Leap

Small Customer Aggregation Proposal

leap

leap **Overview**

- Active in:
  - **NYISO's SCR program as a Responsible Interface Party since 2021,** with aggregations across 4 different zones
  - CAISO since 2019 and ERCOT since 2020
  - Non-wholesale New England programs since 2023
- **›180,000 customers** currently active on Leap's platform, spanning both residential and commercial sectors
- Find more in Appendix and at www.Leap.energy

Small Customer Aggregation Proposal Background

- Per NYISO's [SCA guidelines](#), Leap requests the approval from the relevant Committee Chairs for its Small Customer Aggregation ("SCA") *methodology*, which will be applied to multiple SCAs.
  - Multiple SCAs will allow for coverage of multiple zones, and flexibility over multiple years as new customers enroll
- Although NYISO's SCA process was originally designed with the intent to allow for participation from customers without retail **interval meter data, Leap has access to that data**, which meets NYISO requirements for traditional SCR participation.
  - Instead, similar to [OhmConnect's SCA proposal in 2022](#), Leap has a number of residential customers that are ineligible to participate in NYISO's SCR program, as they have Average Coincident Loads **("ACLs") that are <1 kW**. NYISO's DRIS is not currently capable of managing resources <1 kW, so an SCA is required to be able to participate these resources.

SCA Logistics/Restrictions

- Each SCA will be registered in DRIS as a single SCR
- Only **ConEdison** customers in NYISO **Zones H, I, J, Orange and Rockland** customers in Zones **H and I**, and **PSEG-LI** customers in **Zone K** that have **Smart Meters installed** will be included
  - Leap expects the majority of customers to be located in Zone J
  - Separate SCAs will be utilized for customers in separate zones
- As ACL will be <1 kW, **Subscribed Load** values will also be <1 kW and contain **up to 1 decimal place** for each individual end customer
  - The SCA's total ACL and Subscribed Load values will be **truncated to zero decimal places**
- Ahead of the enrollment deadline, Leap will calculate ACLs for all resources to determine whether they are eligible for an SCA, or must participate as a traditional SCR
  - In line with SCA guidelines, **TO add-backs will not be applicable** for resources in the SCA
  - Resources that have an ACL <1 kW before Transmission Owner (TO) add-backs, but that Leap knows would have an ACL >1 kW after TO add-backs, will be registered as traditional SCR resources

Eligibility Checks

- All enrolled customers will have **smart meters and active accounts** with their respective TO
- Leap will have responsibility to respond to NYISO Documentation Requests, in line with traditional SCR processes
- Leap to procure **confirmation from TOs of load zone and Active account status** before submitting enrollments to NYISO, but within 30 days of the close of the enrollment window
- Customers **cannot be added to or removed** from an SCA in the middle of a capability period
  - If/as accounts move to inactive, Leap will count performance as 0
    - Leap will procure a second confirmation from TOs of **load zone and Active account status** within 10 business days of an event or test
  - SCA aggregate Subscribed Load values will be sized to account for this risk.

ConEd Eligibility Checks 2024 Timeline

March-April

April-May

May-June

ConEd Meter Enrollment

Aggregator of Record Determined

NYISO Meter Enrollment

Leap, and other aggregators, submit resources for enrollment in ConEd's Commercial System Relief Program and Distribution Load Relief Program

ConEd reviews all enrollments to: 1) validate each meter enrolled is active and eligible; 2) flag dual enrollments, and determine final Aggregator of Record based on applicable Terms & Conditions

For those meters for which Leap is the Aggregator of Record, Leap: 1) validates SCA eligibility (<1 kW ACL), 2) submits meters to ConEd for validation of load zone and Active account status within 30 days of end of enrollment window, and 3) submits SCA enrollment package to NYISO

Note that timelines may shift earlier in future years

Settlement Methodology

- Leap will be utilizing Green Button Connect, where available, to **access smart meter interval data** from ConEd and Orange & Rockland, and will utilize existing processes that Leap has had in place for multiple years for PSEG-LI
- Leap will **calculate the performance for each individual meter** using standard protocols identical to traditional SCR participation.
- Finally, Leap will **aggregate performance of all meters** within an SCA into a single value for submission into DRIS, and supply the backup data and analysis via spreadsheet to NYISO

Proposal Recap

- Resources with an **ACL ‹ 1 kW** will be assigned to a Small Customer Aggregation,
- SCAs will only be in a **subset of NYISO territory**, spanning Zones H-K
- Resources in an SCA will **meet all other standard SCR participation requirements**, other than the minimum 1 kW ACL requirement
- Multiple SCAs will be created, all of which use the same, consistent methodology

Appendix

Leap aggregates and sells energy to keep the grid continuously in balance.

We enable our partner ecosystem to supply zero-carbon virtual power plants (VPPs) to support the grid.

1 Virtually aggregate our partners' load assets

2 Sell capacity into NYISO ICAP markets

3 Share revenue with our partners

Partner

Grid Ops

Partnered with industry leaders

Our partners are leaders across the rapidly growing markets
of EV charging, smart building technologies and battery storage.

PEAK POWER

LG

bp pulse

DEMAND Q

solaredge

Ec Epic Charging

energy toolbase

nationalgrid

COPELAND

TESLA

ev.energy

lumin

BLOC POWER

G Nest

SUNBELT CONTROLS

CLEANSPARK

EV

PearlX

evconnect

EnergyHub

GENERAC

stem

Sunnova

ENERSPONSE

resideo

optiwatt

KOHLER

AYANTRA
... Wireless and Web Telemetry

CalCom Energy
Energy Solutions for Ag and Water

sonnen

CORTEX
SUSTAINABILITY INTELLIGENCE

sunrun

Qcells

FLAIR

PHOENIX ENERGY
TECHNOLOGIES

FRACTAL
ENERGY STORAGE CONSULTANTS

Windmill

Therma°

NUVVE

GRIDPOINT

LOGICAL BUILDINGS

Planet

VERDIGRIS

NEXTera ENERGY

Automated grid services operations from a single platform

Our platform provides turnkey access to grid services revenue opportunities. Leap does all the heavy lifting to meet technical and regulatory requirements in each market.

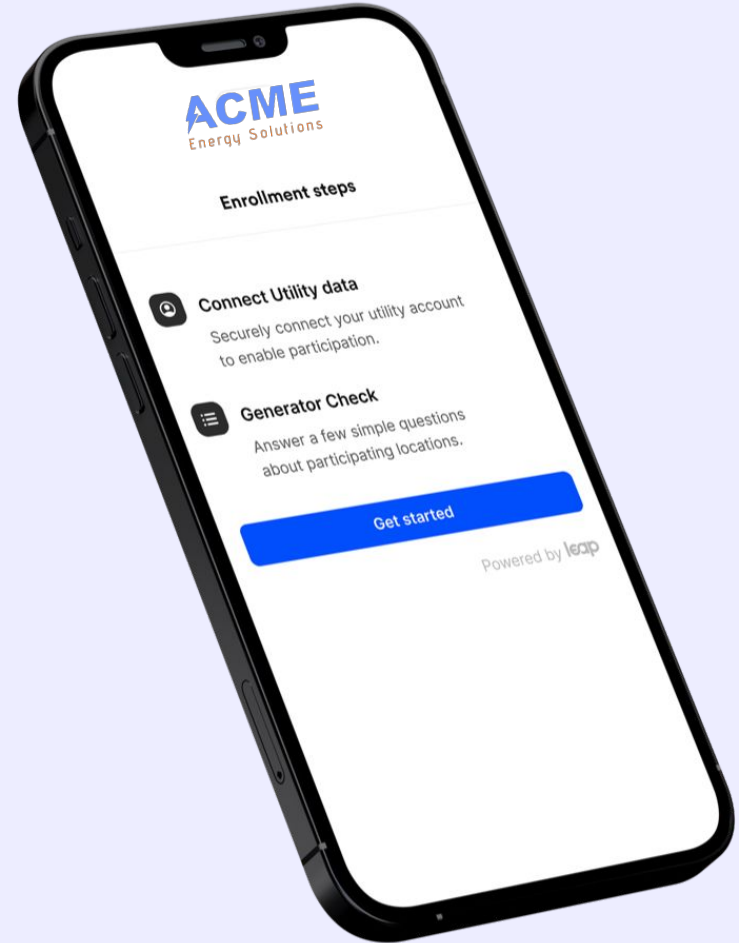| Connect	Manage Meters	Bidding	Dispatching	Performance Analysis	Settlement

Easily receive authorization from customers via Leap Connect

Speed and simplify customer enrollment with Leap Connect, a fully-brandable app that replaces traditional, complex customer meter authorization processes with a few simple clicks.

➔ Track authorization status
➔ Improve conversion rates
➔ Control the customer experience

ACME
Energy Solutions

Enrollment steps

Connect Utility data
Securely connect your utility account to enable participation.

Generator Check
Answer a few simple questions about participating locations.

Get started

Powered by leap

Load Reduction Plan

Resource ID	Resource Name	Month
xxxxxxxx	yyyyyyyy	August
Time with Respect to the SCR event or performance test	**Action**	**Load Reduction achieved (kW)**
21 hours prior	Leap receives dispatch notice from the NYISO	
20.5 hours prior	Resource receives dispatch notice from Leap	
45 minutes prior	Pre-cool/heat	
Event Start	Adjust thermostat temperature setting and other relevant devices to reduce electrical load	xx
0-30 minutes post Event	End adjustments	

Dispatch notifications - email

Date of event

Market

Dispatch window

Event type

# of meters & kW dispatched

Dispatch detail in Partner Portal

Dispatch detail in Partner Portal

> - Dispatches sent to partners via email, API, or other method, with summary available in portal

leap Connect Meters **Dispatch** new Analyze

ⓘ All historic Dispatch Events are now located on the Analyze tab along with performance data!

📅 Sep 17, 2023 ⌄   Add filter +

Upcoming Events ⓘ

Search   Meter Group

40	1.2 MWh	100%
Total Unique Meters	Total Dispatch Qty	Percent of Nomination

Meter ID	Customer ↑	Date	Start Time	End Time	Event Type	Program	Dispatch (kW)	Dispatch (%)
e0fd5787-1e78-4ff5-a6be-76a...		Sep 17, 2023	4:00 PM	5:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
7ecd1554-6afa-4468-b3d4-3fe...		Sep 17, 2023	2:00 PM	3:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
80dbaef7-cc6b-4d4a-9bcc-0a...		Sep 17, 2023	4:00 PM	5:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
c8f2e008-a0b9-45cc-83f5-2e7...		Sep 17, 2023	2:00 PM	3:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
33609e4e-4123-4ec8-b8d2-c8...		Sep 17, 2023	4:00 PM	5:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
e2b4b2eb-9922-4842-81d7-14...		Sep 17, 2023	4:00 PM	5:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
62ac90e3-5f21-40c2-bbed-c6...		Sep 17, 2023	4:00 PM	5:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
970c6a7f-5c37-483d-af8d-35c...		Sep 17, 2023	2:00 PM	3:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
c1b19169-2f14-490c-8765-897...		Sep 17, 2023	4:00 PM	5:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%
1bd5459b-1d66-47f4-ab71-9ba...		Sep 17, 2023	4:00 PM	5:00 PM	⚠ Capacity Test	NYISO-SCR	30 kW	100%

Rows per page 10 ⌄   1 - 10 of 40 |< < > >|

Dispatch API

- Automated dispatching for every Leap program

- Provides data fields that help optimize dispatch strategies and performance

    - Flag for when exports are allowed

    - Flag for voluntary/commitment dispatches, where applicable

- API makes it easier to optimize operations

```
setopt_array($curl, [
OPT_URL => "https://ap
OPT_RETURNTRANSFER =>
OPT_ENCODING => "",
OPT_MAXREDIRS => 10,
OPT_TIMEOUT => 30,
OPT_HTTP_VERSION => CU
OPT_CUSTOMREQUEST => '
OPT_POSTFIELDS => "{\"
OPT_HTTPHEADER => [
accept: application/jso
content-type: applicat
```

leap