

SB 218 Thermal RPS Stakeholder Meeting

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NH PUBLIC UTILITIES COMMISSION**

Inclusion of thermal renewable energy in RPS

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SB 218 amends RPS law (RSA 362-F):

- **Creates Class I sub-class for useful thermal renewable energy**
- **.2% of Class I REC requirement to be met with thermal resources beginning 2013**
- **Requirement increases by .2% annually to 2.6% by 2025.**
- **PUC to create thermal REC measurement and verification protocols in coordination with ISO-NE**
- **Will require PUC rule-making**

REC requirements

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Calendar Year	Class I	*Class I Thermal	Class II	Class III	Class IV
2008	0.00%	0.00%	0.00%	3.50%	0.50%
2009	0.50%	0.00%	0.00%	4.50%	1.00%
2010	1.00%	0.00%	0.04%	5.50%	1.00%
2011	2.00%	0.00%	0.08%	6.50%	1.00%
2012	3.00%	0.00%	0.15%	6.50%	1.00%
2013	4.00%	0.20%	0.20%	6.50%	1.30%
2014	5.00%	0.40%	0.30%	7.00%	1.40%
2015	6.00%	0.60%	0.30%	8.00%	1.50%
2016	6.90%	0.80%	0.30%	8.00%	1.50%
2017	7.80%	1.00%	0.30%	8.00%	1.50%
2018	8.70%	1.20%	0.30%	8.00%	1.50%
2019	9.60%	1.40%	0.30%	8.00%	1.50%
2020	10.50%	1.60%	0.30%	8.00%	1.50%
2021	11.40%	1.80%	0.30%	8.00%	1.50%
2022	12.30%	2.00%	0.30%	8.00%	1.50%
2023	13.20%	2.20%	0.30%	8.00%	1.50%
2024	14.10%	2.40%	0.30%	8.00%	1.50%
2025	15.00%	2.60%	0.30%	8.00%	1.50%

ACP prices

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Inflation Adjusted Compliance Payment per Megawatt Hour						
	2008	2009	2010	2011	2012	2013
Class I	\$ 58.58	\$ 60.92	\$ 60.93	\$ 62.13	\$ 64.02	\$ 55
Class I thermal	---	---	---	---	---	\$ 25
Class II	\$ 153.85	\$ 159.98	\$ 160.01	\$ 163.16	\$ 168.13	\$ 55
Class III	\$ 28.72	\$ 29.86	\$ 29.87	\$ 30.46	\$ 31.39	\$ 31.50
Class IV	\$ 28.72	\$ 29.86	\$ 29.87	\$ 30.46	\$ 31.39	\$ 26.50

What is “useful thermal energy”

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- “Renewable energy delivered from Class I sources that can be metered and that is delivered in NH to an end user in the form of direct heat, steam, hot water or other thermal form that is used for heating, cooling, humidity control, process use, or other valid thermal end use energy requirements and for which fuel or electricity would otherwise be consumed.” RSA 362-F:2, XV-a.
- Sources must be located in NH and in operation after January 1, 2013
- Technologies specifically included: geothermal, solar thermal, biomass

PUC responsibilities

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- To “establish procedures by which electricity **and useful thermal energy** production not tracked by ISO-New England from customer-sited sources, including behind the meter production, may be included within the certificate program, provided such sources are located within NH. RSA 362-F:6, II
- Sources may be aggregated.
- Energy production “to be monitored by and verified by an independent entity designated by the PUC, which may include electric distribution utilities, **or by such other means as the commission finds adequate in verifying that such production is occurring.**” Id.

Conversion of thermal energy production to megawatt hours

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- The calculation of thermal energy produced is expressed in megawatt-hours, where each 3,412,000 BTUs of thermal energy produced is equivalent to one megawatt-hour. RSA 362-F:6, V.
- Price ceiling of \$25 per thermal REC, vs. \$55 for other Class I RECs.

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