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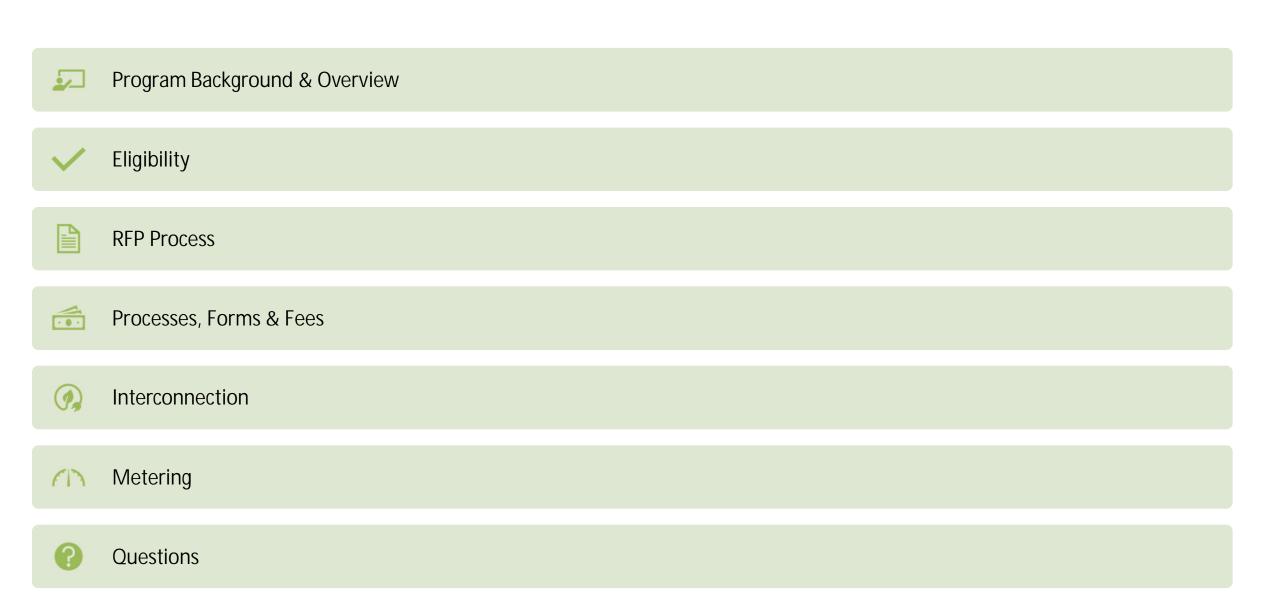
# NON-RESIDENTIAL RENEWABLE ENERGY SOLUTIONS PROGRAM INFORMATIONAL WEBINAR & BIDDERS CONFERENCE

JANUARY 21, 2025

This webinar is being recorded by the EDCs. If you do not consent to being recorded as a participant in the webinar, please exit the call.

In the event of any inconsistency between the provisions of the NRES RFP or any part of this presentation, the provisions of the Tariff Agreement are controlling. Bidders should review the Tariff Agreement and all associated documents thoroughly and submit their Bids based upon the Tariff Agreement, which will solely govern the transactions between any of the parties and their counterparty Company through the term of the resulting Agreement.

### **Agenda**



#### **Questions**

- Meeting Chat
  - We will try to answer questions at end of presentation if time allows
- After presentation
  - Email questions to both companies:
    - CTCommRenewables@eversource.com
    - NRES@uinet.com
- General Q&A's may be added to our running Q&A document

# **BACKGROUND & OVERVIEW**

#### **Connecticut Public Act 22-14**

An Act Concerning Clean Energy Tariff Programs modified the NRES program to expand the growth of the non-residential renewable energy market.

#### **Benefits Include:**

Furthering CT's Clean Energy Goals Supporting
Local
Clean
Energy
Jobs

Lower Customer Energy Bills

#### **NRES Overview**

- 2025 is the fourth year of the NRES program
- Six-year program that combines Net Metering and Renewable Energy Certificates (REC) payments into one program
  - 20-year Agreement term
- Projects less than or equal to 200 kW (AC) will be awarded using the two-week window method and are price-takers
- Projects greater than 200 kW (AC) are awarded based on lowest evaluated bid price and are bid into competitive categories
- Projects less than or equal to 5000 kW (AC) in the School Solar Category are awarded on a first come, first served basis
- State, Agricultural, and Municipal ("SAM") customers may be eligible for virtual net metering which allows them to provide any excess bill credit to other SAM customers
- Bidding will take place in an online bid portal
- Two solicitations per year
  - February=60% of program capacity, August=40% of program capacity plus any remaining MWs from February

#### **Year 4 NRES Key Program Updates**

- Two-week window for Small category: if capacity is reached, lottery is used, if not reached 1<sup>st</sup> come 1<sup>st</sup> served.
- Revised Brownfield definition
- Parcel definition added
  - Buy-All restriction
- Updated Netting Caps
- MW allocation above caps
- School Solar Category
- Load Data must be provided for all Bids
- Bidders must affirm their understanding of the requirements set forth in Public Act No. 21-43, An Act Concerning A Just Transition To Climate-Protective Energy Production And Community Investment

#### **Parcel Definition**

- "Parcel" shall mean the clearly defined property boundaries registered with the local municipality before January 1 of the year of the solicitation.
- 4.1.3 Customers are eligible to submit only one Buy-all Bid per technology or one Buy-All Bid for a Project that uses a combination of technologies (i.e., a wind turbine that has associated solar panels) at any Parcel or contiguous Parcels under common ownership during any single respective solicitation.
- 4.1.4.4 For Rooftop Buy-All projects constructed on physically separate rooftops on the same Parcel, one Bid per building rooftop will be allowed in a single respective solicitation.

#### **Megawatt Allocation Above Cap**

- Public Act 24-31, An Act Concerning Solar Projects Throughout the State
  - Beginning in 2025 with NRES Year 4
  - Allows for the NRES Program to exceed available capacities under certain conditions
- Aggregate annual compensation of all 2025 selected Projects compared with aggregate annual compensation of all 2024 selected projects
  - If 2024 compensation exceeds 2025 compensation, additional capacity can be awarded
  - Annual compensation = Estimated AAP X Total Bid Price
- Total excess \$ amount determines the amount of additional capacity
  - Lowest priced bid is selected if its estimated annual value doesn't exceed excess \$ amount
- Example:
  - 2024 aggregate compensation = \$5 million
  - 2025 aggregate compensation = \$3 million
    - = \$2 million excess
  - Next lowest priced bid price = \$180/MWh
    - Estimated AAP of 2000 MWh/year
    - Cost = \$360,000 annually
  - \$2 million excess \$360,000 = \$1.64 million remaining

#### **School Solar Category - General**

- Public Act 24-151
  - Encourages installation of PV and storage at public schools
  - Incorporated into the NRES program as a separate capacity carveout
- 25 Total MW Annually Separate from other NRES capacities
  - 80/20 split between the EDCs 20 MW for ES and 5 MW for UI
- Projects can be sized up to 5 MW with no minimum size required
- Pricing
  - Buy-All Price = \$188.90/MWh
  - Netting Prices are the Medium Zero netting price caps
- Adders available
  - Brownfield 20% Adder = \$37.78/MWh
  - Distressed Municipality 20% Adder = \$37.78/MWh
  - Carport/Canopy 30% Adder = \$56.67/MWh
  - Verified through the same means and methods as Bid Preferences

#### School Solar Category – Bidding & Timing

- School Solar is non-competitive
  - First come, first served
  - Price takers
- RFP opens on February 3<sup>rd</sup> in combination with other categories
  - Remains open until capacity is filled or the end of the August RFP submission window is reached
- Bid submission and requirements are the same as all other NRES Bids, with one main exception
  - School Solar Pre-Application Checklist
- The status of the 25 MW School Solar capacity awarded will be posted publicly on the respective EDC NRES RFP websites.

#### **School Solar Category – Pre-Application Checklist**

#### School Solar Program - Pre-Application Checklist for the Non-Residential Renewable Energy Solutions ("NRES") Program

A completed form must be uploaded with a Bid for any Project seeking to participate in the NRES School Solar Program Request for Proposal ("RFP").

Requirement	Completed?
Submission of this form is an attestation that the School	
Solar Project has received all required municipal	
approvals (not including necessary permits).	
For projects that will be constructed on a rooftop,	
submission of this form is an attestation that a structural	
study has been completed. The building roof is of an age	
and condition capable of supporting the solar installation	
for the duration of the 20-year Tariff Agreement.	
Submission of this form is an attestation that the School	
Solar Project has secured authorization for the required	
capital to build the Project.	
Submission of this form is an attestation that the School	
Solar Project has submitted a Request for Proposals	
("RFP") to Project installers to build the project. The RFP	
must be uploaded with the online Bid.	
A letter from a municipal building official acknowledging	
that the proposed School Solar Project has a viable	
pathway through the local permitting process must be	
uploaded with the online Bid.	
Provide the Interconnection Application number in the	
online bid so the EDC can document a Fully Executed	
Interconnection Agreement.	
Proof of Site Control must be uploaded with the online	
Bid. See Section 3.4.4 of the NRES Program Manual.	
A recent copy of the customer electric bill must be	
uploaded with the online Bid.	
A complete Bid Certification Form must be uploaded with	
the online Bid.	

Bid submissions must also include all required documentation listed in Section 2.4 of the NRES RFP.

#### NRES Key Program Highlights – February RFP

- Sustainable Energy Advantage, LLC (SEA) serves as the Ombudsperson for the NRES, SCEF, and RRES programs, effective since April 1, 2024.
- The non-refundable NRES Bid fee is now \$350 per Bid to cover the cost of the ombudsperson.
- As ordered in the NRES Year 3 Decision, all Bids must submit a completed Customer Protection and Disclosure Form.
- Agricultural Customers participating as a State, Agricultural, or Municipal ("SAM") must provide proof of Agricultural status. See section 4.4.8 in the Program Manual.
- Up to 30% Bid preference for 100% Solar Carport/Canopy projects over 200kW
- 100% Solar Carport/Canopy Projects have higher price caps than non-Solar Carport/Canopy Projects

#### NRES Key Program Highlights – February RFP

- Add-On Netting systems are now allowed. (EVERSOURCE ONLY)
- REC buybacks Customers can elect to enter into a form of Tariff Agreement that allows them to purchase and retire the RECs from their Project.
- SAM Customer Hosts no longer required to own Project Site
- Projects qualify for the Distressed Municipality Bid preference

#### Year 4 NRES Tips for Successful Bid Submission

- Bids must be submitted with the Bid Certification Form from the current Program year. Only use Program
  documents found on the NRES websites rather than previously saved versions.
- If your project is being sized to load (i.e.: not a rooftop buy-all project), double check the size to load calculation. The total estimated annual generation (kWh) cannot exceed the highest consecutive 12-month load/usage (kWh) over the five years prior to Bid submission. See the Average Annual Production formula on page 15 (footnote 7) in the Program Manual. System size cannot be changed once the Bid is submitted.
- If you submit a Bid with anticipated future load from beneficial electrification or EV chargers, a stamped calculation from a Connecticut licensed Professional Engineer, along with the <u>Professional Engineer</u> <u>Certification Form</u> on the NRES websites.
- For New Construction (non-buy-all rooftop) Projects Professional Engineer Certification must describe the anticipated building load, not just certify the system's anticipated production.
- If the NRES Project Bid is submitted in association with an existing Billing Account, that same Billing Account must be included in the DG Interconnection Application. If the NRES project Bid is NOT submitted and associated with an existing Billing Account, the DG Interconnection Application should NOT include a Billing Account. For Buy-All Projects, a new Billing Account will be established for the new Project service/revenue meter. This is important to ensure proper billing after the Project goes in service.

#### Year 4 NRES Tips for Successful Bid Submission

- Include DG INT number when applying for NRES if you've already submitted an application to DG. In Eversource's bid portal, please include "INT-" before the numerals.
  - If you've already received an NRES award, include your NRES Project Number in your DG application
- If the entity is anything other than an individual person, you must indicate that you are NOT an individual
  and include all necessary information as prompted by the Bid portal
- If the Customer elects to receive direct payments, they do not need to list themselves as the Tariff Payment Beneficiary. Payments will be made per the banking instructions submitted in the Bid.
- Eversource: The banking information for whatever entity will receive payments (Customer or Tariff Payment Beneficiary) must be the same for all existing agreements and new Bids. Before submitting a Bid, confirm that banking info is all going to align. If they aren't sure an authorized contact for the agreement(s) can contact us via email to confirm and update if needed.
- If the Project is sited at an Affordable Multifamily Housing property, is must participate in the RRES Program.

#### **Year 4 NRES Available Capacity - Eversource**

## Eversource Year 4 MW Allocations\*

Category	Project Size (AC)	Eversource Statutory MW/Year	Year 3 February Selected (MW)	Year 3 August Selected (MW)	Rollover from Year 3 RFP (MW)	Year 4 Capacity (MW)	Project Selection Process
Low Emission	≤ 5,000 kW	8	6.975	0.00	1.425	9.425	Competitive Solicitation
Large Zero Emission	≥1000 kW ≤ 5,000 kW	31	22.749	10.749	0.00	31	Competitive Solicitation
Medium Zero Emission	>200 kW < 1000 kW	25	14.647	11.12	.025	25.5	Competitive Solicitation
Small Zero Emission	≤ 200 kW	24	14.574	9.653	.159	24.3	First-Come, First- Served, subject to two-week window
Total Zero Emission		80	58.945	31.522	.184	80.8	
School Solar	≤ 5,000 kW	20	N/A	N/A	N/A	20	First-come, First Served, for first ready projects

<sup>\*</sup>MW allocations may change if projects terminate or install smaller in accordance with the applicable program rules.

**Year 4 NRES Available Capacity – United Illuminating** 

United Illuminating Year 4 MW Allocations						
Category	Project Size (AC)	UI Statutory MW/Year	August Year 3 Solicitation (MW)	August Rollover to Year 4 RFP (MW)	February Year 4 Solicitation (MW)	Project Selection Process
Low Emission	≤ 5,000 kW	2	0.0000	1.4150	3.4150	Competitiv e Solicitation
Large Zero Emission	≥1000 kW ≤ 5,000 kW	6	1.0000	5.2405	8.8405	Competitiv e Solicitation
Medium Zero Emission	>200 kW < 1000 kW	8	2.9610	2.4094	7.2094	Competitiv e Solicitation
Small Zero Emission	≤ 200 kW	6	2.7841	0.0360	3.636*	First-Come, First-Served, subject to two- week window
School Solar Carveout	≤ 5,000 kW	5	N/A	N/A	5 MW (Whole Year)	First-Come, First- Served
Total Zero Emission		20	6. 7451	7.6859	24.6859	

<sup>\*</sup>MW allocations may change if projects terminate or install smaller in accordance with the applicable program rules.

#### **Two Tariff Options**

Zero and Low Emission Project installations that qualify for this Program may sell the energy and Renewable Energy Certificates (RECs) at a fixed 20-year price by selecting one of two tariff options:

# **Buy-All Tariff**

- Customer exports all electricity produced by their renewable energy project to the grid directly without supplying power to their property.
- The EDC purchases all the generated clean energy at the as-bid price (or set price for the Small category).
- The customer purchases all the energy for their property from the grid.
- The customer may determine how the total Buy-All rate will be divided between two compensation options:
  - A monetary on-bill credit that will be applied to the Customer of Record's EDC billing account for the project site to offset their electric bill, and/or
  - A direct payment to a Tariff Payment Beneficiary

# **Netting Tariff**

- Energy generated by the renewable system is first used to offset the property's consumption.
- At the end of the month, if more energy was produced by the system than consumed on site, the customer receives a monetary credit on their bill that can be used in later months.
  - Customers may also qualify for an incentive payment calculated based on the total production of the renewable system.
    - Renewable Energy Credits

Or

### **Buy-All**



Customer receives quarterly payments for all energy and RECs. Customer can elect for a percentage of the total compensation to be assigned to a third party. Any remaining compensation will be applied to the customer's bill as a monetary credit.

### **Netting**



The value of the energy will be credited to the customer's monthly bill. The customer can choose to either receive quarterly direct payment for the RECs, or they can assign all or a portion of the value of the RECs to a third party.

# **ELIGIBILITY**

### **Site and System Eligibility Requirements**

Eligibility	Requirement
Site & Customer Eligibility	<ul><li>Eversource or UI Customer</li><li>Project is going In-Service on or after the RFP issuance date</li></ul>
System Eligibility*	<ul> <li>□ Small Zero Emission Category: ≤ 200 kW</li> <li>□ Medium Zero Emission Category: &gt; 200 kW and &lt; 1000 kW</li> <li>□ Large Zero Emission Category: ≥ 1000 kW and ≤ 5000 kW</li> <li>□ Low Emission Category: ≤ 5000 kW</li> <li>□ School Solar Category: ≤ 5000 kW</li> <li>□ Has not received CT Green Bank incentives</li> <li>□ Projects that are not State, Agricultural, or Municipal Customers or Rooftop Buy-All Projects shall be sized to not exceed the highest consecutive 12 months of load over five years prior to Bid submission</li> </ul>

<sup>\*</sup>If the Project Site qualifies for the Residential Renewable Energy Solutions Program, it will not be eligible for the Non-Residential Renewable Energy Solutions Program in any size category

## **Tariff Eligibility Requirements**

Requirement	How to Meet:
☐ Eversource or UI customer	<ul> <li>Most recent Customer Bill for the Project Site</li> </ul>
□ Site Control	<ul> <li>Proof of Site Control is between the Developer of the Project and the Owner of the Project Site</li> <li>Documentation proving site control such as deeds*, written leases, options to lease, memorandums of lease, memorandums of option to lease, and contracts to purchase</li> </ul>

<sup>\*</sup>Including, but not limited to, Warranty Deed, Quit Claim Deed, Executor's Deed, Trustee's Deed, or any other valid proof of ownership

#### **Sizing Requirements Based on Load**

Projects in the NRES Program must be sized appropriately to the Project Site's load

Load Calculation Options	How to Meet:
☐ Historical Load	Bidder must provide the historical annual load/usage in kWh for the project site. The estimated annual generation (kWh) cannot exceed the highest consecutive 12-month load/usage (kWh) over the five years prior to bid submission.
<ul> <li>Historical Load Based on SAM Beneficial Accounts Load</li> </ul>	For SAM customers, the load data for up to five Beneficial Accounts can be provided to support the project size. See next slide for details.
☐ Load Estimation for New Construction Projects	Bidder must provide a PE Certificate from a CT Licensed Professional Engineer certifying estimated load for the Project Site and for all Project Sites without existing service.
☐ Load Based on Future Beneficial Electrification Measures	Beneficial Electrification measures must be implemented within five years of the Project going in service. Customer must provide proof of measures installed within five years from the Project In-Service Date or compensation will be adjusted accordingly.

<sup>\*</sup>Buy-All Rooftop Projects are not required to meet the size to load requirements outlined above.

#### **SAM Projects**

SAM Customers are **State**, **Agricultural**, or **Municipal** Customers which may have multiple Beneficial Accounts associated with their Projects. SAM Customers can provide load data for up to five Beneficial Accounts to support the Project size.

Additionally, SAM Customers may allocate monthly excess bill credits from their qualified Project to other accounts of the Customer Host or to the accounts of other SAM Customers and certain critical facilities.

Requirement	How Verified?
☐ The Customer Host Account must provide proof of Site Ownership or proof of Site Control	Documentation such as deeds (Including, but not limited to, Warranty Deeds, Quit Claim Deeds, Executor's Deeds, Trustee's Deeds, or any other valid proof of ownership), documentation from the tax assessor's office demonstrating that the Customer Host is the legal owner of the proposed Project Site at the time of bid submission. These ownership requirements do not apply to SAM Beneficial Accounts.  Documentation proving site control such as deeds*, written leases, options to lease, memorandums of lease, memorandums of option to lease, and contracts to purchase
□ Beneficial Account Credit Allocation Form (BACAF)	Each Customer Host that seeks to allocate excess bill credits to Beneficial Accounts must submit a BACAF to direct the allocation of bill credits. Customer Hosts must submit a complete BACAF prior to commercial operations and may submit modifications once per 12-month period. Each time a request is made to modify these allocations, the EDC may charge a \$250 fee associated with such requested modifications.

# **RFP Process**

## **2025 Price Caps and Tariff Rates**

	Buy-All Price Cap (\$/MWh)	100% Solar Carport/Canopy Price Cap (\$/MWh)	Netting Rate
Small Zero Emission Tariff Rate	\$199.82	N/A	Dependent upon EDC, Size
Medium Zero Emission Price Cap	\$188.90	\$269.86	Category, Retail Rate, Technology,
Large Zero Emission Price Cap	\$145.97	\$208.53	and Solar Carport/Canopy
Low Emission Price Cap	\$159.00	\$227.14	(Refer to <u>RFP</u> /Bid Calculator)
School Solar Price Cap	\$188.90	N/A	

## **Application/Bidding Process for February RFP**

Medium an	nd Large Zero Emission, Low Emission Categories
Process	<ul> <li>2/3/2025 at 1:00pm* - Bid Window opens</li> <li>3/17/2025 at 1:00pm - Bid forms for all categories due</li> <li>School Solar Bids submission closes on 9/15/2025 at 1:00pm</li> <li>Bids are screened for eligibility, all eligible Bids are ranked from lowest to highest evaluated Bid price after applicable Bid preferences, awarded until category capacity is reached</li> </ul>
Price Caps	<ul> <li>The competitive Bid process allows Bidders to submit Bids up to the established price caps</li> <li>Price caps vary based on Project size, tariff type, EDC, retail rate, technology, or Bid Preference</li> <li>Selected Projects will be paid at as-Bid price</li> </ul>

<sup>\*</sup>Times shown are in Eastern Prevailing Time.

#### **Application/Bidding Process for February RFP – Small Zero Emission**

	Small Zero Emission Category
Process	<ul> <li>Two-Week Window: All <u>complete</u> bids submitted during two-week window are considered submitted at the same date/time</li> <li>If oversubscribed in Two-Week Window, random selection</li> <li>First-come first-served applies after Two-Week Window and/or if Two-Week Window is undersubscribed</li> <li>Two-Week Window opens 2/3/2025 at 1:00pm*, closes 2/17/2025 at 1:00pm</li> <li>Bid window closes for all categories on 3/17/2025 at 1:00pm</li> <li>Two rounds of Project selection</li> </ul>
Tariff Rate	<ul> <li>Buy-All: \$199.82/MWh</li> <li>Netting: Dependent upon the EDC, retail rate, technology type, and Bid preference</li> </ul>

<sup>\*</sup>Times shown are in Eastern Prevailing Time.

### February RFP Schedule\*

Action Item	Date
Bidders Conference – Webinar Only	January 21, 2025
Deadline for Submission of Questions	January 28, 2025
Release of RFP and Opening of Bid Window for All Project Size Categories, and Opening of Two-Week Window for Small Zero Emission Category	February 3, 2025 at 1:00:00 p.m. (Eastern Prevailing Time "EPT")
Close of Two-Week Window for Small Zero Emission Category	February 17, 2025 at 1:00:00 p.m. (Eastern Prevailing Time "EPT"), at which time the Pricing shall become firm, irrevocable and binding.
Bid Forms Due for All Categories except School Solar Projects	March 17, 2025 by 1:00 p.m. (Eastern Prevailing Time "EPT"), at which time the Pricing shall become firm, irrevocable and binding.

<sup>\*</sup>Pursuant to Section 2.1 of the RFP, Schedule, the Companies, at their sole discretion, may modify the schedule at any time.

### February RFP Schedule (continued)\*

Action Item	Date
First round of Selection and Notification of Winning Bidders for All Categories	On or about May 5, 2025
Tariff Agreement Execution	After Selection and Notification of Winning Bidders. Bidders will have to return partially executed contracts by the date established by the Companies which is expected to be approximately 10 business days.
Second round of Selection and Notification of Winning Bidders for All Categories (if applicable)	Approximately 5 business days after initial tariff agreement execution date (date on which executed tariff Agreement is due to the EDC for the first round of selection). After the tariff agreement execution date, each EDC will reevaluate its available MWs and reallocate to the next project(s) in the queue as necessary in accordance with the RFP and notify selected bidders accordingly.
Tariff Agreement(s) Filed with PURA	At the conclusion of the award notification process
Commencement of Service	In accordance with Tariff Agreements

<sup>\*</sup>Pursuant to Section 2.1 of the RFP, Schedule, the Companies, at their sole discretion, may modify the schedule at any time.

# Processes, Forms & Fees

#### **Tariff Payment Beneficiaries**

Incentive payments may be provided to the Customer or to a Tariff Payment Beneficiary

Buy-All	Netting
Initial Beneficiary Designation – Required at time of application	
Customers can designate a Tariff Payment Beneficiary to receive all or a portion of the total payment	Customers can designate a Tariff Payment Beneficiary to receive the REC payment
Beneficiary Change – Allowed once per year	
Customer may change the allocation of direct cash payments vs. monetary on-bill credits & the Tariff Payment Beneficiary	Customer may change beneficiary for the REC payment

#### **Bid Preferences**

Applicants may select the following Bid Preferences during the Bid process

#### Site Location is a Landfill or Brownfield

20% Bid Preference in Year 4
Available to projects located on landfills or brownfields as defined by CT DEEP.

Source: <a href="https://portal.ct.gov/DEEP/Remediation--Site-Clean-">https://portal.ct.gov/DEEP/Remediation--Site-Clean-</a>

<u>Up/Brownfields/Brownfields-Site-Inventory</u>

Source: https://portal.ct.gov/-

/media/DEEP/site\_clean\_up/Brownfields/closedlandfillslistpdf.pdf

# Site or SAM Project with 100% of Beneficial Accounts located in a Distressed Municipality

20% Bid Preference in Year 4
Available to projects or 100% of SAM
Beneficial Accounts located in or paid/owned
by a Distressed Municipality.

Source: <a href="https://portal.ct.gov/DECD/Content/About\_DECD/Research-and-Publications/02\_Review\_Publications/Distressed-Municipalities">https://portal.ct.gov/DECD/Content/About\_DECD/Research-and-Publications/02\_Review\_Publications/Distressed-Municipalities</a>

Or

#### Project has a portion of Capacity on a Solar Carport/Canopy

30% Weighted Bid Preference in Year 4 Refer to the RFP for specific applicability

While a project may qualify for multiple Bid preferences, the maximum Bid preference that any one Bid may receive is 30%

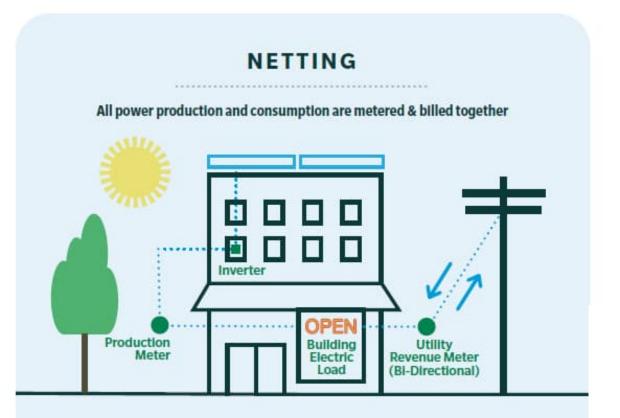
#### **Checklist of Required Bid Documents**

Required Bid Documents
Bid Certification Form (All 5 pages, including documentation proving site control)*
Documentation demonstrating ownership or site control of the Project Site by a SAM Customer Host (if applicable)
12 months of consecutive historical load (if applicable)
Most recent Customer Bill (if applicable)
Certification of Carbon Neutrality (if applicable)
CT PE Certification certifying historical load estimates and/or planned beneficial electrification (if applicable)
Bid Preference Form (if applicable)
School Solar Checklist (if applicable)
Beneficial Account Credit Allocation Form (if applicable)

<sup>\*</sup>Documentation proving site control such as deeds, written leases, options to lease, memorandums of lease, memorandums of option to lease, and contracts to purchase.

#### **Netting Incentive Example**

Assume customer's retail rate = \$0.1487 / kWh



The value of the energy will be credited to the customer's monthly bill. The customer can choose to either receive quarterly direct payment for the RECs, or they can assign all or a portion of the value of the RECs to a third party.

**On-bill Credits** 

Netted production paid to Customer on bill at retail rate

60,000 kWh – 40,000 kWh = 20,000 kWh \* \$0.1487 = \$2,974.00

Regular Bill including Production Credits (on-bill) -40,000+60,000 =

\$ 2,974.00

+20.000

Customer carries forward a bill credit to the next month

**REC Payment** 

Direct cash payment to Customer or Tariff Payment Beneficiary

60,000 kWh \* \$0.019 = \$1,140.00

Cash
Payment
(Quarterly)

+60,000

\$ 1,140.00

kWh

Bill Accrual

#### **Buy-All Incentive Example**



Customer receives quarterly payments for all energy and RECs. Customer can elect for a percentage of the total compensation to be assigned to a third party. Any remaining compensation will be applied to the customer's bill as a monetary credit.

#### **On-bill Credits**

Customer wants 80% as on-bill credits

#### **Cash Payment**

Customer wants 20% as cash payment to Tariff Payment Beneficiary

60,000 kWh \* \$.145/kWh = \$ 8,700

Buy-All Rate = \$.145/kWh

80% \* \$8,700 = \$6,960.00

20% \* \$ 8,700 = \$1,740.00

-40,000

\$ -3,893.60

**Regular Bill** 

Production Credits (on-bill)

+60,000

\$ 6,960.00

Cash Payment (Quarterly)

+60,000

\$ 1,740.00

kWh

-\$3,893.60 + 6,960.00 = \$3,066.40

Customer carries forward a bill credit to the next month

#### **Online Resources**

**United Illuminating** 

Eversource

<u>UI Non-Residential Renewable Energy Solutions Main</u>
<u>Page</u>

Eversource Non-Residential Renewable Energy Solutions Program Main Page

**UI Bid Portal** 

# Interconnection

## Interconnection Application Process Tips: Pre-Application

- Before submitting an application
  - Know your planned or actual compensation/incentive
    - Application must be consistent with planned compensation/metering
    - NRES Buy-All, NRES Netting, SCEF, LREC/ZREC, Virtual Net Metering, Rate 980, Battery Incentives, etc.
  - Use the capacity hosting and Grid Twin tools available on our website
    - Not every site can be easily or quickly developed and interconnected
    - Everything is site and size dependent
    - Know the limitations of these tools
  - Know the technical standards and Information and Requirements for electric service for Eversource, CT
    - Standards are for our safety and for a streamlined technical and business process
    - If proposed design is non-standard, don't assume it will be quick, or approved
    - Technical Guidelines from Working Groups updated December 2023 are on our website
      - Most changes relate to battery storage

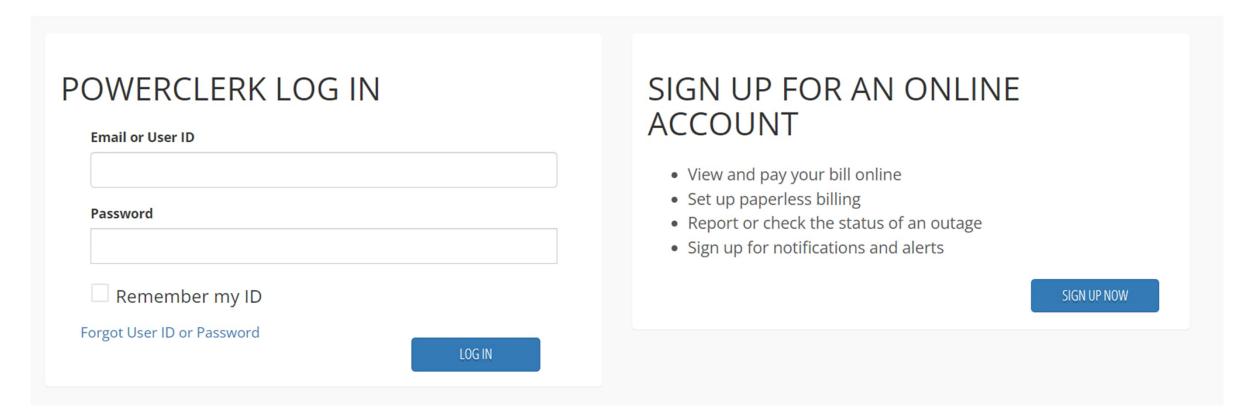
# Interconnection Application Process Tips: Pre-Application-continued

- Visit the site to collect accurate information
  - Do your homework
  - If questions, please ask, don't assume

- Projects over 1 MW may require ISO-mandated transmission cluster studies- FERC order 2023
  - Have the correct pscad models ready- don't wait to be told you need them

#### PowerClerk Log In/Sign Up

- When you apply using the PowerClerk Log In/Sign Up page, please have someone filling out the application that is familiar with how to answer the questions, technical and otherwise.
- The Information and Requirements (I&R) book can be found via the following link (Eversource): <a href="https://www.eversource.com/content/docs/default-source/ct---pdfs/yellowbook.pdf?sfvrsn=3f73d4e\_4">https://www.eversource.com/content/docs/default-source/ct---pdfs/yellowbook.pdf?sfvrsn=3f73d4e\_4</a>

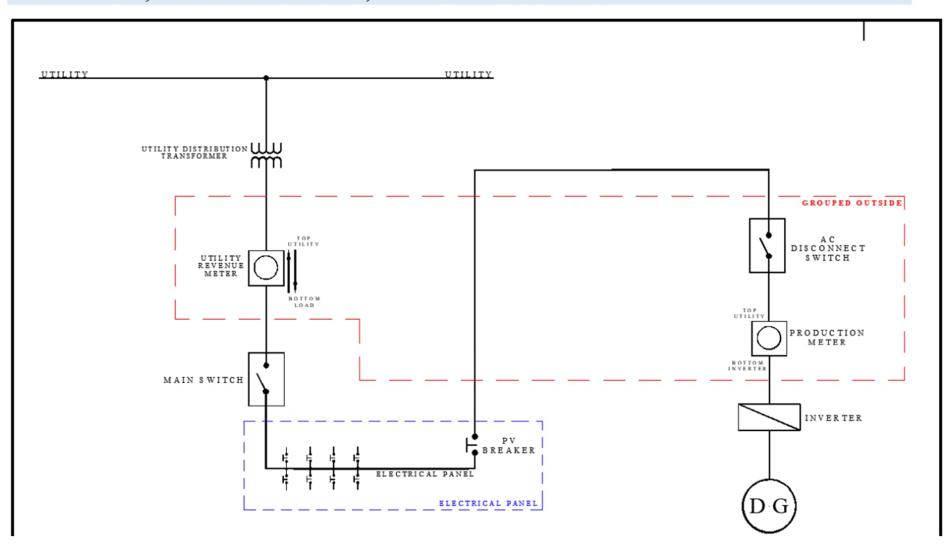


#### Interconnection Application Process Tips- Front-End of Process

- Submit a COMPLETE, CONSISTENT and CORRECT application
  - Accurate Site Plan- show existing and proposed equipment show meters outside, grouped, disconnect
  - Accurate One line- show existing and proposed additions, clearly- (PE stamped if AC rating over 50 kW)
    - Visit the site before submitting an application
  - Signed Application
  - Site Control form
  - UL1741 SB inverters
  - Insurance certificate (needed prior to Contingent Approval)
  - Pay the application fee electronically
- For NRES Buy-Alls, Eversource Customer Care will initiate a Field Work Order to engage distribution engineering in the process earlier than before
  - Requires applicants to have their qualified electrician meet on site with our engineers
  - CA/IA will not be provided for Buy-Alls before the design is approved by Field Engineering
- For all other electrical service upgrades that may be required, applicant's electrician will initiate the service WO
- The next slides are One Line examples of NRES projects. These are general guidelines and nothing should be built before Field Engineering's review and approval; everything is site dependent.

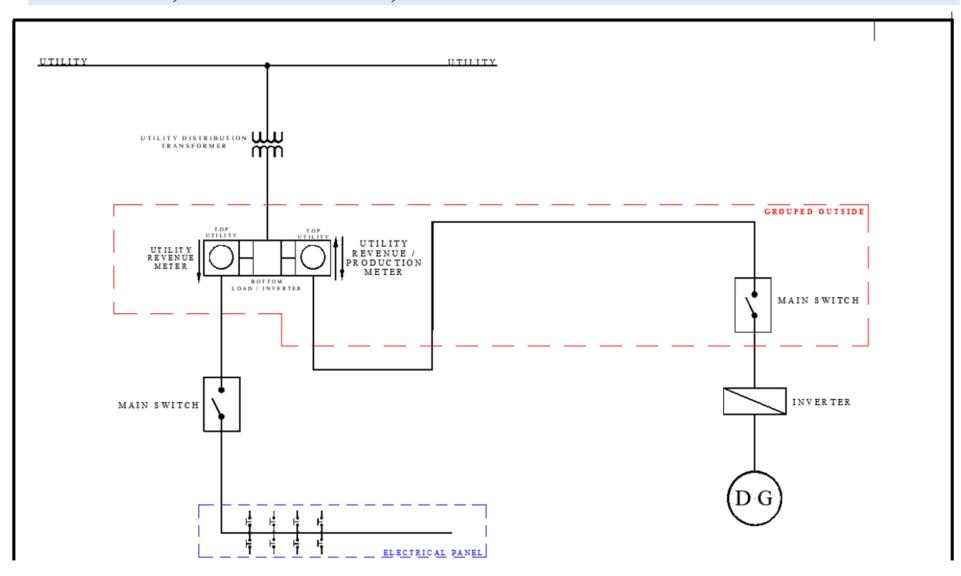
# **NRES Netting One Line Example**

NETTING, SINGLE PHASE, SELF-CONTAINED



## **NRES Buy-All One Line Example**

#### BUY ALL, SINGLE PHASE, SELF-CONTAINED



#### Interconnection Application Process Tips- Mid-Process

- 1. Limit changes mid-process if possible
- 2. A Customer Care Account Executive is assigned to each project a. Single point of contact....but not single point of all answers at their fingertips
- 3. Use the ask-a-question function in PowerClerk for application-specific questions
- 4. For multiple projects we can arrange a monthly or bi-weekly meeting to escalate concerns

# Interconnection Application Tips: Back-End/Final Approval

- 1. After the DER system is installed and tested a. New ISO-settings for newer applications
- 2. Metering install starts with Municipal Inspection approval in our Work order system
- 3. All requirements for close-out should be in indicated in the Contingent Approval/Interconnection Agreement- please read these documents!
- 4. Don't wait to end-of-year and expect fast response and action

## Interconnection Application Process – Future Improvements

 More PowerClerk functionality, Information and Requirements book and website updates

More automation and streamlined processing of workflow

 Keep all communications, documents, status, inside PowerClerk for visibility and tracking

More payment options for Studies and Interconnection Costs

# **Interconnection Application Process**

Please provide feedback via the Meeting Chat:

- 1) What additional information can we provide on the current process?
- 2) What improvements would you like to see to the interconnection process?

# Metering

#### **Meter Engineering Guidance**

- As mentioned earlier, it is critical to know which program or incentive before submitting an application
  - Each incentive has a specific metering design and process.
- Metering equipment and meter installation must be complaint with the Eversource I&R book. The same guidelines
  that apply to the revenue meter apply to the production meter as well
  - Any switchgear with an integrated instrument transformer cabinet should be submitted prior to procurement for approval.
- The latest NRES diagrams must be reviewed when designing DG systems. As a reminder, the diagrams are NOT construction diagrams.
- For any projects that are behind-the-meter (i.e. Netting Tariff, rate 980, etc.), the meter socket or instrument transformer cabinet CANNOT be used as a point of interconnection. DG systems must be connected outside of any metering equipment.
- All metering (production or revenue) must be wired with the LINE side facing the utility

#### **Meter Engineering Guidance**

- Any indoor metering must be relocated outside and brought to standards of the latest Connecticut Eversource I&R book
  - RELOCATION PURPOSES ONLY IT rated service can have meter conduit up to 100' for services 1800A or less. Services greater than 1800A can have conduit up to 150'.
- Any 400A service that is metered with instrument transformers (current transformers or voltage transformers) must be converted to a self-contained CL320 meter socket
- Any instrument rated service (greater than 400A), 480V services, or network services that are currently hot-sequenced (utility > metering > main disconnect) must be upgraded to cold-sequenced (utility > main disconnect > metering). This should be shown on any one-line diagrams submitted through the interconnection process
- AC disconnects must have a visible break. Breakers, push buttons, or any other means that does
  have a break will not be considered for use as the utility AC disconnect for DG systems
- Eversource may request site photos of the existing gear if questions arise during the technical review
- Meter enclosures or cabinet cannot be used as a raceway for any ancillary wiring (i.e. control wire)

#### **Instrument Transformer Rated Metering**

What does the Installation Contractor Provide?

- ✓ All Requirements for a new Service
- ✓ Diagrams 1-line and 3-line diagrams
- ✓ Approved IT cabinet
- ✓ Approved Meter Socket w/Test Switch
- ✓ Emergency disconnect

What does the Eversource Provide?

- ✓ CTs and/or VTs to be installed and secondaries wired to meter test switch
- ✓ Meter to be installed by Eversource.

Provide all diagrams and equipment spec sheets to Eversource for review.

Email <u>scott.d.miller@eversource.com</u> to review any switchgear submittals, preconstruction meetings, or general design questions

#### **Eversource Standards:**

1. All service voltages at or above 277/480v require voltage transformers.

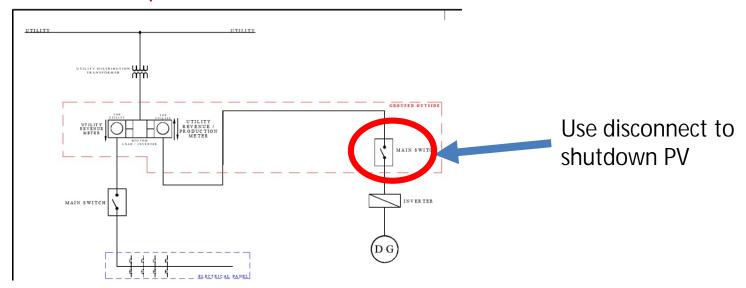
Secondary CTs uses either 600:5 bar types or 2000:5 window types.

#### **Instrument Transformer Rated Metering**

- Current Transformers and Voltage Transformers are installed by the customer's electrician.
   Polarity of the Current Transformers MUST face the utility for all metering at Eversource.
  - Do not confuse this with the requirements for United Illuminating.
- Eversource will coordinate with the installer to drop off the current transformers and voltage transformers for the customer's electrician to installer. Any jumpers or bus-bars inside the instrument transformer cabinet must be removed
- Eversource will return to wire the current transformers and voltage transformers to the meter socket. The system must be turned OFF at this time.

#### **Self-Contained Metering**

- Voltage MUST be present on the line side of self-contained meter sockets prior to an Eversource meter install
  - Sockets that DO NOT have voltage will not have a meter installed. Second visit will be required.
- Buy-all services that are self-contained should use the AC disconnect AFTER the meter if the PV needs to be shutdown for any reason (i.e. awaiting permission to operate, maintenance etc.)
  - The cold-sequence disconnect ahead of the meter should not be utilized unless there is an emergency



#### **Meter Equipment Guidance**

All metering equipment used for should be compliant with the Connecticut Eversource I&R book. This applies to both the production meter and revenue meter.

- When purchasing meter sockets, please ensure that the equipment used matches voltage, amperage, and service being metered.
- This is especially important for current transformer cabinets. Eversource has specific models that are only approved for specific voltages (i.e. 480/277VAC vs 208/120VAC).
- All equipment should be submitted prior to procurement to avoid any issues in the field during the meter install. Eversource will not install metering in equipment that is not approved.

60	00 – 1600 AMP C		RMER ENCLOS		SIKUMENT	
	120/240 Volt and	208Y/120 Volt	Services with BA	R TYPE Current	Transformers.	
				nt before ordering		
MFR/ Rated Voltage	Interruption Duty Amps Sym @ Rated Voltage	600 Amp	800 Amp	1,000 Amp	1,200 Amp	1,600 Amp
Eaton:						
120/240	65,000	WBM	WBM	WBM	WBM	
208Y/120	65,000	WBM	WBM	WBM	WBM	PRL-C
208Y/120	65,000	PRL-C	PRL-C	PRL-C	PRL-C	PRL-C
East C	oast Power Systems	:				
120/240	65.000	MBCT6SB1	MBCT8SB1	MBCT10SB1	MBCT12SB1	
208Y/120	100,000	мвст6нв1	MBCT8HB1	MBCT10HB1	MBCT12HB1	
Genera	al Electric:					
300000000		Si	pectra Series			
120/240	65,000	I, II, III, IV	1, 11, 111, 1V	1, 11, 111, 1V	I, II, III, IV	I, II, III
208Y/120	100,000	I, II, III, IV	1, 11, 111, 1V	I, II, III, IV	1, 11, 111, 17	I, II, III
Murray	r -					
120/240	65,000	CBCT636LX	CBCT836M6	CBCT1036HN	CBCT1236HN	
208Y/120	100,000	CBCT636HL	CBCT836HM	CBCTTUSONN	CBC11236FIN	•
RSE-Si	ierra:					
208Y/120	As Specified	Custom	Custom	Custom	Custom	Custor
208Y/120	As Specified	SB	SB	SB	SB	SB
Siemer	ns ITT					
120/240	V85.000	BCT636LXD6	BCT836LMXD6	2		
208Y/120	100,000	BCT636HLD6	BCT836HMD6	BCT1036HND6	BCT1236HND6	
Square	D:					
120/240	65,000	CTC-366CU	CTC-368CU	(24)	191	
208Y/120	65,000	CTC-366CU	CTC-368CU	CTC3610CU	CTC3612CU	
208Y/120	65,000	QED	QED	QED	QED	QED

	4 PE Current Tran	80Y/277 Volt isformers and	e compartme	ld Sequence, ansformers mi	ust be installed i	n the
MFR Rated Voltage	Interruption Duty Amps Sym @ Rated Voltage	600 Amp	800 Amp	1,000 Amp	1,200 Amp	1,600 Amp
Eaton:						
480Y/277	65,000	WBM	WBM	WBM	WBM	PRL-C
480Y/277	65,000	PRL-C	PRL-C	PRL-C	PRL-C	PRL-C
East Coast P	ower Systems:					
480Y/277	35,000	MBCT6SB1			(4)	
480Y/277	50,000	MBCT6SB1	MBCT8SB1	MBCT10S81	MBCT1081SB1	191
480Y/277	65,000	МВСТ6НВ1	MBCT8HB1	MBCT10HB1	MBCT1081HB1	
General Elec	tric:					
			Spectra Series			
480Y/277	100,000	AV I, II, III & V	AV I, II, III & V	AV I, II, III &	AV I, II, III & V	AV I, II, III & V
Square D:						
480Y/277	65.000	QED II	QEDII	QED II	QED II	QEDI

#### **Self-Contained Metering**



- LINE and LOAD conductors for production meter are in separate conduits
- Neutral isolation is used when required by NEC
- Meter socket is bonded to ground
- Eversource I&R approved meter socket is used with a lever bypass
- -Disconnect is adjacent to production meter socket
- Labels should be weatherproof and distinct
  - 480V labels required on meter and disconnect
  - INT number should be labelled
  - \*\*\*THIS IS CRITICAL IF MULTIPLE METERS ARE ON SITE\*\*\*

## **Transformer Rated Metering**



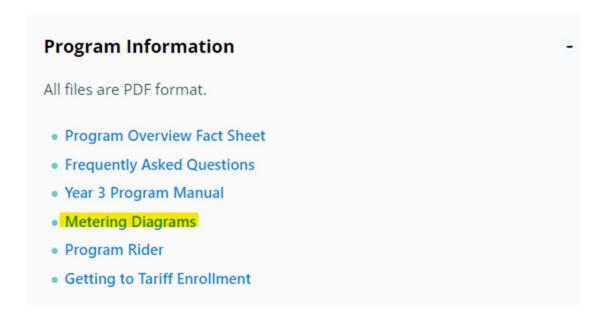
- LINE (Utility) and LOAD (Generation) should be clearly labelled inside current transformer cabinet
- Current transformers must be mounted with polarity facing utility
- Conduits for conductors MUST NOT enter the bottom.

  Space at bottom of current transformer cabinet required for mounting voltage transformers
- See the Eversource I&R book for all construction requirements.

#### **NRES Metering Diagrams Location**

#### **Eversource.com/NRES**

Toward the bottom of the page, expand the Program Information section and click on Metering Diagrams



#### **Buy-all Incentive Guidance**

- Please refer to the latest meter diagrams for guidance on system design.
- Projects applying to the Buy-all Program will require a new service request and a site meeting with a representative from the Field Engineering and Design group. Point of interconnection will be reviewed at the site meeting.
- Buy-all projects follow the same rules as a new service as outlined in the Eversource I&R book. Line-side taps to existing gear are
  only allowed if approved by Eversource's Field Engineering and Design group after a site visit. Not all situations permit the use of a
  line-side tap.
- If there is an existing service and a larger transformer is required, a new one can be installed at the customers expense up to the maximum service size as described in the I&R book, assuming it is the same voltage that the site currently uses and is in an approved location at the site, etc.
  - Eversource's largest 3-phase service is 3000 amps (2500 kva padmount), if the combined load and DER service will exceed that size a written agreement will be required that no load can be added to the DER service. Single phase maximum service size is 1200amps, (250kva pad mount) and falls under the same requirements. See I&R book for more information.
- Disconnects for cold-sequencing cannot be used as the AC disconnect for PV. An additional disconnect after the meter must be installed for PV isolation.
- Any customer owned transformer must be installed after the Buy-All revenue/production meter.

#### **Technical Questions or Concerns on Metering**

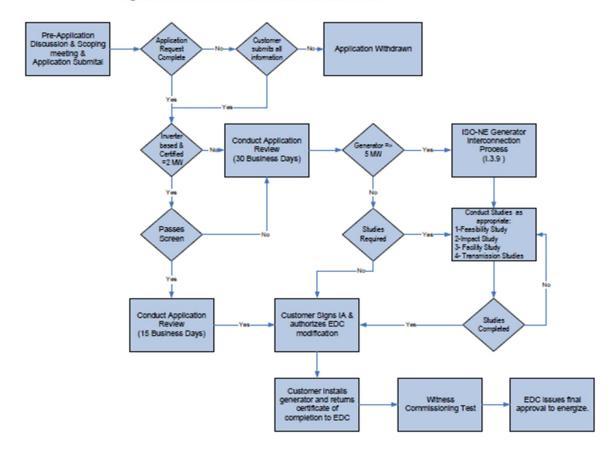
Please reach out to <u>scott.d.miller@eversource.com</u> for questions regarding:

- Meter equipment or switchgear for NRES Buy-all or netting projects
  - Pre-construction meetings
  - Relocation of meters
  - Technical questions on installation

## United Illuminating (UI) DG Interconnection Services



Figure 1: Interconnection Process Flow Chart



# Questions

#### **Contacts**

**UI NRES Team:** 

nres@uinet.com

**Eversource NRES Team:** 

ctcommrenewables@eversource.com