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1 **Q: Do current net metering tariffs balance the interests of customer-generators with**  
2 **those of non-net metered customers?**

3 A: The Joint Utilities believe they do. A large portion of credit provided to customer-  
4 generators through the net metering tariff is directly tied to the wholesale cost of energy  
5 reflected within default service rates and generally avoided or realized through utility  
6 market activity. This ensures a large portion of net metering credit remains market-based  
7 and distributed generation development in New Hampshire is market-driven, as has been  
8 demonstrated through recent increases in solar deployment in response to changes in  
9 energy supply rates. This shows that the current net metering tariff encourages customers  
10 to make investment decisions based on real market conditions, and not just level of  
11 subsidization.

12  
13 Current net metering tariffs do risk shifting costs to non-net metered customers by  
14 providing credit in excess of the wholesale market value of energy, in this instance, the  
15 full default service rate, along with a portion of distribution and transmission rates, but  
16 the risk of significant cost shifting in New Hampshire is mitigated by several factors.  
17 The current net metering tariff limits credit for distribution and transmission values to  
18 only small customer-generators, providing credit for excess generation at only 25 percent  
19 of the distribution rate and providing credit for only kWh-based retail rates limits the  
20 amount of credit provided to New Hampshire customer-generators that may exceed the  
21 wholesale energy market value of energy and risk shifting costs to non-net metered  
22 customers. Net metering tariff designs which have more expansive customer eligibility

1 or issue credits for larger portions of retail rates (i.e. for rates other than supply-related  
2 rates) are at higher risk of shifting costs to non-net metered customers.

3  
4 The Joint Utilities also generally agree that distributed generation facilities can provide  
5 greater benefits than larger generation resources by reducing line losses, lowering peak  
6 loads on portions of the distribution system and diversifying energy resources. These  
7 benefits are more difficult to objectively quantify and are likely to vary based on resource  
8 type and location on the electric power system, but they should be considered in any  
9 assessment of the balance of Customer-Generator interests with those of non-net metered  
10 customers. This is consistent with the 2022 update to the New Hampshire Ten Year State  
11 Energy Strategy, which states: “**Having a diverse resource mix can help ensure a**  
12 **secure, reliable, and resilient energy system.**” (New Hampshire 10-Year State Energy  
13 Strategy at page 39, emphasis in original).

14  
15 The actual costs and benefits of distributed generation facilities are difficult to completely  
16 validate and the current net metering structure does create a risk that electric power  
17 system costs could be shifted from net metered customers to non-net metered customers.  
18 However, the Joint Utilities do not believe the current net metering structure is creating a  
19 clear or significant imbalance between the interests of net metered and non-metered  
20 customers that requires the Commission to address through significant revisions to the  
21 existing net metering tariff.

22

1 **Q: Should the Commission implement new alternative net metering tariffs?**

2 A: The Joint Utilities do not recommend new alternative net metering tariffs at this time.

3 The current net metering tariffs are not creating clearly unbalanced outcomes that merit

4 correcting. A growing number of New Hampshire residents and businesses are

5 increasingly able to make renewable energy choices that reduce their electric bills and

6 introduce potential indirect benefits that are realized by all customers. Moreover, the

7 current net metering tariff is a workable model that is administratively efficient and

8 aligned with technical capabilities, further ensuring an equitable net metering program. If

9 the Commission were to consider alterations to the existing tariff, the Joint Utilities

10 recommend that the Commission consider only limited adjustments to the existing net

11 metering tariffs, and that any such adjustments maintain the level of facility of

12 administration and work within respective technical capabilities and processes to prevent

13 any incremental administrative or equipment and system costs. Costs that are not

14 necessarily commensurate with benefits would have an overall effect of diluting the cost

15 effectiveness of the New Hampshire net metering program, increasing the cost shift to

16 non-net metered customers.

17

18 **Q: Should the Commission consider alternative rate structures, including time-based**  
19 **tariffs?**

20 A: Alternative rate structures are not necessary right now and would not be practicable or

21 necessarily appropriate for incorporation into a net metering program in New Hampshire.

22 Current rate structures provide adequate opportunity for New Hampshire customers to

**Responding Parties**  
**Docket No. DE 22-060**

**Date Request Received: April 24, 2024**  
**Data Request No. RR-005**

**Date of Response: July 8, 2024**  
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**Request from: New Hampshire Public Utilities Commission**

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**Request:**

Would any cross subsidization between customer generators and (non-customer generator) ratepayers be appropriate and acceptable?

**Response:**

No rate structure recovers from each individual customer the exact cost to serve that customer – cross subsidies are always present. In its approval of the current net metering structure in Docket No. DE 16-576 the Commission concluded that there was “little evidence of *significant* cost-shifting from DG customers to customers without DG” (Order No. 26,029 at 72, emphasis added). The reference to significant cost-shifting suggests that the Commission previously found the relationship between customer generators and (non-customer generator) ratepayers was just and reasonable when approving the compensation level of customer generators to as permitted by RSA 362-A:9 to enable net metering. The standard of “unjust and unreasonable cost shifting” is also explicitly called out in RSA 362-A:9, XVI(a) as something the Commission should consider when developing net metering tariffs, which pretty clearly indicates that some level of cost shifting is warranted to support New Hampshire’s net metering policy.

The parties to this response agree with the Commission’s position in the last net metering docket, which is why the utilities testified that current compensation levels have not demonstrated a significant level of cost shifting, and that any cost shifting that may be present is justified by the policy objectives that net metering compensation sustains, as the parties believe that this is consistent with New Hampshire law.

CENH has presented analysis that indicates there are oversetting cost factors that more than compensate non-NEM customers for any current costs of supporting NEM based on current levels of NEM customers in NH and levels likely in the near future.

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**Date Request Received: April 24, 2024**  
**Data Request No. RR-006**

**Date of Response: July 8, 2024**  
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**Request from: New Hampshire Public Utilities Commission**

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**Request:**

How do the prior studies completed in dockets related to net-metering support the parties' positions in this docket?

**Response:**

The parties' various positions are informed by the totality of relevant circumstances surrounding net metering and the evolution of the distributed generation ("DG") and clean energy industries as they specifically apply to New Hampshire. That is to say that any decision regarding the compensation level for net metered customer-generators is closely tied to a constellation of characteristics that is temporally specific. Reports from previous dockets, while informative as to the history of past or current compensation levels, are not necessarily indicative of what is appropriate or justified in this docket and for compensation moving forward, so those reports or studies are not necessary or germane to the party positions in this docket.

The Joint Utilities' position is supported by their collective experience operating the electric power system and administering net metering tariffs, as well as the general findings of prior studies. In particular, the initial pre-filed testimony of the Joint Utilities explains that:

*.....distributed generation facilities can provide greater benefits than larger generation resources by reducing line losses, lowering peak loads on portions of the distribution system and diversifying energy resources. These benefits are more difficult to objectively quantify and are likely to vary based on resource type and location on the electric power system, but they should be considered in any assessment of the balance of Customer-Generator interests with those of non-net metered customers. (Joint Utility Testimony at 11)*

The Joint Utilities' testimony is generally consistent with the results of the New Hampshire Department of Energy's Locational Value of DER Study, conducted pursuant to the Commission's Order in Docket No. 16-576 and which is to be administratively noticed in this docket, which estimated a benefit of capacity avoidance while concluding

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it may range from under \$1/kW to over \$4,000/kW based on location (LVDG Study, Executive Summary at vii). This response does not characterize the position of any party on the substance of the VDER study.

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**Docket No. DE 22-060**

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**Data Request No. RR-007**

**Date of Response: July 8, 2024**  
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**Request from: New Hampshire Public Utilities Commission**

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**Request:**

Is the utility default service rate the appropriate rate to compensate generation for net metering parties? If so, why?

**Response:**

The Joint Utilities recommended in their Direct Testimony in this docket that the Default Service rate is an appropriate and efficient compensation credit for the electricity supply rate component for excess generation from customer-generators. Please refer to the Direct Testimony of the Joint Utilities at:

Page 10, Lines 3-11

Page 14, Lines 1-5

Please also see the Rebuttal Testimony of the Joint Utilities at Page 17, Lines 5-10. The CENH testimony also supports using the utility default service rate for setting the NEM electricity supply rate component of NEM rates. *See* Testimony of David P. Littell on Behalf of Clean Energy NH, NH PUC Dock. No. DE 22-060 (Dec. 6, 2023), pp. 7, 10, 15- 22, 32-33. 36.

Setting the NEM credit level for electricity supply at the utility default service rate has encouraged the development and expansion of distributed clean energy, and there is no evidence that this level of compensation creates unjust cost shifting. In addition, the DOE VDER study indicates that there is no significant or unjust cost shifting at the current level of compensation.



**THE STATE OF NEW HAMPSHIRE  
BEFORE THE  
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**

**TESTIMONY OF**

**David P. Littell on behalf of  
Clean Energy New Hampshire**

**CONSIDERATION OF CHANGES TO THE  
CURRENT NET METERING TARIFF STRUCTURE,  
INCLUDING COMPENSATION OF CUSTOMER-GENERATORS**

**Docket No. DE 22-060**

**December 6, 2023**

1 testify to the balance between value and costs. The costs are quite modest, and the benefits are  
2 substantial for all ratepayers. The benefits are even greater to NEM-customers. In total, the  
3 substantial net benefits are achieved at a very modest cost. Those benefits for all customers exceed  
4 the costs even without accounting for environmental benefits.

5 **Q. When you say benefits to all customers exceed the costs, can you clarify?**

6 A. The costs (as analyzed by the Dunskey NH VDER Study and confirmed by Tom Beach and  
7 other studies) are substantially below the value of the DERs in the NEM program.

8 **Q. How does New Hampshire's cost to benefit compare to other New England states?**

9 A. Since other New England states NEM programs pay more for the same DER kWh of  
10 energy, without doing quantitative analysis, it is fairly clear that New Hampshire's NEM 2.0  
11 program procures more value per dollar than other New England states.

12 **Q. Is New Hampshire more frugal than other New England states?**

13 A. Yes. New Hampshire's NEM 2.0 program is both more frugal and more thrifty than other  
14 New England states. None of the recommendations in this testimony would vary New Hampshire's  
15 status as the most frugal and thrifty New England state on net energy metering.

16 **Q. Has DER activity increased in New Hampshire?**

17 A. DER activity increased in New Hampshire and across the region in recent years largely as  
18 a result of the price of energy. This is a natural and expected response to increase in energy prices.  
19 Price drivers for energy include a constrained gas supply: gas is increasingly being exported from  
20 the U.S. Multiple international markets, including European markets, have experienced severe  
21 supply disruptions with the February 2022 Russian invasion of the Ukraine. As a result, prices of  
22 petroleum and gas have increased and severely increased over the last year and half.

**THE STATE OF NEW HAMPSHIRE  
BEFORE THE  
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**

**TESTIMONY OF  
R. Thomas Beach  
on behalf of  
Clean Energy New Hampshire**

**CONSIDERATION OF CHANGES TO THE  
CURRENT NET METERING TARIFF STRUCTURE,  
INCLUDING COMPENSATION OF CUSTOMER-GENERATORS**

**Docket No. DE 22-060**

**December 6, 2023**

1       • **9.54% factor applied to both avoided transmission costs and transmission**  
2       **lost revenues.** The Dunsky RBI model applies this factor to both the avoided  
3       transmission costs and transmission lost revenues, dramatically reducing both.  
4       Dunsky says that “the rate impacts assessment assumes only the portion [of  
5       transmission costs] attributable to the New Hampshire load as a percentage of the  
6       ISO-NE system, which is approximately 9.54%.”<sup>20</sup> But New Hampshire  
7       ratepayers pay in their rates for 100% of the New England transmission costs  
8       allocated to them, and they can avoid 100% of New England ISO transmission  
9       charges allocated to the New Hampshire utilities if they reduce their demand  
10      during the hours when transmission costs are assessed. This is what is correctly  
11      assumed in Dunsky’s avoided cost model, but not in its RBI analysis. This 9.54%  
12      factor should be eliminated.

13      In addition, the Dunsky RBI model predates the joint testimony of the utilities proposing,  
14      in concept, application fees for new NEM participants. The utilities then supplemented  
15      their testimony in discovery, providing a straw proposal for such fees. As discussed in  
16      Mr. Littell’s testimony, CENH does not oppose the implementation of reasonable  
17      application fees, provided the utilities also commit to providing timely service in  
18      interconnecting DG customers. An application fee would provide a revenue stream to  
19      offset some of the program administration costs included in the Dunsky RBI analysis.

20

21      **Q: Have you re-calculated Dunsky’s RBI results based on all of the issues you have**  
22      **identified in your testimony?**

23      A: Yes. My revised RBI results use (1) Dunsky’s updated avoided costs, (2) modifications  
24      to address the inconsistencies and problems in the RBI analysis noted above, and (3)  
25      revenues from an application fee (based on the utilities’ straw proposal), then add (4)  
26      marginal line losses in all hours, and finally incorporate (5) the revised avoided  
27      distribution costs presented in Table 1 above (with a PCAF-based allocation across  
28      hours). **Table 2** shows the cumulative impacts of each of these changes, in terms of the  
29      average bill impacts on non-participating Eversource ratepayers over the years 2021-  
30      2035, when these changes are made, step by step, to the Dunsky RBI analysis.

31              Several points about Table 2 need to be emphasized, so that what the table shows  
32      is clear. First, the bill impacts shown in the table represent the average change in

---

<sup>20</sup> See Dunsky Report, at Appendix F.2.2.

I have performed analyses similar to the one shown in Table 2 for Liberty and Unitil. The bottom-line results for all three utilities are presented in Table 3, showing the bill impacts after making all changes to the RBI analysis discussed in my testimony.

**Table 3: Impact of Changes to RBI Analysis – Non-participating Customers**

Utility	2021 – 2035 Bill Impact (%)		
	Residential	SG	LG
Eversource	- 0.51%	- 0.70%	- 1.05%
Liberty	+ 0.30%	- 0.15%	- 1.07%
Unitil	+ 0.19%	- 0.14%	- 0.08%
<b>Average</b>	<b>- 0.4%</b>	<b>- 0.6%</b>	<b>- 0.9%</b>

Note: Table 3 includes all Table 2 changes for each utility. Average results are weighted by each utility's sales.

Table 3 shows that, when all of these changes are made, the result is that future DER deployment in New Hampshire will result in small decreases in the rates and bills for all non-participating commercial ratepayers and for Eversource's non-participating residential customers. There would be slight rate and bill increases for the non-participating residential customers of Liberty and Unitil. On average statewide, across all three utilities, net metered DG installations will provide a small net benefit to customers, including to customers who do not install solar. Although the changes that I have made to the Dunsky RBI analysis have small impacts, they do reverse the findings of the Dunsky Report that future DER development would result in slight rate and bill increases for non-participants. My revisions support a conclusion that future DER deployment in New Hampshire will result in slight rate and bill decreases for most non-participants.

#### IV. IMPACTS OF RECOMMENDED CHANGES TO NET METERING

**Q: In light of the results of your analysis, what adjustments could be made to NEM policy in New Hampshire?**

A: CENH has asked me to assess whether adjustments to the current design of the export rates paid to solar customers could be made, without burdening non-participating ratepayers, in order to provide a stronger incentive for customers to adopt DERs. I used

**STATE OF NEW HAMPSHIRE**  
**Before the**  
**PUBLIC UTILITIES COMMISSION**  
**Docket No. DE 23-060**  
**ELECTRIC DISTRIBUTION UTILITIES**  
**Consideration of Changes to the Current Net Metering Tariff Structure, Including**  
**Compensation of Customer-Generators**

**Responses of David Littell on behalf of Clean Energy NH to of the Granite State**  
**Hydropower Association to Clean Energy NH Data Requests, Set 1**  
**January 10, 2024**

Please refer to the testimony of David Littell on behalf of Clean Energy NH filed on December 6<sup>th</sup> at page 40 line 20 which states the following:

“Q. What is the second recommendation?”

A. The second recommendation is that, assuming NEM 3.0 is any different than NEM 2.0, to ask for the same effective grandfathering for NEM customers taking NEM 3.0 after the Commission’s new program becomes effective, so 20 years of NEM for new customers.”

3. Can you please clarify under your proposal what would be the starting point in time for the 20-year term of grandfathering under NEM 3.0?

**Answer:** The starting point for the proposed 20-year term for NEM would be when the facility begins to physically generate power under the NEM tariff. In the case of a newly constructed NEM facility that requires utility permission to interconnect, synchronize with the grid, and energize, that starting point is the date the customer is approved to energize and operate with the utility interconnection facilities. In the case of facilities that energized some time prior, that start date would be the date the facilities began to participate in an NEM tariff.

**STATE OF NEW HAMPSHIRE**  
**Before the**  
**PUBLIC UTILITIES COMMISSION**  
**Docket No. DE 23-060**  
**ELECTRIC DISTRIBUTION UTILITIES**  
**Consideration of Changes to the Current Net Metering Tariff Structure, Including**  
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4. Please clarify what is meant in your response by “new customers”.

**Answer:** New customers in this CENH proposal for a 20-year term refers to customers who take NEM service for the first time under any NEM tariff. The purpose of this 20-year NEM proposed term is to provide adequate and stable customer expectations that allow for project financing including re-financing associated with hydro facility (or any resource type) upgrades and commercial transactions. If there is a risk that NEM qualifications or payment will vary in the future, it can present commercial and transactional risk issues that are not supportive of competitive distributed resource markets in New Hampshire.

**Responding Parties**

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**Date Request Received: April 24, 2024**

**Date of Response: July 8, 2024**

**Data Request No. RR-001**

for customer-generators than New Hampshire and tended to, through multiple iterations of net metering tariffs, provide for predictable rates that support distributed resource development over many years for interested customers.

As set forth in Mr. Littell's testimony, Connecticut sets a several rates for PV customers compensation. Connecticut has transitioned from a pure NEM regime to two different distributed solar compensation regimes for residential customers with PV systems up to 25 kW and non-residential customers up to 5,000 kW of PV. PURA sets a rate for a "buy-all" energy and RECs annually which is \$0.3189/kWh in 2024 for residential customers and can be increased for low-income customers or customers in economically distressed area. For non-residential PV customers, the "buy-all" rates start at \$199.82/MWh for projects with generating capacity up to 200 kW. There is a competitive procurement above 200 kW to 5,000 kW for non-residential new system.

The alternative compensation scheme in Connecticut, at the customer's option, provides for "netting" of net excess energy not used onsite and all RECs at a credit equal to the retail kWh charge for that customers rate class. Vermont has a very complex system to ensure solar development away from sensitive areas and provides a blended net metering rate which in 2024 was re-set at \$0.18398/kWh and subject to various "Siting Adjustor Factors" and other factors.

In Massachusetts, customers with eligible PV up to 5,000 kW can qualify net excess generation compensation for up to 100% retail basic service, distribution, transmission on a per kWh basis for PV up to 25 kW, and solar facilities serving onsite local or governmental facilities. A lower net credit is available for other renewable facilities is "based on 60% of the excess kWh generated, as opposed to 100%." Hydro in Massachusetts can net up to 2,000 kW for credit set at retail basic service. The utility description above provides more detail on Massachusetts.

Maine's programs, called Net Energy Billing take two different forms, full NEM for residential and small business customers known as Maine's KWH credit. The KWH credit includes the default service, transmission, and distribution charges. Likewise, Rhode Island provides a full credit for the default service charges, as well as charges for distribution, transmission, and transition, but in Rhode Island, DG customers are always responsible for customer and demand related charges



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Using the same format as the NH summary of NH’s NEM, Maine’s and Rhode Island’s programs are summarized graphically below as they have different compensation levels but similar structure whereas the Connecticut, Massachusetts, and Vermont programs are not structured similarly to New Hampshire’s so do not lend themselves to the same tables for comparison.

<b>Maine (KWH Program)</b>	
<b>Bill Component</b>	<b>Credit or Charge</b>
Demand Charge	Not Applicable
Min. Bill Charge	Charge
Default Service (Energy)	Full Credit
Distribution	Full Credit
Transmission	Full Credit
System Benefits	Charge
Stranded Cost	Charge

<b>Rhode Island</b>	
<b>Bill Component</b>	<b>Credit or Charge</b>
Demand Charge	Charge
Customer Charge	Charge
Default Service (Energy)	Full Credit
Distribution	Full Credit
Transmission	Full Credit
Transition Charge	Full Credit

**Responding Parties**  
**Docket No. DE 22-060**

**Date Request Received: April 24, 2024**  
**Data Request No. RR-001**

**Date of Response: July 8, 2024**

**For NH Systems less than and equal to 100 kWac**

<b>Bill Component</b>	<b>NEM 1.0 (Standard NEM)</b>	<b>NEM 2.0 (Alternative NEM)</b>
<b>Customer Charge</b>	Yes	Yes
<b>Demand Charge (if applicable)</b>	Yes	Yes
<b>Default Service (Energy)</b>	Full Credit	Full Credit
<b>Distribution</b>	Full Credit	25% Credit
<b>Transmission</b>	Full Credit	Full Credit
<b>System Benefits</b>	Full Credit	No Credit
<b>Stranded Cost</b>	Full Credit	No Credit
<b>Storm Recovery</b>	Full Credit	No Credit
<b>Credit Mechanism (end of each billing cycle)</b>	Net kWh Carried Forward	kWh converted to monetary credit. Monetary credit carried forward as a bill credit.

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**Date Request Received: April 24, 2024**  
**Data Request No. RR-001**

**Date of Response: July 8, 2024**

**For NH Systems larger than 100 kW up to 1 MWac**

<b>Bill Component</b>	<b>NEM 1.0 (Standard NEM)</b>	<b>NEM 2.0 (Alternative NEM)</b>
Customer Charge	Yes	Yes
Demand Charges	Yes	Yes
Default Service (Energy)	Full Credit	Full Credit
Distribution	No Credit	No Credit
Transmission	No Credit	No Credit
System Benefits	No Credit	No Credit
Stranded Cost	No Credit	No Credit
Storm Recovery	No Credit	No Credit
Credit Mechanism (end of each billing cycle)	Net kWh Carried Forward	kWh converted to monetary credit. Monetary credit carried forward as a bill credit.

The above graphics for New Hampshire NEM compensation can also be found here: (NHPUC, What is Net Metering, , [Net Metering Tariff Overview 2020](https://www.puc.nh.gov/sustainable%20energy/Net%20Metering/Net_Metering.html), on the web: [https://www.puc.nh.gov/sustainable%20energy/Net%20Metering/Net\\_Metering.html](https://www.puc.nh.gov/sustainable%20energy/Net%20Metering/Net_Metering.html).)

Attachment B –  
CENH Pro-forma of new NEB Solar Projects in New Hampshire

CENH has simplified the pro forma summary for NEB solar projects in New Hampshire provided to all parties on March 28, 2024. (This version eliminates the transmission credit scenarios for projects > 1 MW which are not part of this settlement.)

The calculations includes median assumptions for the variables that impact new solar NEB project in New Hampshire for projects of 1 MW and qualifying municipal projects of 4.99 MW. The pro formas scenarios lay out pro forma revenues for those two solar projects that begin in 2031 with the current 2041 NEM cliff, for those two solar projects that begin in 2026 with the current 2041 NEM cliff, and finally for those two solar projects that begin in 2026 with a 20-year term recommended in the settlement.

The after-tax internal rates of return (IRR) vary from a negative 2.68 percent to a positive 5.78 percent among these six scenarios.

The pro forma show median project revenue including::

1. Solar power production;
2. Development expenses;
3. Interconnection costs;
4. Net metering discount,
5. Renewable Energy Certificate values;
6. Financing costs;
7. Land lease costs;
8. Taxes; and
9. Operations & maintenance cost.

The pro formas indicate that, even with the 20 year term, solar projects under the current NEM tariff provide relatively low returns for developers, even as they may offer significant value to business and local government. The returns for future projects with current 2041 cliff in place will become negative soon as illustrated by the first two pro formas scenarios. These pro forma scenarios illustrate the modest positive returns NEM solar projects will be able to pursue under the settlement terms.

Attachment B, Joint Settlement submitted in NH PUC Dock. No. DE-22-060

New Hampshire Net Metering Analysis		Year	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
Scenario 1A: 1 MW AC with current Eversource Net Metering Rate and 2041 Net Metering Cliff with Operations beginning in 2031	Net Metering Rate1	-						\$0.1201	\$0.1225	\$0.1250	\$0.1275	\$0.1300	\$0.1326	\$0.1353	\$0.1380	\$0.1408	\$0.1436						
	AC Size (kW)	1,000																					
	After-tax IRR	-2.68%																					
	Footnotes	1 Assumes 2.0% per annum net metering rate escalation																					
Scenario 1B: 4.99 MW AC with current Eversource Net Metering Rate and 2041 Net Metering Cliff with Operations beginning in 2031	Net Metering Rate1	-						\$0.1201	\$0.1225	\$0.1250	\$0.1275	\$0.1300	\$0.1326	\$0.1353	\$0.1380	\$0.1408	\$0.1436						
	AC Size (kW)	4,999																					
	After-tax IRR	-0.59%																					
	Footnotes	1 Assumes 2.0% per annum net metering rate escalation																					
Scenario 2A: 1 MW AC with current Eversource Net Metering Rate and 2041 Net Metering Cliff with Operations beginning in 2026	Net Metering Rate1	-	\$0.1201	\$0.1225	\$0.1250	\$0.1275	\$0.1300	\$0.1326	\$0.1353	\$0.1380	\$0.1408	\$0.1436	\$0.1464	\$0.1494	\$0.1524	\$0.1554	\$0.1585						
	AC Size (kW)	1,000																					
	After-tax IRR	1.57%																					
	Footnotes	1 Assumes 2.0% per annum net metering rate escalation																					
Scenario 2B: 4.99 MW AC with current Eversource Net Metering Rate and 2041 Net Metering Cliff with Operations beginning in 2026	Net Metering Rate1	-	\$0.1201	\$0.1225	\$0.1250	\$0.1275	\$0.1300	\$0.1326	\$0.1353	\$0.1380	\$0.1408	\$0.1436	\$0.1464	\$0.1494	\$0.1524	\$0.1554	\$0.1585						
	AC Size (kW)	4,999																					
	After-tax IRR	3.45%																					
	Footnotes	1 Assumes 2.0% per annum net metering rate escalation																					
Scenario 3A: 1 MW AC Eversource current Net Metering Rate and 20 Year Net Metering Term with Operations beginning in 2026	Net Metering Rate1	-	\$0.1088	\$0.1110	\$0.1132	\$0.1155	\$0.1178	\$0.1201	\$0.1225	\$0.1250	\$0.1275	\$0.1300	\$0.1326	\$0.1353	\$0.1380	\$0.1408	\$0.1436	\$0.1464	\$0.1494	\$0.1524	\$0.1554	\$0.1585	
	AC Size (kW)	1,000																					
	After-tax IRR	4.09%																					
	Footnotes	1 Assumes 2.0% per annum net metering rate escalation																					
Scenario 3B: 4.99 MW AC with current Eversource Net Metering Rate and 20 Year Net Metering Term with Operations beginning in 2026	Net Metering Rate1	-	\$0.1088	\$0.1110	\$0.1132	\$0.1155	\$0.1178	\$0.1201	\$0.1225	\$0.1250	\$0.1275	\$0.1300	\$0.1326	\$0.1353	\$0.1380	\$0.1408	\$0.1436	\$0.1464	\$0.1494	\$0.1524	\$0.1554	\$0.1585	
	AC Size (kW)	4,999																					
	After-tax IRR	5.78%																					
	Footnotes	1 Assumes 2.0% per annum net metering rate escalation																					

## New Hampshire Customer-Generator Application Fee Proposal

The Joint Utilities propose to collect standard, graduated fees for all applications to interconnect by customer-generators. Fees collected by the Utilities will offset the general administrative costs incurred for personnel, systems and services that support the review and processing of applications to interconnect and administration of the net metering credit program.

1. **Fee Amounts:** The following proposed fees by project size are consistent with interconnection application fees assessed by electric distribution companies in other New England states and represent a very small percentage of anticipated overall project costs:

Generating Capacity (AC)	Application Fee
Up to 25 kW	\$200
Greater than 25 kW, up to 100 kW	\$500
Greater than 100 kW	\$1,000

2. **Eligible Administrative Expenses:** Revenues collected from application fees will offset utility costs for staff, services and systems that are required to efficiently process customer-generator applications to interconnect consistent with Puc 900 and other applicable rules and tariffs for electric service. This processing of applications begins with the initial acceptance and review of interconnection applications and extends through issuance of permission to operate and billing account creation for a customer-generator. Utility resources are required to review application materials, communicate with customer-generators and renewable energy installers, track progress through applicable process milestones and ensure required information is recorded into utility systems. General administrative resources that utilities propose to fund through application fees include the following categories:

Category	Description
Labor	Utility employees or contracted staff in positions that directly support the processing of applications to interconnect by customer-generators. Includes staff assigned to departments dedicated to support of customer-generators and proportional costs of staff assigned to other departments with documented responsibilities in support of customer-generator interconnection. Includes labor costs inclusive of benefit loaders and employee expenses
Outside Services	Vendors that provide specialized services and/or technology solutions to support utility interconnection processes. Includes consulting services and license fees
Information Systems	Information technology solutions that support utility interconnection processes. Amounts expected to be included as outside service costs

The Joint Utilities have already incurred costs within some or all of the above categories. These costs have or are expected to grow as the Joint Utilities expand resources to efficiently process an increasing number of applications to interconnect by customer-generators.

3. **Excluded Costs:** Proposed application fees will not offset costs associated with evaluation of individual projects through Pre-Application Reviews conducted pursuant to Puc 904.01, Studies and Analysis conducted pursuant to Puc 905.06, or Upgrades or Improvements to the Electric Distribution System identified pursuant to Puc 905.07. Since there is no overlap among these various fees, the aforementioned costs will continue to be funded by individual Customer-Generators through Pre-Application fees, Supplemental Review Fees and payments for Upgrades or Improvements. Customer-Generators shall not be assessed any Supplemental Review Fees to cover general administrative costs funded through application fees.
4. **Annual Reconciliation:** An annual report and reconciliation of application fees shall take place in each Company's annual filing for the reconciling mechanism selected for crediting any overcollections back to customers as described below.. Each utility shall provide a comparison of application fee revenues collected to actual general administrative costs incurred to support the review and processing of applications to interconnect. Revenues collected to support general administrative costs shall include (1) total application fees collected in the prior year as well as (2) costs for review and processing of applications to interconnect included in operations and maintenance expense of the test year applied in each Company's most recent base rate proceeding. Revenues and general administrative costs shall not include amounts associated with individual projects for Pre-Application, Supplemental Review or Upgrades and Improvements.

If revenues collected to support general administrative costs exceed actual general administrative costs in any year, the excess amount shall be credited to customers through an existing reconciling mechanism<sup>1</sup>. The Utilities shall not include any deficiency in revenues from the combination of base rate revenues and application fees to support general administrative costs in amounts for recovery through a reconciling mechanism without prior authorization by the Commission. However, the Commission may approve changes to fee amounts in any Companies applicable annual filing to achieve better alignment of revenues and administrative expenses in future years.

Each Company shall be responsible for reasonably demonstrating, within each annual reconciling mechanism filing, that administrative costs were incurred directly in support of the interconnection processes for customer-generators.

**Performance Reporting:** The Joint Utilities shall provide quarterly reports that include application processing metrics and narrative descriptions of how each utility is managing interconnection processes to streamline and expedite the experience of customer-generators.

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<sup>1</sup> Eversource will credit applicable costs to Stranded Cost Recovery Charge; Unital will credit applicable costs to XX; Liberty will credit applicable costs to XX

Application processing metrics may be adjusted or expanded based on stakeholder input and Distribution Company experience, but will initially include:

1. Total number of complete applications submitted
2. Total number of Permissions to Operate issued
3. Total complete applications by MW submitted
4. Total MW issued Permissions to Operate
5. Total Average time to issue Contingent Approvals
6. Percent of applications requiring customer correction (Eversource and Liberty)
7. Average time to complete the meter installation after complete and correct submittal of Completion Documents

Reports will be sufficiently detailed to assess whether the fees are having the intended effect and support opportunities for the DOE, Joint Utilities and stakeholders to meet and discuss process improvements or adjustments to the fees.



## Direct Ownership Customer Disclosure Form

<b>CUSTOMER INFORMATION</b>	
Customer Name:	
Name on Electric Bill (if different):	
Site Address:	
City, State, Zip:	
Phone:	
Email:	
<b>INSTALLER CONTACT INFORMATION</b>	<b>PRIMARY SERVICE CONTACT INFORMATION</b>
Company:	Company:
Street Address:	Street Address:
City, State, Zip:	City, State, Zip:
Phone:	Phone:
Email:	Email:
<b>CONTRACT, COST, AND ESTIMATED PERFORMANCE INFORMATION</b>	
System Size (kW DC):	
System Size (kW AC):	
Where in the contract is the warranty information located?	
Are all warranties transferrable?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Has a shading analysis been completed for the property?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
How much production is expected to be lost due to shading? (%):	
Estimated Year One Production (kWh):	
What is the Final Purchase Price for the system before any rebates or other incentives (\$ and \$/watt)	\$
	\$/Watt
Estimated net average monthly savings (\$)	\$
Starting utility rate used to estimate net average monthly savings:	
Escalator rate used to estimate net average monthly savings:	
<b>FINANCING INFORMATION*</b>	
Does the above-listed Final Purchase Price include any dealer fees or other finance-related charges that would not be charged to a customer in a similar cash transaction?*	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Amount of dealer fees or other finance-related charges in the Final Purchase Price (\$):	\$
<b>OTHER INFORMATION</b>	
Describe any system performance or electricity production guarantees:	
Have you and the customer discussed the condition of the roof and the potential for removing and reinstalling the array in the event that repair or replacement of the roof is needed?	<input type="checkbox"/> Yes or <input type="checkbox"/> No

<b>KEY RESPONSIBILITIES CHECKLIST*</b>	<b>PRIMARY INSTALLER</b>	<b>OWNER</b>
System Operations and Maintenance		
Submission of Interconnection Application to Utility	X	
Securing Required Permits		
Obtaining Engineering Approvals		
Scheduling Inspections		
Participation in Inspections		
Copy of Customer-Contractor Contract/Agreement		
<b>OWNERSHIP OF INCENTIVES</b>	<b>PRIMARY INSTALLER</b>	<b>OWNER</b>
Owner of Renewable Energy Attributes		X
Owner of Federal Investment Tax Credit		X

\* If your System is financed, carefully read any agreement and disclosure forms provided by your lender. Your installer may not be aware of the terms of your financing agreement, which may include fees not listed above. This disclosure does not contain the terms of your financing agreement. If you have any questions about your financing arrangement, contact your finance provider before signing a Contract.

I, \_\_\_\_\_, hereby confirm that I have received and understand the information above and understand the information. I further confirm that I have had a chance to ask questions of my Installer and have received sufficient answers, if applicable.

Customer Signature	Date
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I, \_\_\_\_\_, hereby confirm that the information provided on this form is true and accurate and that any factual misrepresentations on this Customer Disclosure Form may be grounds for enforcement action by the New Hampshire Public Utilities Commission up to and including permanent removal from participation in Net Metering.

Signature of Installer Representative	Date
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## Third Party Ownership Customer Disclosure

CUSTOMER INFORMATION		SYSTEM OWNER CONTACT INFORMATION	
Customer Name:		Company:	
Name on Electric Bill:		Street Address:	
Site Address:		City, State, Zip:	
City, State, Zip:		Phone:	
Phone:		Email:	
Email:			
INSTALLER CONTACT INFORMATION		PRIMARY SERVICE CONTACT INFORMATION	
Company:		Company:	
Street Address:		Street Address:	
City, State, Zip:		City, State, Zip:	
Phone:		Phone:	
Email:		Email:	
CONTRACT, COST, AND ESTIMATED PERFORMANCE INFORMATION			
System Size (kW DC):		System Size (kW AC):	
Contract Effective Date:		Contract End Date:	
Option to Renew	<input type="checkbox"/> Yes or <input type="checkbox"/> No	Option to Buyout	<input type="checkbox"/> Yes or <input type="checkbox"/> No
Starting Rate PPA/Lease Rate (Select one)		\$ _____/kWh	\$ _____/month
Lease down payment and/or pre-payment amount		\$	
Contract Rate Increase Frequency		<input type="checkbox"/> Monthly or <input type="checkbox"/> Annually or <input type="checkbox"/> N/A	
Amount of Rate Increase			
Has a shading analysis been completed for the property?		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
How much production is expected to be lost due to shading? (%):			
Estimated Year One Production (kWh):			
Estimated Year One Payments (\$):		\$	
Estimated Year One Customer Net Savings (\$):		\$	
Starting utility rate used to estimate net year one savings:		\$ _____/kWh	
Escalator rate used to estimate net year one savings:		_____%	
Is the contract transferrable?		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
Where in the contract is the warranty information located?			
Are all warranties transferrable?		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
OTHER INFORMATION			
Describe any system performance or electricity production guarantees:			
Describe opt-out or early termination terms:			
Must the customer continue to make payments in the event of an extended system shutdown?		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
Will a filing be recorded in the land records of the customer's municipality pursuant to the contract for this system?		<input type="checkbox"/> Yes or <input type="checkbox"/> No	
Describe any protections for the customer in the event that the service provider goes out of business:			

Has the condition of the roof and the potential for removing and reinstalling the array in the event that roof repair or replacement is needed been discussed with the customer?	<input type="checkbox"/> Yes or <input type="checkbox"/> No
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KEY RESPONSIBILITIES CHECKLIST**	PRIMARY INSTALLER/OWNER	CUSTOMER
System Operations and Maintenance		
Submission of Interconnection Application to Utility	<b>X</b>	
Securing Required Permits		
Obtaining Engineering Approvals		
Scheduling Inspections		
Participation in Inspections		
Application for Program	<b>X</b>	
<u>Copy of Customer-Contractor Contract/Agreement***</u>		
OWNERSHIP OF INCENTIVES	PRIMARY INSTALLER/OWNER	CUSTOMER
Owner of Renewable Energy Attributes	<b>X</b>	
Owner of Federal Investment Tax Credit	<b>X</b>	

I, \_\_\_\_\_, hereby confirm that I have received and understand the information above and understand the information. I further confirm that I have had a chance to ask questions of my Installer and have received sufficient answers, if applicable.

Customer Signature	Date
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I, \_\_\_\_\_, hereby confirm that the information provided on this form is true and accurate and that any factual misrepresentations on this Customer Disclosure Form may be grounds for enforcement action by the New Hampshire Public Utilities Commission up to and including permanent removal from participation in net metering.

Signature of Installer Representative	Date
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