CT Solar Virtual Net Metering Program

Town of Enfield   – June 26, 2019

# About Lodestar

lode·star   *noun* \ ˈlōd -ˌstär \

1. a star that leads or guides . 2. something that serves as an inspiration, model or guide .

Lodestar Energy is a CT-based company that develops commercial and public sector, DG and small utility scale solar PV Projects . We rely on our deep experience, wide network, and strong problem solving abilities to create value for our customers .

Over the last five years, our team has worked with utilities, school districts, cities, counties, states, commercial businesses, industrial clients and many others to develop over 30 solar projects worth over $150 million .

Lodestar currently owns and operates more than 40 megawatts (MW) of solar projects in the Northeast, including rooftops and field systems .

# Lodestar CT Projects



Barkhamsted, New Hartford, and
Winsted – Regional Refuse Center
1.4 MWs (8 acres)

Savings – Town of Vernon

# Lodestar CT Projects



Suffield Property
2.88 MWs (17 acres)

Savings – Town of Vernon

# Lodestar CT Projects



NorCap North
2.88 MWs (17 acres)
Savings – Town of Suffield

----------------------------------------

NorCap South
2.88 MWs (17 acres)
Savings – Town of South Windsor

# CT History and Timeline

**Regulatory Timeline**

- June 2013 – Virtual Net Metering (VNM) legislation approved
- Feb 2014– VNM working group report to PURA
- July 2014 – PURA order implementing program
- Sept 2014 – PURA begins taking applications for VNM
- March 2015 – PURA changes rules on VNM applications
- June 2015 – LSE submits 1st applications
- 2016/2017 – Program funding $10 million depleted.  Only 16 towns (10%) benefit from program
- June 2019 – HB 5002 approved; funds $10 million additional VNM capacity

# Virtual Net Metering     - Program Advantages

Discounted, clean, solar energy

Day one savings with no upfront costs

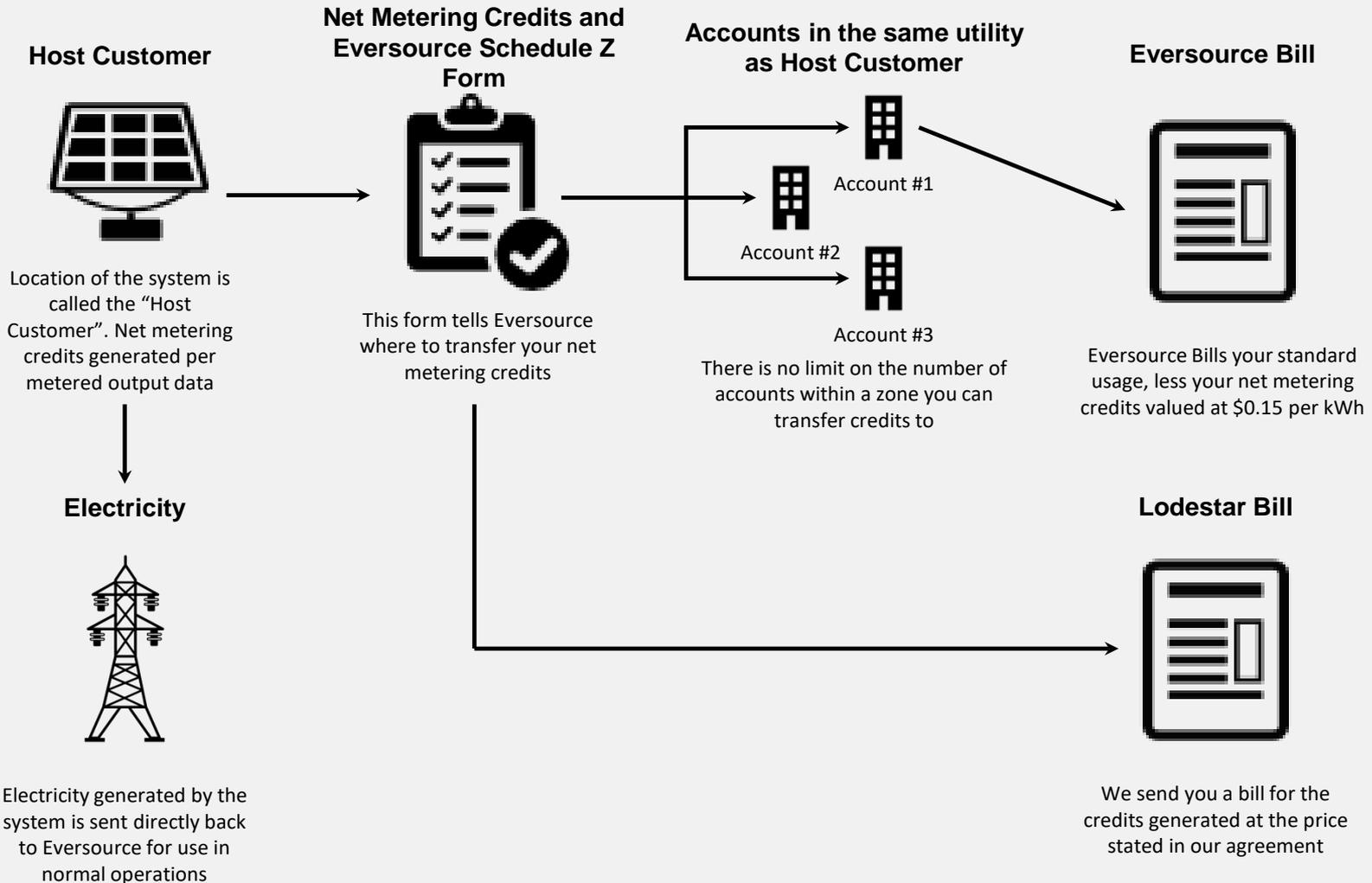No use of your property or buildings

Zero changes to your current electricity purchasing

Guaranteed savings over the contract life

# How Do I Get My Credits

All solar output "pushed back" to the grid results in net metering credits calculated at the R30 rate. These credits can be allocated to other Eversource accounts located in the same ISO-NE zone per instructions captured in the Schedule Z form.

**Host Customer**

Location of the system is called the "Host Customer". Net metering credits generated per metered output data

**Net Metering Credits and Eversource Schedule Z Form**

This form tells Eversource where to transfer your net metering credits

**Accounts in the same utility as Host Customer**

Account #1

Account #2

Account #3

There is no limit on the number of accounts within a zone you can transfer credits to

**Eversource Bill**

Eversource Bills your standard usage, less your net metering credits valued at $0.15 per kWh

**Electricity**

Electricity generated by the system is sent directly back to Eversource for use in normal operations

**Lodestar Bill**

We send you a bill for the credits generated at the price stated in our agreement

# How the Savings Work (15% discount)

Enfield Top 3 Accounts (HS, Fermi, JFK)

3.6 million kWh (11 months only)

Rate Savings (15% discount)

$0.155/kWh  —  $0.132/kWh  =  $0.023/kWh

Year 1 Savings

3,600,000 kWh  ✖  $0.023/kWh  =  $83,552

Total Savings

$1.5 million +

# Estimated Savings Analysis

| Contract Year | kWh Produced | Generation Rate | T&D | Net Meter Credit Rate (Total) | Discounted NM Credit Rate Price | NM Credit Savings | Annual Benefit |
|---|---|---|---|---|---|---|---|
| 1 | 3,600,000 | $ 0.1014 | $ 0.0534 | $ 0.1547 | $0.1315 | $ 0.0232 | $ 83,552 |
| 2 | 3,582,000 | $ 0.1034 | $ 0.0408 | $ 0.1442 | $0.1226 | $ 0.0216 | $ 77,485 |
| 3 | 3,564,090 | $ 0.1055 | $ 0.0278 | $ 0.1332 | $0.1200 | $ 0.0132 | $ 47,110 |
| 4 | 3,546,270 | $ 0.1076 | $ 0.0283 | $ 0.1359 | $0.1200 | $ 0.0159 | $ 56,323 |
| 5 | 3,528,538 | $ 0.1097 | $ 0.0289 | $ 0.1386 | $0.1200 | $ 0.0186 | $ 65,631 |
| 6 | 3,510,896 | $ 0.1119 | $ 0.0295 | $ 0.1414 | $0.1202 | $ 0.0212 | $ 74,451 |
| 7 | 3,493,341 | $ 0.1142 | $ 0.0300 | $ 0.1442 | $0.1226 | $ 0.0216 | $ 75,561 |
| 8 | 3,475,874 | $ 0.1164 | $ 0.0306 | $ 0.1471 | $0.1250 | $ 0.0221 | $ 76,687 |
| 9 | 3,458,495 | $ 0.1188 | $ 0.0313 | $ 0.1500 | $0.1275 | $ 0.0225 | $ 77,829 |
| 10 | 3,441,202 | $ 0.1211 | $ 0.0319 | $ 0.1530 | $0.1301 | $ 0.0230 | $ 78,989 |
| 11 | 3,423,996 | $ 0.1236 | $ 0.0325 | $ 0.1561 | $0.1327 | $ 0.0234 | $ 80,166 |
| 12 | 3,406,876 | $ 0.1260 | $ 0.0332 | $ 0.1592 | $0.1353 | $ 0.0239 | $ 81,360 |
| 13 | 3,389,842 | $ 0.1286 | $ 0.0338 | $ 0.1624 | $0.1380 | $ 0.0244 | $ 82,572 |
| 14 | 3,372,893 | $ 0.1311 | $ 0.0345 | $ 0.1656 | $0.1408 | $ 0.0248 | $ 83,803 |
| 15 | 3,356,028 | $ 0.1337 | $ 0.0352 | $ 0.1681 | $0.1429 | $ 0.0252 | $ 84,605 |
| 16 | 3,339,248 | $ 0.1364 | $ 0.0359 | $ 0.1681 | $0.1429 | $ 0.0252 | $ 84,182 |
| 17 | 3,322,552 | $ 0.1392 | $ 0.0366 | $ 0.1681 | $0.1429 | $ 0.0252 | $ 83,761 |
| 18 | 3,305,939 | $ 0.1419 | $ 0.0374 | $ 0.1681 | $0.1429 | $ 0.0252 | $ 83,342 |
| 19 | 3,289,410 | $ 0.1448 | $ 0.0381 | $ 0.1681 | $0.1429 | $ 0.0252 | $ 82,925 |
| 20 | 3,272,963 | $ 0.1477 | $ 0.0389 | $ 0.1681 | $0.1429 | $ 0.0252 | $ 82,511 |
| Total | | | | | | | $ 1,542,844 |

* Based on R30 Gen rate blended over the past 12 months - $0.09422, $0.1085

** Annual virtual net metering credits (VNMC) will be calculated at the time of the application and this will be the maximum annual amount.

# Sample Clients   – Public & Private Sector
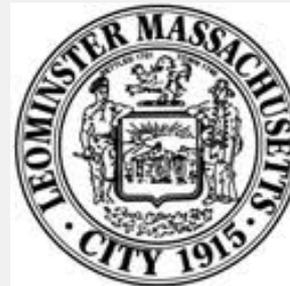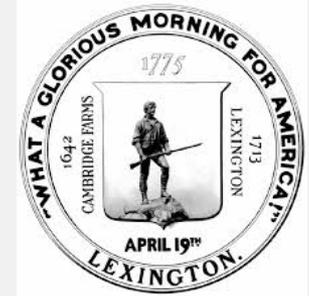
# Process/Next Steps

1. Sign simple authorized representative form
2. Lodestar applies for virtual net metering $ allocation
3. Permitting – Town & CT Siting Council
4. Negotiate definitive agreement
5. Start construction (Fall)
6. Finalize construction (Spring)