

Introduction

This page provides an overview of the REC Index pricing structure and inputs for calculations using data from the NYISERDA Agreement, NYISO, and NYGATS.

Sample Calculation of Index Invoice

Contract Data:

Installed Capacity	100 MW	a
Bid Quantity Percentage	95%	b
Incremental Upgrade Percentage	100%	c
Index REC Strike Price	\$60.00 /MWh	d
Seasonal UCAP Production Factor	0.2000	e

Market Data for Month:

	Jun-19	
Applicable Zone	A	West
Reference Energy Price for Zone	\$26.76 /MWh	f (rounded to \$0.01)
Reference UCAP Price for Zone	\$1.80 /kW-mo	g (rounded to \$0.01)

Project Data for Month:

Total RECs	18,676	h
Tier 1 RECs Transferred to NYISERDA	17,742	i

Calculations:

Quantity Obligation	17,742 RECs	$j = h * b * c$ (rounded down)
Reference Capacity Price	\$1.93 /MWh	$k = (g * e * a * 1000) / h$ (rounded to \$0.01)

Payment Information

Net Price	\$31.31 /MWh	$l = d - f - k$
Invoice Amount	\$555,502.02	$m = l * i$

Part 1: Reference Energy Price for Zone

Click **learn more...** below to open and follow the steps to generate the **Reference Energy Price for Zone** report from NYISO. The Reference Energy Price is the simple average of the hourly zonal LBMPs for the applicable month.

1

Access the [NYISO Custom Report](#) (click) or enter the following URL in your browser: https://www.nyiso.com/custom-reports?report=dam_lbmp_zonal (also accessible by navigating to the NYISO homepage > Markets > Energy Market & Operational Data > Custom Reports).

2

Within the Custom Report page, select **Day Ahead Market/LBMP** and **Zonal** from the **Select Report** drop-downs.

The screenshot shows the New York ISO website's Custom Report page. The 'Select report' section has two dropdown menus: 'Day-Ahead Market LBMP' and 'Zonal'. Below these, the 'Day-Ahead Market LBMP - Zonal' section is visible, containing a 'Choose Zone(s)' list, a 'Zone(s) Added' list, and a 'Choose Options' section. The 'Choose Zone(s)' list includes checkboxes for various zones like CAPITL, CENTRL, DUNWOD, etc. The 'Choose Options' section includes fields for 'Start Date' and 'End Date' (both set to 05/10/2022), a 'Version' dropdown (set to Latest), and a 'Format' dropdown (set to CSV). A 'GENERATE REPORT' button is at the bottom right.

3

Next, select the applicable zone(s) under the **Choose Zone(s)** section.

This screenshot is similar to the previous one, but with a green rectangular box highlighting the 'Choose Zone(s)' list. The list contains checkboxes for various zones: CAPITL, CENTRL, DUNWOD, GENESE, H Q, HUD VL, LONGIL, MHK VL, MILLWD, and N.Y.C. The other elements of the page, including the 'Select report' dropdowns and the 'Choose Options' section, remain the same.

4

Under **Choose Options**:

- Input **Start** and **End** dates for the month (ex. 01/01/2021 - 01/31/2021)
- Select **Latest** for **Version**
- Select **CSV** (comma separated values) for **Format**

The screenshot shows the New York ISO Markets page. On the left is a sidebar with navigation links. The main content area has a 'Select report' section with dropdowns for 'Day-Ahead Market LBMP' and 'Zonal'. Below this is a form titled 'Day-Ahead Market LBMP - Zonal' with three columns: 'Choose Zone(s)', 'Zone(s) Added', and 'Choose Options'. The 'Choose Options' column contains date pickers for 'Start Date' and 'End Date', a 'Version' dropdown, a 'Format' dropdown, and a 'GENERATE REPORT' button. The 'Start Date' and 'End Date' are both set to 01/01/2022 and 01/31/2022. The 'Version' is set to 'Latest'. The 'Format' is set to 'CSV'.

5

Then click the **Generate Report** button to generate a report.

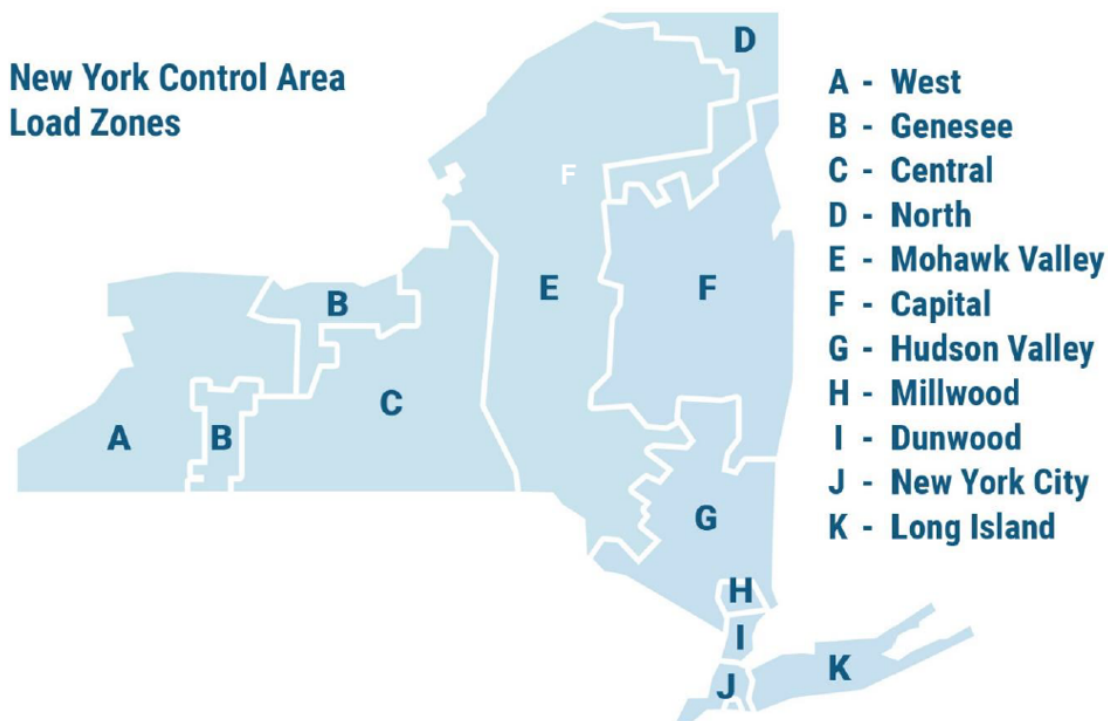
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6

Calculate the **Reference Energy Price** by averaging the hourly **LBMPs** from the generated report.

Part 2: Reference UCAP Price for Zone

Click **learn more...** to open and follow the steps to determine the **Reference UCAP Price for Zone** from NYISO. The NYSERDA Agreement will specify the **Zone** to be used.



Source: NYISO

1

Access the [NYISO Spot Auction Summary](#) (click) or enter the following URL into your browser: [Installed Capacity - View Spot Auction Summary \(nyiso.com\)](#) (also accessible by navigating to the NYISO homepage > Markets > Installed Capacity Data > Monthly Auction Summary).

2

Select the applicable **Season** and **Auction month/Year** from the drop-down, then click the **Display** button (e.g., for May 2022 Settlement, select Season: Summer 2022 and Auction Month/Year: May/2022).

3

The Reference UCAP Price is the **Price (\$/kW-Month)** for the applicable project location.

Table 1: NYSERDA Agreement Applicable Zone and NYISO Spot Auction Summary Results

NYSERDA Agreement Applicable Zone	NYISO Spot Summary Results for UCAP
Zone A-F	NYCA - The NYCA Auction Result is used for Zones A-F because this output is the Market Clearing Price for Rest of State (ROS). The last entry in the Auction Results (ROS Price Paid by Bidders) is the weighted average of ROS, HQ, IESO, NE, and PJM Market Clearing Prices. These definitions are stated in the ICAP Automated Market System User's Guide
Zone G-I	G-I Locality
Zone J	NYC

ISO Installed Capacity View Spot Auction Summary

Auction • Mitigation • Load Forecast • Calendar • Rights • Upload/Download

Season: Summer 2023 Months: Aug/2023 Display

View Spot Auction Summary

Summer 2023 Capability Period
08/2023 Spot Market Auction Results - UCAP
Posted Date: 07/28/2023 10:02 AM

	08/2023
G-I Locality	
Awarded Deficiency (MW)	2,431.6
Awarded Excess (MW)	1,073,500
% Excess Above Requirement	8.57
Price (\$/kW-M)	\$6.01
LI	
Awarded Deficiency (MW)	132.4
Awarded Excess (MW)	633,400
% Excess Above Requirement	12.78
Price (\$/kW-M)	\$6.01
NYC	
Awarded Deficiency (MW)	3,988.3
Awarded Excess (MW)	237,500
% Excess Above Requirement	2.63
Price (\$/kW-M)	\$19.46
NYCA	
Awarded Deficiency (MW)	6,539.6
Awarded Excess (MW)	1,489,600
% Excess Above Requirement	4.31
Price (\$/kW-M)	\$6.01

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