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

JULY 23, 2024

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



Program Background & Overview



Eligibility



RFP Process



Processes, Forms & Fees



Interconnection



Metering



Questions

BACKGROUND & OVERVIEW


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

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

- 2024 is the third 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
- 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 annual solicitations per year
 - February=60% of program capacity, August=40% of program capacity plus any remaining MWs from February

Year 3 NRES Key Program Updates

- Two-week window reinstated for Small category
- Small category will be open as long as the Competitive Size Categories
- Updated price caps for Buy-All and Netting tariffs
- 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
- SAM Customer Hosts no longer required to own Project Site
- Projects qualify for the Distressed Municipality bid preference in the following scenarios:
 - Non-SAM Project sited in a Distressed Municipality
 - SAM Project with 100% of the State and/or Agricultural Beneficial Accounts located in Distressed Municipalities
 - SAM Project with 100% of the Municipal Beneficial Accounts located in Distressed Municipalities and owned by a Distressed Municipality or Municipal Beneficial Accounts owned by a Distressed Municipality which is also paying for the Beneficial Accounts' electric service

Year 3 NRES Key Program Updates – August RFP

- Sustainable Energy Advantage, LLC (SEA) serves as the Ombudsperson for the NRES, SCEF, and RRES programs, effective April 1, 2024.
 - Extension requests should be emailed to ct-extensionrequest@seadvantage.com or submitted through the Extension Request Information Form.
 - Matters involving program disputes should be emailed to ct-disputeresolution@seadvantage.com.
- The non-refundable NRES Bid fee is now \$350 per bid to cover the cost of the ombudsperson.
- New bid requirements:
 - As ordered in the NRES Year 3 Decision, all bids must submit a completed Customer Protection and Disclosure Form. Bids claiming a Distressed Municipality bid preference must enter the average annual customer savings for each kilowatt of solar installed for all Distressed Municipality projects. The EDCs must report those figures to PURA annually.
 - Agricultural customers participating as a State, Agricultural, or Municipal (“SAM”) must provide proof of Agricultural status. See section 3.4.8 in the RFP.
 - One year of tax returns with a Schedule F, a farmer’s tax exemption permit, and a NAICS classification code beginning with an 11. Any of these requirements may be fulfilled with documentation that was valid at any point in the last three years (i.e., a farmer’s tax exemption permit that was valid three years ago would fulfill that requirement).

Year 3 NRES Key Program Updates – August RFP

- Add-on Netting systems are now allowed. **(EVERSOURCE ONLY)**
 - Previously, if an NRES project bid was for additional capacity being added to an existing project, the new project could only elect the Buy-All compensation structure. Now, Netting can be selected.
 - The existing project will need to convert from legacy Net Metering to the NRES Netting tariff.
 - There will be no annual cash-out option and credits will be calculated on a monetary rather than kWh basis.
 - The existing project and the add-on capacity will be separately metered. Only the new capacity (i.e.: the project submitting the bid) will be eligible for REC compensation in the NRES program (if applicable).
- REC buybacks – Customers can elect to enter into a form of agreement that allows them to purchase and retire the RECs from their project.
 - The REC purchase price will be the Alternative Compliance Price (ACP) that is in place at the time of purchase. The REC purchase price is currently valued at \$40/REC.
 - Projects participating in REC Buy-Back will be required to pay a fee (in addition to the bid fee and performance assurance) to cover the administrative costs of facilitating the REC Buy-Back.
 - There will be a non-refundable fee in addition to the standard \$350 Bid fee required for participation in REC Buy-Back.

Year 3 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 [Professional Engineer Certification Form](#) 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 in association 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 3 NRES Tips for Successful Bid Submission

- Include DG INT number when applying for NRES if you've already submitted an application to DG
 - 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.

Year 3 NRES Available Capacity - Eversource

Eversource Year 3 MW Allocations*						
Category	Project Size (AC)	Eversource Statutory MW/Year	Rollover from Year 2 RFP (MW)	February Selected (MW)	August Solicitation (MW)	Project Selection Process
Low Emission	≤ 5,000 kW	8	0.4	6.98	1.42	Competitive Solicitation
Large Zero Emission	≥1000 kW ≤ 5,000 kW	31	0.5001	22.75	8.75	Competitive Solicitation
Medium Zero Emission	>200 kW < 1000 kW	25	0	14.65	10.39	Competitive Solicitation
Small Zero Emission	≤ 200 kW	24	0.0204	14.57	9.627	First-Come, First-Served, subject to two-week window
Total Zero Emission		80	0.5205	51.97	28.767	

*MW allocations may change if projects terminate or install smaller in accordance with the applicable program rules.

Year 3 NRES Available Capacity – United Illuminating

United Illuminating Year 3 MW Allocations					
Category	Project Size (AC)	UI MW/Year	February Selected (MW)	August Solicitation* (MW)	Project Selection Process
Low Emission	≤ 5,000 kW	4.0	2.59	1.41	Competitive Solicitation
Large Zero Emission	≥1000 kW ≤ 5,000 kW	6	0.0	6.0	Competitive Solicitation
Medium Zero Emission	>200 kW < 1000 kW	8	2.6296	5.37041	Competitive Solicitation
Small Zero Emission	≤ 200 kW	6	3.07008	2.8201**	First-Come, First-Served, subject to two-week window
Total Zero Emission		20	6.0013	14.19051	

*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

Or

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

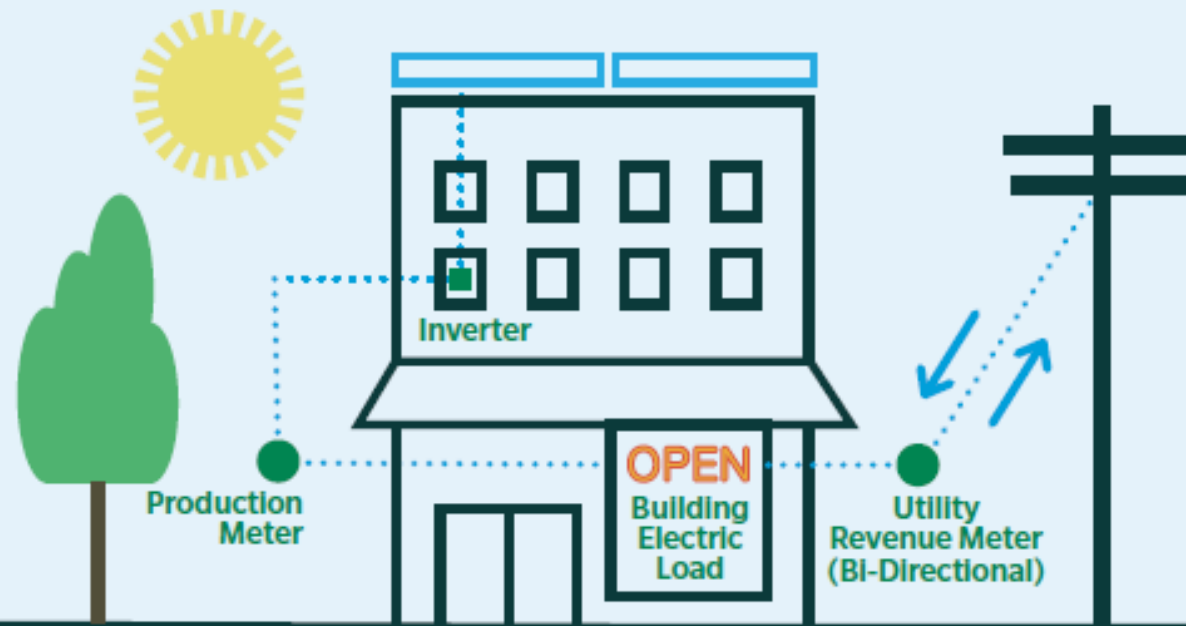
Buy-All



Netting

NETTING

All power production and consumption are metered & billed together



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 style="list-style-type: none"><input type="checkbox"/> Eversource or UI customer<input type="checkbox"/> Project is going In-Service on or after the RFP issuance date
System Eligibility*	<ul style="list-style-type: none"><input type="checkbox"/> Small Zero Emission Category: ≤ 200 kW<input type="checkbox"/> Medium Zero Emission Category: > 200 kW and < 1000 kW<input type="checkbox"/> Large Zero Emission Category: ≤ 1000 kW and ≤ 5000 kW<input type="checkbox"/> Low Emission Category: ≤ 5000 kW<input type="checkbox"/> Has not received CT Green Bank incentives<input type="checkbox"/> Projects that are not State, Agricultural, or Municipal Customers or Rooftop Buy-All Projects, each Project shall be sized to not exceed the highest consecutive 12 months of load over five years prior to bid submission

*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:
<input type="checkbox"/> Eversource or UI customer	<ul style="list-style-type: none">• Most recent Customer Bill for the Project Site
<input type="checkbox"/> Site Control	<ul style="list-style-type: none">• Proof of Site Control is between the Developer of the Project and the Owner of the Project Site• Documentation proving site control such as deeds*, written leases, options to lease, memorandums of lease, memorandums of option to lease, and contracts to purchase

*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:
<input type="checkbox"/> 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.
<input type="checkbox"/> Historical Load Based on SAM Beneficial Accounts Load	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.
<input type="checkbox"/> 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.
<input type="checkbox"/> 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.

*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?
<input type="checkbox"/> The Customer Host Account must provide proof of Site Ownership or proof of Site Control	<p>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.</p> <p>Documentation proving site control such as deeds*, written leases, options to lease, memorandums of lease, memorandums of option to lease, and contracts to purchase</p>
<input type="checkbox"/> Beneficial Account Credit Allocation Form (BACAF)	<p>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.</p>

RFP Process

2024 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 Category, Retail Rate, Technology, and Solar Carport/Canopy (Refer to RFP /Bid Calculator)
Medium Zero Emission Price Cap	\$188.90	\$269.86	
Large Zero Emission Price Cap	\$145.97	\$208.53	
Low Emission Price Cap	\$159.00	\$227.14	

Application/Bidding Process for August RFP

Medium and Large Zero Emission, Low Emission Categories	
Process	<ul style="list-style-type: none">• 8/1/24 at 1:00pm* - Bid window opens• 9/17/24 at 1:00pm - Bid forms for all categories due• 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
Price Caps	<ul style="list-style-type: none">• The competitive bid process allows Bidders to submit Bids up to the established price caps• Price caps vary based on project size, tariff type, EDC, retail rate, technology, or Bid Preference• Selected Projects will be paid at as-Bid price

*Times shown are in Eastern Prevailing Time.

Application/Bidding Process for August RFP – Small Zero Emission

Small Zero Emission Category	
Process	<ul style="list-style-type: none">• Two-Week Window: All <u>complete</u> bids submitted during two-week window are considered submitted at the same date/time• If oversubscribed in two-week window, random selection• First-come first-served applies after two-week window and/or if two-week window is undersubscribed• Two-week window opens 8/1/24 at 1:00pm*, closes 8/14/24 at 1:00pm• Bid window closes for all categories on 9/17/24 at 1:00pm• Two rounds of project selection
Tariff Rate	<ul style="list-style-type: none">• Buy-All: \$199.82/MWh• Netting: Dependent upon the EDC, retail rate, technology type, and bid preference

*Times shown are in Eastern Prevailing Time.

August RFP Schedule*

Action Item	Date
Bidders Conference – Webinar Only	July 23, 2024
Deadline for Submission of Questions	July 30, 2024
Release of RFP and Opening of Bid Window for All Project Size Categories, and Opening of Two-Week Window for Small Zero Emission Category	August 1, 2024 at 1:00:00 p.m. (Eastern Prevailing Time “EPT”)
Close of Two-Week Window for Small Zero Emission Category	August 14, 2024 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	September 17, 2024 by 1:00:00 p.m. (Eastern Prevailing Time “EPT”), at which time the Pricing shall become firm, irrevocable and binding.

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

August RFP Schedule (continued)*

Action Item	Date
First round of Selection and Notification of Winning Bidders for All Categories	On or about November 1, 2024
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

*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 3

Available to projects located on landfills or brownfields as defined by CT DEEP.

Source: <https://portal.ct.gov/DEEP/Remediation--Site-Clean-Up/Brownfields/Brownfields-Site-Inventory>

Source: https://portal.ct.gov/-/media/DEEP/site_clean_up/Brownfields/closedlandfillslistpdf.pdf

Or

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

20% Bid Preference in Year 3

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

Source: https://portal.ct.gov/DECD/Content/About_DECD/Research-and-Publications/02_Review_Publications/Distressed-Municipalities

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

30% Weighted Bid Preference in Year 3

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%

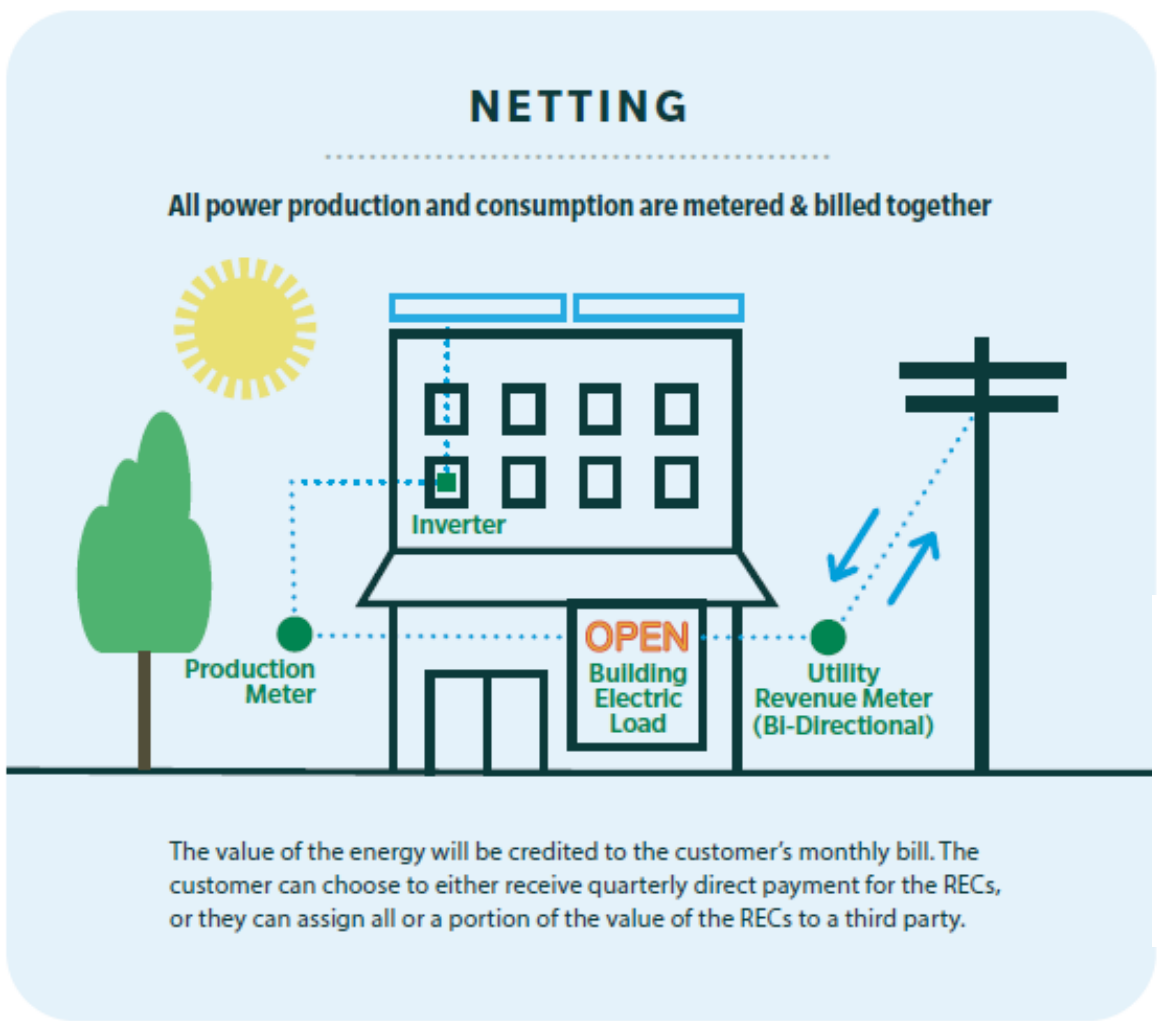
Checklist of Required Bid Documents

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

*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



On-bill Credits

Netted production paid to Customer on bill at retail rate

$$60,000 \text{ kWh} - 40,000 \text{ kWh} = 20,000 \text{ kWh} * \$0.1487 = \$1,946.80$$

Regular Bill including Production Credits (on-bill)

$$-40,000 + 60,000 = +20,000$$

\$ 2,974.00

Customer carries forward a bill credit to the next month

REC Payment

Direct cash payment to Customer or Tariff Payment Beneficiary

$$60,000 \text{ kWh} * \$0.019 = \$1,140.00$$

Cash Payment (Quarterly)

$$+60,000$$

\$ 1,140.00

kWh
Bill Accrual

Buy-All Incentive Example



On-bill Credits

Customer wants 80% as on-bill credits

Cash Payment

Customer wants 20% as cash payment to Tariff Payment Beneficiary

$$60,000 \text{ kWh} * \$0.145/\text{kWh} = \$8,700$$

$$\text{Buy-All Rate} = \$0.145/\text{kWh}$$

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

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

kWh

Regular Bill

-40,000

\$ -3,893.60

Production Credits (on-bill)

+60,000

\$ 6,960.00

Cash Payment (Quarterly)

+60,000

\$ 1,740.00

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

Customer carries forward a bill credit to the next month

Online Resources

United Illuminating

[UI Non-Residential Renewable Energy Solutions Main Page](#)

[UI Bid Portal](#)

Eversource

[Eversource Non-Residential Renewable Energy Solutions Program Main Page](#)

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

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

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 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 compliant 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

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

Email scott.d.miller@eversource.com to review any switchgear submittals, pre-construction meetings, or general design questions

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.

Eversource Standards:

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

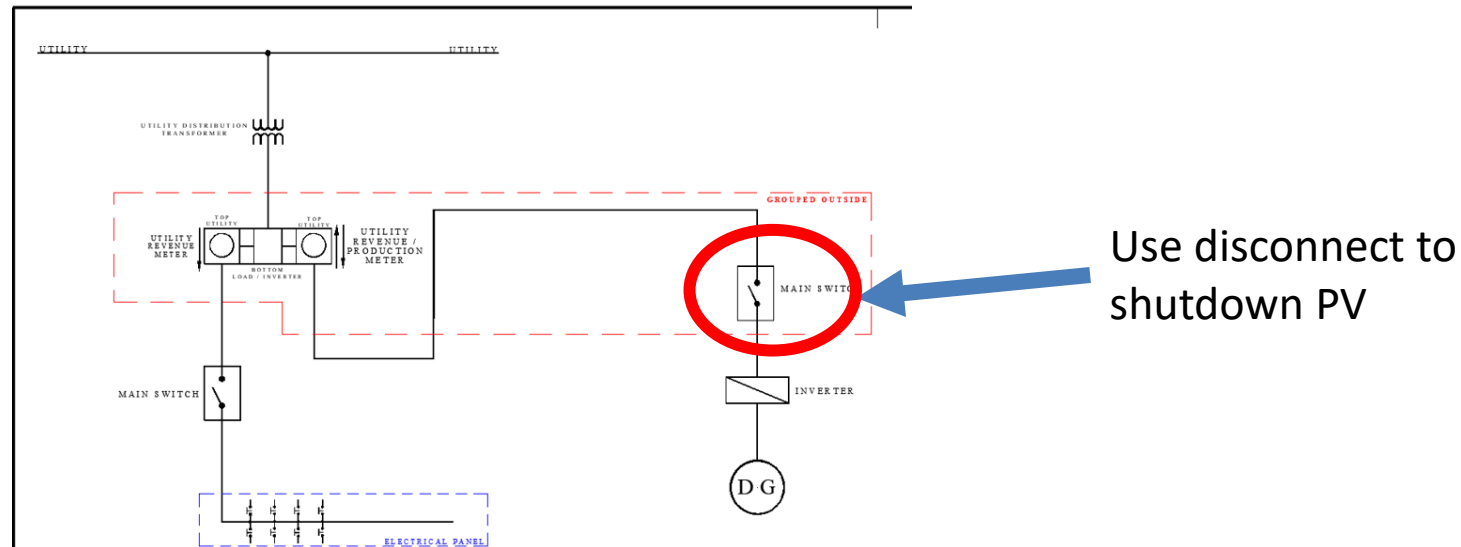
Secondary CTs uses either 600:5 bar types or 2000:5 window types.

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 install. 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.**

600 – 1600 AMP COMBINATION CIRCUIT BREAKER AND INSTRUMENT TRANSFORMER ENCLOSURE						
120/240 Volt and 208Y/120 Volt Services, with BAR TYPE Current Transformers. Check with Eversource for available fault current before ordering equipment.						
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 Coast Power Systems:						
120/240	65,000	MBCT6SB1	MBCT8SB1	MBCT10SB1	MBCT12SB1	-
208Y/120	100,000	MBCT6HB1	MBCT8HB1	MBCT10HB1	MBCT12HB1	-
General Electric:						
Spectra Series						
120/240	65,000	I, II, III, IV	I, II, III, IV	I, II, III, IV	I, II, III, IV	I, II, III, IV
208Y/120	100,000	I, II, III, IV	I, II, III, IV	I, II, III, IV	I, II, III, IV	I, II, III, IV
Murray:						
120/240	65,000	CBCT636LX	CBCT836M6	-	-	-
208Y/120	100,000	CBCT636HL	CBCT836HM	CBCT1036HN	CBCT1236HN	-
RSE-Sierra:						
208Y/120	As Specified	Custom	Custom	Custom	Custom	Custom
208Y/120	As Specified	SB	SB	SB	SB	SB
Siemens IT:						
120/240	65,000	BCT636LXD6	BCT836LMD6	-	-	-
208Y/120	100,000	BCT636HLD6	BCT836HMD6	BCT1036HND6	BCT1236HND6	-
Square D:						
120/240	65,000	CTC-366CU	CTC-368CU	-	-	-
208Y/120	65,000	CTC-366CU	CTC-368CU	CTC3610CU	CTC3612CU	-
208Y/120	65,000	QED	QED	QED	QED	QED

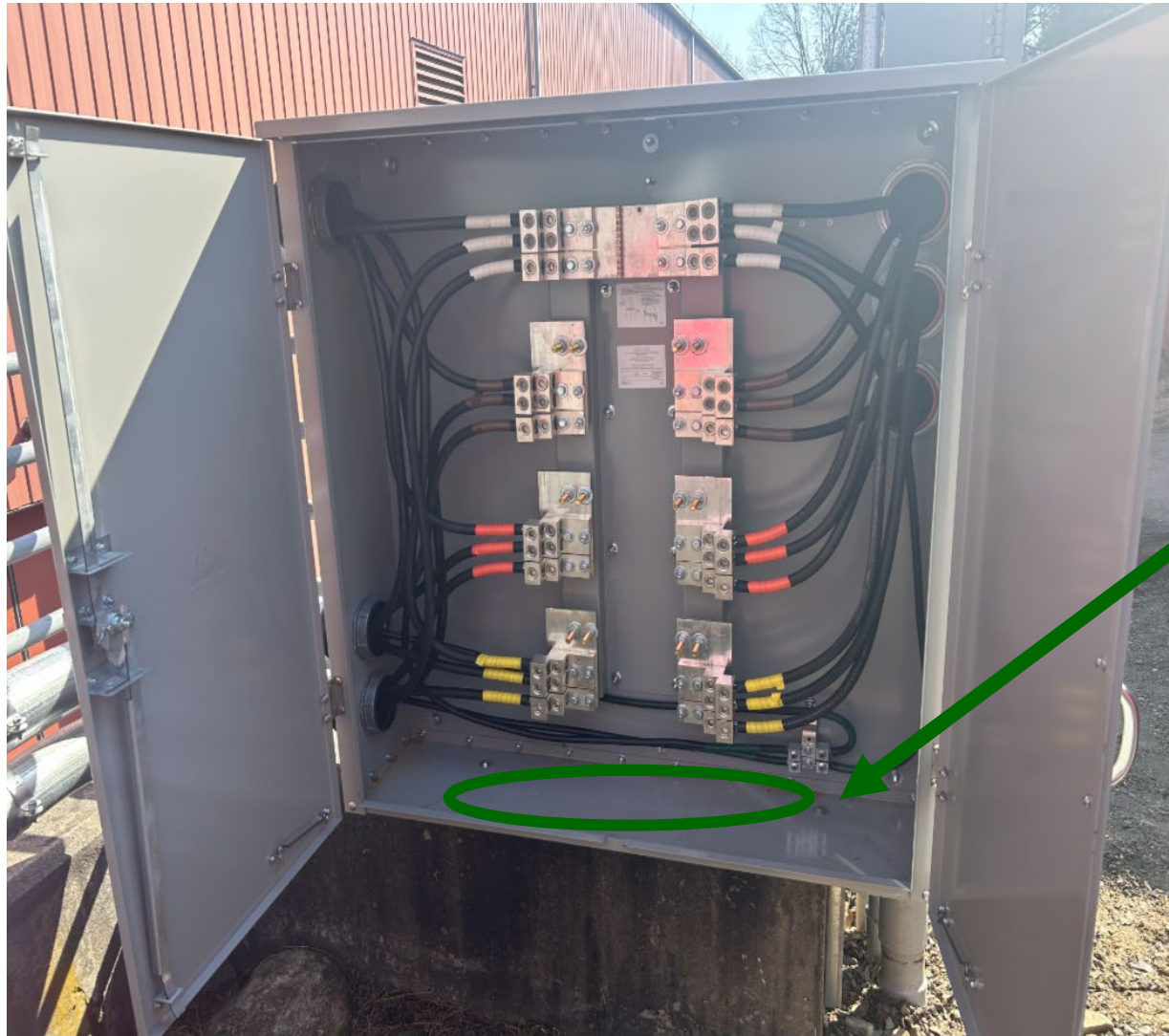
600 – 1600 AMP COMBINATION CIRCUIT BREAKER AND INSTRUMENT TRANSFORMER ENCLOSURE						
480Y/277 Volt Services • Cold Sequence. BAR TYPE Current Transformers and Voltage Transformers must be installed in the same compartment. Check with Eversource for available fault current before ordering equipment.						
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 Power Systems:						
480Y/277	35,000	MBCT6SB1	-	-	-	-
480Y/277	50,000	MBCT6SB1	MBCT8SB1	MBCT10SB1	MBCT1081SB1	-
480Y/277	65,000	MBCT6HB1	MBCT8HB1	MBCT10HB1	MBCT1081HB1	-
General Electric:						
Spectra Series						
480Y/277	100,000	AV I, II, III & V	AV I, II, III & V	AV I, II, III & V	AV I, II, III & V	AV I, II, III & V
Square D:						
480Y/277	65,000	QED II	QED II	QED II	QED II	QED II

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

Program Information -

All files are PDF format.

- [Program Overview Fact Sheet](#)
- [Frequently Asked Questions](#)
- [Year 3 Program Manual](#)
- [Metering Diagrams](#)
- [Program Rider](#)
- [Getting to Tariff Enrollment](#)

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

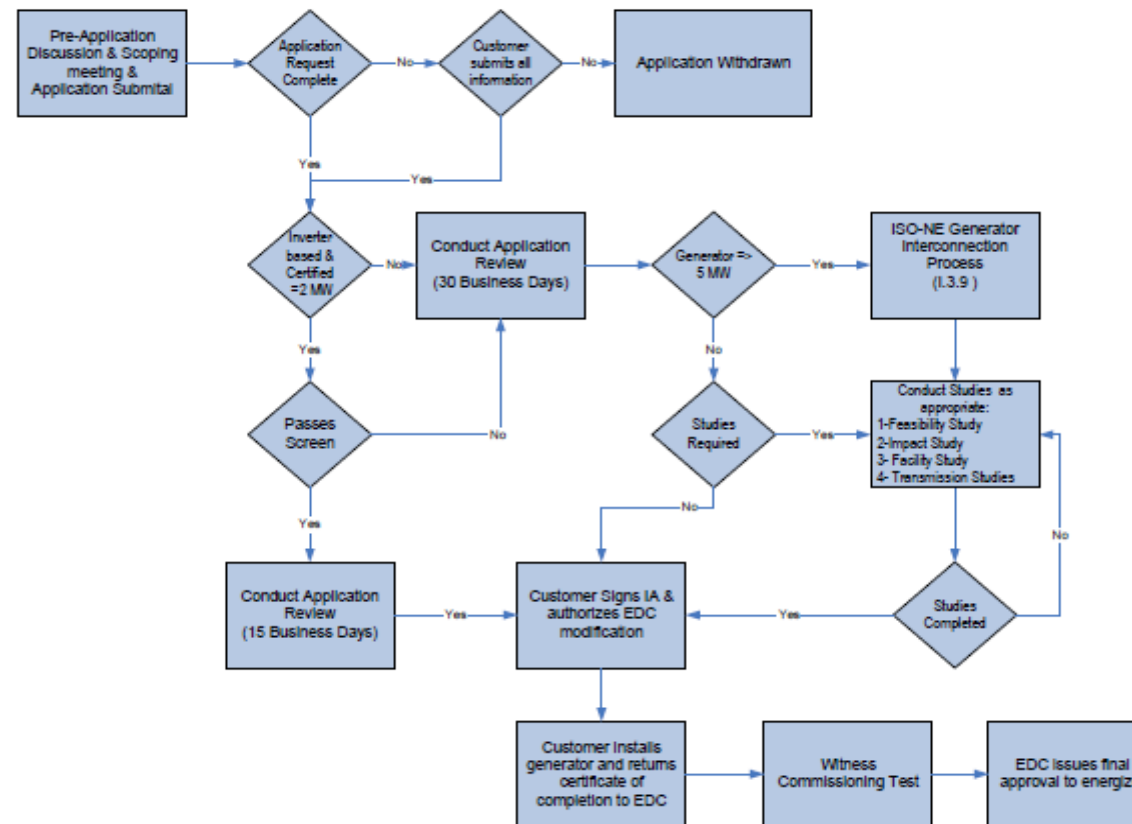
Please reach out to scott.d.miller@eversource.com for questions regarding:

- 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

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