



Rhode Island Energy™
a PPL company

Demand-Side Management Investment Proposal

Energy Efficiency Council

October 5, 2026

Intended Outcomes



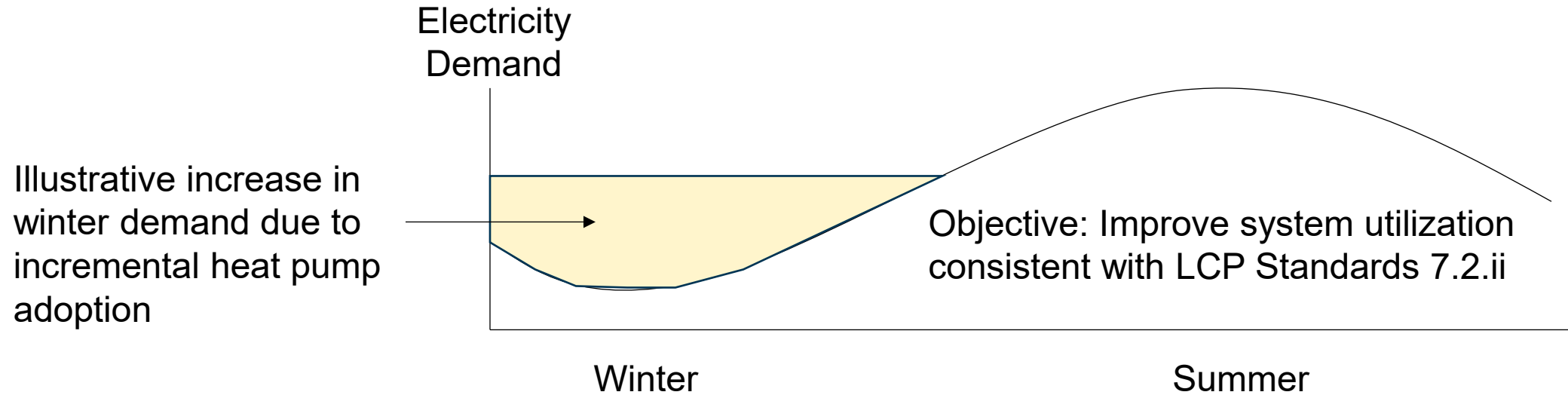
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1. Gain deeper understanding of upcoming DSM proposal
2. Inform specific assumptions and provide leads to useful data
(specific assumptions are underlined in blue throughout!)
3. Opportunity to ask questions and discuss design elements

Note that scope is narrowed
to design of the credit and
the funding source

Out of scope for today:
program administration
considerations, like eligibility
criteria and enrollment
processes

Investment Proposal Concept



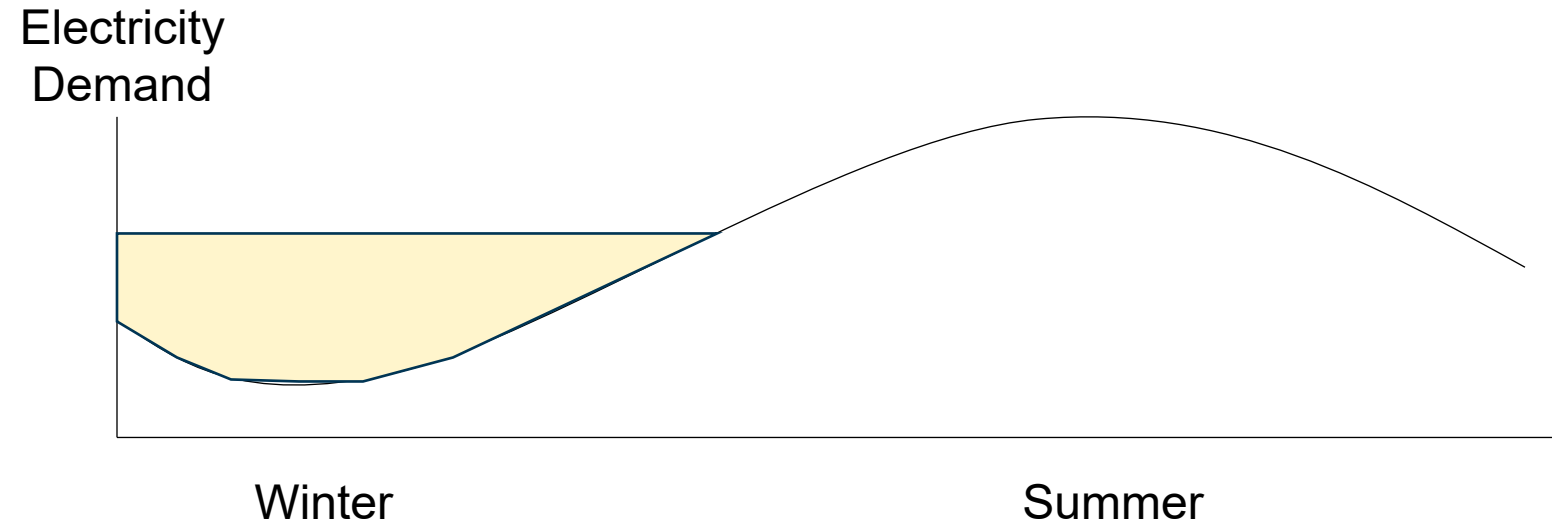
$$\text{Volumetric Rates (\$/kWh)} = \frac{\text{Energy Revenue Requirement (\$)}}{\text{Total Forecasted Deliveries (kWh)}}$$

$$\text{Energy Revenue Collected (\$)} = \text{Volumetric Rates (\$/kWh)} \times \text{Total Actual Deliveries (kWh)}$$

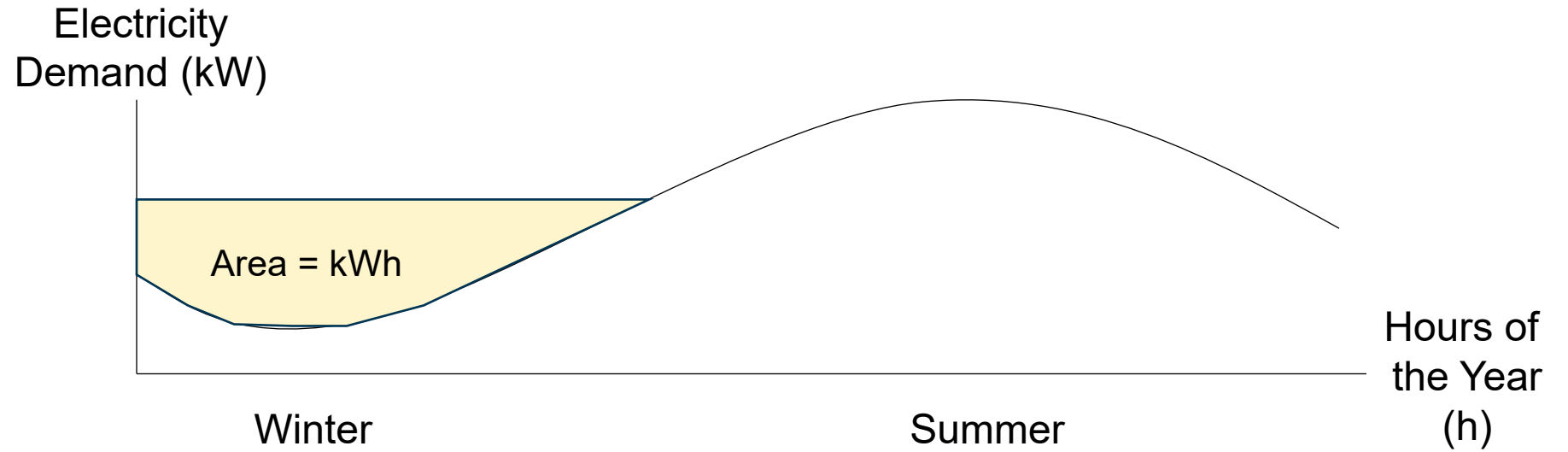
Key Concept:

Holding rates steady: more kWh means more revenue collected than required *in short term*

Amount of Credit



Amount of Credit



Amount of Credit

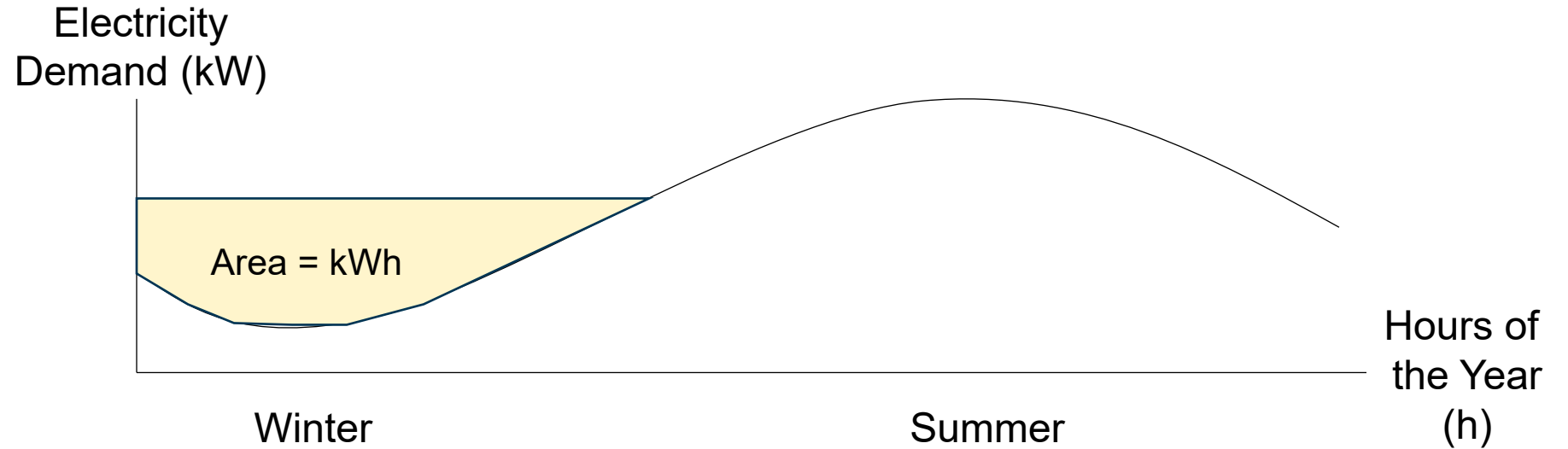


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Goal:
**Credit per ton per
month
(\$/ton/month)**

Question #1:
How much area?

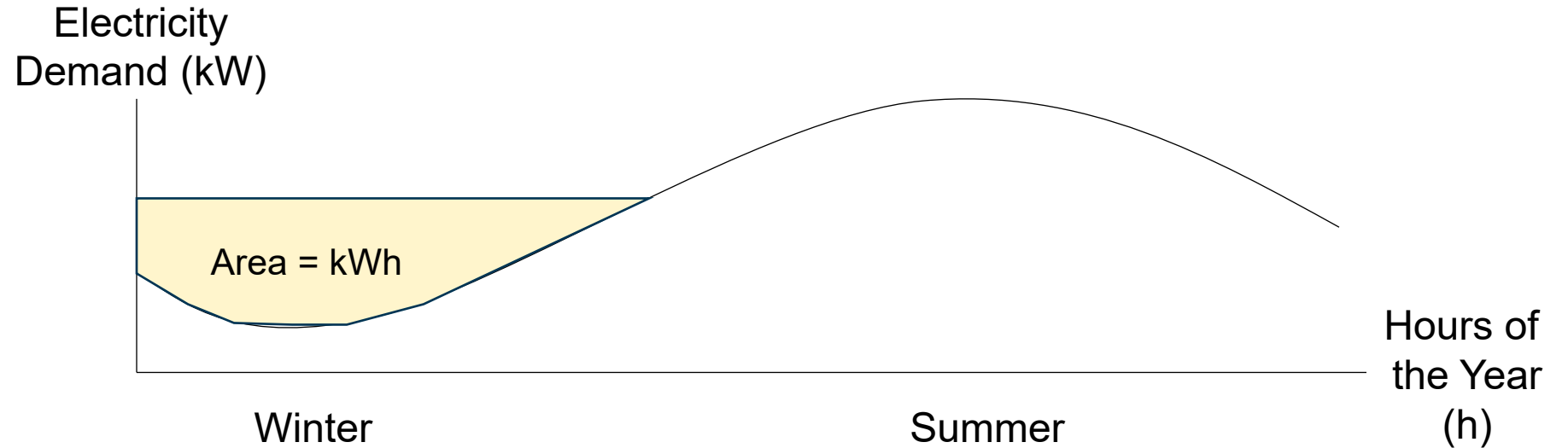
(Breakout by ton and by month)



Amount of Credit

Goal:
**Credit per ton per
month
(\$/ton/month)**

Question #1:
How much area?



Consider full displacement of delivered fuel heating with electric heat pump heating.
Assume average size of 3 tons.

Say 0 kWh heating before || 10,000 kWh heating after

→ Incremental kWh/ton = $10,000 \text{ kWh} / 3 \text{ tons} = 3,333 \text{ kWh/ton}$

Say 4 months of winter heating season (Dec – Mar)

→ Incremental kWh/ton/month = $833 \text{ kWh/ton/month}$

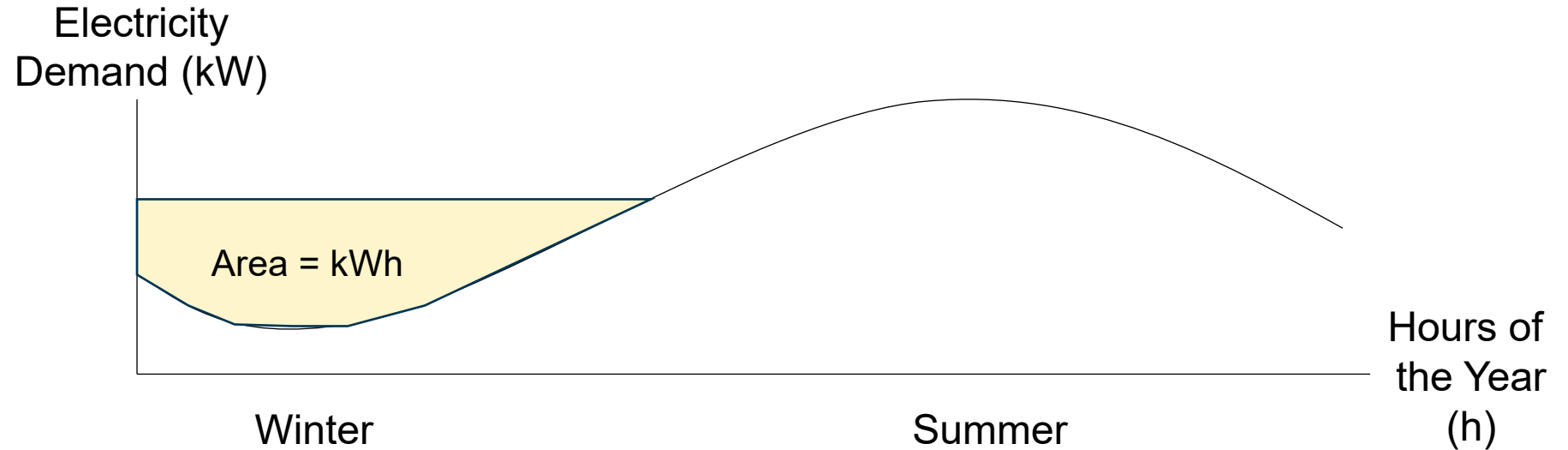
Amount of Credit



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Goal:
Credit per ton per month
(\$/ton/month)

Question #1:
How much area?



What about other displacement scenarios?

→ Weighted average based on kWh and portfolio of installs

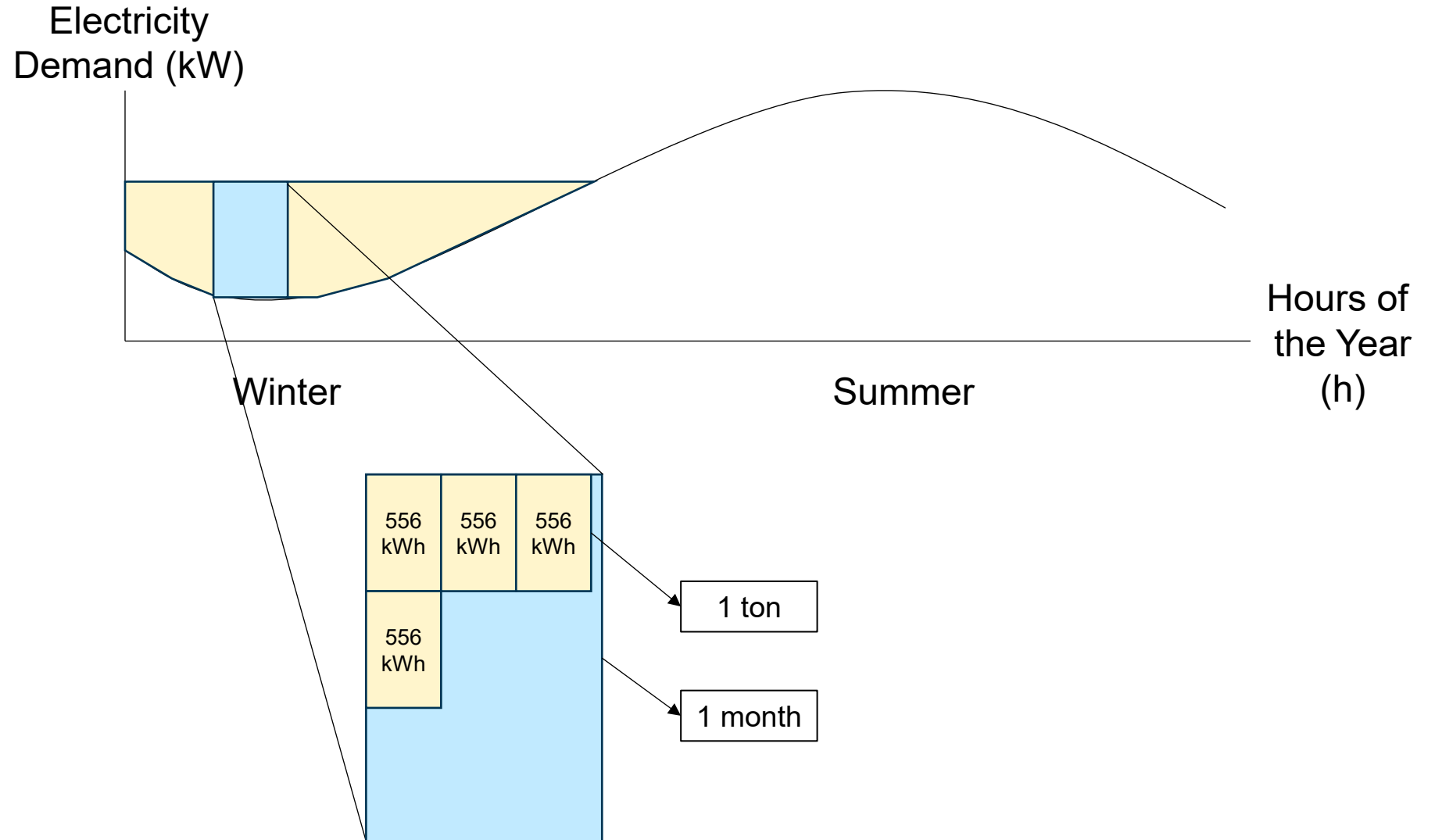
	DF to HP Full Displace	DF to HP Hybrid	NG to HP Full Displace	NG to HP Hybrid	Elec Res to HP
<u>Change in Winter Consumption (kWh)</u>	10,000	6,700	10,000	6,700	(2,000)
<u>Average HP size (ton)</u>	3	3	3	3	3
Winter Period (months)	4	4	4	4	4
Monthly change (kWh per ton)	833	558	833	558	(167)
<u>Proportion of installs (sum to 100%)</u>	10%	47%	7%	29%	7%
Weighted average (kWh per month per ton)	556				

These numbers are illustrative at this point (draft, preliminary, placeholders) and subject to change as we refine them

Amount of Credit

Goal:
**Credit per ton per
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(\$/ton/month)**

Question #1:
How much area?



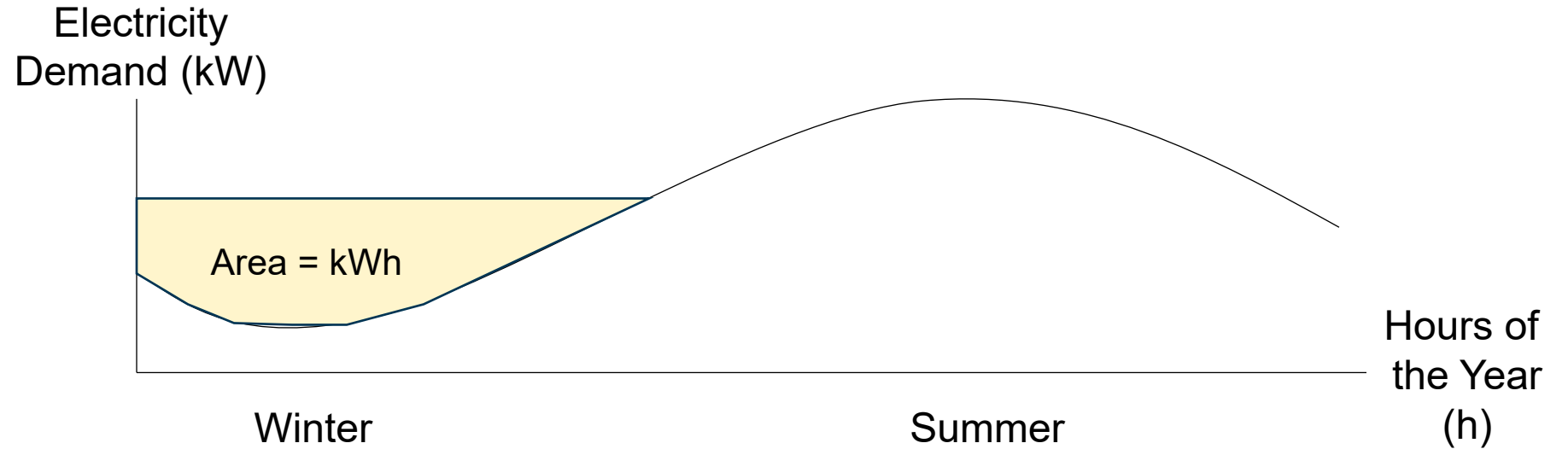
Amount of Credit



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Goal:
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month
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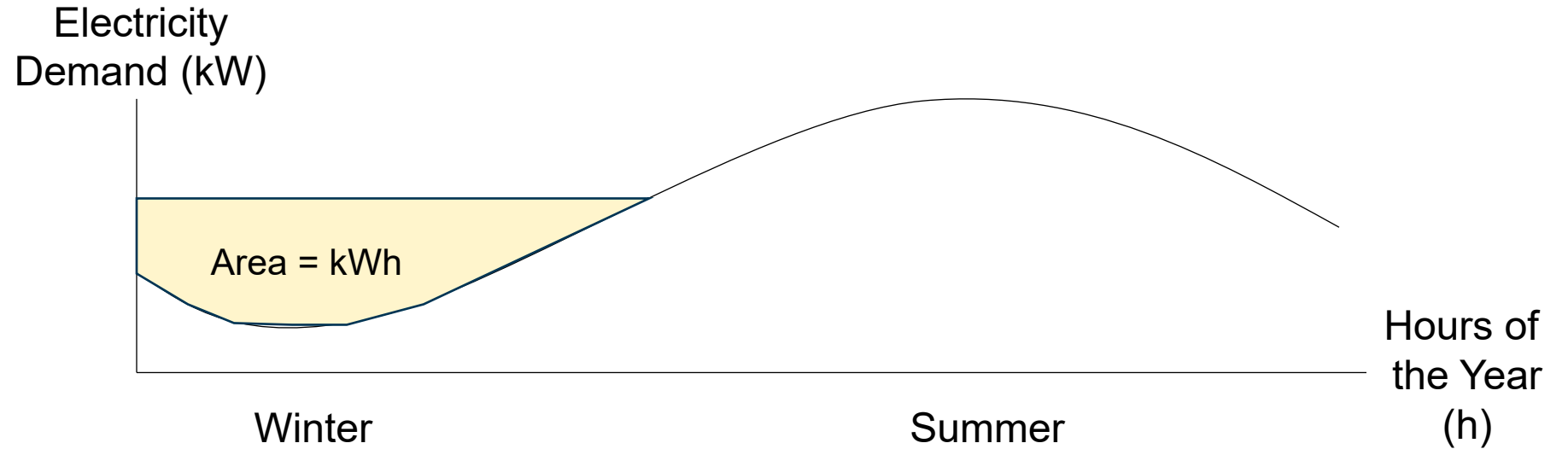
Question #2:
How much value?



Amount of Credit

Goal:
**Credit per ton per
month
(\$/ton/month)**

Question #2:
How much value?



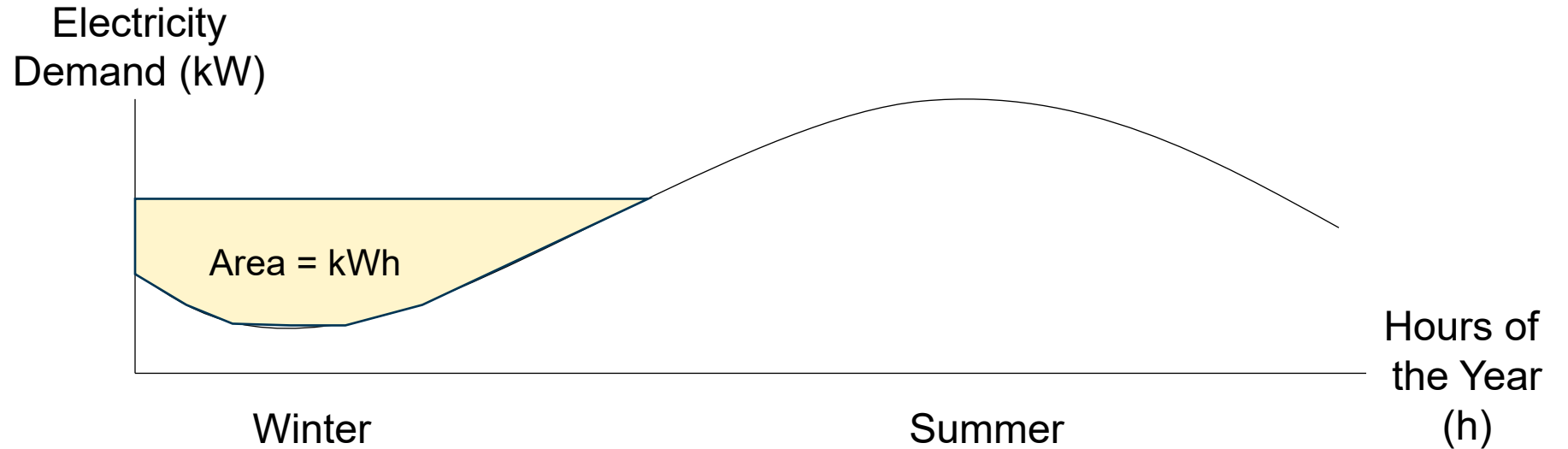
Winter base distribution rate

→ $\$0.04998/\text{kWh} * 556 \text{ kWh/ton/month} = \$27.80 \text{ credit per ton per month}$

Amount of Credit

Goal:
Credit per ton per month
(\$/ton/month)

Question #2:
How much value?



Winter base distribution rate

→ $\$0.04998/\text{kWh} * 556 \text{ kWh/ton/month} = \$27.80 \text{ credit per ton per month}$

Example:

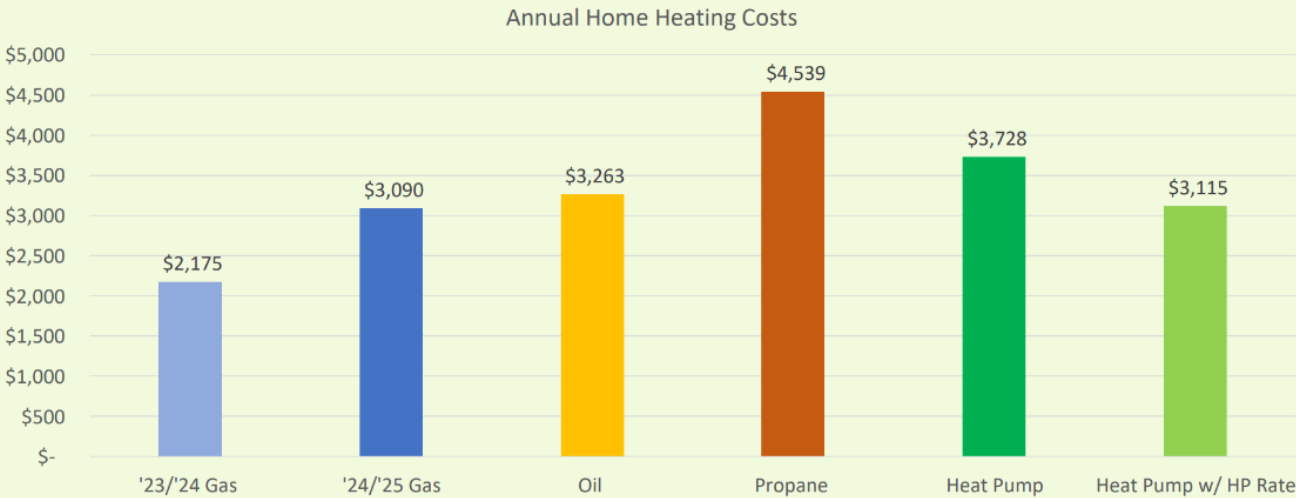
→ Adrian has a 3 ton heat pump.

→ His credit = $\$27.80/\text{ton/month} * 3 \text{ tons} = \$83.39 \text{ per month}$

→ His total winter credit = $\$83.39/\text{month} * 4 \text{ months} = \$333.56$

Putting the Credit in Context

Potential Change in Heating Costs After Electrification



At winter 24/25 gas rates, adopting a **full displacement** heat pump results in an *increase* compared to gas and fuel oil costs, and *savings* compared to propane.
A heat pump rate that discounted electricity by 5 cents would equalize oil/gas with heat pumps.

Oil → Heat Pump

Home heating costs are \$465 greater per season for heat pumps than oil heating.

Value of credit is \$333.

Resulting economic delta reduces to \$132.

'24/'25 Gas → Heat Pump

Home heating costs are \$638 greater per season for heat pumps than gas heating.

Value of credit is \$333.

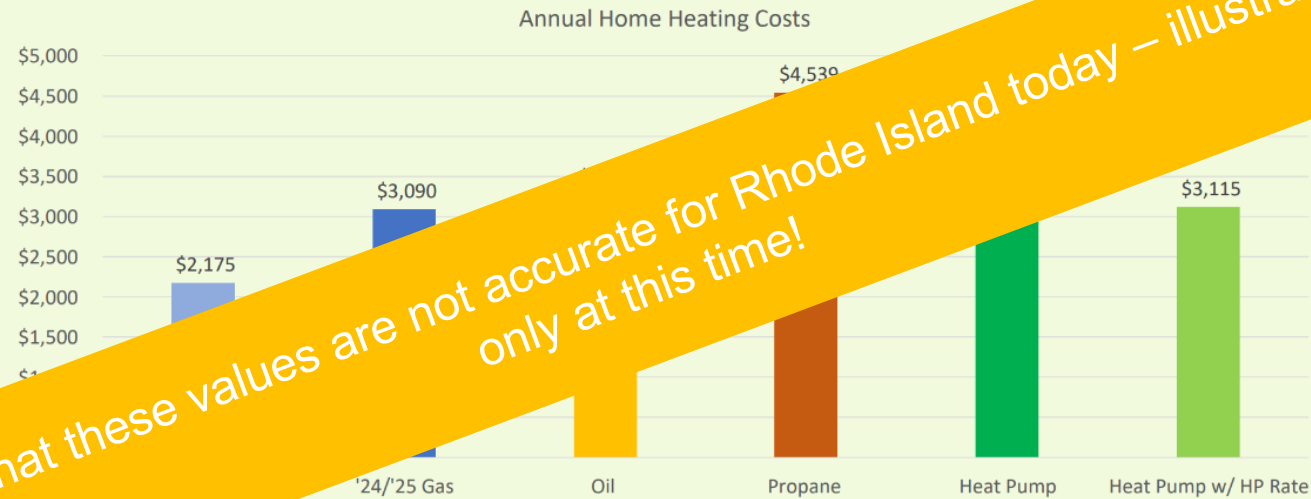
Resulting economic delta reduces to \$305.

Putting the Credit in Context



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Potential Change in Heating Costs After Electrification



Note that these values are not accurate for Rhode Island today – illustrative only at this time!

At winter 24/25 gas rates, adopting a **full displacement** heat pump results in an *increase* compared to gas and fuel oil costs, and *savings* compared to propane.
A heat pump rate that discounted electricity by 5 cents would equalize oil/gas with heat pumps.

Oil → Heat Pump

Home heating costs are \$465 greater per season for heat pumps than oil heating.

Value of credit is \$333.

Resulting economic delta reduces to \$132.

'24/'25 Gas → Heat Pump

Home heating costs are \$638 greater per season for heat pumps than gas heating.

Value of credit is \$333.

Resulting economic delta reduces to \$305.

However, results suggest the magnitude of the credit is likely to be a meaningful amount.

Amount of Credit

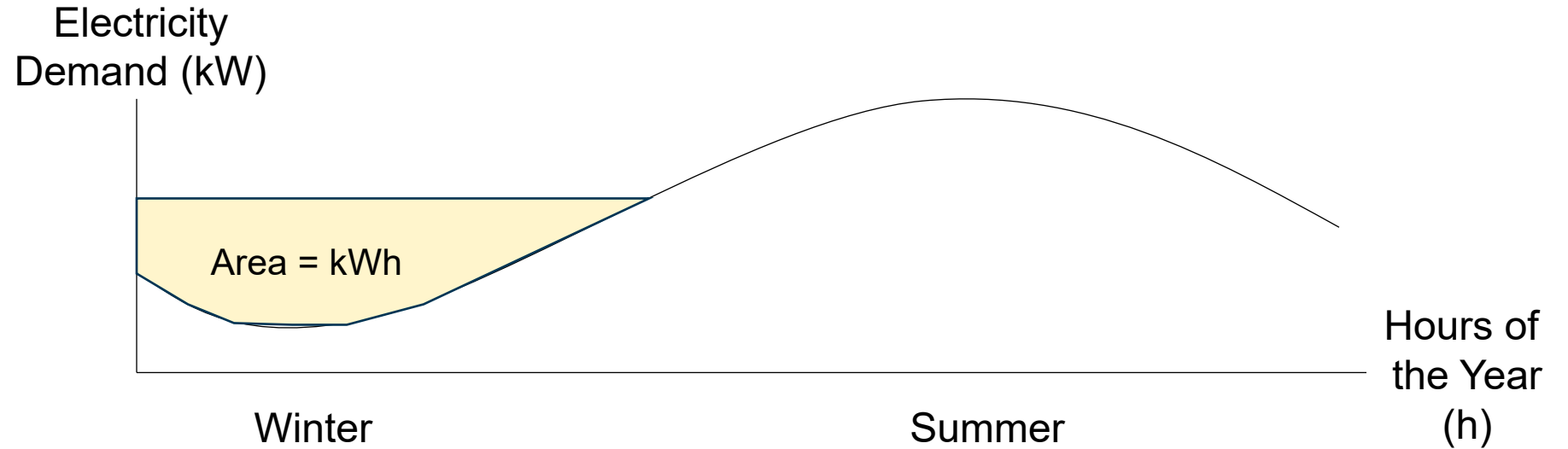


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Goal:
**Credit per ton per
month
(\$/ton/month)**

Question #3:
**Are there other
considerations that
should be factored into
the value of the credit?**

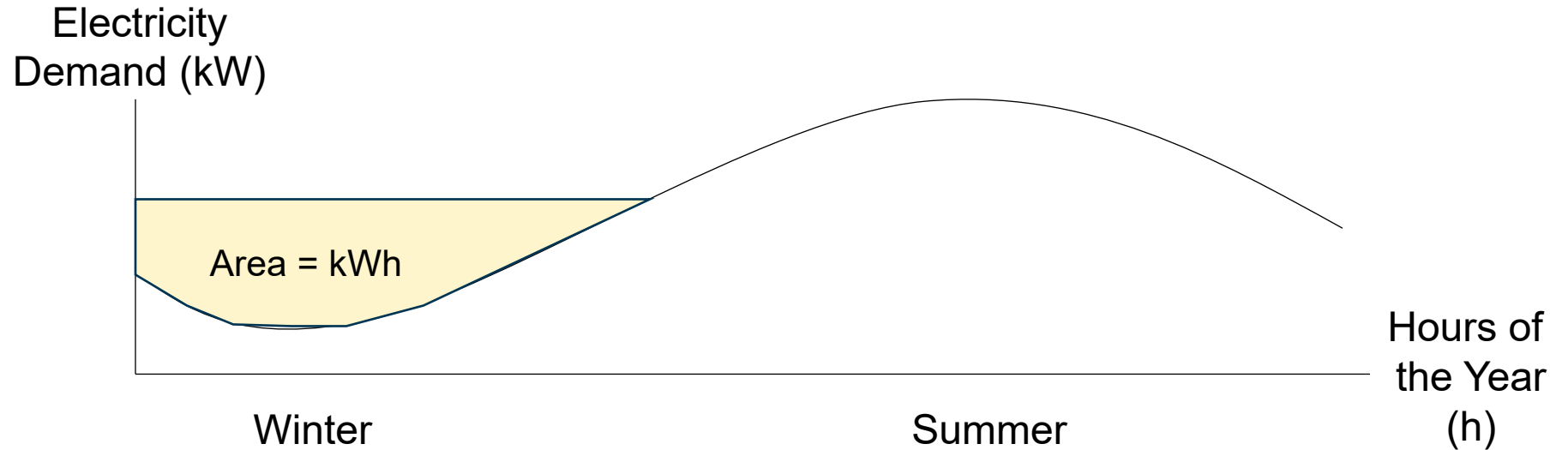
- Non-winter changes in kWh?
- Changes in gas supply/price?
- Eligible pool of customers?
- Transmission expenses?
- Reconciling factors?



Amount of Credit

Goal:
Credit per ton per
month
(\$/ton/month)

Question #3:
**Are there other
considerations that
should be factored into
the value of the credit?**



- Non-winter changes in kWh? ←Leaning towards no: simplicity is best and year-round load profiles covered by HP Rate Study
- Changes in gas supply/price? ←Leaning towards no: likely negligible in short-term
- Eligible pool of customers? ←Leaning towards yes but depends on when we consider heat pumps to be 'incremental' to rate calcs
- Transmission expenses? ←Doing some research on this; note contrasts with base transmission factor relative to distribution
- Reconciling factors? ←Doing some research on this; is magnitude worth complexity?

Funding the Credit

Goal:
**Revenue reconciliation
adjusts for total credit
provided**

Question #4:
**What is the total credit
provided?**

Assuming credit of \$27.80 per ton per month

Assuming participation by 1,000 customers

Assuming average system size of 3 tons

→ $\$27.80/\text{ton/month} * 4 \text{ months} * 3 \text{ tons/customer} * 1,000 \text{ customers} = \$333,545 \text{ total credit}$

Assuming participation by 10,000 customers

→ \$3,335,451 total credit

These numbers are illustrative at this point (draft, preliminary, placeholders) and subject to change as we refine them

Funding the Credit

Goal:
**Revenue reconciliation
adjusts for total credit
provided**

Question #4:
**What is the total credit
provided?**

Assuming credit of \$27.80 per ton per month
Assuming participation by 1,000 customers
Assuming average system size of 3 tons
→ \$333,545 total credit

Assuming participation by 10,000 customers
→ \$3,335,451 total credit

For Context:

Docket No. 26-21-EL FY26 Electric RDM Reconciliation Filing
Schedule NECO-1 Page 1

RDM Reconciliation – Over Recovery	\$3,640,488
<u>Other Adjustments and Interest</u>	<u>\$14,230,009</u>
Amount to be credited through RDM Adj.	\$17,740,761
<u>Forecasted 7/1/26-6/30/27 Deliveries</u>	<u>7,460,191,682 kWh</u>
Proposed RDM Adj. Factor	(\$0.00237) per kWh

Illustrative: inclusion of DSM proposal

RDM Reconciliation – Over Recovery	\$3,640,488
DSM Heat Pump Credit Adjustment	(\$3,335,451)
<u>Other Adjustments and Interest</u>	<u>\$14,230,009</u>
Amount to be credited through RDM Adj.	\$14,405,310
<u>Forecasted 7/1/26-6/30/27 Deliveries</u>	<u>7,460,191,682 kWh</u>
Proposed RDM Adj. Factor	(\$0.00193) per kWh

→ Continuing to work out internally

This is for illustrative purposes only to aid in understanding underlying concept! Actual rate calculations would be based on actual credits and will be within the context of another year's revenue collection and adjustments.

Questions and Discussion

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**It's not just energy—
It's your energy.**



Lee Gresham, Ph.D. | [Head of Gas Regulatory Strategy](#)
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Appendix: Refresher slides on Standards and Timeline

Investment Proposal Purpose (LCP Standards § 7.2)

7.2 Purpose

A. DSM Proposals must do one of the following

i

Manage existing demand

Manage existing demand for electric or gas supply consistent with the Least Cost Procurement Standards.

OR

ii

Manage demand growth

Manage growth in demand so incremental system investment is avoided, lowering the average cost of supply.

Proposal Contents (LCP Standards § 7.3) – Part 1

7.3.A.i. Testimony

The distribution company will prefile testimony on the following

a

DSM Proposal description

Description of the Proposal and its consistency with the purposes in Section 7.2.

b

Impact on demand

Impact of the Proposal on demand for electric or gas supply.

c

Impact on supply costs

Impact of the Proposal on average electric or gas supply costs.

d

Rate and bill savings

Evidence that rates and customer bills decrease over the lifetime of the proposal, program, or measure.

e

Cost-effectiveness

Evidence the proposal is cost-effective, reliable, prudent, and environmentally responsible.

f

PUC approvals sought

The specific approvals the distribution company is requesting from the PUC.

Proposal Contents (LCP Standards § 7.3) – Part 2

7.3.B-G. Proposal Requirements

Each DSM Proposal must address the following

B

Delivery period and targets

Define a delivery period, establish implementation targets within it, and enumerate strategies to attain those targets.

C

Impact analysis

Analyze impacts of the proposed DSM activity on demand and the resulting effect on average supply costs.

D

Costs and cost recovery

Present specific program costs, funding plans, and cost recovery — including how costs are split between gas and electric customers.

E

Existing funding streams

Identify existing funding or incentives for the same offerings and explain how proposed incentives were adjusted for them.

F

Annual reporting

Include an annual reporting plan on implementation across the stated delivery period.

G

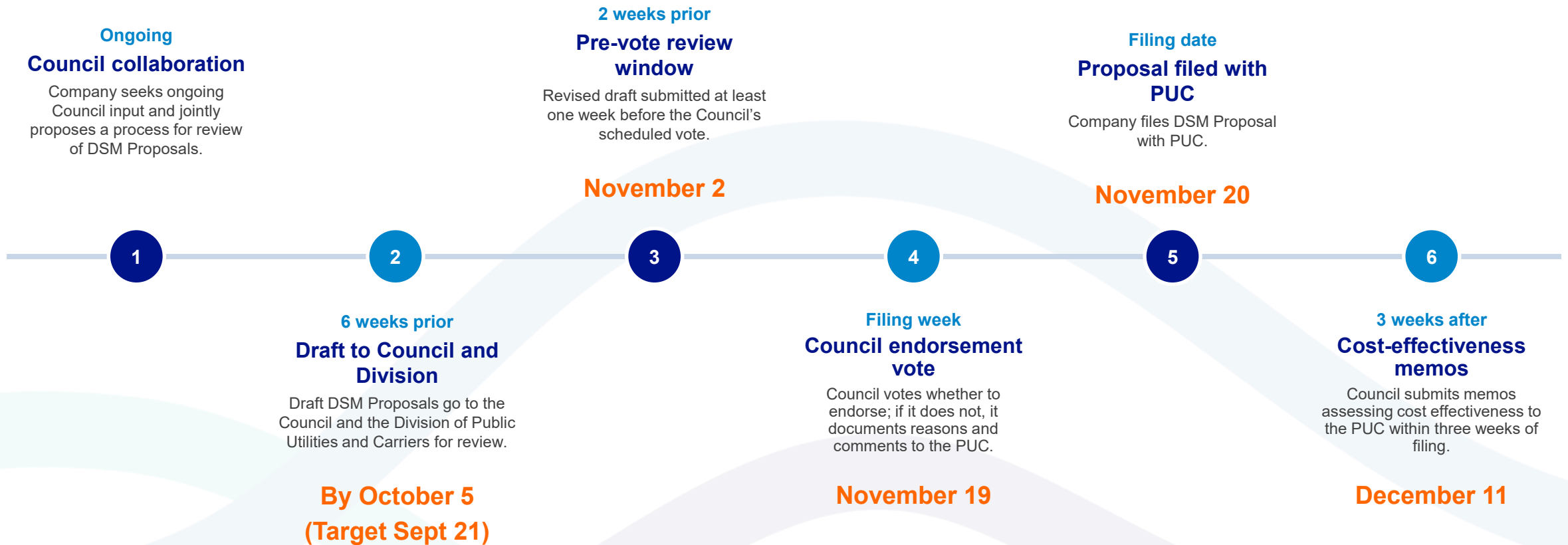
Filing discretion

Proposals shall be filed at the discretion of the distribution company or of the Commission. (Docket No. 23-07-EE, p. 31)

Late November (11/20)

LCP 6.4 Guidelines for DSM Investment Proposals

Council review milestones, sequenced around the PUC filing date





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Appendix: How did we get here? Rate case recap

Rate Case: CLF Proposal

PROPOSAL: FAIR RATE FOR HEAT PUMP CUSTOMERS

Having determined the correct delivery revenue requirement for heat pump customers — \$11.9 million per year, reflecting their actual cost of service — the next question is how to collect it.

We propose a simple **flat rate** that would lower heat pump customer delivery bills, and could therefore be retroactively applied to all known heat pump customers in the state. This rate would only be available to heat pump customers, and would only apply to the delivery side of the bill.

During the test year, the total volumetric delivery rate was 14.08¢/kWh. Our proposal would reduce all volumetric delivery charges by a uniform 41.4%, bringing the total volumetric delivery rate for heat pump customers below the default. Per-customer fixed charges are unchanged.

Area	Default rate	Adj. default rate	Change
Distribution Charge	4.58¢/kWh	2.68¢/kWh	-41.40%
Transmission	4.77¢/kWh	2.80¢/kWh	-41.40%
Other Delivery	1.65¢/kWh	0.97¢/kWh	-41.40%
Renewable Energy	2.14¢/kWh	1.25¢/kWh	-41.40%
Energy Efficiency	0.89¢/kWh	0.52¢/kWh	-41.40%
Total	14.08¢/kWh	8.24¢/kWh	-41.40%

See Schedule JPV-1 Page 30 of 42 Table 4 for discount for heat pump customers and pages 35-36 of 43 Table 5 and Figure 28 and surrounding text for resulting bill increase for non-heat pump customers <https://ripuc.ri.gov/sites/g/files/xkqbur841/files/2026-04/JPV%20Witness%20Testimony%20FINAL.pdf>

ADJUSTED RATES FOR NON-HEAT PUMP CUSTOMERS

The heat pump rate is revenue-neutral at the residential class level: it reallocates delivery revenue responsibility within the residential class, but does not reduce total residential revenue. Heat pump customers' delivery revenue would decrease to match their cost of service, and the volumetric delivery rates for non-heat pump customers remaining on the default schedule would be adjusted upward to recover the difference.

The total volumetric delivery rate for non-heat pump customers would rise from 14.08¢/kWh to 14.37¢/kWh — a 2.0% increase.

Area	Default rate	Adj. default rate	Change
Distribution Charge	4.58¢/kWh	4.67¢/kWh	+2.0%
Transmission	4.77¢/kWh	4.87¢/kWh	+2.0%
Other Delivery	1.65¢/kWh	1.69¢/kWh	+2.0%
Renewable Energy	2.14¢/kWh	2.19¢/kWh	+2.0%
Energy Efficiency	0.89¢/kWh	0.91¢/kWh	+2.0%
Total	14.08¢/kWh	14.37¢/kWh	+2.0%

As with the HP rate, the adjustment is a uniform percentage applied to all volumetric charges; per-customer fixed charges are unchanged.

BILL IMPACT OF HEAT PUMP RATE ON NON-HEAT PUMP CUSTOMERS

How would this small rate adjustment affect non-heat pump customers' bills (Figure 28)?

Monthly bill change for non-HP homes after cross-subsidy removal



Figure 28: Average monthly bill change — all non-HP homes after cross-subsidy removal (Statewide)

It would raise them by **\$1.57 per month**, on average.

And **98%** of non-HP households would see their monthly electric bill rise by less than \$5 a month.

Rate Case: RIE Position

9 **Q. What is your recommendation to the Commission regarding the cost-of-service**
10 **study performed by Witness Velez in support of his recommendation to create a new**
11 **Residential Heat Pump subclass?**

12 **A.** I recommend that the Commission reject Witness Velez's cost of service study. The study
13 is not based on sound data and is not representative of the heat pump customers.
14 and inappropriately separates the heat pump customers from the other residential customers.
15 Witness Velez's recommendation to create a new Residential Heat Pump subclass is not supported
16 of the heat pump customers.
17 Commission reject the recommendation to create a new Residential Heat Pump subclass.

6 **Q. Mr. Velez makes a number of assumptions regarding electricity usage by residential**
7 **customers using heat pumps. At a high level, do you agree with Mr. Velez's**
8 **assumptions regarding the electricity usage of residential heat-pump customers?**

9 **A.** No, generally speaking, I do not agree with Mr. Velez's assumptions regarding the electricity
10 usage by residential heat-pump customers. The assumptions should be separated based on
11 the type of heat pump and the size of the home. The assumptions should be supported by data.
12 support this approach. The assumptions should be supported by data.
13 to be considered collectively in the context of the entire residential rate class.

9 **Q. Do you agree with CLF Witness Velez's recommendation to establish a new heat**
10 **pump rate?**

11 **A.** No. I, Company Witness Schafer, and Company Witness Constable, all find issue with
12 CLF Witness Velez's recommendations and underlying analysis.²⁶ As discussed below,
13 CLF Witness Velez's underlying cost analysis does not meet the standards of utility
14 ratemaking and his recommendations should be rejected by the Commission in their
15 entirety. Although the Company supports heat pump adoption, the Company is not in
16 favor of establishing a heat pump specific rate for residential customers in this
17 proceeding. CLF Witness Velez's recommendation and underlying analysis, which is
18 flawed, is not supported by the data and is not in the best interests of the ratepayers.

See Direct Testimony of Company Witness Lance Schafer Pages 8-21 of 21 Section V
<https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-05/25-45-GE%20Book%2017%20%28Schafer%20Rebuttal%20Testimony%29.pdf>

See Rebuttal Testimony of Company Witness Peter Blazunas Pages 18-21 of Section IV.C
<https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-05/25-45-GE%20Book%2019%20%28Blazunas%20Rebuttal%20Testimony%29.pdf>

See Rebuttal Testimony of Company Witness Ryan Constable All
<https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-05/25-45-GE%20Book%2005%20%28Constable%20Rebuttal%20Testimony%29.pdf>

<https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-05/25-45-GE%20Book%2005%20%28Constable%20Rebuttal%20Testimony%29.pdf>

<https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-05/25-45-GE%20Book%2005%20%28Constable%20Rebuttal%20Testimony%29.pdf>

<https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-05/25-45-GE%20Book%2005%20%28Constable%20Rebuttal%20Testimony%29.pdf>

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<https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-05/25-45-GE%20Book%2005%20%28Constable%20Rebuttal%20Testimony%29.pdf>

Rate Case: Settlement

Settlement Terms

- The Company agrees to submit a Demand Side Management (“DSM”) Investment Proposal with the Rhode Island Public Utilities Commission (“PUC”) consistent with the applicable Least Cost Procurement (“LCP”) Standards. The Parties acknowledge that the LCP Standards currently in effect may be amended through Docket No. 26-15-EE prior to this filing.
- Subject to the Company’s application of the LCP Standards, the DSM Investment Proposal will include a monetary benefit for heat pump customers. The Company is committed to making enrollment in the program as seamless as possible for eligible customers.
- Subject to the Company’s application of the LCP Standards, the DSM Investment Proposal will include a proposal for cost recovery for benefits paid to heat pump customers. CLF agrees not to oppose the Company’s cost recovery proposal provided it is reasonable and consistent with the LCP Standards.
- The Company agrees that it will not oppose a Motion to Intervene from CLF should it seek party status in the DSM Investment Proposal docket. Nothing in this Heat Pump Settlement precludes CLF from proposing an alternative solution through the DSM Investment Proposal.



DSM Investment Proposal



Heat Pump Study

- At or around the same time as the filing of the DSM Investment Proposal, the Company agrees to file a study that evaluates the extent to which there are differences in cost causation for heat pump customers and other customers. This study will address the propriety of rate design and other ratemaking principles to reflect any difference in cost causation.
- Unless a specific docket is directed by the PUC, the Company will file the study in an appropriate docket. The Company will consult with CLF to determine an appropriate docket.

See Settlement Agreement <https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2026-06/25-45-GE-Heat%20Pump%20Settlement%20-%20Added%20Signatures%20%28PUC%206-9-2026%29.pdf>



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Appendix: Governing Statute

§ 39-2-1.2. Utility base rate — Advertising, demand-side management, and renewables.

(b) Effective as of January 1, 2008, and for a period of twenty (20) years thereafter, each electric distribution company shall include a charge per kilowatt-hour delivered to fund demand-side management programs. The 0.3 mills per kilowatt-hour delivered to fund renewable energy programs shall remain in effect until December 31, 2028. The electric distribution company shall establish and, after July 1, 2007, maintain, two (2) separate accounts, one for demand-side management programs (the “demand-side account”), which shall be funded by the electric demand-side charge and administered and implemented by the distribution company, subject to the regulatory reviewing authority of the commission, and one for renewable energy programs, which shall be administered by the Rhode Island commerce corporation pursuant to § 42-64-13.2 and shall be held and disbursed by the distribution company as directed by the Rhode Island commerce corporation for the purposes of developing, promoting, and supporting renewable energy programs.