Piclo Flex Program Manual

Overview

The Piclo Flex platform is used to run a grid flexibility marketplace in predefined areas within Connecticut that can help mitigate grid constraints using flexible loads, generation, and storage during peak periods, planned maintenance, and to support infrastructure deferral. The Piclo Flex platform allows Connecticut's Electricity Distribution Companies (EDCs), Eversource and UI, to engage with Flexibility Service Providers (FSPs) as program participants. FSPs may submit bids for competitions (auctions) in predefined grid constrained locations in the Connecticut service territories. Any DER aggregator or operator, DR provider, or non-residential end-customer that can provide flexibility to the grid within the parameters of the marketplace can be considered an FSP.

Eligibility Requirements

Prospective FSP participants must be accepted through the EDC's qualification process to be eligible to participate in competitions. End-customers recruited by FSPs are required to be customers of the EDC in which competition(s) they are engaging with. As part of the customer enrollment process, FSPs may be required to provide a list of enrolled Distributed Resources, asset details, Customer information (including customer type, the respective EDC's account number, Customer name, Customer address, and contact name, number, and email address), and/or other commitments.¹ An end-customer with a business account can decide to participate via an aggregator, or individually if they meet the qualification criteria.

All asset types are eligible for participation, including but not limited to electric vehicles (EVs), smart thermostats, batteries, heat pumps, commercial and industrial load, and back-up power. However, greenhouse gas-emitting generation is currently excluded from participation.

Qualification

- 1. Account Setup
 - a. If you haven't done so already, <u>register</u> as a Flexibility Service Provider (FSP) on Piclo: create your personal login and set up an account for your organization.
 - b. After setup, you can invite <u>additional colleagues</u> so your team can access and manage the same account. Remember, each team member will need to use their own email to log in.
- 2. Company Qualification
 - a. On the Piclo platform, navigate to Manage > View Company Qualification > Applications or use the map competition side panel.
 - Fill out the application form and submit it for approval. If you plan to submit bids in both Eversource and United Illuminating territories, you must complete two application forms – one for each EDC.
 - c. Learn more about the entire company qualification process by reading the detailed guide provided by Piclo, <u>linked here</u>.
- 3. Add Assets to the Platform
 - a. On the Piclo platform, go to Manage > Assets. Download the latest template by selecting "download latest template"
 - b. Open the file you downloaded. Fill in asset details (one row per asset), and save the file as xlsx. Don't forget to read the instructions provided.

¹ Requirements may vary by EDC.

- c. When you are complete with the spreadsheet, return to your Piclo account and upload your file via the 'choose file' button.
- d. Learn more about adding assets by reading the detailed guide provided by Piclo, <u>linked</u> here.

Submitting a Bid

When a competition opens for bidding, an email notification is sent to all FSPs that have qualified assets with an invite to submit bids. Bids can be submitted directly in the Piclo platform for each competition, or via a bulk upload from a file.

Bids are always submitted against the service window for a competition, and it is the FSP's responsibility to adhere to any additional requirements set by the EDC via their competition documentation. Learn more about submitting bids and bid results by reading the detailed guide provided by Piclo, <u>linked here</u>.

It is important to note that FSPs are not constrained by the guide pricing provided for each competition. FSPs are encouraged to submit a price commensurate with the value of grid services they are providing.

Data Requirements

All end-customers are required to provide interval data to Eversource and/or United Illuminating. Acceptable interval data can be sourced from meters or at the asset-level (e.g. batteries and smart thermostats). Commercial and industrial curtailment sites are required to send site level data. To verify performance, FSPs must upload their baseline and performance data to the Piclo platform.

Dispatch

Event Parameters

Event Parameters are defined on the Piclo Flex platform for each competition, including capacity relief, service window, number of dispatches (estimate), and minimum runtime.

Notification Details

Notification of events will be given at least 24 hours before the event (including weekends). Following the notification of an event, the FSP is responsible for notifying end customers. Notifications will be sent to the parties designated at the time of enrollment based on their communication preferences. FSPs are responsible for notifying the EDC in the event their contact information changes. FSPs are responsible for implementing the necessary communication channels needed to notify customers of events.

FSPs shall accept the Dispatch Instruction on the Piclo Flex platform, adhering to the parameters outlined in the Flexibility Services Provider Agreement.

FSPs may also accept Discretionary Dispatch Requests on the Piclo Flex platform. The FSP shall acknowledge receipt of Event Starts, Discretionary Dispatch Requests, and Event Stops by written notification to the Company, as outlined in the Flexibility Services Provider Agreement.

Performance and Incentives

Baseline Calculation

Performance is calculated using a "last 10-of-10 baseline method" with a same-day adjustment two (2) hours before the start of the event. FSPs will not be charged a fee for poor performance. However, since this is a pay-for performance offering, poor performance on any or all events will decrease the incentive amount paid. Non-event participation, or having negative performance during an event, will be included in an FSP's monthly average performance calculation.

To calculate an FSP's performance during an event, it is necessary to calculate what the customer's/asset's typical power use is to estimate what the power use would have been if no demand response event was called. ISO-NE uses a similar last 10-of-10 model in their active demand response programs. This method assesses the customer's/asset's last 10 similar days.² An example of a baseline set by loads in the ten (10) similar days before a demand response event is shown below:

Time Interval	10 similar days before event	 2 similar days before event	Holiday, weekend, day of another DR event	1 similar day before event	Baseline
12pm-1p	500 kW	 500 kW		500 kW	500 kW
m			Not counted in		
2pm-5pm	500 kW	 500 kW	average	500 kW	500 kW

To account for events called during extreme weather days (resulting in higher loads), the baseline is adjusted to reflect asset load during the event day. This baseline adjustment is the difference between the asset's average load during the hour starting the two (2) hours before the event start and the load during the event day. However, the asset's load may be lower during an event day than the last ten (10) similar days because the FSP is responding to the event. Therefore, the adjustment can only be positive. Below are two examples of baseline adjustments:

	Time Interval	Baseline	Event Day Load	Baseline Adjustment
Example 1	12pm-1pm	500 kW	600 kW	100 kW
Example 2	12pm-1pm	500 kW	400 kW	0 kW (not negative)

Performance is calculated by subtracting the event day load during the event from the sum of the FSP's baseline and baseline adjustment. An example of an event day performance is shown below:

Time	Baseline	Event Day	Baseline	Event Day Performance	
Interval		Load	Adjustment	(Performance = Baseline + Adjustment – Event Day)	
12pm-1pm	500 kW	600 kW	100 kW	200 1444 - 500 1444 - 400 1444 - 400 1444	
2pm-5pm	500 kW	400 kW	-	200 kW = 500 kW + 100 kW – 400kW	

For example, in a hypothetical scenario with an assumed incentive rate of \$10/kW, the incentive for an event day performance of 200 kW would be paid \$2,000.³

If the asset produces more energy than they consume during the baseline period or the event day through permitted and interconnected onsite generation or discharging energy storage, the net energy use will be used to calculate the asset's performance in the same process detailed above.

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² Similar days are defined as the same day type (weekday or weekend) that are not holidays and where no other DR event from either ISO-NE (under "OP-4") or ConnectedSolutions was called.

 $^{^{3}}$ \$2,000 = \$10/kW x 200 kW

Negative performance over the course of an entire season will not be penalized. However, negative performance during a single event will count against the Provider's average, for example:

Time	Customer's	Customer's Power Use	Performance	
Interval	Adjusted Baseline	During Event		
3pm-4pm	300 kW	400 kW	-100 kW	
4pm-5pm	500 kW	400 kW	100 kW	
5pm-6pm	500 kW	400 kW	100 kW	
Average Eve	nt Performance	(-100 + 100 + 100) / 3 = 33		
			kW	

Settlement

Piclo will use the data uploaded from the FSPs to conduct the baseline and performance calculations and generate a Performance Report that will be shared with the FSP and the EDC. Once performance values are agreed upon, Piclo will provide an invoice to the EDC. Invoices will be issued monthly for any services completed in the preceding month.

Each EDC reserves the right to adjust and/or negotiate settlement and respective incentive amount. Incentives will be paid at a rate no more than the prescriptive performance rate agreed upon at time of enrollment.

Meter Inspection and Verification

The EDCs, upon reasonable notice, shall have the right to inspect enrolled flexible load and verify meter accuracy.

Testing

Performance test events are not planned in this initiative.

Co-Participation

Customers may co-participate in other programs such as (but not limited to) the Connecticut Energy Storage Solutions, ConnectedSolutions, and/or ISO-NE Demand Resource Programs.

Although rare, it is possible that both Piclo Flex and another program will call on a customer to curtail on the same day. This will not affect how the customer performance is calculated in the Piclo Flex platform.

Terms and Conditions

These materials and participation in the Piclo Flex platform are pursuant to and subject to the Terms and Conditions in effect from individual FSP contract agreements between the EDC and the FSP.