

# DER Compensation

**Tom Su, District Director - DER**

**Central Hudson New Business**

# Value Stack

- Demand customers, Community Distributed Generation, and Remote Net Metering projects which have made payment for 25% of interconnection costs, or executed their Standard Interconnection Contract if no such payment is required after July 17<sup>th</sup>, 2017.
- Requires hourly meter - \$30 monthly metering fee.

# Value Stack

- **Energy** – day ahead NYISO hourly zonal LBMP for Zone G
- **Capacity** (ICAP)
- **Environmental** – higher of Tier 1 REC price or Social Cost of Carbon
- **Demand Reduction Value (DRV)** – Based on hourly output in the ten peak CH hours in the previous calendar year.
- **Market Transition Credit (MTC)** – residential and non-demand commercial customers participating in CDG.
- **LSRV**

# Remote Net Metering

- Allows renewable energy system owners with excess net metering credits to offset other electric metered accounts.
- Host account must be non-residential or residential with farm operations.
- All accounts must be held by the same customer, on property owned or leased by the customer.
- Must submit Remote Net Metering Application
- Satellite accounts may be added or removed once per year, from January 1 – January 31.
- Credited via the Value Stack.

# Remote Net Metering

- Accounts added to summary billing.

Electric	Meter #	RATE E230 GENERAL SERVICE	
Electric Service Charges 0 kWh at a cost of \$45.11			
Average Daily Cost for Electric \$1.1567			
<b>Amount of Electricity Used</b>			
	NET MTR INDEX RESET	kWh	KW
Jan 29, 2019	Present Reading (act.)	995214	0.13
Dec 21, 2018	Previous Reading (act.)	995214	0.13
	Multiplier	1400.000	1400.000
	<b>Electricity Used</b>	<b>0</b>	<b>0.0</b>
<b>Cost for Electricity Used (for 1.3 months)</b>			
ENERGY DELIVERY CHARGES:			
	Basic Service Charge 1.3 Mos @	32.00	41.60
	NYS & Local Taxes and Surcharges		0.12
	Sales Tax @	8.125%	3.39
	<b>TOTAL ELECTRICITY COST</b>		<b>\$45.11</b>
	PREVIOUS GENERATION BALANCE	0 KWH	
	CURRENT GENERATION	200800 KWH	
	GENERATION APPLIED	(200800) KWH	
	GENERATION BALANCE	0 KWH	



# Community Distributed Generation

- Allows members of a community to share the benefits of renewable energy even if they cannot or prefer not to install solar panels on their property.
- CDG Host must be non-residential.
- Must have a minimum of 10 CDG Satellite accounts.
- Satellite accounts with demands of 25 kW or greater, in aggregate cannot receive no more than 40 percent of the system output.
- Host must be registered with Department of Public Service.
- Host must submit a completed Self-Certification Form.

# Community Distributed Generation

## Tranches

- Tranche 0/1 – Phase One NEM / 100% Base Retail Rate
- Tranche 2 – 95% Base Retail Rate
- Tranche 3 – 90% Base Retail Rate
- Tranche 4 – 85% Base Retail Rate



# Community Distributed Generation

## Summary of Subscriber Credit

Account No	Allocation %	SC	Value Stack Credit	Actual Billed Dollars	Actual Billed kWh	Monthly Bank Contribution	Bank Withdraw	Bank Balance
	0.550%	SC2	154.96	94.39	634	60.57	-	134.11
	1.500%	SC2	221.60	119.90	76	101.70	-	223.92
	11.116%	SC2	2,380.82	2,631.01	26,320	-	-	-
	4.750%	SC2	701.72	836.03	7,440	-	-	-
	0.021%	SC2	3.10	34.98	30	-	-	-

Generation For:	November	Applied For:	December
<b>Host Value Stack Statement</b>			
Energy	\$ 8,561.93	SC1 MTC	\$ 6,326.53
Capacity	\$ 4,756.12	SC2 MTC	\$ 2,228.92
Environmental	\$ -	DRV	\$ 87.88
		LSRV	\$ -
		Total	\$ 23,768.91
		kWh-Export	246,115

# Community Distributed Generation



**Questions About Your Bill?** See the reverse side for explanations. For further help call a Customer Service Representative at 845-452-2700 or 1-800-527-2714. Our phone lines are busiest Monday and Tuesday mornings. We can better respond to your call if you avoid these times.

### Your Bill Summary At A Glance

Previous Billed Amount		\$17.41
Payments Since Last Bill	- THANK YOU!	\$-17.41
Current Electric Charges		\$196.10
Billing Adjustments		\$-155.06
<b>Total Amount Due Now</b>		<b>\$41.04</b>
Current Billing Period	Jan 04, 2019 - Feb 06, 2019	
Late Charges Added After	Mar 08, 2019	
Next Scheduled Reading Date	Apr 04, 2019	
	<b>This Year</b>	<b>Last Year</b>
Heating Degree Days	1217	1243

Account Number:

Service For:

### GENERATION CREDIT TRACKING

Account -		
Previous Generation Balance		-
Generation Credit Available For:	Dec-18	157.40
Generation Credit Applied For:	Jan-19	(155.06)
Generation Credit Remaining		<u>2.34</u>

### Payments and Adjustments

PAYMENT RECEIVED BY US MAIL	JAN 28	\$-17.41
COMMUNITY DISTRIB GENERATION CREDIT	FEB 11	\$-155.06

### What's New...

EMERGENCY HEAP IS OPEN! IF YOU RECEIVE A HEAP GRANT YOU ARE ELIGIBLE FOR A BILL CREDIT TO BE APPLIED TO YOUR CENTRAL HUDSON BILL FOR 12 MONTHS. YOU ARE ELIGIBLE EVEN IF YOU HEAT WITH OIL, WOOD, PROPANE, PELLETS OR COAL. SEND US YOUR "NOTICE OF DECISION LETTER" FROM HEAP. GO TO CENHUD.COM/BILLDISCOUNT



# Value Stack Calculation

- Net Generation – 50 kW system produces 10 kWh for 3 pm hour on November 2, 2018
  - LBMP - 11/2/2018 15:00 \$32.62 per MW = \$0.03262 per kWh
  - Environmental Credit - \$0.02741 per kWh
  - ICAP Alt 1 - \$0.01961 per kWh
  - Tranche 1 MTC for SC 1 - \$0.0599 per kWh
  - DRV - \$0.50 per kW - month
- CDG - SC1 subscriber – \$0.13954 per kWh \* 10 kWh = \$1.39 credit

# Energy Storage Solutions

- Hybrid Energy Storage Systems

- A. Charged exclusively from a renewable generator and not from utility
- B. Storage used only to serve on-site load and not to inject energy
- C. Storage may be charge from both renewable generator or utility
- D. Hybrid facilities that are separately sited

Will receive environmental component for any injections charged by renewables.

- Stand-alone storage

- Capacity alternative 3