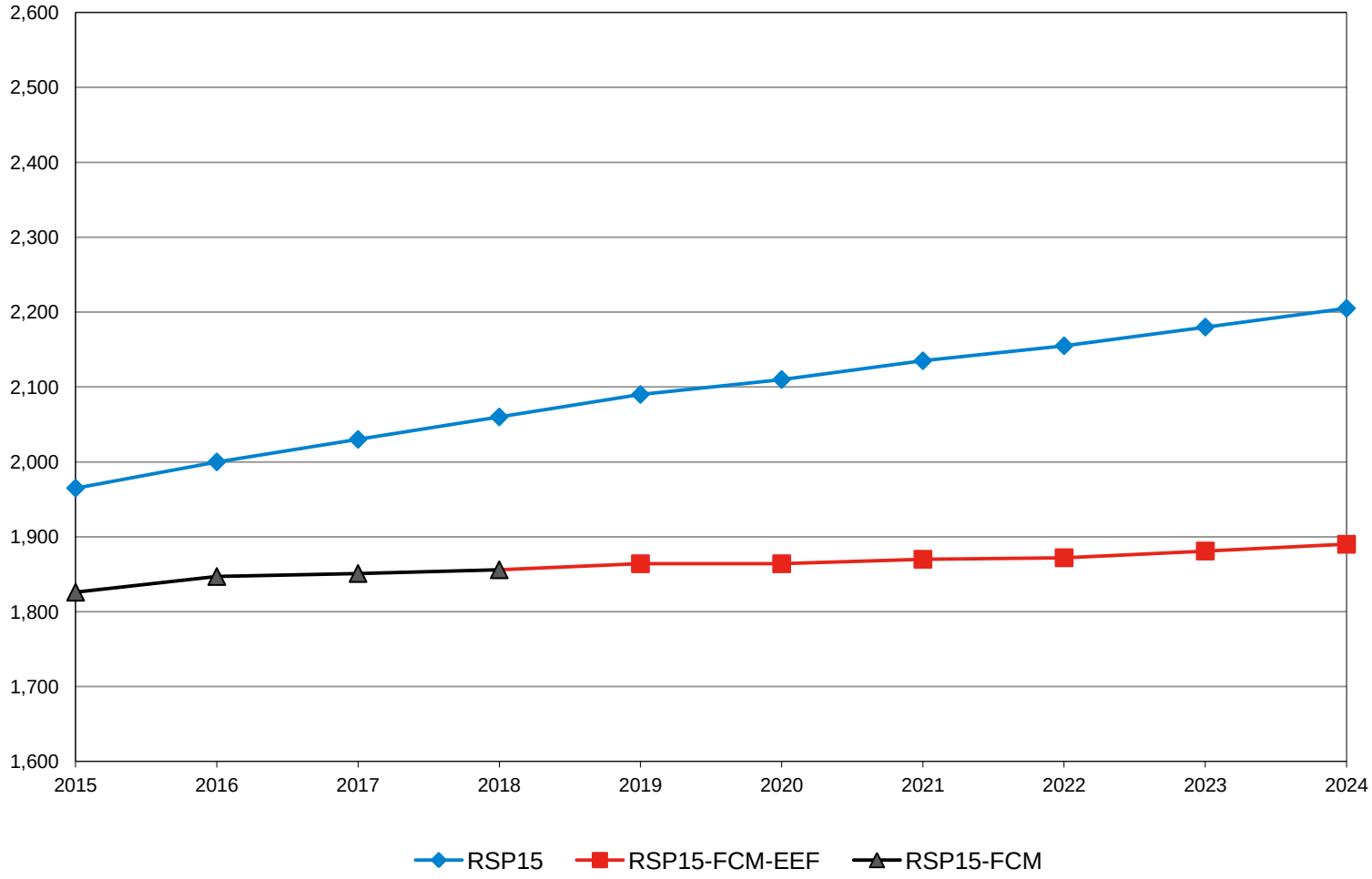
RI Energy Efficiency on Summer Peak (MW)



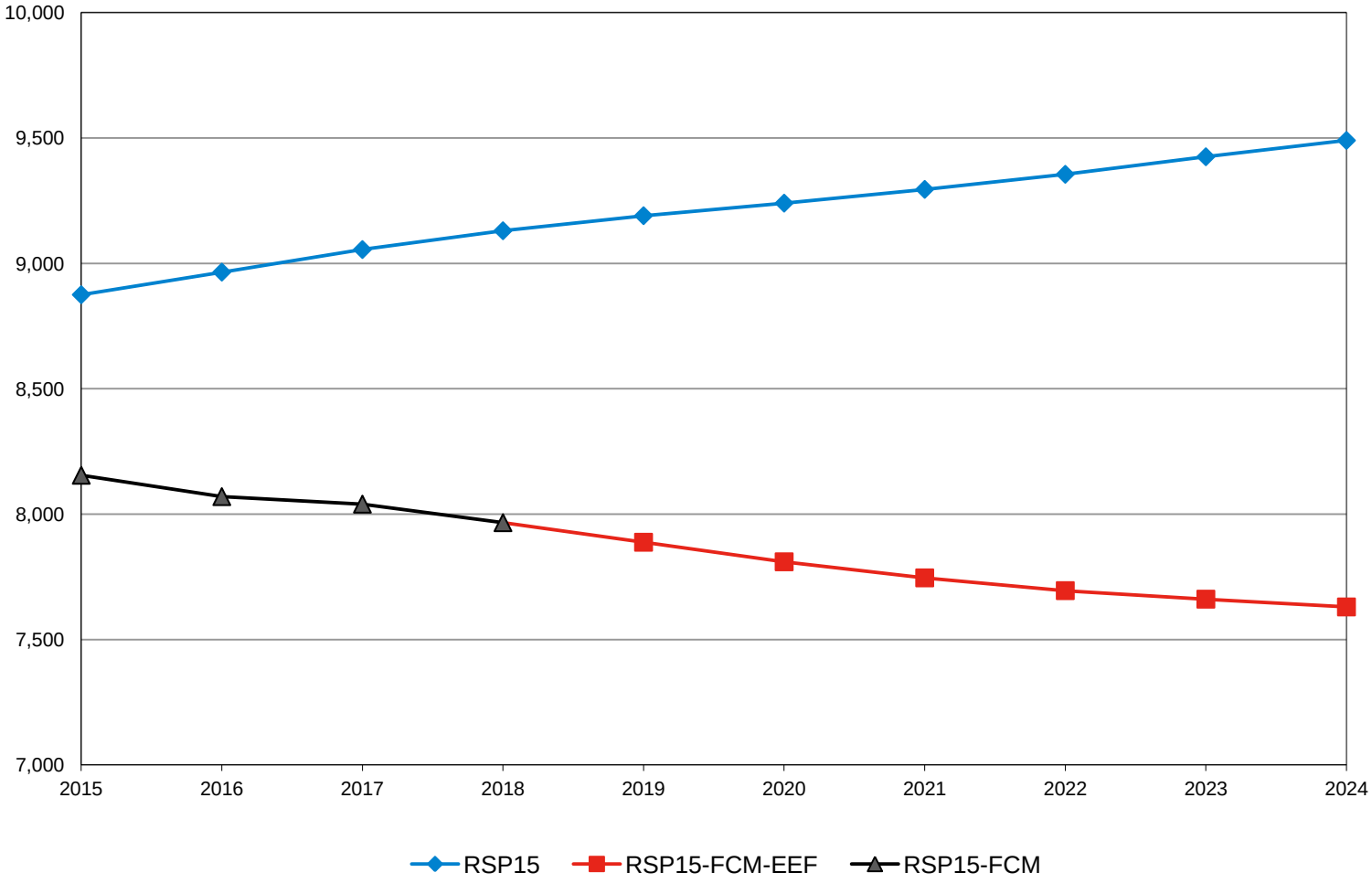
RI 90/10 Summer Peak: RSP15 Forecast (MW)



RI 50/50 Summer Peak: RSP15 Forecast (MW)



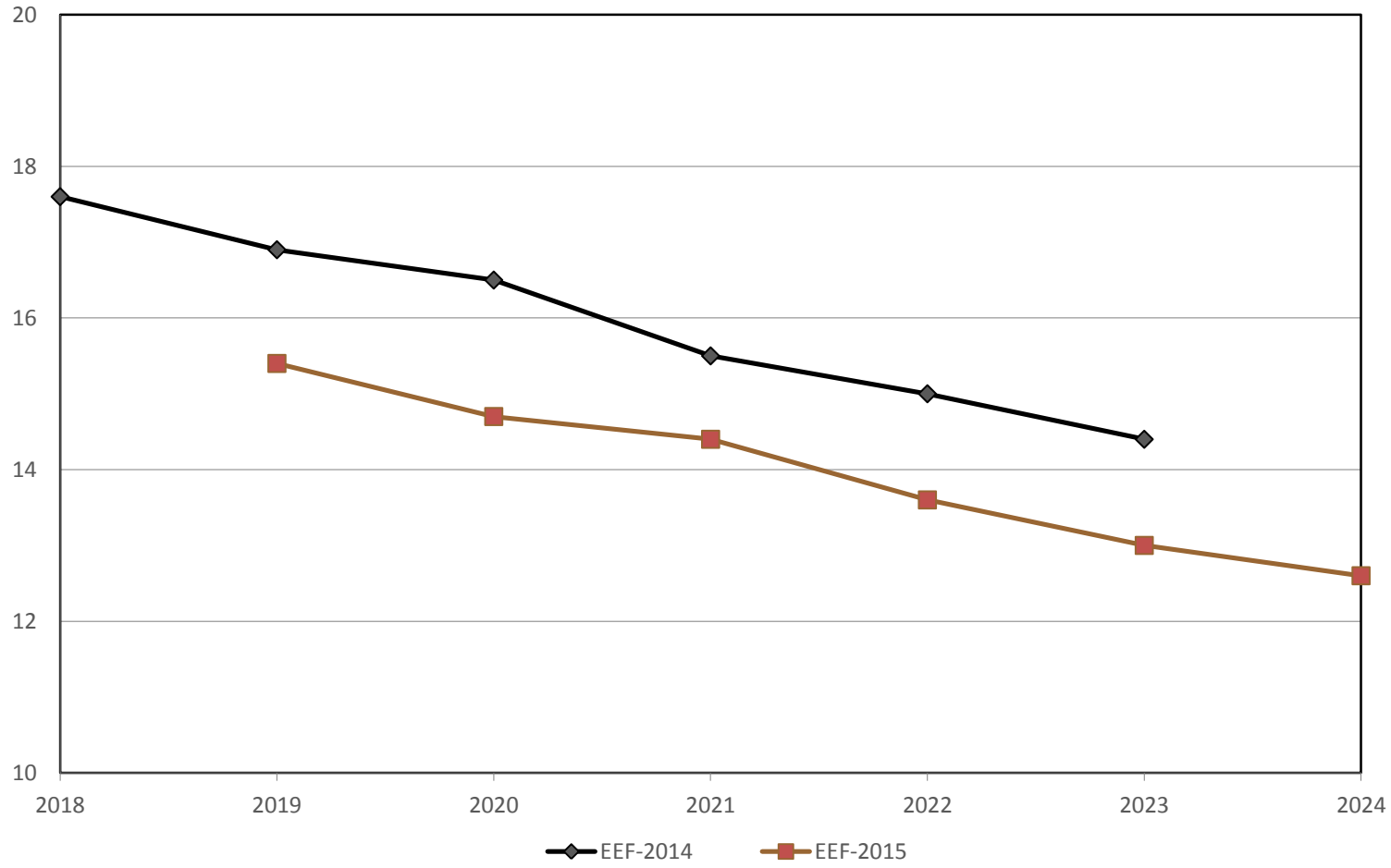
RI Annual Energy: RSP15 Forecast (GWh)



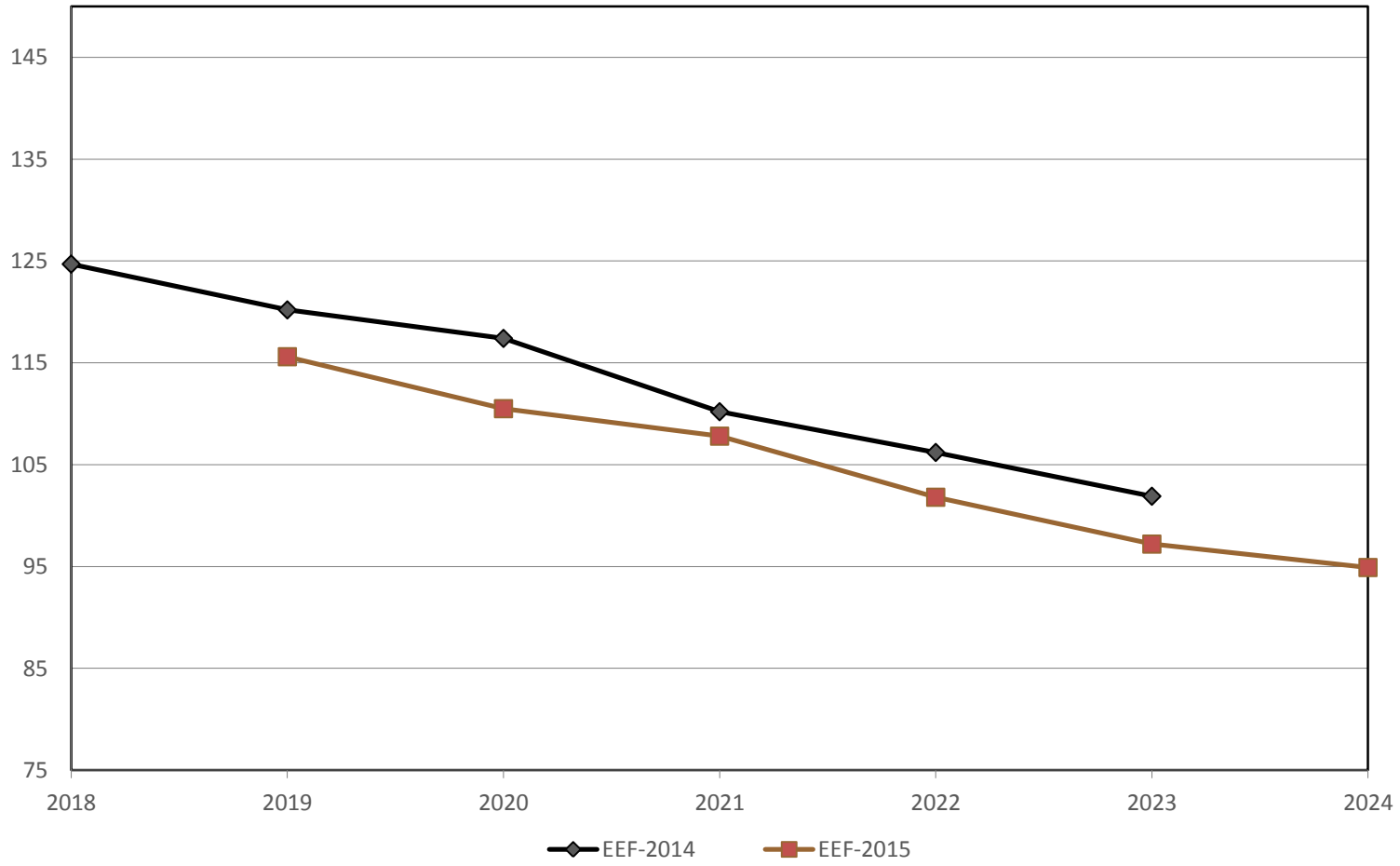
State-Level Assumptions - Vermont

- Budget: Based on commission approved 2014-2024 budget
- Budget Spend Rate: not applicable
- Production Cost: Based on average of 2011-2013 PA data
- Production Cost Escalation Rate: 5% + 2.5% inflation
- Peak to Energy Ratio: Based on average of 2011-2013 PA data

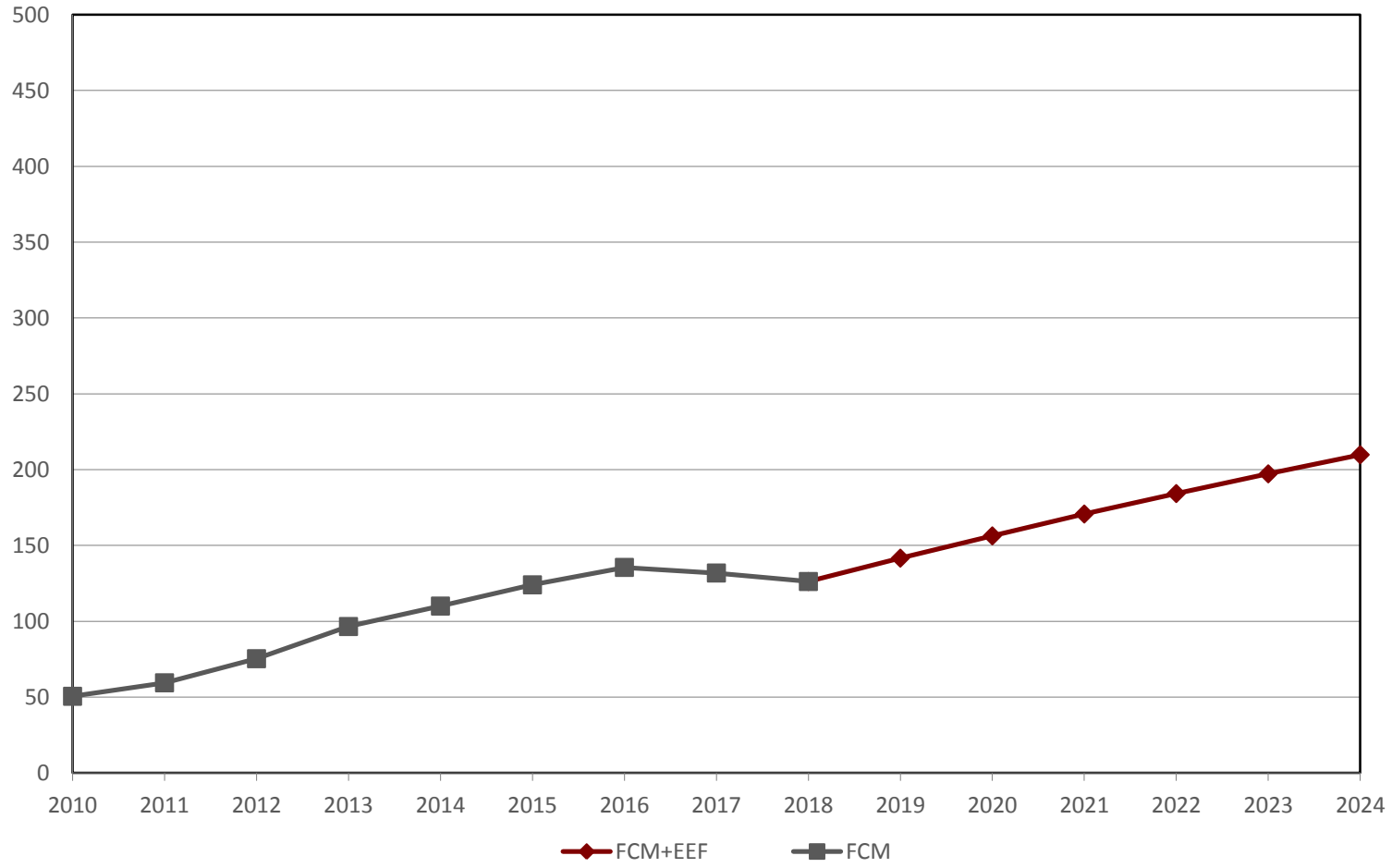
VT Energy Efficiency on Summer Peak (MW)



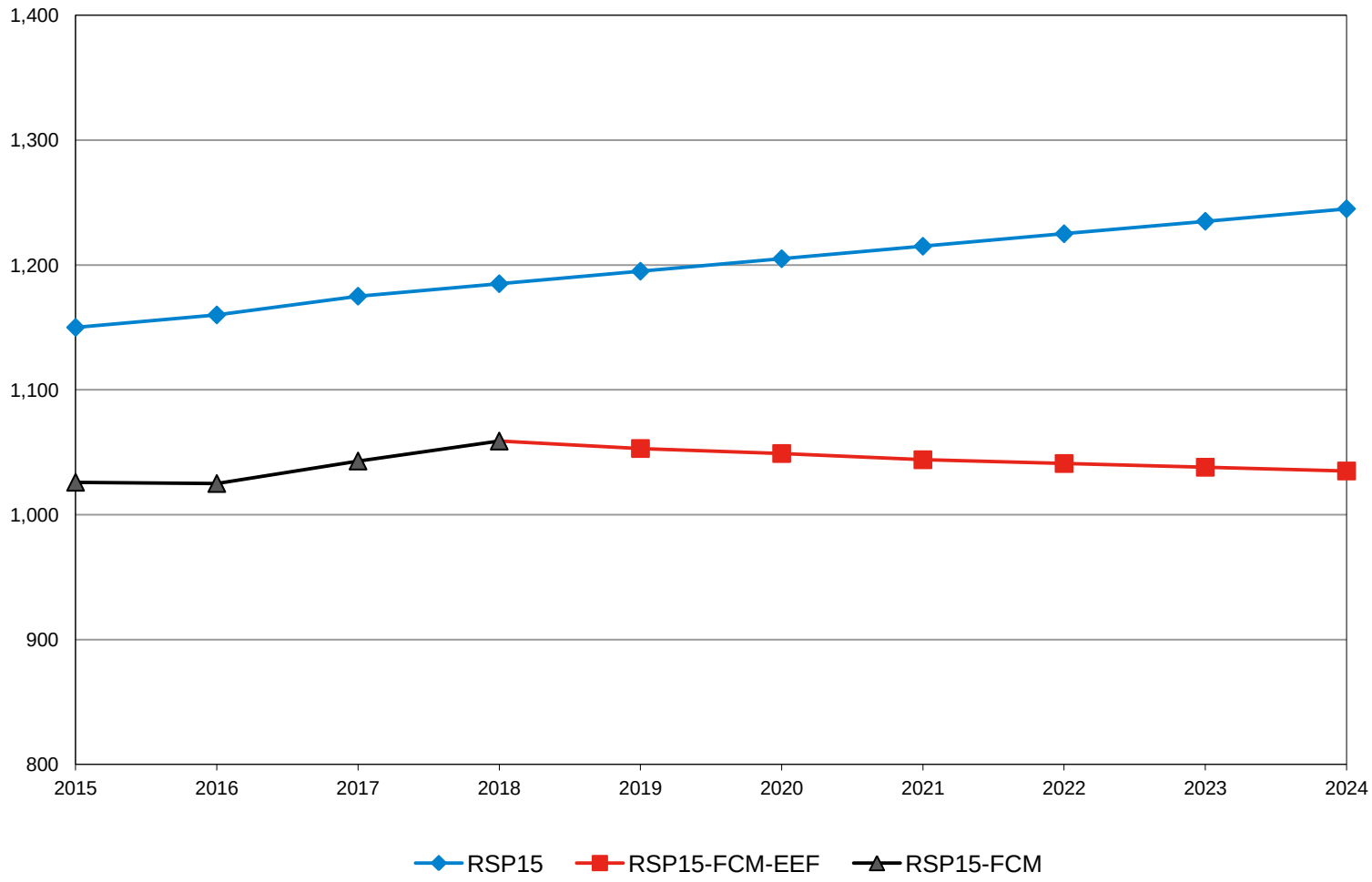
VT Energy Efficiency on Annual Energy (GWh)



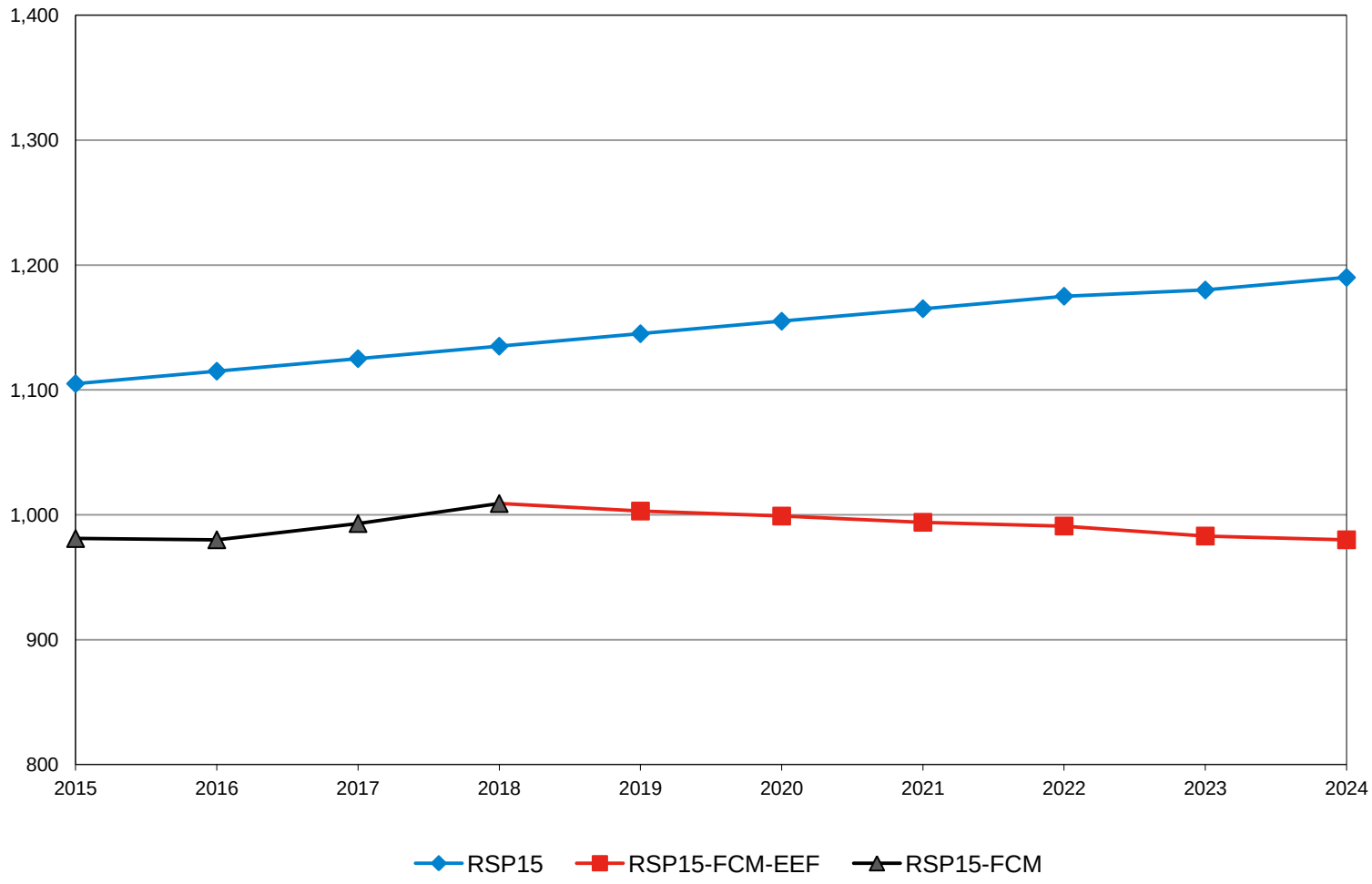
VT Energy Efficiency on Summer Peak (MW)



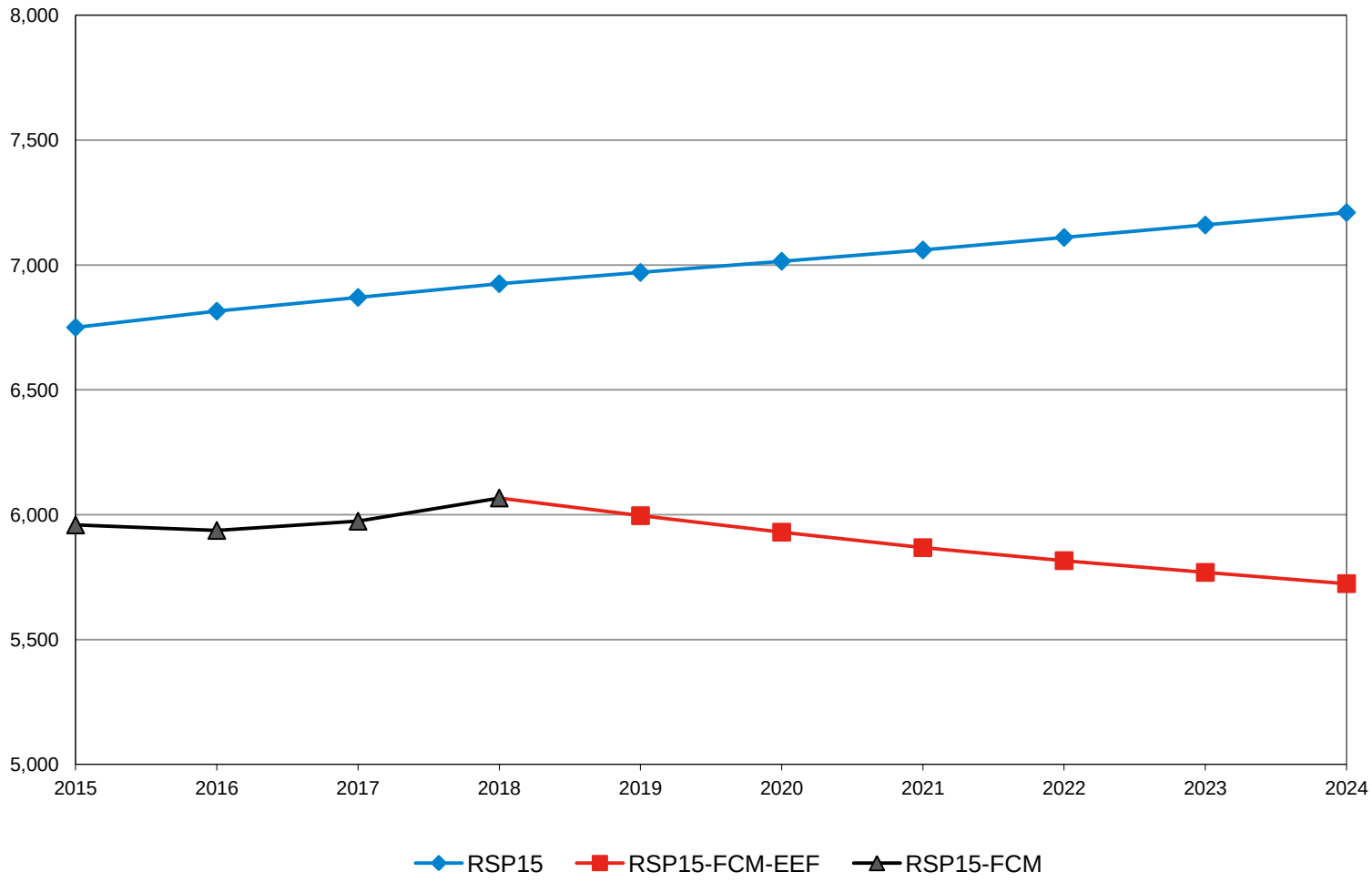
VT 90/10 Summer Peak: RSP15 Forecast (MW)



VT 50/50 Summer Peak: RSP15 Forecast (MW)

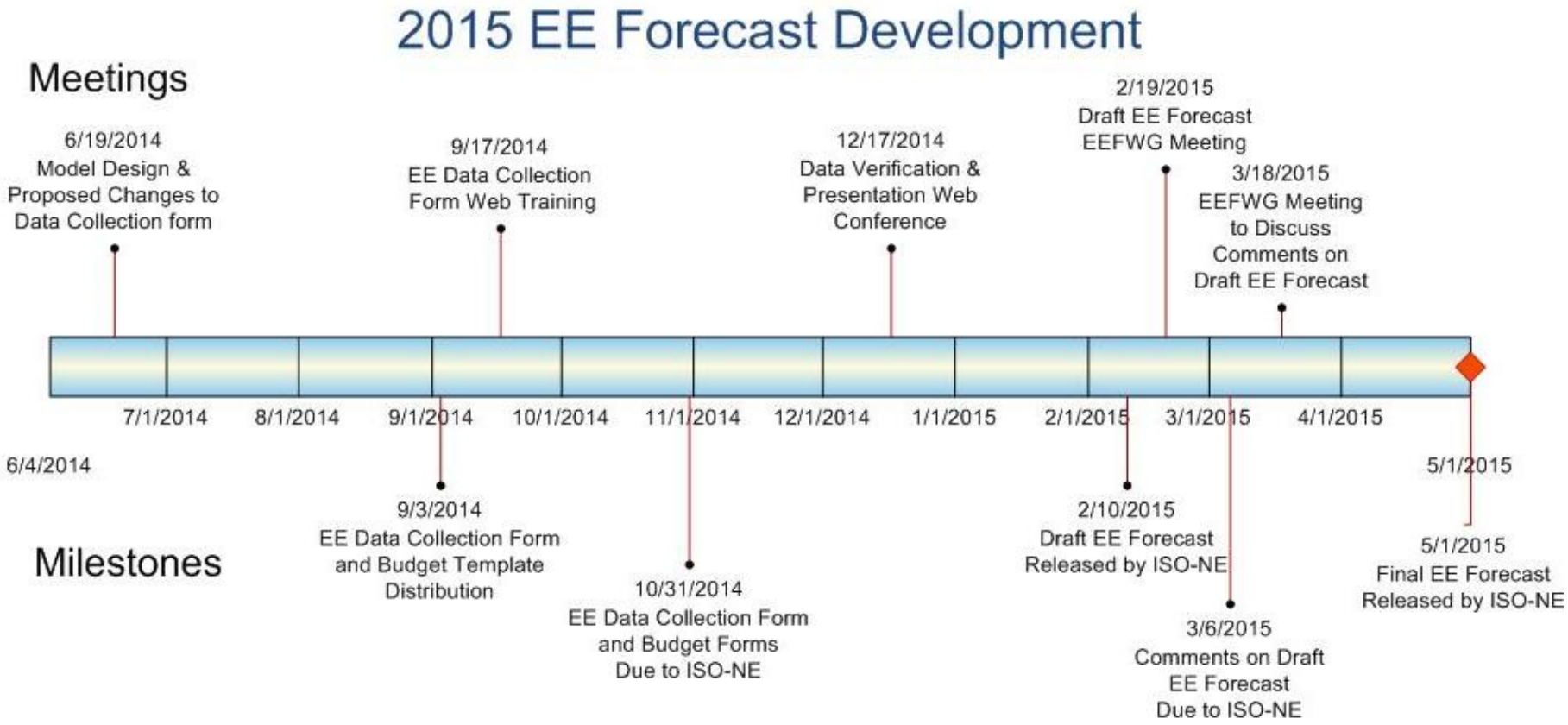


VT Annual Energy: RSP15 Forecast (GWh)



NEXT STEPS

2015 EE Forecast Timeline



Subject to modification

Additional 2015 EE Forecast Process

- Present an update to the Planning Advisory Committee – TBD
- Incorporate into the CELT to be released in May 2015 and Regional System Plan later in 2015