

### **BOARD AGENDA SUMMARY SHEET**

<b>Committee or Board:</b> Board	<b>Date:</b> July 12, 2019	<b>Board Meeting Date:</b> July 24, 2019
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**For All Board Voting Items:**

**Title of Agenda Item:** Approval of Tariff Amendments Relating to the Value of Distributed Energy Resources

**Consent Agenda:** ☐ Yes ☒ No

**Accompanying Presentation:** ☒ Yes ☐ No

**Recommendation from Committee:** ☒ N/A ☐ F&A; ☐ GP&P; ☐ Oversight & REV

**LIPA Presenter:** Justin Bell

**PSEG Long Island Presenter:** N/A

**For Finance Approval Items Only:**

**Budget** ☐; **Plan of Finance** ☐; **Tariff Changes** ☒; **Other** ☐ (describe below)

<b>Requested Action:</b>	The Board is requested to approve changes to the Authority's Tariff, effective August 1, 2019, to modify the Authority's Value of Distributed Resources ("VDER") tariff in accordance with the New York Public Service Commission <i>Order Regarding Value Stack Compensation</i> issued and effective on April 18, 2019.
<b>Summary:</b> <b>(include proposed amendments to Board Policies, if applicable)</b>	<p>The requested updates include changes to the Demand Reduction Value, Locational System Relief Value, and Capacity Value calculation and compensation, and increasing the eligibility of Phase One Net Metering to additional qualifying projects.</p> <p>Additionally, the Authority staff proposes to update the Tariff to expand eligibility for Value Stack crediting under the VDER tariff to additional technologies in order to further align the Tariff with the September 12, 2018 Commission Order, <i>In the Matter of the Value of Distributed Energy Resources, Order on Value Stack Eligibility Expansion and other Matters</i> and the December 13, 2018 Commission Order, <i>In the Matter of the Value of Distributed Energy Resources, Order Implementing Hybrid Energy Storage System Relief</i>.</p>

## **FOR CONSIDERATION**

July 24, 2019

**TO:** The Board of Trustees

**FROM:** Thomas Falcone

**SUBJECT:** Consideration of Modifications to the Value of Distributed Energy Resources Tariff to Effectuate Recent Actions of the Public Service Commission

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### **Requested Action**

The Trustees of the Long Island Power Authority (the “Authority”) are requested to approve changes to the Authority’s Tariff for Electric Service (the “Tariff”), effective August 1, 2019, to modify the Authority’s Value of Distributed Resources (“VDER”) tariff in accordance with the New York Public Service Commission (the “Commission”)’s *Order Regarding Value Stack Compensation* (the “Value Stack Compensation Order”) issued and effective on April 18, 2019.<sup>1</sup> The requested updates include changes to the Demand Reduction Value (“DRV”), Locational System Relief Value (“LSRV”), and Capacity Value calculation and compensation, and increasing the eligibility of Phase One Net Metering to additional qualifying projects. Additionally, the Authority staff proposes to update the Tariff to expand eligibility for Value Stack crediting under the VDER tariff to additional technologies in order to further align the Tariff with the September 12, 2018 Commission Order, *In the Matter of the Value of Distributed Energy Resources, Order on Value Stack Eligibility Expansion and other Matters* (the “Value Stack Eligibility Expansion Order”)<sup>2</sup> and the December 13, 2018 Commission Order, *In the Matter of the Value of Distributed Energy Resources, Order Implementing Hybrid Energy Storage System Relief* (the “Hybrid Energy Storage System Order”).<sup>3</sup>

### **Background**

On March 9, 2017, the Commission issued its *Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters* (the “VDER Phase One Order”)<sup>4</sup>, which established the first phase of a plan to establish a new system for compensation of distributed energy resources based on the component values those resources provide to the electric grid (the “Value Stack”). The Value Stack consists of four compensation components: (1) The Energy Component compensates customers for the amount of energy that is injected onto the grid at the NYISO day-ahead hourly wholesale energy price; (2) The Capacity Component compensates customers for the amount of power a system injects during the highest system peaks; (3) The Environmental Component compensates customers who choose to sell the project’s eligible RECs to the Authority. Finally, the (4) Demand Reduction Value Component

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<sup>1</sup> Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources, Order on Value Stack Compensation*, Issued and Effective April 18, 2019.

<sup>2</sup> Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources, Order on Value Stack Eligibility Expansion and other Matters*, Issued and Effective September 12, 2018.

<sup>3</sup> Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources, Order Implementing Hybrid Energy Storage System Tariff*, Issued and Effective December 13, 2018

<sup>4</sup> Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources, Order on Net Energy Metering Transition, Phase One of Value of Distributed Energy Resources, and Related Matters*, Issued and effective March 9, 2017

compensates customers for injections that reduce the distribution grid's peak demand. In addition to the DRV, some projects are eligible for additional compensation, known as the Locational System Relief Value, for those projects in a designated location-specific congestion relief area of the distribution network. On December 19, 2017, the Authority adopted Tariff changes implementing the VDER Phase One Order.

To continuously refine and improve VDER, the Department of Public Service ("DPS") Staff has held working group meetings with stakeholders on a number of different topics. These topics include modifications to the calculations of the DRV and LSRV, increasing the eligibility of Phase One NEM to projects with a rated capacity of 750 kW AC or lower, improvements to the calculation of the Capacity Value, and expanding eligibility of Value Stack crediting to additional technologies, such as resources qualified under the Clean Energy Standard ("CES") as eligible to receive renewable energy credits.<sup>5</sup> PSEG Long Island participated in the working group meetings on behalf of the Authority. The Commission subsequently issued Orders on September 12, 2018, December 13, 2018, and April 18, 2019 to revise the VDER tariffs (collectively referred to herein as the "VDER Orders").<sup>6</sup> Staff is recommending that the LIPA Tariff be modified to conform to these Statewide policies.

### **Proposed Action**

Consistent with the VDER Orders, the Authority Staff proposes to make the following changes to the Value of Distributed Energy Resources tariff:

#### **Phase One NEM for Certain On-site Projects**

An update to Phase One NEM extends eligibility for net energy metering ("NEM") to projects that are at the same location and behind the same meter as the electric customer whose usage they are designed to off-set; and (a) have a rated capacity of 750 kW AC or lower; and (b) have an estimated annual output less than 110% of that customer's annual usage in kWh. Upon PSEG Long Island's and LIPA's recommendation, the Commission raised this output limit to 110% from 100%, as had originally been proposed, in order to accommodate future growth needs of the customers, and ordered this change for all State's utilities. As VDER Phase One NEM is transitional by nature, the Commission recognizes that the Value Stack compensation model may not be well-suited for use in all cases and market segments. For example, smaller demand-metered non-residential customers may prefer an option for more fixed compensation alternatives for DER projects than the Value Stack provides.

Per the Value Stack Compensation Order, Staff proposes the extension of Phase One NEM eligibility to projects that meet the above criteria and qualify before January 1, 2020, or such later date as may be established by subsequent Commission order, for a 20-year term from each project's in-service date.

Due to the extension of Phase One NEM, updated customer and project definitions were created for the purposes of the tariff. There are now four (4) categories of customers eligible for compensation under the Value Stack tariff or Phase One NEM.

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<sup>5</sup> The CES defines certain technologies as eligible for "Tier 1" renewable energy credits in Case 15-E-0302, *Appendices to Order Adopting a Clean Energy Standards*, August 1, 2016.

<sup>6</sup> *Supra*, notes 1-3.

- 1) **Mass Market Customers** which applies to residential and small commercial customers without demand billing. Mass Market Customers who add NEM eligible generating equipment or become a satellite participant in a CDG project are eligible for Phase One NEM.
- 2) **Commercial Demand NEM Customers** which applies to commercial customers with demand billing that (a) have submitted a complete application as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018, and are at the same location and behind the same meter as the electric customer whose usage they are designed to off-set and; (b) have a rated capacity of up to 750 kW AC; (c) have an estimated annual output less than or equal to 110% of that customer's historic annual usage in kWh; and (d) have not elected compensation under the Value Stack tariff. Commercial Demand NEM Customers are eligible for Phase One NEM.
- 3) **Large Onsite Customers** which applies to customers with Net Metered Eligible Technologies that are at the same location and behind the same meter as the electric customer whose usage they are designed to off-set; and (a) have a rated capacity of higher than 750 kW AC or (b) have an estimated annual output greater than 110% of that customer's historic annual usage in kWh, or (c) are a commercial demand billed customer that has opted to be a Large Onsite Customer, or (d) are a commercial demand billed customer that does not qualify to be a Commercial Demand NEM Customer. Large Onsite Customers are eligible for compensation under the Value Stack tariff.
- 4) **Large Offsite Customers** which applies to all demand billed commercial Remote Net Metering and demand billed commercial Community Distributed Generation customers. Large Offsite Customers are eligible for compensation under the Value Stack tariff.

#### Expand Eligibility for Value Stack Crediting

The Commission Order allowed for Value Stack crediting under VDER tariffs to include generation technologies that satisfy the requirements described for Tier 1 resources under the CES such as tidal energy generators and biomass anaerobic food waste digestors, Regenerative Braking, Vehicle-to-Grid<sup>7</sup>, and Hybrid Energy Storage Systems<sup>8</sup>.

#### Modifications to the DRV Calculations

The Order<sup>9</sup> modifies the calculation of the DRV. Staff proposes that the DRV compensation, under the new methodology, be calculated as the assigned \$/kW-year value for DRV from the Authority's already approved Statement of Value Stack Credits divided by the peak hours of the year. For PSEG Long Island, the summer peak hours are from 2:00 PM to 7:00 PM on each non-holiday weekdays from June 1 through August 31, excluding Independence Day. This would result in DRV compensation being spread over 320 or 325 hours each year. The hours used for PSEG Long Island DRV Calculation vary from the hours used for other utilities, as other utilities begin their hours on June 24; however, PSEG Long Island has experienced system peak in early June two times in the last ten years. The Commission Order authorizes each utility to use the hours appropriate to its situation. This varies from the existing methodology of calculating the DRV based on the injections

<sup>7</sup> Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources, Order on Value Stack Eligibility Expansion and other Matters*, Issued and Effective September 12, 2018

<sup>8</sup> Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources, Order Implementing Hybrid Energy Storage System Tariff*, Issued and Effective December 13, 2018

<sup>9</sup> Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources, Order on Value Stack Compensation*, Issued and Effective April 18, 2019.

from the project during the top ten peak hours. The top ten peak hours were determined after the summer season, which prevented developers from meaningfully predicting or managing DRV compensation. Under the new methodology, the DRV calculation will be based on injections from the project for the known hours for which a peak will likely occur. This will allow project owners the opportunity to better develop their projects based on more predictable calculations.

The DRV will include a modification to have the rate locked in for ten years, an increase from three years which provides greater stability for the project's financing.

In addition to the modification of the calculation of DRV, the Tariff will allow dispatchable renewable projects to make a one-time irreversible decision to opt-in to the Commercial System Relief Program ("CSRP") program in place of receiving the DRV, as was ordered in the Value Stack Compensation Order. The Commission stated it was necessary to make this option available because some projects may prefer the CSRP's smaller number of called events.

#### Modifications to the LSRV

An update to the LSRV calculation will introduce a call system, which will make it easier for project owners to take action to maximize their benefits. There must be a minimum of ten calls per year, but the amount of calls can exceed ten. The existing \$/kW year credit from the Authority-approved Statement of Value Stack Credits will be divided by ten events to determine the value of each call window. If there are less than ten calls, the project owner will be compensated as if there are ten calls. The call will be made by PSEG Long Island 21 hours in advance and will be between one and four hours long. Compensation for a call window shall be based on the lowest hourly net kW injection during the call window.

Under the existing methodology for LSRV, projects were compensated based on their injections during the top ten peak hours of the system, which were defined at the end of the summer season, after they had occurred. The changes to LSRV allow for project owners to take action to increase their injections knowing in advance when an event will occur.

#### Introduction of a Community Credit

To further encourage Community Distributed Generation ("CDG") projects, the Authority staff proposes to add a Community Credit of an amount identified in the Statement of Value Stack Credits (currently \$0.0225) to Large Offsite Customers that are hosts or participants in a CDG project with Eligible Net Metering Technology other than Fuel Cell Generating Equipment, receiving the Value Stack Bill Credit. As provided in the Board's original December 2017 memorandum and resolution implementing VDER Phase One and consistent with statewide policy, CDG projects that complete applications on or after January 1, 2020, will be compensated under the Value Stack Tariff, without exception for mass market satellite accounts. The Community Credit will apply to all satellite participants compensated under the Value Stack Tariff.

#### Improvements to the Capacity Value

An update to Alternative 1 would calculate the compensation as the monthly NYISO \$/kW auction price multiplied by the proxy capacity factor, divided by the expected monthly kWh per kW of capacity. The proxy capacity factor reflects the ratio of the facility's output in the system peak hour divided by the facility's output over the five on-peak hours.

An update to Alternative 2 would calculate the compensation on a smaller amount of peak annual sales. The total \$/kW-year value would be determined each year based on the sum of the most recently available monthly NYISO \$/kW-Month auction prices for the prior 12 months as of May 31 of each year divided by 240 or 245 hours, based on the number of available hours that year. The available hours would be from 2:00 PM to 7:00 PM on non-holiday weekdays from June 24 to August 31.

An update to Alternative 3 would remove the Top 10 Hour option, which was originally developed to be consistent with the now effective version of the DRV compensation, which is proposed to be changed. The top ten hours were identified at the end of the summer season and compensated based on the performance of the project after the hours were identified. This did not give project owners the opportunity to react in a timely manner. For this reason, the top ten hours has been eliminated to ensure more predictable compensation.

### **Financial Impact**

The proposal will not have a material financial impact on the Authority because revenues lost from VDER are recovered through the Authority's Revenue Decoupling Mechanism. Over the past year, approximately 30 demand-metered commercial customers installed on-site solar, are under 750 kW in size, and were subject to VDER. If those 30 customers elected to be compensated under Phase One NEM, as would be their option under the proposal, the impact on non-participating customers would be approximately \$129,000 per year. The number of such customers that may elect Phase One NEM in the future is difficult to estimate.

### **Department of Public Service Input**

The Department provided helpful input during the development of this tariff proposal that was incorporated into the original proposal.

The DPS has provided a letter recommending adoption of these Tariff modifications (Exhibit D). The DPS's letter also recommended a modification. In its September 12, 2018, *Order on Value Stack Eligibility Expansion and other Matters*, in connection with expanding VDER eligibility to standalone energy storage systems, the Commission ordered that standalone energy storage systems sized above 115% of onsite load are required to enroll in mandatory hourly pricing for imports and entitled to receive Value Stack crediting for hourly exports. Because the Authority does not currently have the billing capability to charge mandatory hourly pricing, Authority staff had originally proposed that these customers enroll in standard commercial rates for their imports and receive SC-11 buyback prices for exports. The DPS recommended, instead, that the Authority require these customers to enroll in an eligible time-of-use rate for imports and receive Value Stack crediting for hourly exports, as this would be more consistent with the statewide approach and the principles of VDER. The Authority staff agrees and has made this change. To be fully aligned with the Commission orders, the Authority will also implement hourly pricing for these customers as soon as it has the billing capability to do so. The DPS also noted that pursuant to the Climate Leadership and Community Protection Act, the VDER Community Credit should apply only to clean energy technologies, which no longer include Fuel Cell Electric Generating Equipment. The Authority staff agrees and has made this change.

## **Public and Stakeholder Input**

Public hearings were held on the Tariff proposal on June 26, 2019 in Nassau County and June 27, 2019 in Suffolk County. Two members of the public attended the hearings and commented on the tariff proposal, Stephen Foley and Tara Bono. Both commenters were representatives of the Long Island Solar Energy Industry Association (“LISEIA”). LISEIA also submitted written comments, which were shared with the Board of Trustees and the staffs of the Authority and PSEG Long Island.

The commenters were generally supportive of the proposal and in favor of the VDER modifications made in recent PSC orders. However, the commenters recommended that the extension of Phase One NEM eligibility to onsite projects sized up to 750 kW be locked in for five years. As ordered by the PSC and reflected in the current proposal, this extension of Phase One NEM eligibility applies, *at a minimum*, to all such projects that qualify before January 1, 2020, for a 20-year term from each project’s in-service date. The LISEIA commenters claim that this extension is insufficient to ensure predictability and stability in the commercial solar market because of the long timeline associated with commercial project development.

**Staff response:** Over the last two years, the Department of Public Service has hosted a series of stakeholder working groups, solicited public comments, engaged expert consultants, and issued staff white papers for further discussion and comment with the aim of refining and improving the value-based compensation of DERs.<sup>10</sup> LIPA, PSEG Long Island, and Long Island stakeholders have engaged with these statewide policymaking activities. These statewide proceedings and working groups are the venue for stakeholders to influence the policymaking process.

The April 2019 Order Modifying Value Stack Compensation is one of the fruits of this collaborative effort. The Order takes steps to increase the certainty and predictability of value stack compensation. The provision of the Order addressed by this comment is the extension of eligibility for net energy metering to systems under 750 kilowatts in size and located onsite at a demand-metered commercial customer. Per the Order, this proposal would apply, at a minimum, to all such projects that qualify before January 1, 2020, for a 20-year term from each project’s in-service date.

The LISEIA commenters request that the Authority guarantee that projects qualifying after January 1, 2020 (for a period of up to five years), continue to be eligible for net metering. Creating such a guarantee would foreclose the Authority implementing statewide policy in the event the statewide proceedings reach an alternative conclusion. Accordingly, the Authority staff cannot recommend such a guarantee. We note, however, that other changes to VDER set forth in the April Order—such as the new community credit and the extended lock-in of the distribution values—both enrich the level of compensation and increase the predictability for project owners.

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<sup>10</sup> Information on the value stack and net energy metering proceeding, including working group agendas, is available at: <http://www3.dps.ny.gov/W/PSCWeb.nsf/All/8A5F3592472A270C8525808800517BDD?OpenDocument>.

After the public hearings, comments were received from a solar developer who objected to the fact that CDG projects that complete applications on or after January 1, 2020, will be compensated under the Value Stack Tariff, without exception for mass market satellite accounts. The commenter was concerned that this would slow the pace of community solar development as it would result in less favorable compensation for the mass market portion of a community solar project.

**Staff response:** In the rest of New York, CDG projects receive Value Stack compensation for all participants, including mass market participants. When the LIPA Board approved VDER Phase One in December 2017, the Board allowed the CDG industry a more gradual transition to Value Stack compensation by permitting mass market CDG participants to remain on net metering provided the CDG project was substantially interconnected by January 1, 2020. The December 2017 Board memorandum gave notice that this exception from statewide policy was temporary, by providing that “[a]fter January 1, 2020, and if the total capacity of NEM and CDG projects interconnected after the effective date reaches 94 megawatts before January 1, 2020, new mass market CDG customers will be compensated under the Phase One Value Stack plus a CDG transition credit.”

Staff notes that the current tariff proposal provides more forgiving grandfathering terms that allow any CDG project that has completed its application before January 1, 2020 to receive compensation for its mass market customers under Phase One NEM.

Staff further notes that the new community credit will further ease the transition for these projects, as the credit covers a portion of the “value gap”, which is the difference between the value that CDG projects provide to the electric grid (i.e. the Value Stack) and the relatively higher compensation they received under net metering.

Additional comments were received from Tara Bono of LISEIA on July 22, 2019. Although the comments were received after the close of the public comment period, they are addressed here. The comments requested further grandfathering of CDG projects to allow the mass market participants in CDG projects that apply after January 1, 2020 and before January 1, 2021 to be eligible for net energy metering. In support of this request, Ms. Bono writes that certain incentives are lower in Long Island than in the rest of the state, including: the VDER Community Credit; the battery incentive; solar rebates; incentives for carports; and that interconnection costs and related hurdles are higher.

**Staff response:** As noted above, the compensation of mass market participants in new CDG projects under VDER (rather than net energy metering) was passed in 2017, together with the rest of the state. On Long Island, implementation was delayed by two years (to January 1, 2020) to allow for a more gradual transition. The Long Island industry has had two more years than the rest of the state to prepare.



The newly proposed community credit is a supplement over and above the value that CDG projects provide to the grid. It is based on the Long Island-specific difference between average VDER payments and net metering. Most of the state's utilities have a 2.25 cent community credit. For consistency and to alleviate stakeholder concerns, LIPA Staff proposes to increase the community credit to 2.25 cents (from 1.2 cents as originally proposed). In addition, as it does other value stack components, LIPA Staff will periodically review the community credit together with DPS and NYSERDA.

In further response, Authority staff notes:

- Long Island's NYSERDA storage incentives of \$250/kWh are the second-highest in the state, after New York City.
- Long Island has the state's first (and, to our knowledge, only) demand response incentives for storage and hybrid storage + solar.
- Through LIPA's rebates and NYSERDA NY Sun block grants, customers and developers have received over \$226 million in behind-the-meter residential and commercial solar incentives on Long Island since 2000. These rebates and block grants were intended to stimulate the behind-the-meter solar market not to provide a permanent subsidy.
- In addition to the programs offered in the rest of the state, LIPA has offered Feed-in-Tariffs (FITs), which target the same mid-size solar projects as the CDG program. The most recent FIT was open to commercial roof-tops and carports.
- PSEG Long Island's energy efficiency and DER budget is funded in part by RGGI funds and in part through LIPA's DER rider. It includes a broad array of Utility 2.0 projects, BTM storage and hybrid storage+solar incentives, grid-scale storage projects, energy efficiency programs, smart metering, smart thermostats, non-wire alternatives, electric vehicle programs, interconnection process improvements, and more. Additional renewable energy projects are funded through LIPA's power supply charge.

No other public comments were received.

### **Recommendation**

For the foregoing reasons, I recommend that the Trustees approve the modifications to the Tariff for Electric Service described herein and set forth in the accompanying resolutions.

### **Attachments**

**Exhibit A** Resolution

**Exhibit B** Tariff Redline (final proposed tariff reflecting comments compared to current tariff)

**Exhibit C** Original Tariff Proposal (not reflecting comments)

**Exhibit D** DPS Letter of Recommendation

**APPROVAL OF MODIFICATIONS TO THE VALUE OF DISTRIBUTED ENERGY RESOURCES TARIFF TO EFFECTUATE RECENT ACTIONS OF THE PUBLIC SERVICE COMMISSION**

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**WHEREAS**, on December 19, 2017, the Authority adopted Tariff changes implementing the Value of Distributed Energy Resources Phase One Order (“VDER Phase One”); and

**WHEREAS**, the New York Public Service Commission subsequently issued orders modifying VDER Phase One; and

**WHEREAS**, the Board accepts the recommendations of the Authority staff to implement modifications of VDER Phase One in accordance with the Commission’s orders; and

**WHEREAS**, the Department of Public Service is supportive of this proposal; and

**WHEREAS**, following the issuance of public notice in the State Register on August 15, 2018, two public hearings were held in Suffolk and Nassau counties on June 26 and June 27, 2019, and the public comment period has since expired;

**NOW, THEREFORE, BE IT RESOLVED**, that for the reasons set forth herein and in the accompanying Memorandum, the proposed modifications to the Authority’s Tariff are hereby adopted and approved to be effective August 1, 2019; and be it further

**RESOLVED**, that the Chief Executive Officer and his designees are authorized to carry out all actions deemed necessary or convenient to implement this Tariff; and be it further

**RESOLVED**, that the Tariff amendments reflected in the attached redlined Tariff leaves are approved.

Dated: July 24, 2019

**I. General Information (continued):****B. Abbreviations and Definitions (continued):****C**

**Capacity:** The load-carrying ability of the transmission and distribution systems during a specified period of time.

**Catch-up Bill:** First bill based on an actual reading following one or more estimated or Customer read bills.

**Character of Service:** Refers to the type of service supplied, including the voltage at which it is supplied, the type of current, its frequency, etc.

**Circuit:** A conductor or a system of conductors through which an electric current flows or is meant to flow.

**Coincidental Demand:** (See Demand)

**Cold Weather Period:** The period between November 1 through April 15, inclusive.

**Commercial Demand NEM Customer:** A Commercial Customer that is demand metered and has submitted a complete application as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018 and has an Eligible Net Metering Technologies (see Section 1.B.) project at the same location that is electrically connected behind the meter; and

- (a) has a rated AC capacity of 750 kW or less and
- (b) has an estimated annual output of 110% or less of that customer's annual usage in kWh.

**Commercial Demand NEM Project:** An Eligible Net Metering Technologies (see Section 1.B.) project owned by a Commercial Demand NEM Customer(s).

**Conduit:** A tube or duct for enclosing electric wires or cable.

**Construction Loan Agreement:** An agreement between the Authority and a Non-Residing Customer for payment in advance for a line extension on private property with the potential to service multiple Customers. As other Customers come on line, the original Customer will receive a prorated rebate.

**Controlled-Access Highway:** A public roadway with entrance and exit ramps.

**Core Customer:** (See *Customer - Core Customer*)

**Core Service:** Service provided to a Core Customer.

**Cost or Expense:** The cost of all materials, equipment, labor, and other definite charges plus a reasonable charge for other costs of a general nature (purchasing, engineering, etc.) involved in a project.

**General Information (continued):****B. Abbreviations and Definitions (continued):**

**Demand Customer**: - A Customer who is billed for Demand charges.

**Demand Meter**: The device that records the maximum amount of power used by the Customer over a 15-minute interval during a specific period, such as a month.

**Department**: -The New York State Department of Public Service.

**Deposit**: -A sum of money given as security for payment of service.

**Distribution Facilities**: - Facilities used to distribute electric energy to consumers, including supply lines, distribution lines, service laterals, and accessory equipment.

**Distribution Line(s)**: -A system of poles, wires, ducts, conduits, and additional equipment used for the shared distribution of electricity to Customers.

**E**

**Easement**: -(See *Right-of-way*)

**Eligible Net Metering Technology/Technologies**: - The list of eligible technologies is: Solar Electric Generating Equipment, Wind Electric Generating Equipment, Micro-Hydroelectric Generating Equipment, Micro- Combined Heat and Power (CHP) Generating Equipment, Fuel Cell Electric Generating Equipment, ~~and Farm Waste Electric Generating Equipment, -Stand Alone Storage Equipment, Regenerative Braking, Vehicle-to-Grid, or other generating equipment identified as a Tier 1 technology as defined in Appendix A of the CES Order of the New York Public Service Commission issued August 1, 2016 in Cases 15-E-0302 and 16-E-0270. Tier 1 technologies are required to take compensation based on the Value Stack.~~

~~See definition of Solar Electric Generating Equipment, Wind Electric Generating Equipment, Micro-Hydroelectric Generating Equipment, Micro-Combined Heat and Power (CHP) Generating Equipment, Fuel Cell Electric Generating Equipment, and Farm Waste Electric Generating equipment for further details. In addition, electric generating equipment identified as Newly Eligible Technologies.~~

**Energy**: - Energy is electric power, used or supplied over time, and measured in KWH.

**Existing Overhead Areas**: -Areas in which electric distribution facilities are constructed overhead, and there are no requirements to construct facilities underground.

**E**

**Farm Waste Electric Generating Equipment**: -Equipment that generates electric energy from biogas produced by anaerobic digestion of agricultural wastes, such as livestock manure, farming wastes and food processing wastes with a rated capacity of not more than five thousand (5,000) kilowatts that is manufactured, installed and operated by Customer-generator in accordance with applicable government and industry standards, connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities, operated in compliance with the Authority's standards and requirements established, fueled at a minimum of ninety (90) percent on an annual basis by biogas produced from the anaerobic digestion of agricultural waste such as livestock manure materials, crop residues, and food processing waste, and fueled by biogas generated by anaerobic digestion with at least fifty (50) percent by weight of its feed stock being livestock manure on an annual basis.

**Fuel Cell Electric Generating Equipment**: -A solid oxide, molten carbonate, proton exchange membrane or phosphoric acid fuel cell, with a combined rated capacity of not more than ten (10) kilowatts for a residential customer or with a rated capacity of not more than five thousand (5,000) kilowatts for a non-residential customer, that is manufactured, installed and operated in accordance with applicable government and industry standards, that is connected to the electric system and operated in compliance with the Authority's standards and requirements established therefor. -This definition, including the capacity limits specified herein, does not apply to fuel cells participating in the Fuel Cell Feed-in Tariff.

**Fuel and Purchased Power Cost Adjustment Clause**: -See definition for Power Supply Charge.

**Full-Requirements Customer**: -A Customer whose electric power requirements are all supplied by the Authority. -(See *Customer – Full Requirements Customer*)

**G**

**Generation Project:-** A specific project that is eligible to participate in the Commercial Solar or Fuel Cell Feed-In Tariff under Service Classification No. 11 – Buy-Back Service.

**I. General Information (continued):****B. Abbreviations and Definitions (continued):****H**

**Heat-Related Service:** A service provided under a residential space-heating rate classification or service needed to start or operate the primary heating system. It also includes a safe, supplemental electrical heating device that is needed by the Customer because the third party who controls the primary heating system does not supply enough heat.

**Hybrid Electric Generating System or Hybrid System:** An electric generating system consisting exclusively of wind and solar electric generators which are metered and billed as single unit, Hybrid electric generating systems owned and/or operated by Residential, or Residential Farm, or non-residential or Farm Service Customers may be eligible for net metering. Hybrid systems may not include micro- Combined Heat and Power (CHP) or micro-Fuel Cell electric generation.

**J**

**Jurisdiction:** The right and power to interpret and apply the law.

**K**

**Kilovar(s) = KVAR 1,000 reactive voltamperes (See Reactive Power)**

A unit of measure of that part of Apparent Power that is not useful, but is required by some types of electricity-consuming devices such as motors.

**Kilovoltampere = kVA = 1,000 voltamperes (See Voltamperes)**

**Kilowatt(s) = KW = 1,000 watts**

A unit of measure of that part of Apparent Power that is useful (Real Power). (See Power)

**Kilowatt-hour = KWH = 1,000 watt-hours**

A unit of electric energy equal to one (1) kilowatt of power supplied to or taken from an electricity-consuming device steadily for one (1) hour.

**L**

**Large Offsite Customer(s):** Commercial customer(s) with demand billing that host a Remote Net Metering or Community Net Metering project or participate as a Satellite Account.

**Large Offsite Project(s):** Projects using an Eligible Net Metering Technologies owned by a hosting Large Offsite Customer(s).

**Large Onsite Customer(s):** Commercial customer(s) with ~~demand billing~~ an Eligible Net Metering Technologies project (see Section 1.B.) at the same location and electrically connected, behind the Commercial customer's meter, with

- (a) an AC capacity over 750 kW, or
- (b) an estimated annual output more than 110% of that customers annual usage in kWh, or
- (c) a commercial customer who is billed demand and choose to be considered a Large Onsite Customer, or
- (d) a commercial customer who is billed demand but does not qualify to be considered a Commercial Demand NEM Customer.

**Large Onsite Project(s):** Projects using an Eligible Net Metering Technologies owned by a Large-Onsite Customer(s).

**Late Payment:** Payment made more than twenty (20) calendar days after the date payment was due. The due date is the earlier of the two (2) dates: the personal delivery date or three (3) calendar days after the mailing of the bill. The Customer must pay the bill by the "Pay by" date on the bill to avoid making a late payment.

**Letter of Credit:** A letter issued by a bank authorizing the bearer to draw a stated amount of money from the issuing bank, its branches, or other associated banks or agencies.

**Levelized Payment Plan:** (See *Balanced or Budget Billing Plan*)

**Liability:** A legal obligation.

**Line:** A system of overhead poles, wires, and accessory equipment or underground ducts, conduits, and cables used for the distribution of electricity to Customers.

**Line Extension:** The addition of poles, wires, ducts, conduits, appurtenant facilities and additional equipment to a distribution line used to expand the shared distribution of electricity to Customers

**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Net Financing Cost:** The weighted average cost of debt for the Authority, including all costs of issuance of the debt.

**New York Independent System Operator (NYISO):** A not-for-profit corporation established to provide and maintain open access transmission to the power system in New York State, provide for centralized commitment and dispatch of the generation system in New York State, and provide other services.

**New York Power Authority (NYPA):** a New York State Authority responsible for the generation, transmission and sale of electricity to wholesale customers pursuant to the Public Authorities Law.

**Noncoincidental Demand:** (See Demand)

**Non-Core Customer:** (See *Customer - Non-Core Customer*)

**Non-Core Service:** Service to Non-Core Customers.

**Non-Residential Applicant:** (See *Customer - Non-Residential Customer*)

**Non-Residing Applicant:** (See *Customer - Non-Residing Customer*)

**O**

**Ohm:** The unit of measurement of electrical resistance.

**Operations Services Agreement:** A contractual agreement (as may be amended, modified, or supplemented from time to time) between PSEG Long Island and the Authority, under which PSEG Long Island operates, maintains, and manages the Authority's transmission and distribution system.

**P**

**Payment Date:** The Authority considers a payment to be made on the date the Authority or one of its authorized agents receives the payment.

**Payments In Lieu of Taxes (PILOTs):** Payments that the Authority makes to other governmental authorities in replacement of the taxes which were previously collected on utility revenues, assets or operations.

**Performance Payment:** An advance payment made by a Non-Residing Applicant for service construction for multiple occupancy buildings in an underground-designated area. The payment guarantees the Applicant's performance for five (5) years.

**Peak Power or Peak Demand:** See *Power*.

**Power (Electric):** Amount of electrical energy produced or consumed, measured over a specific time period in kilowatts (KW).

1. Apparent Power includes both Real and Reactive Power and is the product of Volts and Amperes in a circuit. Apparent power is expressed in kilovoltamperes (kVA).
2. Instantaneous Power is power at an instant in time.

**I. General Information (continued):****C. General Terms and Conditions (continued):  
Net Metering (continued):****a) Requirements for Installation and Operation**

- (1) Wiring and switches for Solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind or Hybrid Electric Generating Equipment, owned and/or operated by Customer-generators to supply their load and feed energy to the Authority's electric system, shall be arranged in parallel so as to permit the flow of current from the Authority to the Customer-generator and vice-versa.
- (2) Solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind or Hybrid Electric Generating Equipment installed in parallel with the Authority's system must comply with the Authority's "Smart Grid Small Generator Interconnection Procedures".
- (3) The Authority shall require a Customer-generator who owns and/or operates Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind, Solar or Hybrid Electric Generating Equipment to pay for the installation of dedicated transformer(s) if it is determined that dedicated transformer(s) is (are) necessary to protect the safety and adequacy of electric service provided to other Customers.
- (4) The Authority may require a Customer-generator who owns and/or operates Solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind or Hybrid Electric Generating Equipment to comply with additional safety or performance standards than those specified in the Authority's "Smart Grid Small Generator Interconnection Procedures", perform or pay for additional tests, or purchase additional liability Insurance when the total rated generating capacity of the electric generating equipment that provides electricity to the Authority through the same local feeder line exceeds twenty (20%) of the rated capacity of the total feeder line.
- (5) ~~On-site energy storage will be permissible to be paired with Mass Market Project(s) or Large Onsite Project(s).~~ Mass Market Projects subject to NEM compensation will be permitted to pair on-site energy storage with the eligible generating equipment under PSL Sections 66-j and 66-l and remain eligible under Phase One NEM. However, customers that wish to pair energy storage with a Large On-site Project or Large Off-site Project will be required to receive compensation based on the VDER Value Stack tariff.



**I. General Information (continued):****C. General Terms and Conditions (continued):  
Net Metering (continued):****d) Interconnection and Transformer Charges**

- (1) If the Mass Market Customer's Solar, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell and/or Wind Electric Generating Equipment has a rated capacity of equal to or less than twenty five (25) kilowatts the Customer-generator shall not be required to pay the Authority any Interconnection charges.
- (2) If the Mass Market Customer's Solar, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell and/or Wind Electric Generating Equipment has a rated capacity of more than twenty five (25) kilowatts, the Customer-generator shall be responsible for payment to the Authority of one hundred percent (100%) of the interconnection expenses.
- (3) Large Onsite Customers, Large Offsite Customers, and Commercial Demand NEM Customers shall be responsible for payment to the Authority of one hundred percent (100%) of the interconnection expenses of such Solar, Micro-Hydroelectric Fuel Cell and/or Wind Electric Generating Equipment.
- (4) If the Authority determines that it is necessary to install a dedicated transformer or transformers or other equipment to protect the safety and adequacy of the electric service provided to other Customers:
  - (a) The Mass Market Customer installing Solar Generating Equipment, Micro-Combined-Heat-and-Power Generating Equipment, Micro-Hydroelectric Generating Equipment, or Fuel Cell Electric Generating Equipment with a rated capacity of equal to or less than twenty five (25) kilowatts, shall pay to the Authority the cost of installing the transformer(s) and other equipment, up to a maximum of three hundred and fifty dollars (\$350.00).
  - (b) The Residential Customer installing Farm Waste Electric Generating Equipment shall pay to the Authority the cost of installing the transformer(s) and other equipment, up to a maximum of five thousand dollars (\$5,000) per farm operation.
  - (c) The Non-residential Customer-generator installing Solar Generating Equipment with a rated capacity of equal to or less than twenty five (25) kilowatts shall pay to the Authority the cost of installing the transformer(s) or other equipment, up to a maximum of three hundred and fifty dollars (\$350.00).

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):**

- (5) If the Authority determines a Mass Market Customer-generator installing Wind Electric Generating equipment that requires installation of a dedicated transformer(s) or other equipment to protect the safety and the adequacy of electric service provided to other Customers, the Customer-generator shall pay to the Authority the lesser of the: (1) Actual costs, or (2) the charges identified under (a) or (b) below. (See Paragraph(s) C.15.c)(4) and C.15.d)(5) for other applicable safety requirements and charges):
  - (a) Seven hundred and fifty dollars (\$750.00) if the Customer-generator owns and/or operates wind electric generating equipment with a rated capacity equal to or less than 25 kW, or
  - (b) Five thousand dollars (\$5000.00) if the Customer-generator owns and/or operates wind electric generating equipment with a rated capacity greater than 25kW but not more than 500 kW.
- (6) If the Authority determines a Mass Market Customer-generator installing a Hybrid System that requires installation of a dedicated transformer(s) or other equipment to protect the safety and adequacy of the electric service provided to other Customers, the Customer-generator shall pay to the Authority either seven hundred and fifty dollars (\$750.00) if the Wind Electric Generating Equipment of the Hybrid System has a rated capacity equal or less than 25 kW or five thousand dollars (\$5,000.00) if the wind generator of the Hybrid System has a rated capacity greater than 25 kW but not more than 500 kW.
- e) Maintenance and Replacement Charges for Interconnection Equipment  
The Authority will maintain and replace interconnection equipment installed by the Authority for Solar and/or Wind electric generators, without direct cost to the Customer.
- f) Metering
  - (1) The Authority shall install an AMI meter capable of recording hourly interval metering data.
  - (2) A common, single metering system shall be used to measure at the point of interconnection with the Authority's system as a single quantity the net energy associated with Solar, Micro-Hydroelectric, and Wind Customer-generators including cases where they constitute a hybrid system.
  - (3) In the event that a Customer-generator chooses to install Wind, Micro-Hydroelectric or Solar electric generation in conjunction with Farm Waste, Micro-Combined-Heat-And-Power or Fuel Cell electric generation, the customer must choose between:
    - (a) separately measuring the output of the Farm Waste, Micro-Combined Heat and Power or Fuel Cell electric generation for sale to the Authority under Service Classification No. 11 so that the Solar, Micro-Hydroelectric or Wind electric generation can be billed under the applicable net metering provisions, or
    - (b) Measuring at the point of interconnection with the Authority's system as a single quantity, the net energy associated with the combined system as if the entire system were derived from Farm Waste, Micro-Combined Heat and Power or Fuel Cell electric generation.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):****g) Termination of the Interconnection Agreement**

The "Interconnection Agreement" between the Authority and Customer-generator may be terminated as follows:

- (1) The Customer-generator may terminate the Agreement at any time, by giving the Authority sixty (60) days' written notice;
- (2) If the Customer-generator fails to seek final acceptance by the Authority within twelve (12) months after completion of construction, then the Authority may terminate the Agreement on thirty (30) days prior written notice;
- (3) Either Party may, by giving the other Party at least sixty (60) days prior written notice, terminate this agreement in the event that the other Party is in default of any of the terms and conditions of the "Interconnection Agreement". The terminating Party shall specify in the notice the basis of the termination and shall provide a reasonable opportunity to correct the default;
- (4) The Authority may, by giving the Customer-generator at least sixty (60) days prior written notice, terminate this agreement for cause. The Customer-generator's non-compliance with the Authority's "Smart Grid Small Generator Interconnection Procedures" or non-compliance with the "Interconnection Agreement" shall constitute a good cause;
- (5) Unless the Interconnection Agreement is terminated pursuant to items (1) through (4) above, the net energy metering service will be provided for a term of ten years from the date of installation of service and thereafter will be automatically renewed for annual periods unless the Authority provides thirty days prior written notice of termination before the end of the term.

**h) Net Billing Procedures for Eligible Customer-generators**

- (1) Projects with Eligible Net Metering Technologies are subject to the billing procedures described in items (a) through (h) below when (1) Mass Market Projects have become Substantially Interconnected before January 1, 2018, or (2) Large Onsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" before May 1, 2018 and are in service before January 1, 2020 and whose rated capacity of the Electric Generating Equipment is equal to or less than 2,000 kilowatts:
  - (a) In the event that the amount of electricity supplied by the Authority during the billing period exceeds the amount of electricity provided to the Authority by the Customer-generator, the Authority shall charge the Customer-generator for the net (excess) electricity it supplied to the Customer-generator at the same rate per kilowatt-hour applicable: (a) to service provided to other Customers in the same service class who do not generate electricity on site, and (b) to the month the energy was generated.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):**

- (b) For eligible Mass Market Projects and Large Onsite Projects with Solar or Wind or Farm Waste or Micro-Hydroelectric electric generators whose amount of electricity provided to the Authority during the billing period exceeds the amount of electricity provided by the Authority to the Customer-generator, the Authority shall apply a credit to the next bill for service at the same rate per kilowatt-hour applicable to service provided to other Customers in the same service class who do not generate electricity on site.
- (c) For eligible Mass Market Customers and Large Onsite Customers with Micro-Combined-Heat-and-Power Electric Generating Equipment or for Fuel Cell Electric Generating Equipment whose amount of electricity provided to the Authority during the billing period exceeds the amount of electricity provided by the Authority to the Customer-generator, the Authority shall apply a credit to the next bill for service at the SC-11 Avoided Cost Rate per kilowatt-hour.
- (d) For Large Onsite Customers the monthly billing demand is determined by the maximum measured kilowatt demand actually supplied to the Customer-Generator during the billing period.
- (e) For Customer-generators served under a rate code with multiple rating periods, excess generation in one rating may not be used to reduce the billed consumption in a different rating period. Peak and off-peak periods will be treated separately when calculating and applying any credits.
- (f) At the end of the first year that service for eligible Mass Market Projects and Large On-site Projects with Solar, or Wind, or Farm Waste or Micro-Hydroelectric generators, and every anniversary date thereafter, the Authority shall promptly thereafter issue payment to the Customer-generator for any value of the remaining credit for the net (excess) electricity provided to the Authority by the Customer-generator during the previous twelve (12) month period. The payment issued to the Customer-generator shall be equal to the product of the remaining excess (net) energy generated by the Customer-generator times the corresponding avoided energy prices as per the Statement of Market Energy Prices.
- (g) For eligible Mass Market Projects and Large Onsite Projects that terminate service or become ineligible for net metering, the Authority shall promptly thereafter issue payment to the Customer-generator for any value of the remaining credit for the net (excess) electricity provided to the Authority by the Customer-generator. The payment issued to the Customer-generator shall be equal to the product of the remaining net (excess) energy generated by the Customer-generator times the corresponding avoided energy prices as per the Statement of Market Energy Prices.
- (h) The avoided cost rates to be used to issue payment to Mass Market Projects and Large Onsite Projects for energy sold to the Authority by the Customer-generator will be determined based on the simple average of the Zone K Day-Ahead Locational Based Marginal Prices (LBMP). Monthly and Time-of-Use energy payments will be shown each month on a separate Statement of Market Energy Prices.

**I. General Information (continued):****C. General Terms and Conditions (continued):  
Net Metering (continued):**

- (2) Projects with Eligible Net Metering Technologies are subject to the billing procedures described in items (a) through (g) below when (1) Mass Market Projects become Substantially Interconnected on or after January 1, 2018, ~~or~~ (2) **or Commercial Demand NEM Customers or** (3) Large Onsite Projects have submitted a complete application as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018:
- (a) Net Importing by Mass Market Customers **and Commercial Demand NEM Customers**: In the event that the amount of electricity supplied to a Mass Market **Customer or Commercial Demand NEM** Customer by the Authority during the billing period exceeds the amount of electricity such Customer provided to the Authority from an eligible Mass Market Project **or Commercial Demand NEM Project**, the Authority will charge ~~the Mass Market~~that Customer for the net (excess) electricity supplied. Such net (excess) electricity will be billed at the same rate per kilowatt-hour **and same rate per kilowatt** applicable to (i) service provided to other Customers in the same service class who do not generate electricity on site, and (ii) the month the energy was generated.
- (b) Net Importing by Large Onsite Customers: In the event that the amount of electricity supplied to a Large Onsite Customer by the Authority during any hour exceeds the amount of electricity such customer provided to the Authority from an eligible Large Onsite Project, the Authority shall charge the Large Onsite Customer for the net (excess) energy supplied. Such net (excess) energy will be billed at the same rate per kilowatt-hour **and same rate per kilowatt** applicable to (i) service provided to other Customers in the same service class who do not generate electricity on site, and (ii) the month the energy was generated.
- (c) For Large Onsite Customers **and Commercial Demand NEM Customers**, the monthly billing demand is determined by the maximum measured kilowatt demand actually supplied to the Customer during the billing period.
- (d) Net Exporting by Mass Market Customers **and Commercial Demand NEM Customers**: In the event that the amount of electricity provided to the Authority by an eligible Mass Market Project **or Commercial Demand NEM Project** during the billing period exceeds the amount of electricity provided by the Authority to ~~the Mass Market~~that Customer, the Authority will apply a credit to the Customer's next bill for service. The credit will be applied at the same rate per kilowatt-hour applicable to service provided to other Mass Market Customers **and Commercial Demand NEM Customers** in the same service class who do not generate electricity on site. For Mass Market Projects **and Commercial Demand NEM Projects** served under a rate code with multiple rate periods, peak and off-peak periods will be treated separately when calculating and applying any credits.
- (e) Net Exporting by Large Onsite Customers: For any hour in which the amount of electricity generated by an eligible Large Onsite Project exceeds the electricity consumed on the site, the Large Onsite Customer will be credited for electricity provided to the Authority as described in Section 1.C.18.C – Value Stack Crediting.

**I. General Information (continued):****C. General Terms and Conditions (continued):  
Net Metering (continued):**

~~(e)~~(f) At the conclusion of the billing period containing the twentieth (20) anniversary of the in-service date of an eligible Mass Market Project, **eligible Commercial Demand NEM Project**, or the twenty-fifth (25) anniversary of the in-service date of an eligible Large Onsite Project:

- (i) The Authority will remove any remaining credits for net (excess) energy attributable to the project from the Customer's account.
- (ii) The Authority will notify the Customer of the removal of credits and such notice will include a description of the subsequent compensation system to be applied.
- (iii) Mass Market Projects, **Commercial Demand NEM Projects**, and Large Onsite Projects still in operation and injecting energy onto the Authority's electric system will be compensated under the tariff then in effect.

~~(f)~~(g) Notwithstanding any other provision of this Tariff and without waiving or limiting any of the Authority's other rights, the Authority reserves the right to alter the compensation structure for any Customer with an Eligible Net Metering Technology that is Substantially Interconnected on or after January 1, 2020, as the Authority expects to take further action consistent with Phase Two of the New York Public Service Commission's Value of Distributed Energy Resources Proceeding on or around that date.

**I. General Information (continued):**

**C. General Terms and Conditions (continued):  
Net Metering (continued):**

**[CANCELLED]**

**I. General Information (continued):**

**C. General Terms and Conditions (continued):  
Net Metering (continued):**

**[CANCELLED]**



**I. General Information (continued):****C. General Terms and Conditions (continued):****16. Remote Net Metering:****a) Customer Requirements and Eligibility**

- (1) Non-Residential Solar, Wind, Farm Waste, Micro-Hydroelectric and Fuel Cell Generators as described in Section 1.C.15.b are eligible to be host remote net metering accounts.
- (2) A Customer-generator who qualifies as stated above may designate all or a portion of their excess net metering credits generated by such equipment to any account, in any service classification, in the same name as the Customer-generator. The Authority reserves the right to obtain proof that all accounts are held by the qualifying Customer-generator.
- (3) The terms and conditions for net metering applicable to the Host Account are contained in Section I.C.15, except as modified below.

**b) Host Designation and Allocation of Satellite Accounts**

- (1) The Host account must designate their Satellite accounts and the percentage of their net metering credits designated to these Satellite accounts when submitting their initial remote net metering application. After the initial application, the Host account may designate additional Satellite accounts or delete existing Satellite accounts from the Customer's remote net metering arrangement to be effective on January 1 and July 1 of each year thereafter, with 30 days advance notice.
- (2) The Satellite account must meet the following requirements:
  - a) The Satellite account must be designated as premises owned or leased by the non-residential Host account and in the same name within the Authority's billing system as the Host account Customer-generator.
  - b) Both the Satellite account and the Host account must be within the Authority's service territory.
  - c) The Satellite account must be in the same load zone as the Host account as of the date of the initial application of the Host account to be eligible for remote net metering and must remain in the same load zone as the Host account to continue to be eligible to receive excess net metering credits.
  - d) The Satellite account can be a Customer-generator being net metered at that Satellite account, however, the Satellite account cannot also be a Remote Net Metering Host.
  - e) A Satellite account may have more than one Host account.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Remote Net Metering (continued):**

- f) The aggregate rated capacity of net-metered generating equipment of the Remote Net Metering Host Account(s) designated to serve a Satellite plus the rated capacity of net-metered generating equipment on the Remote Net Metered Satellite account, if any, cannot exceed two thousand (2,000) kilowatts for existing Net Metering or Phase One NEM. The aggregate rated capacity of generating equipment of the Remote Net Meter Host Account(s) designated to serve a Remote Net Meter Satellite Account plus the rated capacity of net-metered generating equipment on the RNM Satellite Account, if any, shall not exceed five thousand (5,000) kilowatts for the Value Stack Tariff.
  - g) If a Remote Net Metered Satellite account is also a net-metered Customer-generator, charges and credits will first be applied pursuant to section I.C.15.h. Remote Net Metering credits will then be applied pursuant to section I.C.16.b.4 & 5.
- (3) In the event that the amount of electric energy supplied by the Authority to the Host Account during the billing period exceeds the amount of electric energy provided by the Host account to the Authority during the same billing period, the Authority shall charge the Host account the rates provided in the Service Classifications applicable to the Host account Customer-generator for only the net amount of energy provided to the Host account, plus the amount of demand actually recorded in that billing month and other charges as applicable. The appropriate Service Classification for the Host account will be determined on the basis of the larger of the load at the Host account or the generation at the Host account.
- (4) In the event that the amount of electric energy provided by the Host account to the Authority in any billing period exceeds the amount of electric energy supplied by the Authority to the Host account during the same billing period, the Host account shall be regarded as having received no electric energy (kWh) during that billing period.
- a) Demand and other applicable charges will still apply to the Host account and the Satellite accounts. Host Accounts and Satellite accounts will be subject to applicable actual demand charges consumed in the billing period. The Authority will not adjust the demand charge to reflect demand ratchets or monthly demand minimums that might be applied to a standard tariff for net metering purposes.
  - b) If the Host account has excess on-site generation, the excess generation shall be converted to a monetary credit and applied as a direct credit to the host account's outstanding electric charges.
  - c) In the event that the excess on-site generation of the Host account as described in b) above exceeds all components of the host account's outstanding balance owed to the Authority, the remaining monetary credit will be allocated to the eligible designated Satellite accounts in the following manner:
    - (1) Any remaining monetary credit will be applied to the eligible designated Satellite accounts at the percentage designated by the Customer-generator and in the order that each subsequent Satellite account bills in the Authority's billing system. This process will continue through each day in the current and subsequent billing cycle until each Satellite account has been billed. The monetary credit applied to each Satellite account shall not exceed the Satellite account's charges for that billing period. Any allocated credits that exceed the amount that can be used by a Satellite account in that billing cycle will be returned to the Host account. If a Remote Net Metering Satellite account has more than one Remote Net Metering Host, it will receive credits from the Remote Net Metering Host Accounts in the order in which the Host Accounts are billed.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Remote Net Metering (continued):**

(2) If a monetary credit remains with the Host account after all the designated Satellite accounts have been billed, the remaining monetary credit will be applied as a direct monetary credit to the Host account. The monetary credit remaining will be redistributed in any subsequent billing cycle to the designated Satellite accounts prior to the annual reconciliation.

(5) Mass Market Projects and Large ~~Onsite~~Offsite Projects with Eligible Net Metering Technologies that have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" before May 1, 2018 and are in service by January 1, 2020 will be credited as described in items (a) through (b) below.

(a) The Authority will calculate a monetary credit at the Host account's applicable tariff per kWh rate.

(b) Annual Reconciliation of Remaining Credits.

An annual reconciliation will be performed in the first billing period that ends on or after the annual Anniversary Date unless the Customer has residential Solar, Wind, Farm Wind, or Farm Waste electric generating equipment and makes a one-time election to have the Annual Reconciliation performed in an alternate month.

Any monetary credits remaining with the Host account will be converted back to kWhs and reconciled in accordance with the annual reconciliation procedures for net metering of an individual account.

(6) Mass Market Projects and Large ~~Onsite~~Offsite Projects with Eligible Net Metering Technologies that have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018, will be credited as described in items (a) through (c) below.

(a) The Authority will calculate a monetary credit for energy as described in Section 1.C.18.c – Value Stack Calculation.

(b) At the conclusion of the billing period containing the twentieth (20) anniversary of the in service date for Mass Market Projects ~~of the in service date~~ or the twenty-fifth (25) anniversary of the in service date for Large ~~On-site~~Offsite Projects ~~of the in service date~~:

(i) The Authority will remove any remaining credit for the net (excess) energy from the Host account;

(ii) The Authority will notify the Customer of the removal of credits and such notice will include a description of the subsequent compensation system to be applied.

(iii) Host projects still in operation and injecting energy onto the Authority's electric system, will be compensated under the tariff then in effect.

(c) Notwithstanding any other provision of this Tariff and without waiving or limiting any of the Authority's other rights, the Authority reserves the right to alter the compensation structure for any Customer with an Eligible Net Metering Technology that are Substantially Interconnected on or after January 1, 2020, as the Authority expects to take further action consistent with Phase Two of the New

York Public Service Commission's Value of Distributed Energy Resources  
Proceeding on or around that date.

**I. General Information (continued):****C. General Terms and Conditions (continued):****17. Net Metering of Community Distributed Generation**

Net metering of Community Distributed Generation ("CDG") allows residential and commercial customers to collectively share in the benefits of a remotely-sited distributed generation resource as if such resource was interconnected directly to the Customer's account. The general eligibility requirements for net metering and all other terms and conditions of this Tariff apply, as modified by or in addition to the specific requirements contained in this section.

Net metering of Community Distributed Generation is available throughout the Authority's service territory. Net metering of Community Distributed Generation is available to eligible customers, on a first come, first served basis.

The Authority shall not be responsible for any contractual arrangements or other agreements between the CDG Host and CDG Satellite, including contractual terms, pricing, dispute resolution, and contract termination

**a) Definitions**

CDG Host: a Non-Residential Customer-Generator that owns or operates electric generating equipment eligible for net metering under this Tariff. Net energy produced by the generating equipment of a CDG Host is applied to the accounts of CDG Satellites with which it has a contractual arrangement governing the disposition of net metering credits.

CDG Satellite: A residential or commercial Customer who is participating in a CDG Project. Each CDG Satellite Customer shall own or contract for a proportion of the Excess Generation accumulated at the meter of the CDG Host.

Excess Generation: the electricity (kWh) supplied by the CDG Host to the Authority during the billing period that exceeds the electricity (kWh) supplied by the Authority to CDG Host. For purposes of net metering of Community Distributed Generation, the excess generation will be recorded by an hourly interval meter so that time-differentiated excess generation can be calculated for distribution to CDG Satellite accounts as required.

**b) Initial and Subsequent Applications by CDG Hosts**

The CDG Host must be a Non-Residential Customer-Generator that meets all the qualifications of this Tariff and must comply with any Operating Procedures for Community Distributed Generation approved by the Board of Trustees, including and in addition to the requirements listed below. The CDG Host will be assigned to an applicable Service Classification based on the greater of the load or the generation at the CDG Host site.

The terms and conditions for net metering applicable to the CDG Host Account are contained in Section I.C.15, except as modified below.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

- (1) Initial Allocation Requests: At least 60 days before commencing net metered service under CDG, the CDG Host shall designate in its initial application for net metered service the CDG Host account and CDG Satellite accounts that shall receive net metered service under CDG as well as the percentage of net energy output to be allocated to each CDG Satellite account and the percentage to be retained by the CDG Host. The CDG Host must designate no fewer than ten CDG Satellite accounts that meet the specifications provided below, and maintain that minimum number to remain eligible for net metering of CDG Satellite accounts, except when the project is located on the site of a contiguous property serving multiple residential or non-residential customers.
- (2) Subsequent Allocation Requests: The CDG Host may modify its CDG Satellite accounts and/or the percentage allocated to itself or one or more of its CDG Satellite accounts once per CDG Host billing cycle by giving notice to the Authority no less than 30 days before the CDG Host account's cycle billing date to which the modifications apply.
- (3) A CDG Host that provides a CDG Satellite's name and account number to the Authority (and such other information as the Authority may require to verify the customer's account based on the information provided), is certifying that it has written authorization from the customer to request and receive that customer's usage information and, upon enrolling a CDG Satellite account, that it has entered into a written contract with such customer for the specified percentage.
- (4) Allocations of Excess Generation to CDG Satellite Customers must be specified in a percentage with no more than three decimal places of accuracy (0.001%).
- (5) If less than 100.000% of the CDG Host Excess Generation is allocated by the CDG Host, the balance shall be retained on the CDG Host account, so that the full output of the CDG Host generation is allocated.
- (6) Submittals with allocations that total more than 100.000% will be rejected, and the CDG Host must submit a new allocation percentage 60 days before net metered service commences.
- (7) No more than 40% of the Excess Generation of the CDG Host may serve CDG Satellites of 25 kW or greater (for those members collectively); provided, however, that the CDG Host may count each dwelling unit located within a multi-unit building and served indirectly as though it were a separate participant for determining whether the ten CDG Satellite account minimum and 40% output limits are reached.
- (8) A CDG Host account shall not be a Remote Net Metered Host or Satellite account. If the CDG Host account was previously established as a net metered Customer-Generator or Remote Net Metered Host, it must forfeit any remaining kWh credits at the time it becomes a CDG Host.
- (9) A CDG Host account cannot voluntarily become a net metered Customer-generator or Remote Net Metered Host unless all Satellite accounts agree in writing to the transfer and agree to give up their rights to future output of the Host account. If the CDG Host account transfers to a net metered Customer-generator or Remote Net Metered Host, or becomes ineligible to participate as a CDG Host, it must forfeit any remaining kWh credits at the time it switches.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):****c) CDG Satellite Account Requirements**

- (1) A CDG Satellite account shall have only one CDG Host account.
- (2) All associated CDG Satellite accounts must be located within the Authority's service territory and within the same NYISO zone as the CDG Host account.
- (3) The CDG Satellite account shall not be a net metered Customer-Generator or a Remote Net Metered Host or Satellite account or take service under Service Classification 12.
- (4) Each CDG Satellite account must take a percentage of the output of the CDG Host's Excess Generation. The percentage must amount to at least 1,000 kWh annually and may not exceed the CDG Satellite account's historic average annual kWh usage over the past three years (or forecast usage if sufficient historic data is not available).

**d) Process and Customer Protections**

- (1) The Authority reserves the right to establish CDG Operating Procedure that detail the format and requirements for CDG application submissions and other forms and procedures as may be required to administer the program in accordance with this Tariff.
- (2) Additionally, the Authority's CDG Operating Procedure will set forth consumer protections required of CDG Hosts, which may be in addition to the terms of this Tariff.
- (3) A CDG Host may not request termination or suspension of the Authority's electric service to a CDG Satellite account.
- (4) The Authority may terminate net metering under this program and return all Customers to their otherwise applicable billing procedures if it determines that a CDG Host is no longer eligible, if the CDG Host withdraws from CDG participation, or if the Authority terminates service to the CDG Host account.

**e) Account Closure**

- (1) The Authority shall require an actual meter reading to close a CDG Host account or CDG Satellite account taking service pursuant to CDG.
- (2) The Authority shall close an account on the earlier of: (a) the first cycle date on which a reading is taken following the requested turn off date, or (b) the date of a special reading, which a Customer may request at the charge specified in Charges for Special Meter Reading as referenced in IX.B.(4).
- (3) At the time a CDG Host account's final bill is rendered, all remaining Excess Generation will be allocated among the CDG Satellite accounts in the proportions most recently specified by the CDG Host, and any remaining credit will be purchased by the Authority at its avoided cost as if the account were individually net metered.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

- (4) A CDG Satellite shall no longer receive credits after the final bill is rendered on its account. Any remaining credit at the CDG Satellite account at the time its final bill is rendered will be purchased by the Authority at avoided energy prices as per the Statement of Market Energy Prices.
- f) Projects with Eligible Net Metering Technologies will receive volumetric (kWh) credits calculated and applied as described in items (1) through (5) below when (1) Mass Market Projects that are Substantially Interconnected before January 1, 2018 or (2) Large ~~Onsite~~Offsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" before May 1, 2018 and are interconnected by January 1, 2020.
- (1) The CDG Host account will be billed in accordance with the procedures used to calculate a bill for an individually net metered Customer, except that Excess Generation remaining after the bill has been calculated will be allocated to each Satellite account in accordance with the CDG Host's designated allocation requests. Any Excess Generation remaining after the allocation will remain with the CDG Host account as an energy credit to be allocated to the Satellite accounts in future billing periods.
- (2) As each CDG Satellite account is billed, Excess Generation allocated to the Satellite account will be applied to the CDG Satellite account as if the Customer were individually net metered. For CDG Satellite accounts served under time-of-use rates, the Excess Generation will be further allocated to the rating periods applicable to the CDG Satellite account in proportion to the times, days and seasons when the Excess Generation was delivered to the Authority.
- (3) If any allocated Excess Generation remains after application to the Satellite account, the remaining allocated Excess Generation shall be carried forward on the CDG Satellite's account as a volumetric (kWh) credit for future bill periods.
- (4) Any volumetric (kWh) credit remaining at the end of the annual period for each CDG Satellite account will be purchased by the Authority as if the account were individually net metered.
- (5) Annual Allocation Requests

Once a year, following the annual anniversary of the CDG Host, after the CDG Host and all CDG Satellite accounts have billed and credits allocated in accordance with this Tariff, the Authority shall supply the CDG Host a calculation of any excess credits returned to the CDG Host and/or any unallocated excess credits remaining at the CDG Host. Within 30 days of receipt of such information, the CDG Host must furnish to the Authority an annual allocation request for distributing these excess credits to one or more of the CDG Satellite Accounts. No portion of the excess credits may be allocated to the CDG Host Account.

No distribution shall be made if an annual allocation request is not received by the required date, and any undistributed credits on the CDG Host shall be forfeited.



**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

g) Projects with Eligible Net Metering Technologies will receive credits calculated and applied as described in items (1) through (89) below when (1) Mass Market Projects have become Substantially Interconnected on or after January 1, 2018 (2) Large ~~Onsite~~Offsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018 or (3) Existing generators sized greater than two thousand (2,000) kilowatts to five thousand (5,000) kilowatts that meet the eligibility criteria and are not currently compensated under the Value Stack shall be permitted to opt-in to participation in the Value Stack compensation.

(1) The CDG Host account will be billed in accordance with the procedures used to calculate a bill for an individually net metered Customer, except that Excess Generation remaining after the bill has been calculated will be monetized based on a calculation described in Section 1.C.18.C - Value Stack Crediting then the Excess Generation will be allocated to Mass Market Customer Satellite accounts and the monetized Value Stack Crediting will be allocated to Large ~~Onsite~~Offsite Customer Satellite accounts in accordance with the CDG Host's designated allocation requests. Any monetized value remaining after the allocation will remain with the CDG Host account as a bill credit to be allocated to the Satellite accounts in future billing periods.

~~(2)~~ For Mass Market Customer Satellite accounts, as each is billed, Excess Generation allocated to the Satellite account will be applied to the Mass Market Satellite account as if the Customer were individually net metered. For Mass Market Satellite accounts served under time-of-use rates, the Excess Generation will be further allocated to the rating periods applicable to the Mass Market Satellite account in proportion to the times, days and seasons when the Excess Generation was delivered to the Authority.

~~(3)-(2)~~

(3) For Mass Market Customer Satellite accounts, if any allocated Excess Generation remains after application to the Satellite account, the remaining allocated Excess Generation shall be carried forward on the Mass Market Satellite's account as a volumetric (kWh) credit for future bill periods.

(4) Value Stack Crediting will apply to Mass Market Customer Satellite accounts that participate in a CDG project that has submitted a complete application as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after January 1, 2020. For a Mass Market Customer Satellite account receiving Value Stack crediting, if any bill credit remains on the Satellite account, the remaining bill credit shall be carried forward for future bill periods.

~~(4)-(5)~~ For a Large ~~Onsite~~Offsite Customer Satellite account, as each Large ~~Onsite~~Offsite Satellite account is billed, the monetized Value Stack Crediting will be allocated to that account.

~~(5)-(6)~~ For a Large ~~Onsite~~Offsite Customer Satellite account, if any bill credit remains on the Satellite account, the remaining bill credit shall be carried forward on the Large ~~Onsite~~Offsite Satellite's account for future bill periods.

~~(6)-(7)~~ Annual Allocation Requests

Once a year, following the annual anniversary of the CDG Host, after the CDG Host and all CDG Satellite accounts have been billed and credits allocated in accordance with this Tariff, the Authority shall supply the CDG Host a calculation of any excess credits returned to the CDG Host and/or any unallocated excess credits remaining at the CDG

Host. By the following anniversary date, the CDG Host must provide to the Authority an annual allocation request for distributing these excess credits to one or more of the CDG Satellite Accounts. No distribution shall be made if an allocation request is not received by the required date, and undistributed credits on the CDG Host shall be subject to forfeit.

~~(7) (1) The day following the twenty fifth (25) anniversary of the in service date, projects still in operation and injecting energy onto the Authority's electric system, will be compensated under the tariff then in effect.~~

**I. General Information (continued):****D. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

(8) The day following the twenty-fifth (25) anniversary of the in service date, projects still in operation and injecting energy onto the Authority's electric system, will be compensated under the tariff then in effect.

~~(8)~~ (9) Notwithstanding any other provision of this Tariff and without waiving or limiting any of the Authority's other rights, the Authority reserves the right to alter the compensation structure for any Customer with an Eligible Net Metering Technology that are Substantially Interconnected on or after January 1, 2020, as the Authority expects to take further action consistent with Phase Two of the New York Public Service Commission's Value of Distributed Energy Resources Proceeding on or around that date.

**I. General Information (continued):****C. General Terms and Conditions (continued):****18. Value of Distributed Energy Resources (VDER)****a) Definitions:**

- (1) Capacity Alternative 2 Contracted Hours: The hours of 2:00pm to 7:00pm within a weekday, Monday through Friday, from June 24<sup>th</sup> to August 31<sup>st</sup> excluding Independence Day for a total of 240 or 245 hours, depending on the calendar for that year.
- ~~(2) Customer-generator's Weighted Capacity Value: The value determined from the previous NYISO Capability Year by measuring net export onto the Authority's system by a Customer-generator at the time of the Top 10 Peak Hours for the Long Island Locality, Zone K. Customer-generator's UCAP Value is defined as a kilowatt value (kW).~~
- (4)(2) Customer-generator's Annual Unforced Capacity (UCAP) Value: - The value determined from the previous NYISO Capability Year by measuring net export onto the Authority's system by a Customer-generator at the time of the peak recorded for the Long Island Locality, Zone K. Customer-generator's UCAP Value is defined as a kilowatt value (kW).
- (3) Monthly Spot Market Capacity Price: - The UCAP price of capacity in the Long Island Locality, Zone K, as determined by the NYISO Spot Market Auction measured in (\$/kw-mo).
- (4) Planned LSRV Event: The Authority's request, on not less than 21 hours' advance notice, for Load Relief during the LSRV Contracted Hours. Planned LSRV Events will be called when the Authority's day-ahead forecasted load level is at least 94 percent of the forecasted summer system-wide peak. Day-ahead and summer peak forecast information for the system will be posted to the Manager's website.
- (5) DRV/LSRV Contracted Hours: The five-hour period 2pm to 7pm within a weekday, Monday through Friday, during the June 1<sup>st</sup>, through August 31<sup>st</sup> excluding Independence Day for a total of 320 or 325 hours, depending on the calendar for that year.
- ~~(5) Top 10 Peak Hours: The ten (10) highest load hours (MW) on the Authority's system during the months of June, July and August between the hours of 2 pm to 6 pm.~~
- ~~(6) Top 10 Peak Hour Weighting Factor: An hourly percentage factor will be applied to the Top 10 Peak Hours. The system peak will be considered the highest of Top 10 Peak Hours and will be given a twenty percent (20%) weighting. The lowest of the Top 10 Peak Hour Weighting Factor will be targeted to five percent (5%). Then, each of the remaining eight hours will be weighted based on its load (MW) difference from the system peak.~~

**b) Value Stack Terms:**

- (1) Eligible Customer-generators will be compensated based on monetary crediting for net hourly injections into the grid.
- (2) Projects eligible for the Value Stack will receive compensation for a term of twenty-five (25) years from the date of interconnection and will have the ability to carry-over excess credits to subsequent billing periods and annual periods as follows:
  - (a) Excluding credits held by CDG project hosts, unused credits may be carried over to the next monthly billing period, including to the next annual period.
  - (b) At the end of a project's compensation term, twenty-five (25) years from the date of interconnection, any unused credits will be forfeited.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):**

- (c) CDG project hosts will be given a one-year grace period beyond the end of the annual period to distribute any credits they retain at the end of the annual period.
- (d) At the end of the grace period the CDG project host will be required to forfeit a number of credits equal to the smallest number of credits that were in its account at any point during the grace period, since that represents the number of credits that were held over from the previous period.

c) Value Stack Calculation:

Compensation under the Value Stack will apply to Customers identified as eligible in the Net Metering, Remote Net Metering, and Community Distributed Generation provisions of this Tariff (see *supra* Sections I.C.15 – I.C.17). The net energy injections of these resources will be calculated based on the values associated with the following components, which will be shown on a separate Statement of Value Stack Credits:

(1) Energy Component

For any hour in a monthly billing period where there is a net export onto the Authority's system by a Customer-generator, the Customer-generator will receive a credit for energy by multiplying the export in that hour times the Energy Component (\$/kWh). The Energy Component will be equal to the NYISO day-ahead Locational Based Marginal Price (LBMP) based on Zone K, inclusive of transmission losses identified by the NYISO and delivery losses as defined by Statement of Energy and Peak Demand Losses. The Energy Component compensation will be summed for all hours of the Customer-generator's billing month and added to Value Stack Calculation Bill Credit posted to the Customer-generator's account.

(2) Capacity Component

Non-dispatchable resources may select Alternative 1, Alternative 2, or Alternative 3. Alternative 1 will be the default VDER Value Stack Capacity Component compensation methodology for non-dispatchable resources if no selection is made by the Customer-Generator.

Dispatchable technologies will be assigned to Alternative 3.

## (a) Alternative 1

Under Alternative 1, compensation for capacity will be calculated by multiplying the sum of the project's net injections (kWh) for ~~the billing period~~ each hour by the Alternative 1 VDER Value Stack Capacity Component (\$/kWh) in effect at the time of billing. The Alternative 1 VDER Value Stack Capacity Component will be ~~determined~~calculated by multiplying the ~~Previous Year's Annual Spot Market Capacity Price~~monthly NYISO \$/kW-month auction price by ~~Previous Year's Coincidental Demand applicable to Large Demand customers~~the proxy capacity factor, divided by ~~current year's Large Demand customers forecast of sales~~the monthly production, all as identified -in the Statement of Value Stack Credit.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):****(b) Alternative 2**

Under Alternative 2, compensation for capacity will be calculated by multiplying the sum of the project's net injections (kWh) for each of the Capacity Alternative 2 Contracted Hours on ~~peak hour in the summer months of June, July, and August~~ hours by the ~~effective~~ Alternative 2 VDER Value Stack Capacity Component (\$/kWh) ~~for that month~~. The Alternative 2 VDER Value Stack Capacity ~~Component~~ rate will be calculated by dividing the ~~Alternative 1 VDER Value Stack~~ Previous Year's Annual Spot Market Capacity ~~Component~~ Price by the ~~percentage of annual sales attributable to the 460 Capacity Alternative 2 Contracted Hours (240 or 245 hours). peak summer hours by annual sales for Service Classification No. 2 (Rate Code 280) to determine a \$/kWh~~ compensation value to be applied during the following summer season. ~~The on-peak hours are defined as the hours of 2 pm to 7 pm each day in the months of June, July, and August.~~ A Customer-Generator must elect Alternative 2 by May 1 to be eligible to receive the rate beginning June 1 of that year. A Customer-Generator electing Alternative 2 after May 1 will be compensated under Alternative 1 until April 30 of the following calendar year.

The Alternative 2 rate will be revised by June 1 of each year in the Statement of Value Stack Credits.

**(c) Alternative 3**

Under Alternative 3, compensation for capacity will be calculated based on a Customer-generator's Capacity Value and Capacity Price, as follows.

**(i) Customer-generator's Capacity Value:**

~~New eligible dispatchable and non-dispatchable Customer generators that do not have metered load history available will have their Capacity Value estimated for the first year of operation based on load profiles for their specific Customer generator technology, Customer generator size, and their rate code. After the first Anniversary of a Customer generator's in-service date, the Customer generator will be credited or charged a true-up value based on its measured Capacity Value during the first year of operations. The true-up value will be equal to the applicable Previous Year's Annual Spot Market Capacity Price multiplied by the difference between the first year estimated Capacity Value and the first year measured Capacity Value.~~

~~Eligible non-dispatchable Customer generators. The Capacity Value of an eligible non-dispatchable Customer generator will be its Weighted Capacity Value (kW), which will be based on the Customer generator's measured output during the Top 10 Peak Hours of the previous year as weighted by the Top 10 Peak Hour Weighting Factor, as follows:~~

~~Weighted Capacity Value = (PF1\*E1+PF2\*E2 ...+PF10\*E10), where~~

~~PF<sub>n</sub> = Top 10 Peak Hour Weighting Factor~~

~~E<sub>n</sub> = Customer generator's measured output (kWh) injected into LIPA system during Top 10 Peak Hours.~~

Eligible Customer-generators will receive a Capacity Value calculated as the Customer-generator's Annual UCAP Value (kW). The Capacity Value will remain in effect as long as the eligible Customer-generator resource operates or until the last month of the NYISO Capability Year (April), whichever comes first.

(ii) Customer-generator's Capacity Price:

Eligible Customer-generators will receive a Capacity Price equal to the current Monthly Spot Market Capacity Price grossed up to include peak losses as defined by the Statement of Energy and Peak Demand Losses and additional reserve requirements as required by the NYISO. The Capacity Price is shown on the Statement of Value Stack Credits.

(iii) Capacity Component Payments:

An Eligible Customer-generator's Capacity Component Credit in each month will be calculated as the Customer-generator's Capacity Value multiplied by the current Monthly Spot Market Capacity Price. The Capacity Component Credit will be added to Value Stack Calculation Bill Credit posted to the Customer-generator's account each month.



**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):**

~~Eligible dispatchable Customer generators will receive a Capacity Value calculated as the Customer generator's Annual UCAP Value (kW). The Capacity Value will remain in effect as long as the eligible Customer generator resource operates or until the last month of the NYISO Capability Year (April), whichever comes first.~~

~~(ii) Customer generator's Capacity Price:~~

~~Eligible non-dispatchable Customer generators selecting Alternative 3 will receive a Capacity Price equal to the Previous Year's Annual Spot Market Capacity Price grossed up to include peak losses as defined by the Statement of Energy and Peak Demand Losses and additional reserve requirements as required by the NYISO. The Capacity Price is shown on a separate Statement of Value Stack Credits.~~

~~Eligible dispatchable Customer generators will receive a Capacity Price equal to the current Monthly Spot Market Capacity Price grossed up to include peak losses as defined by the Statement of Energy and Peak Demand Losses and additional reserve requirements as required by the NYISO. The Capacity Price is shown on the Statement of Value Stack Credits.~~

~~(iii) Capacity Component Payments:~~

~~Eligible non-dispatchable Customer generators selecting Alternative 3 will receive an "Annual Capacity Payment Amount" calculated by multiplying its Capacity Value times its Capacity Price.~~

~~A Customer generator's Annual Capacity Payment Amount including any first year Capacity Value true-up will be applied to the Customer generator's Value Stack Calculation Bill Credit as follows. The Customer generator may select from the following three methods to receive Capacity Component Payments. After the first year in service, the Customer generator will have a one-time option to modify its selection.~~

~~(1) Method One The Capacity Component Credit (\$) will be the Customer generator's Annual Capacity Payment Amount divided by twelve and added to Value Stack Calculation Bill Credit posted to the Customer generator's account each month.~~

~~(2) Method Two The Capacity Component Credit (\$) will be the Customer generator's Annual Capacity Payment Amount divided by three and added to Value Stack Calculation Bill Credit posted to the Customer generator's account in three installments during the peak months of June, July and August.~~

~~(3) Method Three The Capacity Component Credit per (\$/kWh) will be calculated based on Customer generator's Annual Capacity Payment Amount divided by the Customer generator's previous year's net energy injections (8,760 Hours). The Capacity Component Credit \$/kWh will be applied to all energy net injections. The Capacity Component will be summed for all hours of the Customer generators applicable billing months and added to Value Stack Calculation Bill Credit posted to the Customer generator's account.~~

[CANCELLED]

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):**

~~If an eligible non-dispatchable Customer generator selects Method Three and the Authority does not have sufficient metered load history to calculate the Capacity Component Payments, the Customer generator's Annual Capacity Payment Amount will be divided by a load profile for their specific Customer generator technology, Customer generator size, and their specific Customer's rate code to calculate the Capacity Component Credit per (\$/kWh).~~

~~An Eligible dispatchable Customer generator's Capacity Component Credit in each month will be calculated as the Customer generator's Capacity Value multiplied by the current Monthly Spot Market Capacity Price. The Capacity Component Credit will be added to Value Stack Calculation Bill Credit posted to the Customer generator's account each month.~~

**(d) Alternative Method Change Requests**

A request for a change in VDER Value Stack Capacity Component compensation submitted by a Customer-Generator with intermittent generation is subject to the following limitations:

- (i) A project compensated under Alternative 1 may switch to compensation under Alternative 2 or to Alternative 3;
- (ii) A project compensated under Alternative 2 may switch to Alternative 3;
- (iii) A project compensated under Alternative 2 cannot switch to Alternative 1; and
- (iv) A project compensated under Alternative 3 cannot switch to Alternative 1 or Alternative 2.

**(3) Environmental Component**

- (a) Customers with generation that is eligible to receive Renewable Energy Standard Tier 1 Renewable Energy Credits ("RECs") must elect, by the date of interconnection, to either retain all RECs generated, or to sell these RECs to The Authority. For customers who elect to transfer their RECs to The Authority and for CDG Satellite Accounts who's CDG Host Account elects to transfer their RECs to The Authority, will receive the Environmental Component.
- (b) The environmental component will be determined as of the in service date of the Customer-generator and will be the greater of either:
  - (i) NYSERDA posted Tier 1 REC market price or
  - (ii) Social Cost of Carbon net of the Regional Greenhouse Gas Initiative ("RGGI")
- (c) The value shall be fixed for the Customer-generator's first twenty-five (25) years of compensation under the Value Stack. The Environmental Component Credit per (\$/kWh) will be summed for all hours of the Customer-generator's billing month and added to Value Stack Calculation Bill Credit posted to the Customer-generator's account.
- (d) For all other customers that choose to retain their RECs, the Environmental Component Rate is \$0/kWh.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):****(4) Value of Distribution**

Demand Reduction Value (DRV) and Locational System Relief Value (LSRV) will be based on the utility Marginal Cost of Service (MCOS) studies per Service Classification, and will be determined as follows:

- (a) For eligible Customer-generators, the DRV compensation will be calculated by multiplying the ~~Customer-generator's Capacity Value as determined by Alternative 3 by the applicable DRV (\$/kW-month) rate.~~ Forsum of the project's net injections (kWh) for each of the ~~first three (3) years eligible Customer-generators are in service,~~ DRV/LSRV Contracted Hours by the project's DRV Value Stack rate (\$/kWh). The project's DRV rate will be ~~fixed~~ set at the current DRV value as of the in-service date ~~for ten (10) years.~~ After the first ~~three (3)~~ ten (10) years eligible Customer-generators ~~are in service~~ will be compensated with the ~~then-applicable DRV rate will be determined at least every three (3) years and hours.~~ The rate will be updated in a Statement of Value Stack Credits.
- (i) ~~Customer-generators may choose to waive the DRV compensation of the Value Stack and opt-in to the Commercial System Relief Program (CSRP). This voluntary election is a one-time, irreversible decision that may be made at any point during the project's Value Stack compensation period. The Customer-generator must notify the Authority of its intention to opt in to the CSRP.~~
- (b) Customer-generators located in designated project locations will receive a LSRV payment. ~~The Customer-specific based on Load Relief when a LSRV paymentPlanned Event is called. PSEG Long Island will be calculated by multiplying the notify the Customer-generator's annual Capacity Value by the generators of an Event twenty-one (21) hours in advance and the window may be between one (1) to four (4) hours long.~~
  - (i) ~~Customer-generators will receive payments based on the lowest hourly net kW injection during each call.~~
  - (ii) ~~The LSRV (\$/kW-month) in effect at the project's location as of the in-service date. The LSRV (\$/kW-month-year) is currently set at 50% of the DRV value identified in Statement of Value Stack Credits for all LSRV areas.~~
  - (iii) ~~There must be a minimum of ten (10) calls each year. The \$/kW-year will be divided by ten (10) to determine the value of each call window. If there are less than ten (10) calls, at the end of the period identified in the DRV/LSRV Contracted Hours, the Customer-generator will be compensated for the calls that did not occur at the lowest hourly net kW injection for a total of ten (10) calls in their October Value Stack Bill Credit.~~
  - (iv) ~~The LSRV payment shall be fixed for a ten (10) year term of compensation for the Customer-generator, after which time the LSRV payment will be reset based on the then applicable LSRV-at that location, if any, for an additional ten-year term until the twenty fifth (25) year of the in-service date.~~
  - (v) ~~The LSRV will only be available to projects located in LSRV areas. Eligible LSRV areas that have been identified by the Authority may be found on Statement of LSRV Areas.~~
- (b)(c) For each Customer-generator's billing period, the sum of the above listed components from 1.C.18 (4) (a) to (b) will be added to Value Stack Calculation Bill Credit posted to the Customer-generator's account.

~~Any account receiving a CDG Transition Credit will not be eligible to receive the DRV.~~

(5) ~~CDG Transition Credit~~ Community Credit

- (a) Any Large Offsite Projects, other than projects with Fuel Cell Electric Generating Equipment, will receive a CDG Community Credit (\$/kWh) as part of their Value Stack Calculation Bill Credit for 25 years from their in-service date.

**I. General Information (continued):****D. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):**

- (b) Mass Market participants in CDG projects receiving the Value Stack Calculation Bill Credit will receive an additional CDG Community Credit (\$/kWh) for 25 years from the project's in-service date.
- (c) The value of the CDG Community Credit is identified in Statement of Value Stack Credits.

**d) Value Stack Billing**

At the conclusion of a billing period, a Customer will be billed for the total consumption of energy measured at the rates specified in the customer's otherwise applicable Service Classification, including applicable demand charges.

If there is a Value Stack Calculation Bill Credit for the month, such credit will be applied as a direct monetary credit to the Customer's current utility bill for any outstanding energy, customer, demand, or other charges. If the Customer's current month's Value Stack Calculation Bill Credit plus any prior period Value Stack Calculation Bill Credit exceeds the current bill, the remaining monetary credit will be handled as follows:

- (1) Large On-Site Customers, See Section C.15.h).(2)
- (2) For Remote Net Metered accounts, See Section C.16.b).(5)
- (3) For CDG accounts, See Section C.17.g)

**e) Storage**

- (1) Customers with stand-alone storage that is sized not to exceed 115% of the customer's peak hourly consumption load may be on any rate for which they qualify and will be compensated at the Value Stack minus the Environmental credit and the CDG Community Credit for all excess generation.
- (2) Customers with stand-alone storage that is sized at 115% or above of the customer's peak hourly consumption must be on a qualifying Time Of Use rate and will be compensated at the Value Stack minus the Environmental credit and the CDG Community Credit for all excess generation.
- (4)(3) For customers who pair energy storage systems with eligible electric generating equipment ("Hybrid Facility"), the Authority will calculate the Environmental Component Credit and the CDG Community Credit, pursuant to the rules set forth below. All other Value Stack components, including Energy Component Credit, Capacity Component Credit, DRV Component Credit, and LSRV Component Credit, will be calculated as specified in section I.C.18.c).(4) above. Consistent with section I.C.18.c).(3), the Environmental Component Credit will only be provided where the electric generating equipment is eligible to receive Tier 1 RECs, the Community Credit will only be provided for eligible customers and consistent with the Community Cred rate applicable to the customer and the Capacity Component will be calculated based on Alternative 1, Alternative 2 or Alternative 3 based on customer election.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued)****Storage (continued):**

- (4) Customers operating Hybrid Facilities have the opportunity to elect one of the four compensation methodologies described below in (4).(a), (4).(b), (4).(c), or (4).(d). Customers will make this election at the same time they select a capacity compensation methodology in accordance with section I.(C).18.c).(2). The default option, if no other election is made by the customer, is compensation methodology (4).(d). below.

Customers operating Hybrid Facilities have a one-time option to change their initial election of (4).(a) or (4).(b) to election of (4).(c). This one-time election may be made at any time following the initial election but will not become effective until such time that any required metering or telecommunications is installed.

- (a) Storage Exclusively Charged from Eligible Generator – For customers operating Hybrid Facilities who are able to demonstrate that the energy storage system charges exclusively from the qualified electric generating equipment, Environmental Component Credit and the CDG Community Credit will be based on net hourly injections to the Authority's electric system as measured at the Authority's meter located at the point of common coupling ("PCC").
- (b) Storage Controls Configuration – For customers operating Hybrid Facilities who install appropriate controls to ensure that net hourly injections are only made with energy produced from eligible technologies, the Value Stack Environmental Component Credit and the CDG Community Credit will be based on net hourly injections to the Authority's system and calculated as described in section I.C.18.c).(2).
- (c) Storage Import Netting Configuration - For customers operating Hybrid Facilities with a separate Authority-approved revenue grade interval meter and appropriate telemetry on the AC side of the inverter of the Hybrid Facility and whose storage configuration does not meet the requirements of (4).(a) or (4).(b) above, the Value Stack Environmental Component Credit and the CDG Community Credit is determined by reducing the net hourly injections, as measured at the Authority's meter located at the Customer's PCC with the Authority's system, by the monthly consumption of energy recorded on the Authority's separate Hybrid Facility meter.
- (d) Storage Default Configuration - For all other Customers with energy storage paired with electric generating equipment, the Value Stack Environmental Component Credit and the CDG Community Credit is based on netting of all metered consumption and injections at the PCC over the applicable billing period.
- (e) Reference the (a) – (d) above, the Customer is responsible for any costs associated with additional metering requirements and telemetry. Customers shall be responsible for any work required to accommodate the appropriate controls and/or multiple meter configuration. This controls demonstration may require separate Authority revenue grade interval meter(s) and appropriate telemetry on the AC side of the applicable inverter(s) and explicit Authority acceptance.

**XIII. Dynamic Load Management****A. Commercial System Relief Program****1. Purpose and Availability**

The Commercial System Relief Program is being offered by the Authority to enable participating eligible customers to be compensated for reducing their load under certain conditions when called upon by the Authority to do so.

The program is available to any Customer served at transmission, primary or secondary voltage and taking service under one of the Service Classifications shown below; and to any Aggregator that meets the requirements of this Rider.

Service Classification No. 1 (Rate Codes 180, 380, 580, 880; excluding 480, 481)

Service Classification No. 1-VMRP(L) (Rate Codes 181, 182, 184)

Service Classification No. 1-VMRP(S) (Rate Codes 188)

Service Classification No. 2 (Rate Code 280)

Service Classification No. 2-VMRP (Rate Code 288)

Service Classification No. 2-L (Rate Codes 281, 291, 283)

Service Classification No. 2L-VMRP (Rate Codes 282, M282)

Service Classification No. 2-MRP (Rate Codes 284, 285, M284, M285)

Service Classification Nos. 11, 12, and 13 (Rate Codes 289, 680, 681, 278)

Service Classification No. 16-AMI (Rate Code M188, M288)

Customers who take service pursuant to the Direct Load Control Program are not eligible to participate in this program.

Customer-generators subject to Value Stack compensation may choose to waive the DRV compensation of the Value Stack and opt-in to participating in the Commercial System Relief Program (CSRP). Opting into the CSRP program is a one-time irreversible decision which may be made at any point during the project's Value Stack compensation period.

The Metropolitan Transportation Authority for Traction Power Service to the Long Island Rail Road and Brookhaven National Laboratories pursuant to a Sale for Resale agreement between the Authority and the New York Power Authority (both as referenced on Leaf 271) are not eligible to participate.

**2. Definitions:**

**Aggregator:** A party other than the Authority that represents and aggregates the load of Customers who collectively have a Load Relief potential of 50 kW or greater in an Authority Designated Area and is responsible for the actions of the Customers it represents, including performance and, as applicable, repayments to the Authority. A Direct Participant may combine multiple customer locations to meet the Load Relief potential requirements of an aggregator.

**Authority Designated Area:** An electrically defined area determined by the Authority to be approaching system capacity limits during peak periods. A current list of the Authority Designated Areas will be listed on the Manager's website and payments by area are listed on the Statement of Commercial System Relief Program Payments.

**Capability Period:** The period during which the Authority can request Load Relief. The Capability Period will be from May 1 through September 30.



**Long Island Power  
Authority**

**Statement of Value Stack Credits (VSC)**

Applicable to those Rate Codes and Customers

Subject to the Phase One Value Stack as set forth in the Tariff for Electric Service

Applicable to all metered accounts with Customer-generators subject to the Value Stack with rate codes within Service Classification Nos. 2-L, 2L-VMRP, 2-MRP or 12.

<b>Energy Component</b>		
Average Monthly Energy Component (based on published day ahead NYISO hourly zonal LBMP energy prices) [averaged by zone]. <a href="http://www.nyiso.com/public/markets_operations/market_data/pricing_data/index.jsp">http://www.nyiso.com/public/markets_operations/market_data/pricing_data/index.jsp</a>		
<b>Capacity Component</b>		
Alternative 1 <del>August 2019 Rate</del>		<del>\$0.0079660.018</del> / kWh
Alternative 1 Proxy Capacity Factor		34.3%
Alternative 1 Solar Production (kWh/kW) (see table below)		1,260 hours
Alternative 2 Rate		<del>\$0.114134.2074</del> / kWh
<del>Alternative 3 – Undispatchable Prior (May-Apr) NYISO Capability Year Price</del>		<del>\$50.0028 / kW Annually</del>
Alternative 3 – <del>Dispatchable April-August</del> - 2019 Monthly Market Price		<del>\$0.4619</del> / kW Monthly
<b>Environmental Component</b>		\$0.02741 / kWh
<b>Demand Reduction Value (DRV)</b>	For injection during DRV/LSRV contracted hours	<del>\$109.86.338</del> / kWh <del>Annual</del>
<b>Demand Reduction Value (LSRV)</b>	For the lowest hourly net kW injection during LSRV events	<del>\$54.035.4035.49</del> / kWh per event <del>AnnualEvent</del>
<b>Community Credit</b>		\$0.0225 / kWh

Alternative 1 Table for Monthly Solar Production per NY State Public Service Commission Order Regarding Value Stack Compensation in Case 15-E-0751 issued April 18, 2019:-

Monthly Solar Production	
Month	(kWh/kW)
1	56
2	71
3	113
4	123
5	143
6	148
7	147
8	141
9	112
10	90
11	66
12	51
<b>Total</b>	<b>1260</b>

NYISO Top Ten Peak Hours and Peak Demand:		
Hours	Date & Time	Company Peak Demand (MW)
Hour 1:	8/29/2018 5:00:00 PM	5,412
Hour 2:	8/29/2018 6:00:00 PM	5,388
Hour 3:	8/29/2018 4:00:00 PM	5,359
Hour 4:	8/29/2018 3:00:00 PM	5,293
Hour 5:	8/28/2018 6:00:00 PM	5,259
Hour 6:	8/28/2018 5:00:00 PM	5,253
Hour 7:	9/6/2018 5:00:00 PM	5,222
Hour 8:	8/28/2018 4:00:00 PM	5,186
Hour 9:	8/29/2018 6:00:00 PM	5,163
Hour 10:	9/6/2018 6:00:00 PM	5,162

Note:- 1) SC-12 customer will pay the rate of a similar size customer on SC-2L, 2L-VMRP or 2-MRP.

——— 2) For Solar Load Profile used to calculate Alternative 1 and 2 see PSEG LI website.

**I. General Information (continued):****B. Abbreviations and Definitions (continued):****C**

**Capacity:** The load-carrying ability of the transmission and distribution systems during a specified period of time.

**Catch-up Bill:** First bill based on an actual reading following one or more estimated or Customer read bills.

**Character of Service:** Refers to the type of service supplied, including the voltage at which it is supplied, the type of current, its frequency, etc.

**Circuit:** A conductor or a system of conductors through which an electric current flows or is meant to flow.

**Coincidental Demand:** (See Demand)

**Cold Weather Period:** The period between November 1 through April 15, inclusive.

**Commercial Demand NEM Customer:** A Commercial Customer that is demand metered and has submitted a complete application as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018 and has an Eligible Net Metering Technologies (see *Section 1.B.*) project at the same location that is electrically connected behind the meter; and

- (a) has a rated AC capacity of 750 kW or less and
- (b) has an estimated annual output of 110% or less of that customer's annual usage in kWh.

**Commercial Demand NEM Project:** An Eligible Net Metering Technologies (see *Section 1.B.*) project owned by a Commercial Demand NEM Customer(s).

**Conduit:** A tube or duct for enclosing electric wires or cable.

**Construction Loan Agreement:** An agreement between the Authority and a Non-Residing Customer for payment in advance for a line extension on private property with the potential to service multiple Customers. As other Customers come on line, the original Customer will receive a prorated rebate.

**Controlled-Access Highway:** A public roadway with entrance and exit ramps.

**Core Customer:** (See *Customer - Core Customer*)

**Core Service:** Service provided to a Core Customer.

**Cost or Expense:** The cost of all materials, equipment, labor, and other definite charges plus a reasonable charge for other costs of a general nature (purchasing, engineering, etc.) involved in a project.

**General Information (continued):****B. Abbreviations and Definitions (continued):**

**Demand Customer:** A Customer who is billed for Demand charges.

**Demand Meter:** The device that records the maximum amount of power used by the Customer over a 15-minute interval during a specific period, such as a month.

**Department:** The New York State Department of Public Service.

**Deposit:** A sum of money given as security for payment of service.

**Distribution Facilities:** Facilities used to distribute electric energy to consumers, including supply lines, distribution lines, service laterals, and accessory equipment.

**Distribution Line(s):** A system of poles, wires, ducts, conduits, and additional equipment used for the shared distribution of electricity to Customers.

**E**

**Easement:** (See *Right-of-way*)

**Eligible Net Metering Technology/Technologies:** The list of eligible technologies is: Solar Electric Generating Equipment, Wind Electric Generating Equipment, Micro-Hydroelectric Generating Equipment, Micro- Combined Heat and Power (CHP) Generating Equipment, Fuel Cell Electric Generating Equipment, Farm Waste Electric Generating Equipment, Stand Alone Storage Equipment, Regenerative Braking, Vehicle-to-Grid, or other generating equipment identified as a Tier 1 technology as defined in Appendix A of the CES Order of the New York Public Service Commission issued August 1, 2016 in Cases 15-E-0302 and 16-E-0270. Tier 1 technologies are required to take compensation based on the Value Stack.

**Energy:** Energy is electric power, used or supplied over time, and measured in KWH.

**Existing Overhead Areas:** Areas in which electric distribution facilities are constructed overhead, and there are no requirements to construct facilities underground.

**F**

**Farm Waste Electric Generating Equipment:** Equipment that generates electric energy from biogas produced by anaerobic digestion of agricultural wastes, such as livestock manure, farming wastes and food processing wastes with a rated capacity of not more than five thousand (5,000) kilowatts that is manufactured, installed and operated by Customer-generator in accordance with applicable government and industry standards, connected to the electric system and operated in conjunction with the Authority's transmission and distribution facilities, operated in compliance with the Authority's standards and requirements established therefor, fueled at a minimum of ninety (90) percent on an annual basis by biogas produced from the anaerobic digestion of agricultural waste such as livestock manure materials, crop residues, and food processing waste, and fueled by biogas generated by anaerobic digestion with at least fifty (50) percent by weight of its feed stock being livestock manure on an annual basis.

**Fuel Cell Electric Generating Equipment:** A solid oxide, molten carbonate, proton exchange membrane or phosphoric acid fuel cell, with a combined rated capacity of not more than ten (10) kilowatts for a residential customer or with a rated capacity of not more than five thousand (5,000) kilowatts for a non-residential customer, that is manufactured, installed and operated in accordance with applicable government and industry standards, that is connected to the electric system and operated in compliance with the Authority's standards and requirements established therefor. This definition, including the capacity limits specified herein, does not apply to fuel cells participating in the Fuel Cell Feed-in Tariff.

**Fuel and Purchased Power Cost Adjustment Clause:** See definition for Power Supply Charge.

**Full-Requirements Customer:** A Customer whose electric power requirements are all supplied by the Authority. (See *Customer – Full Requirements Customer*)

**G**

**Generation Project:** A specific project that is eligible to participate in the Commercial Solar or Fuel Cell Feed-In Tariff under Service Classification No. 11 – Buy-Back Service.

**I. General Information (continued):****B. Abbreviations and Definitions (continued):****H**

**Heat-Related Service:** A service provided under a residential space-heating rate classification or service needed to start or operate the primary heating system. It also includes a safe, supplemental electrical heating device that is needed by the Customer because the third party who controls the primary heating system does not supply enough heat.

**Hybrid Electric Generating System or Hybrid System:** An electric generating system consisting exclusively of wind and solar electric generators which are metered and billed as single unit, Hybrid electric generating systems owned and/or operated by Residential, or Residential Farm, or non-residential or Farm Service Customers may be eligible for net metering. Hybrid systems may not include micro- Combined Heat and Power (CHP) or micro-Fuel Cell electric generation.

**J**

**Jurisdiction:** The right and power to interpret and apply the law.

**K**

**Kilovar(s) = KVAR 1,000 reactive voltamperes (See Reactive Power)**

A unit of measure of that part of Apparent Power that is not useful, but is required by some types of electricity-consuming devices such as motors.

**Kilovoltampere = kVA = 1,000 voltamperes (See Voltamperes)**

**Kilowatt(s) = KW = 1,000 watts**

A unit of measure of that part of Apparent Power that is useful (Real Power). (See Power)

**Kilowatt-hour = KWH = 1,000 watt-hours**

A unit of electric energy equal to one (1) kilowatt of power supplied to or taken from an electricity-consuming device steadily for one (1) hour.

**L**

**Large Offsite Customer(s):** Commercial customer(s) with demand billing that host a Remote Net Metering or Community Net Metering project or participate as a Satellite Account.

**Large Offsite Project(s):** Projects using an Eligible Net Metering Technologies owned by a hosting Large Offsite Customer(s).

**Large Onsite Customer(s):** Commercial customer(s) with an Eligible Net Metering Technologies project (see Section 1.B.) at the same location and electrically connected, behind the Commercial customer's meter, with

- (a) an AC capacity over 750 kW, or
- (b) an estimated annual output more than 110% of that customers annual usage in kWh, or
- (c) a commercial customer who is billed demand and choose to be considered a Large Onsite Customer, or
- (d) a commercial customer who is billed demand but does not qualify to be considered a Commercial Demand NEM Customer.

**Large Onsite Project(s):** Projects using an Eligible Net Metering Technologies owned by a Large-Onsite Customer(s).

**Late Payment:** Payment made more than twenty (20) calendar days after the date payment was due. The due date is the earlier of the two (2) dates: the personal delivery date or three (3) calendar days after the mailing of the bill. The Customer must pay the bill by the "Pay by" date on the bill to avoid making a late payment.

**Letter of Credit:** A letter issued by a bank authorizing the bearer to draw a stated amount of money from the issuing bank, its branches, or other associated banks or agencies.

**Levelized Payment Plan:** (See *Balanced or Budget Billing Plan*)

**Liability:** A legal obligation.

**Line:** A system of overhead poles, wires, and accessory equipment or underground ducts, conduits, and cables used for the distribution of electricity to Customers.

**Line Extension:** The addition of poles, wires, ducts, conduits, appurtenant facilities and additional equipment to a distribution line used to expand the shared distribution of electricity to Customers

**I. General Information (continued):****B. Abbreviations and Definitions (continued):**

**Net Financing Cost:** The weighted average cost of debt for the Authority, including all costs of issuance of the debt.

**New York Independent System Operator (NYISO):** A not-for-profit corporation established to provide and maintain open access transmission to the power system in New York State, provide for centralized commitment and dispatch of the generation system in New York State, and provide other services.

**New York Power Authority (NYPA):** a New York State Authority responsible for the generation, transmission and sale of electricity to wholesale customers pursuant to the Public Authorities Law.

**Noncoincidental Demand:** (See Demand)

**Non-Core Customer:** (See *Customer - Non-Core Customer*)

**Non-Core Service:** Service to Non-Core Customers.

**Non-Residential Applicant:** (See *Customer - Non-Residential Customer*)

**Non-Residing Applicant:** (See *Customer - Non-Residing Customer*)

**O**

**Ohm:** The unit of measurement of electrical resistance.

**Operations Services Agreement:** A contractual agreement (as may be amended, modified, or supplemented from time to time) between PSEG Long Island and the Authority, under which PSEG Long Island operates, maintains, and manages the Authority's transmission and distribution system.

**P**

**Payment Date:** The Authority considers a payment to be made on the date the Authority or one of its authorized agents receives the payment.

**Payments In Lieu of Taxes (PILOTs):** Payments that the Authority makes to other governmental authorities in replacement of the taxes which were previously collected on utility revenues, assets or operations.

**Performance Payment:** An advance payment made by a Non-Residing Applicant for service construction for multiple occupancy buildings in an underground-designated area. The payment guarantees the Applicant's performance for five (5) years.

**Peak Power or Peak Demand:** See *Power*.

**Power (Electric):** Amount of electrical energy produced or consumed, measured over a specific time period in kilowatts (KW).

1. Apparent Power includes both Real and Reactive Power and is the product of Volts and Amperes in a circuit. Apparent power is expressed in kilovoltamperes (kVA).
2. Instantaneous Power is power at an instant in time.

**I. General Information (continued):****C. General Terms and Conditions (continued):  
Net Metering (continued):****a) Requirements for Installation and Operation**

- (1) Wiring and switches for Solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind or Hybrid Electric Generating Equipment, owned and/or operated by Customer-generators to supply their load and feed energy to the Authority's electric system, shall be arranged in parallel so as to permit the flow of current from the Authority to the Customer-generator and vice-versa.
- (2) Solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind or Hybrid Electric Generating Equipment installed in parallel with the Authority's system must comply with the Authority's "Smart Grid Small Generator Interconnection Procedures".
- (3) The Authority shall require a Customer-generator who owns and/or operates Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind, Solar or Hybrid Electric Generating Equipment to pay for the installation of dedicated transformer(s) if it is determined that dedicated transformer(s) is (are) necessary to protect the safety and adequacy of electric service provided to other Customers.
- (4) The Authority may require a Customer-generator who owns and/or operates Solar, Farm Waste, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell, Wind or Hybrid Electric Generating Equipment to comply with additional safety or performance standards than those specified in the Authority's "Smart Grid Small Generator Interconnection Procedures", perform or pay for additional tests, or purchase additional liability Insurance when the total rated generating capacity of the electric generating equipment that provides electricity to the Authority through the same local feeder line exceeds twenty (20%) of the rated capacity of the total feeder line.
- (5) Mass Market Projects subject to NEM compensation will be permitted to pair on-site energy storage with the eligible generating equipment under PSL Sections 66-j and 66-l and remain eligible under Phase One NEM. However, customers that wish to pair energy storage with a Large On-site Project or Large Off-site Project will be required to receive compensation based on the VDER Value Stack tariff.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):****d) Interconnection and Transformer Charges**

- (1) If the Mass Market Customer's Solar, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell and/or Wind Electric Generating Equipment has a rated capacity of equal to or less than twenty five (25) kilowatts the Customer-generator shall not be required to pay the Authority any Interconnection charges.
- (2) If the Mass Market Customer's Solar, Micro-Combined-Heat-and-Power, Micro-Hydroelectric, Fuel Cell and/or Wind Electric Generating Equipment has a rated capacity of more than twenty five (25) kilowatts, the Customer-generator shall be responsible for payment to the Authority of one hundred percent (100%) of the interconnection expenses.
- (3) Large Onsite Customers, Large Offsite Customers, and Commercial Demand NEM Customers shall be responsible for payment to the Authority of one hundred percent (100%) of the interconnection expenses of such Solar, Micro-Hydroelectric Fuel Cell and/or Wind Electric Generating Equipment.
- (4) If the Authority determines that it is necessary to install a dedicated transformer or transformers or other equipment to protect the safety and adequacy of the electric service provided to other Customers:
  - (a) The Mass Market Customer installing Solar Generating Equipment, Micro-Combined-Heat-and-Power Generating Equipment, Micro-Hydroelectric Generating Equipment, or Fuel Cell Electric Generating Equipment with a rated capacity of equal to or less than twenty five (25) kilowatts, shall pay to the Authority the cost of installing the transformer(s) and other equipment, up to a maximum of three hundred and fifty dollars (\$350.00).
  - (b) The Residential Customer installing Farm Waste Electric Generating Equipment shall pay to the Authority the cost of installing the transformer(s) and other equipment, up to a maximum of five thousand dollars (\$5,000) per farm operation.
  - (c) The Non-residential Customer-generator installing Solar Generating Equipment with a rated capacity of equal to or less than twenty five (25) kilowatts shall pay to the Authority the cost of installing the transformer(s) and other equipment, up to a maximum of three hundred and fifty dollars (\$350.00).



**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):**

- (5) If the Authority determines a Mass Market Customer-generator installing Wind Electric Generating equipment that requires installation of a dedicated transformer(s) or other equipment to protect the safety and the adequacy of electric service provided to other Customers, the Customer-generator shall pay to the Authority the lesser of the: (1) Actual costs, or (2) the charges identified under (a) or (b) below. (See Paragraph(s) C.15.c)(4) and C.15.d)(5) for other applicable safety requirements and charges):
  - (a) Seven hundred and fifty dollars (\$750.00) if the Customer-generator owns and/or operates wind electric generating equipment with a rated capacity equal to or less than 25 kW, or
  - (b) Five thousand dollars (\$5000.00) if the Customer-generator owns and/or operates wind electric generating equipment with a rated capacity greater than 25kW but not more than 500 kW.
- (6) If the Authority determines a Mass Market Customer-generator installing a Hybrid System that requires installation of a dedicated transformer(s) or other equipment to protect the safety and adequacy of the electric service provided to other Customers, the Customer-generator shall pay to the Authority either seven hundred and fifty dollars (\$750.00) if the Wind Electric Generating Equipment of the Hybrid System has a rated capacity equal or less than 25 kW or five thousand dollars (\$5,000.00) if the wind generator of the Hybrid System has a rated capacity greater than 25 kW but not more than 500 kW.
- e) Maintenance and Replacement Charges for Interconnection Equipment  
The Authority will maintain and replace interconnection equipment installed by the Authority for Solar and/or Wind electric generators, without direct cost to the Customer.
- f) Metering
  - (1) The Authority shall install an AMI meter capable of recording hourly interval metering data.
  - (2) A common, single metering system shall be used to measure at the point of interconnection with the Authority's system as a single quantity the net energy associated with Solar, Micro-Hydroelectric, and Wind Customer-generators including cases where they constitute a hybrid system.
  - (3) In the event that a Customer-generator chooses to install Wind, Micro-Hydroelectric or Solar electric generation in conjunction with Farm Waste, Micro-Combined-Heat-And-Power or Fuel Cell electric generation, the customer must choose between:
    - (a) separately measuring the output of the Farm Waste, Micro-Combined Heat and Power or Fuel Cell electric generation for sale to the Authority under Service Classification No. 11 so that the Solar, Micro-Hydroelectric or Wind electric generation can be billed under the applicable net metering provisions, or
    - (b) Measuring at the point of interconnection with the Authority's system as a single quantity, the net energy associated with the combined system as if the entire system were derived from Farm Waste, Micro-Combined Heat and Power or Fuel Cell electric generation.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):****g) Termination of the Interconnection Agreement**

The "Interconnection Agreement" between the Authority and Customer-generator may be terminated as follows:

- (1) The Customer-generator may terminate the Agreement at any time, by giving the Authority sixty (60) days' written notice;
- (2) If the Customer-generator fails to seek final acceptance by the Authority within twelve (12) months after completion of construction, then the Authority may terminate the Agreement on thirty (30) days prior written notice;
- (3) Either Party may, by giving the other Party at least sixty (60) days prior written notice, terminate this agreement in the event that the other Party is in default of any of the terms and conditions of the "Interconnection Agreement". The terminating Party shall specify in the notice the basis of the termination and shall provide a reasonable opportunity to correct the default;
- (4) The Authority may, by giving the Customer-generator at least sixty (60) days prior written notice, terminate this agreement for cause. The Customer-generator's non-compliance with the Authority's "Smart Grid Small Generator Interconnection Procedures" or non-compliance with the "Interconnection Agreement" shall constitute a good cause;
- (5) Unless the Interconnection Agreement is terminated pursuant to items (1) through (4) above, the net energy metering service will be provided for a term of ten years from the date of installation of service and thereafter will be automatically renewed for annual periods unless the Authority provides thirty days prior written notice of termination before the end of the term.

**h) Net Billing Procedures for Eligible Customer-generators**

- (1) Projects with Eligible Net Metering Technologies are subject to the billing procedures described in items (a) through (h) below when (1) Mass Market Projects have become Substantially Interconnected before January 1, 2018, or (2) Large Onsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" before May 1, 2018 and are in service before January 1, 2020 and whose rated capacity of the Electric Generating Equipment is equal to or less than 2,000 kilowatts:
  - (a) In the event that the amount of electricity supplied by the Authority during the billing period exceeds the amount of electricity provided to the Authority by the Customer-generator, the Authority shall charge the Customer-generator for the net (excess) electricity it supplied to the Customer-generator at the same rate per kilowatt-hour applicable: (a) to service provided to other Customers in the same service class who do not generate electricity on site, and (b) to the month the energy was generated.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):**

- (b) For eligible Mass Market Projects and Large Onsite Projects with Solar or Wind or Farm Waste or Micro-Hydroelectric electric generators whose amount of electricity provided to the Authority during the billing period exceeds the amount of electricity provided by the Authority to the Customer-generator, the Authority shall apply a credit to the next bill for service at the same rate per kilowatt-hour applicable to service provided to other Customers in the same service class who do not generate electricity on site.
- (c) For eligible Mass Market Customers and Large Onsite Customers with Micro-Combined-Heat-and-Power Electric Generating Equipment or for Fuel Cell Electric Generating Equipment whose amount of electricity provided to the Authority during the billing period exceeds the amount of electricity provided by the Authority to the Customer-generator, the Authority shall apply a credit to the next bill for service at the SC-11 Avoided Cost Rate per kilowatt-hour.
- (d) For Large Onsite Customers the monthly billing demand is determined by the maximum measured kilowatt demand actually supplied to the Customer-Generator during the billing period.
- (e) For Customer-generators served under a rate code with multiple rating periods, excess generation in one rating may not be used to reduce the billed consumption in a different rating period. Peak and off-peak periods will be treated separately when calculating and applying any credits.
- (f) At the end of the first year that service for eligible Mass Market Projects and Large On-site Projects with Solar, or Wind, or Farm Waste or Micro-Hydroelectric generators, and every anniversary date thereafter, the Authority shall promptly thereafter issue payment to the Customer-generator for any value of the remaining credit for the net (excess) electricity provided to the Authority by the Customer-generator during the previous twelve (12) month period. The payment issued to the Customer-generator shall be equal to the product of the remaining excess (net) energy generated by the Customer-generator times the corresponding avoided energy prices as per the Statement of Market Energy Prices.
- (g) For eligible Mass Market Projects and Large Onsite Projects that terminate service or become ineligible for net metering, the Authority shall promptly thereafter issue payment to the Customer-generator for any value of the remaining credit for the net (excess) electricity provided to the Authority by the Customer-generator. The payment issued to the Customer-generator shall be equal to the product of the remaining net (excess) energy generated by the Customer-generator times the corresponding avoided energy prices as per the Statement of Market Energy Prices.
- (h) The avoided cost rates to be used to issue payment to Mass Market Projects and Large Onsite Projects for energy sold to the Authority by the Customer-generator will be determined based on the simple average of the Zone K Day-Ahead Locational Based Marginal Prices (LBMP). Monthly and Time-of-Use energy payments will be shown each month on a separate Statement of Market Energy Prices.

**I. General Information (continued):****C. General Terms and Conditions (continued):  
Net Metering (continued):**

- (2) Projects with Eligible Net Metering Technologies are subject to the billing procedures described in items (a) through (g) below when (1) Mass Market Projects become Substantially Interconnected on or after January 1, 2018, (2) or Commercial Demand NEM Customers or Large Onsite Projects have submitted a complete application as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018:
- (a) Net Importing by Mass Market Customers and Commercial Demand NEM Customers: In the event that the amount of electricity supplied to a Mass Market Customer or Commercial Demand NEM Customer by the Authority during the billing period exceeds the amount of electricity such Customer provided to the Authority from an eligible Mass Market Project or Commercial Demand NEM Project, the Authority will charge that Customer for the net (excess) electricity supplied. Such net (excess) electricity will be billed at the same rate per kilowatt-hour and same rate per kilowatt applicable to (i) service provided to other Customers in the same service class who do not generate electricity on site, and (ii) the month the energy was generated.
- (b) Net Importing by Large Onsite Customers: In the event that the amount of electricity supplied to a Large Onsite Customer by the Authority during any hour exceeds the amount of electricity such customer provided to the Authority from an eligible Large Onsite Project, the Authority shall charge the Large Onsite Customer for the net (excess) energy supplied. Such net (excess) energy will be billed at the same rate per kilowatt-hour and same rate per kilowatt applicable to (i) service provided to other Customers in the same service class who do not generate electricity on site, and (ii) the month the energy was generated.
- (c) For Large Onsite Customers and Commercial Demand NEM Customers, the monthly billing demand is determined by the maximum measured kilowatt demand actually supplied to the Customer during the billing period.
- (d) Net Exporting by Mass Market Customers and Commercial Demand NEM Customers: In the event that the amount of electricity provided to the Authority by an eligible Mass Market Project or Commercial Demand NEM Project during the billing period exceeds the amount of electricity provided by the Authority to that Customer, the Authority will apply a credit to the Customer's next bill for service. The credit will be applied at the same rate per kilowatt-hour applicable to service provided to other Mass Market Customers and Commercial Demand NEM Customers in the same service class who do not generate electricity on site. For Mass Market Projects and Commercial Demand NEM Projects served under a rate code with multiple rate periods, peak and off-peak periods will be treated separately when calculating and applying any credits.
- (e) Net Exporting by Large Onsite Customers: For any hour in which the amount of electricity generated by an eligible Large Onsite Project exceeds the electricity consumed on the site, the Large Onsite Customer will be credited for electricity provided to the Authority as described in Section 1.C.18.C – Value Stack Crediting.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering (continued):**

- (f) At the conclusion of the billing period containing the twentieth (20) anniversary of the in-service date of an eligible Mass Market Project, eligible Commercial Demand NEM Project, or the twenty-fifth (25) anniversary of the in-service date of an eligible Large Onsite Project:
  - (i) The Authority will remove any remaining credits for net (excess) energy attributable to the project from the Customer's account.
  - (ii) The Authority will notify the Customer of the removal of credits and such notice will include a description of the subsequent compensation system to be applied.
  - (iii) Mass Market Projects, Commercial Demand NEM Projects, and Large Onsite Projects still in operation and injecting energy onto the Authority's electric system will be compensated under the tariff then in effect.
- (g) Notwithstanding any other provision of this Tariff and without waiving or limiting any of the Authority's other rights, the Authority reserves the right to alter the compensation structure for any Customer with an Eligible Net Metering Technology that is Substantially Interconnected on or after January 1, 2020, as the Authority expects to take further action consistent with Phase Two of the New York Public Service Commission's Value of Distributed Energy Resources Proceeding on or around that date.

**I. General Information (continued):**

**C. General Terms and Conditions (continued):  
Net Metering (continued):**

**[CANCELLED]**

**I. General Information (continued):**

**C. General Terms and Conditions (continued):  
Net Metering (continued):**

**[CANCELLED]**

**I. General Information (continued):****C. General Terms and Conditions (continued):****16. Remote Net Metering:****a) Customer Requirements and Eligibility**

- (1) Non-Residential Solar, Wind, Farm Waste, Micro-Hydroelectric and Fuel Cell Generators as described in Section 1.C.15.b are eligible to be host remote net metering accounts.
- (2) A Customer-generator who qualifies as stated above may designate all or a portion of their excess net metering credits generated by such equipment to any account, in any service classification, in the same name as the Customer-generator. The Authority reserves the right to obtain proof that all accounts are held by the qualifying Customer-generator.
- (3) The terms and conditions for net metering applicable to the Host Account are contained in Section I.C.15, except as modified below.

**b) Host Designation and Allocation of Satellite Accounts**

- (1) The Host account must designate their Satellite accounts and the percentage of their net metering credits designated to these Satellite accounts when submitting their initial remote net metering application. After the initial application, the Host account may designate additional Satellite accounts or delete existing Satellite accounts from the Customer's remote net metering arrangement to be effective on January 1 and July 1 of each year thereafter, with 30 days advance notice.
- (2) The Satellite account must meet the following requirements:
  - a) The Satellite account must be designated as premises owned or leased by the non-residential Host account and in the same name within the Authority's billing system as the Host account Customer-generator.
  - b) Both the Satellite account and the Host account must be within the Authority's service territory.
  - c) The Satellite account must be in the same load zone as the Host account as of the date of the initial application of the Host account to be eligible for remote net metering and must remain in the same load zone as the Host account to continue to be eligible to receive excess net metering credits.
  - d) The Satellite account can be a Customer-generator being net metered at that Satellite account, however, the Satellite account cannot also be a Remote Net Metering Host.
  - e) A Satellite account may have more than one Host account.



**I. General Information (continued):****C. General Terms and Conditions (continued):****Remote Net Metering (continued):**

- f) The aggregate rated capacity of net-metered generating equipment of the Remote Net Metering Host Account(s) designated to serve a Satellite plus the rated capacity of net-metered generating equipment on the Remote Net Metered Satellite account, if any, cannot exceed two thousand (2,000) kilowatts for existing Net Metering or Phase One NEM. The aggregate rated capacity of generating equipment of the Remote Net Meter Host Account(s) designated to serve a Remote Net Meter Satellite Account plus the rated capacity of net-metered generating equipment on the RNM Satellite Account, if any, shall not exceed five thousand (5,000) kilowatts for the Value Stack Tariff.
  - g) If a Remote Net Metered Satellite account is also a net-metered Customer-generator, charges and credits will first be applied pursuant to section I.C.15.h. Remote Net Metering credits will then be applied pursuant to section I.C.16.b.4 & 5.
- (3) In the event that the amount of electric energy supplied by the Authority to the Host Account during the billing period exceeds the amount of electric energy provided by the Host account to the Authority during the same billing period, the Authority shall charge the Host account the rates provided in the Service Classifications applicable to the Host account Customer-generator for only the net amount of energy provided to the Host account, plus the amount of demand actually recorded in that billing month and other charges as applicable. The appropriate Service Classification for the Host account will be determined on the basis of the larger of the load at the Host account or the generation at the Host account.
- (4) In the event that the amount of electric energy provided by the Host account to the Authority in any billing period exceeds the amount of electric energy supplied by the Authority to the Host account during the same billing period, the Host account shall be regarded as having received no electric energy (kWh) during that billing period.
- a) Demand and other applicable charges will still apply to the Host account and the Satellite accounts. Host Accounts and Satellite accounts will be subject to applicable actual demand charges consumed in the billing period. The Authority will not adjust the demand charge to reflect demand ratchets or monthly demand minimums that might be applied to a standard tariff for net metering purposes.
  - b) If the Host account has excess on-site generation, the excess generation shall be converted to a monetary credit and applied as a direct credit to the host account's outstanding electric charges.
  - c) In the event that the excess on-site generation of the Host account as described in b) above exceeds all components of the host account's outstanding balance owed to the Authority, the remaining monetary credit will be allocated to the eligible designated Satellite accounts in the following manner:
    - (1) Any remaining monetary credit will be applied to the eligible designated Satellite accounts at the percentage designated by the Customer-generator and in the order that each subsequent Satellite account bills in the Authority's billing system. This process will continue through each day in the current and subsequent billing cycle until each Satellite account has been billed. The monetary credit applied to each Satellite account shall not exceed the Satellite account's charges for that billing period. Any allocated credits that exceed the amount that can be used by a Satellite account in that billing cycle will be returned to the Host account. If a Remote Net Metering Satellite account has more than one Remote Net Metering Host, it will receive credits from the Remote Net Metering Host Accounts in the order in which the Host Accounts are billed.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Remote Net Metering (continued):**

- (2) If a monetary credit remains with the Host account after all the designated Satellite accounts have been billed, the remaining monetary credit will be applied as a direct monetary credit to the Host account. The monetary credit remaining will be redistributed in any subsequent billing cycle to the designated Satellite accounts prior to the annual reconciliation.
- (5) Mass Market Projects and Large Offsite Projects with Eligible Net Metering Technologies that have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" before May 1, 2018 and are in service by January 1, 2020 will be credited as described in items (a) through (b) below.
  - (a) The Authority will calculate a monetary credit at the Host account's applicable tariff per kWh rate.
  - (b) Annual Reconciliation of Remaining Credits.

An annual reconciliation will be performed in the first billing period that ends on or after the annual Anniversary Date unless the Customer has residential Solar, Wind, Farm Wind, or Farm Waste electric generating equipment and makes a one-time election to have the Annual Reconciliation performed in an alternate month.

Any monetary credits remaining with the Host account will be converted back to kWhs and reconciled in accordance with the annual reconciliation procedures for net metering of an individual account.
- (6) Mass Market Projects and Large Offsite Projects with Eligible Net Metering Technologies that have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018, will be credited as described in items (a) through (c) below.
  - (a) The Authority will calculate a monetary credit for energy as described in Section 1.C.18.c – Value Stack Calculation.
  - (b) At the conclusion of the billing period containing the twentieth (20) anniversary of the in service date for Mass Market Projects or the twenty-fifth (25) anniversary of the in service date for Large Offsite Projects:
    - (i) The Authority will remove any remaining credit for the net (excess) energy from the Host account;
    - (ii) The Authority will notify the Customer of the removal of credits and such notice will include a description of the subsequent compensation system to be applied.
    - (iii) Host projects still in operation and injecting energy onto the Authority's electric system, will be compensated under the tariff then in effect.
  - (c) Notwithstanding any other provision of this Tariff and without waiving or limiting any of the Authority's other rights, the Authority reserves the right to alter the compensation structure for any Customer with an Eligible Net Metering Technology that are Substantially Interconnected on or after January 1, 2020, as the Authority expects to take further action consistent with Phase Two of the New York Public Service Commission's Value of Distributed Energy Resources Proceeding on or around that date.

**I. General Information (continued):****C. General Terms and Conditions (continued):****17. Net Metering of Community Distributed Generation**

Net metering of Community Distributed Generation ("CDG") allows residential and commercial customers to collectively share in the benefits of a remotely-sited distributed generation resource as if such resource was interconnected directly to the Customer's account. The general eligibility requirements for net metering and all other terms and conditions of this Tariff apply, as modified by or in addition to the specific requirements contained in this section.

Net metering of Community Distributed Generation is available throughout the Authority's service territory. Net metering of Community Distributed Generation is available to eligible customers, on a first come, first served basis.

The Authority shall not be responsible for any contractual arrangements or other agreements between the CDG Host and CDG Satellite, including contractual terms, pricing, dispute resolution, and contract termination

**a) Definitions**

CDG Host: a Non-Residential Customer-Generator that owns or operates electric generating equipment eligible for net metering under this Tariff. Net energy produced by the generating equipment of a CDG Host is applied to the accounts of CDG Satellites with which it has a contractual arrangement governing the disposition of net metering credits.

CDG Satellite: A residential or commercial Customer who is participating in a CDG Project. Each CDG Satellite Customer shall own or contract for a proportion of the Excess Generation accumulated at the meter of the CDG Host.

Excess Generation: the electricity (kWh) supplied by the CDG Host to the Authority during the billing period that exceeds the electricity (kWh) supplied by the Authority to CDG Host. For purposes of net metering of Community Distributed Generation, the excess generation will be recorded by an hourly interval meter so that time-differentiated excess generation can be calculated for distribution to CDG Satellite accounts as required.

**b) Initial and Subsequent Applications by CDG Hosts**

The CDG Host must be a Non-Residential Customer-Generator that meets all the qualifications of this Tariff and must comply with any Operating Procedures for Community Distributed Generation approved by the Board of Trustees, including and in addition to the requirements listed below. The CDG Host will be assigned to an applicable Service Classification based on the greater of the load or the generation at the CDG Host site.

The terms and conditions for net metering applicable to the CDG Host Account are contained in Section I.C.15, except as modified below.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

- (1) Initial Allocation Requests: At least 60 days before commencing net metered service under CDG, the CDG Host shall designate in its initial application for net metered service the CDG Host account and CDG Satellite accounts that shall receive net metered service under CDG as well as the percentage of net energy output to be allocated to each CDG Satellite account and the percentage to be retained by the CDG Host. The CDG Host must designate no fewer than ten CDG Satellite accounts that meet the specifications provided below, and maintain that minimum number to remain eligible for net metering of CDG Satellite accounts, except when the project is located on the site of a contiguous property serving multiple residential or non-residential customers.
- (2) Subsequent Allocation Requests: The CDG Host may modify its CDG Satellite accounts and/or the percentage allocated to itself or one or more of its CDG Satellite accounts once per CDG Host billing cycle by giving notice to the Authority no less than 30 days before the CDG Host account's cycle billing date to which the modifications apply.
- (3) A CDG Host that provides a CDG Satellite's name and account number to the Authority (and such other information as the Authority may require to verify the customer's account based on the information provided), is certifying that it has written authorization from the customer to request and receive that customer's usage information and, upon enrolling a CDG Satellite account, that it has entered into a written contract with such customer for the specified percentage.
- (4) Allocations of Excess Generation to CDG Satellite Customers must be specified in a percentage with no more than three decimal places of accuracy (0.001%).
- (5) If less than 100.000% of the CDG Host Excess Generation is allocated by the CDG Host, the balance shall be retained on the CDG Host account, so that the full output of the CDG Host generation is allocated.
- (6) Submittals with allocations that total more than 100.000% will be rejected, and the CDG Host must submit a new allocation percentage 60 days before net metered service commences.
- (7) No more than 40% of the Excess Generation of the CDG Host may serve CDG Satellites of 25 kW or greater (for those members collectively); provided, however, that the CDG Host may count each dwelling unit located within a multi-unit building and served indirectly as though it were a separate participant for determining whether the ten CDG Satellite account minimum and 40% output limits are reached.
- (8) A CDG Host account shall not be a Remote Net Metered Host or Satellite account. If the CDG Host account was previously established as a net metered Customer-Generator or Remote Net Metered Host, it must forfeit any remaining kWh credits at the time it becomes a CDG Host.
- (9) A CDG Host account cannot voluntarily become a net metered Customer-generator or Remote Net Metered Host unless all Satellite accounts agree in writing to the transfer and agree to give up their rights to future output of the Host account. If the CDG Host account transfers to a net metered Customer-generator or Remote Net Metered Host, or becomes ineligible to participate as a CDG Host, it must forfeit any remaining kWh credits at the time it switches.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):****c) CDG Satellite Account Requirements**

- (1) A CDG Satellite account shall have only one CDG Host account.
- (2) All associated CDG Satellite accounts must be located within the Authority's service territory and within the same NYISO zone as the CDG Host account.
- (3) The CDG Satellite account shall not be a net metered Customer-Generator or a Remote Net Metered Host or Satellite account or take service under Service Classification 12.
- (4) Each CDG Satellite account must take a percentage of the output of the CDG Host's Excess Generation. The percentage must amount to at least 1,000 kWh annually and may not exceed the CDG Satellite account's historic average annual kWh usage over the past three years (or forecast usage if sufficient historic data is not available).

**d) Process and Customer Protections**

- (1) The Authority reserves the right to establish CDG Operating Procedure that detail the format and requirements for CDG application submissions and other forms and procedures as may be required to administer the program in accordance with this Tariff.
- (2) Additionally, the Authority's CDG Operating Procedure will set forth consumer protections required of CDG Hosts, which may be in addition to the terms of this Tariff.
- (3) A CDG Host may not request termination or suspension of the Authority's electric service to a CDG Satellite account.
- (4) The Authority may terminate net metering under this program and return all Customers to their otherwise applicable billing procedures if it determines that a CDG Host is no longer eligible, if the CDG Host withdraws from CDG participation, or if the Authority terminates service to the CDG Host account.

**e) Account Closure**

- (1) The Authority shall require an actual meter reading to close a CDG Host account or CDG Satellite account taking service pursuant to CDG.
- (2) The Authority shall close an account on the earlier of: (a) the first cycle date on which a reading is taken following the requested turn off date, or (b) the date of a special reading, which a Customer may request at the charge specified in Charges for Special Meter Reading as referenced in IX.B.(4).
- (3) At the time a CDG Host account's final bill is rendered, all remaining Excess Generation will be allocated among the CDG Satellite accounts in the proportions most recently specified by the CDG Host, and any remaining credit will be purchased by the Authority at its avoided cost as if the account were individually net metered.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

- (4) A CDG Satellite shall no longer receive credits after the final bill is rendered on its account. Any remaining credit at the CDG Satellite account at the time its final bill is rendered will be purchased by the Authority at avoided energy prices as per the Statement of Market Energy Prices.
- f) Projects with Eligible Net Metering Technologies will receive volumetric (kWh) credits calculated and applied as described in items (1) through (5) below when (1) Mass Market Projects that are Substantially Interconnected before January 1, 2018 or (2) Large Offsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" before May 1, 2018 and are interconnected by January 1, 2020.
  - (1) The CDG Host account will be billed in accordance with the procedures used to calculate a bill for an individually net metered Customer, except that Excess Generation remaining after the bill has been calculated will be allocated to each Satellite account in accordance with the CDG Host's designated allocation requests. Any Excess Generation remaining after the allocation will remain with the CDG Host account as an energy credit to be allocated to the Satellite accounts in future billing periods.
  - (2) As each CDG Satellite account is billed, Excess Generation allocated to the Satellite account will be applied to the CDG Satellite account as if the Customer were individually net metered. For CDG Satellite accounts served under time-of-use rates, the Excess Generation will be further allocated to the rating periods applicable to the CDG Satellite account in proportion to the times, days and seasons when the Excess Generation was delivered to the Authority.
  - (3) If any allocated Excess Generation remains after application to the Satellite account, the remaining allocated Excess Generation shall be carried forward on the CDG Satellite's account as a volumetric (kWh) credit for future bill periods.
  - (4) Any volumetric (kWh) credit remaining at the end of the annual period for each CDG Satellite account will be purchased by the Authority as if the account were individually net metered.
  - (5) Annual Allocation Requests

Once a year, following the annual anniversary of the CDG Host, after the CDG Host and all CDG Satellite accounts have billed and credits allocated in accordance with this Tariff, the Authority shall supply the CDG Host a calculation of any excess credits returned to the CDG Host and/or any unallocated excess credits remaining at the CDG Host. Within 30 days of receipt of such information, the CDG Host must furnish to the Authority an annual allocation request for distributing these excess credits to one or more of the CDG Satellite Accounts. No portion of the excess credits may be allocated to the CDG Host Account.

No distribution shall be made if an annual allocation request is not received by the required date, and any undistributed credits on the CDG Host shall be forfeited.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

- g) Projects with Eligible Net Metering Technologies will receive credits calculated and applied as described in items (1) through (9) below when (1) Mass Market Projects have become Substantially Interconnected on or after January 1, 2018 (2) Large Offsite Projects have submitted complete applications as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after May 1, 2018 or (3) Existing generators sized greater than two thousand (2,000) kilowatts to five thousand (5,000) kilowatts that meet the eligibility criteria and are not currently compensated under the Value Stack shall be permitted to opt-in to participation in the Value Stack compensation.
- (1) The CDG Host account will be billed in accordance with the procedures used to calculate a bill for an individually net metered Customer, except that Excess Generation remaining after the bill has been calculated will be monetized based on a calculation described in Section 1.C.18.C - Value Stack Crediting then the Excess Generation will be allocated to Mass Market Customer Satellite accounts and the monetized Value Stack Crediting will be allocated to Large Offsite Customer Satellite accounts in accordance with the CDG Host's designated allocation requests. Any monetized value remaining after the allocation will remain with the CDG Host account as a bill credit to be allocated to the Satellite accounts in future billing periods.
- (2) For Mass Market Customer Satellite accounts, as each is billed, Excess Generation allocated to the Satellite account will be applied to the Mass Market Satellite account as if the Customer were individually net metered. For Mass Market Satellite accounts served under time-of-use rates, the Excess Generation will be further allocated to the rating periods applicable to the Mass Market Satellite account in proportion to the times, days and seasons when the Excess Generation was delivered to the Authority.
- (3) For Mass Market Customer Satellite accounts, if any allocated Excess Generation remains after application to the Satellite account, the remaining allocated Excess Generation shall be carried forward on the Mass Market Satellite's account as a volumetric (kWh) credit for future bill periods.
- (4) Value Stack Crediting will apply to Mass Market Customer Satellite accounts that participate in a CDG project that has submitted a complete application as per Step 3 of the Authority's "Smart Grid Small Generator Interconnection Procedures" on or after January 1, 2020. For a Mass Market Customer Satellite account receiving Value Stack crediting, if any bill credit remains on the Satellite account, the remaining bill credit shall be carried forward for future bill periods.
- (5) For a Large Offsite Customer Satellite account, as each Large Offsite Satellite account is billed, the monetized Value Stack Crediting will be allocated to that account.
- (6) For a Large Offsite Customer Satellite account, if any bill credit remains on the Satellite account, the remaining bill credit shall be carried forward on the Large Offsite Satellite's account for future bill periods.
- (7) Annual Allocation Requests  
Once a year, following the annual anniversary of the CDG Host, after the CDG Host and all CDG Satellite accounts have been billed and credits allocated in accordance with this Tariff, the Authority shall supply the CDG Host a calculation of any excess credits returned to the CDG Host and/or any unallocated excess credits remaining at the CDG Host. By the following anniversary date, the CDG Host must provide to the Authority an annual allocation request for distributing these excess credits to one or more of the CDG Satellite Accounts. No distribution shall be made if an allocation request is not received by the required date, and undistributed credits on the CDG Host shall be subject to forfeit.

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**I. General Information (continued):****D. General Terms and Conditions (continued):****Net Metering of Community Distributed Generation (continued):**

- (8) The day following the twenty-fifth (25) anniversary of the in service date, projects still in operation and injecting energy onto the Authority's electric system, will be compensated under the tariff then in effect.
- (9) Notwithstanding any other provision of this Tariff and without waiving or limiting any of the Authority's other rights, the Authority reserves the right to alter the compensation structure for any Customer with an Eligible Net Metering Technology that are Substantially Interconnected on or after January 1, 2020, as the Authority expects to take further action consistent with Phase Two of the New York Public Service Commission's Value of Distributed Energy Resources Proceeding on or around that date.



**I. General Information (continued):****C. General Terms and Conditions (continued):****18. Value of Distributed Energy Resources (VDER)****a) Definitions:**

- (1) Capacity Alternative 2 Contracted Hours: The hours of 2:00pm to 7:00pm within a weekday, Monday through Friday, from June 24<sup>th</sup> to August 31<sup>st</sup> excluding Independence Day for a total of 240 or 245 hours, depending on the calendar for that year.
- (2) Customer-generator's Annual Unforced Capacity (UCAP) Value: - The value determined from the previous NYISO Capability Year by measuring net export onto the Authority's system by a Customer-generator at the time of the peak recorded for the Long Island Locality, Zone K. Customer-generator's UCAP Value is defined as a kilowatt value (kW).
- (3) Monthly Spot Market Capacity Price: - The UCAP price of capacity in the Long Island Locality, Zone K, as determined by the NYISO Spot Market Auction measured in (\$/kw-mo).
- (4) Planned LSRV Event: The Authority's request, on not less than 21 hours' advance notice, for Load Relief during the LSRV Contracted Hours. Planned LSRV Events will be called when the Authority's day-ahead forecasted load level is at least 94 percent of the forecasted summer system-wide peak. Day-ahead and summer peak forecast information for the system will be posted to the Manager's website.
- (5) DRV/LSRV Contracted Hours: The five-hour period 2pm to 7pm within a weekday, Monday through Friday, during the June 1<sup>st</sup>, through August 31<sup>st</sup> excluding Independence Day for a total of 320 or 325 hours, depending on the calendar for that year.
- (6) Previous Year's Annual Spot Market Capacity Price: - Sum of twelve (12) Monthly Spot Market Capacity Prices from previous NYISO Capability Year (May-April) (\$ / kw-yr.)

**b) Value Stack Terms:**

- (1) Eligible Customer-generators will be compensated based on monetary crediting for net hourly injections into the grid.
- (2) Projects eligible for the Value Stack will receive compensation for a term of twenty-five (25) years from the date of interconnection and will have the ability to carry-over excess credits to subsequent billing periods and annual periods as follows:
  - (a) Excluding credits held by CDG project hosts, unused credits may be carried over to the next monthly billing period, including to the next annual period.
  - (b) At the end of a project's compensation term, twenty-five (25) years from the date of interconnection, any unused credits will be forfeited.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):**

- (c) CDG project hosts will be given a one-year grace period beyond the end of the annual period to distribute any credits they retain at the end of the annual period.
- (d) At the end of the grace period the CDG project host will be required to forfeit a number of credits equal to the smallest number of credits that were in its account at any point during the grace period, since that represents the number of credits that were held over from the previous period.

**c) Value Stack Calculation:**

Compensation under the Value Stack will apply to Customers identified as eligible in the Net Metering, Remote Net Metering, and Community Distributed Generation provisions of this Tariff (see *supra* Sections I.C.15 – I.C.17). The net energy injections of these resources will be calculated based on the values associated with the following components, which will be shown on a separate Statement of Value Stack Credits:

**(1) Energy Component**

For any hour in a monthly billing period where there is a net export onto the Authority's system by a Customer-generator, the Customer-generator will receive a credit for energy by multiplying the export in that hour times the Energy Component (\$/kWh). The Energy Component will be equal to the NYISO day-ahead Locational Based Marginal Price (LBMP) based on Zone K, inclusive of transmission losses identified by the NYISO and delivery losses as defined by Statement of Energy and Peak Demand Losses. The Energy Component compensation will be summed for all hours of the Customer-generator's billing month and added to Value Stack Calculation Bill Credit posted to the Customer-generator's account.

**(2) Capacity Component**

Non-dispatchable resources may select Alternative 1, Alternative 2, or Alternative 3. Alternative 1 will be the default VDER Value Stack Capacity Component compensation methodology for non-dispatchable resources if no selection is made by the Customer-Generator.

Dispatchable technologies will be assigned to Alternative 3.

**(a) Alternative 1**

Under Alternative 1, compensation for capacity will be calculated by multiplying the sum of the project's net injections (kWh) for each hour by the Alternative 1 VDER Value Stack Capacity Component (\$/kWh) in effect at the time of billing. The Alternative 1 VDER Value Stack Capacity Component will be calculated by multiplying the monthly NYISO \$/kW-month auction price by the proxy capacity factor, divided by the monthly production, all as identified in the Statement of Value Stack Credit.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):****(b) Alternative 2**

Under Alternative 2, compensation for capacity will be calculated by multiplying the sum of the project's net injections (kWh) for each of the Capacity Alternative 2 Contracted Hours hours by the Alternative 2 VDER Value Stack Capacity Component (\$/kWh) for that month. The Alternative 2 VDER Value Stack Capacity rate will be calculated by dividing the Previous Year's Annual Spot Market Capacity Price by the Capacity Alternative 2 Contracted Hours (240 or 245 hours).. A Customer-Generator must elect Alternative 2 by May 1 to be eligible to receive the rate beginning June 1 of that year. A Customer-Generator electing Alternative 2 after May 1 will be compensated under Alternative 1 until April 30 of the following calendar year.

The Alternative 2 rate will be revised by June 1 of each year in the Statement of Value Stack Credits.

**(c) Alternative 3**

Under Alternative 3, compensation for capacity will be calculated based on a Customer-generator's Capacity Value and Capacity Price, as follows.

**(i) Customer-generator's Capacity Value:**

Eligible Customer-generators will receive a Capacity Value calculated as the Customer-generator's Annual UCAP Value (kW). The Capacity Value will remain in effect as long as the eligible Customer-generator resource operates or until the last month of the NYISO Capability Year (April), whichever comes first.

**(ii) Customer-generator's Capacity Price:**

Eligible Customer-generators will receive a Capacity Price equal to the current Monthly Spot Market Capacity Price grossed up to include peak losses as defined by the Statement of Energy and Peak Demand Losses and additional reserve requirements as required by the NYISO. The Capacity Price is shown on the Statement of Value Stack Credits.

**(iii) Capacity Component Payments:**

An Eligible Customer-generator's Capacity Component Credit in each month will be calculated as the Customer-generator's Capacity Value multiplied by the current Monthly Spot Market Capacity Price. The Capacity Component Credit will be added to Value Stack Calculation Bill Credit posted to the Customer-generator's account each month.

**I. General Information (continued):**

**C. General Terms and Conditions (continued):**

**Value of Distributed Energy Resources (VDER) (continued):**

**[CANCELLED]**

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):****(d) Alternative Method Change Requests**

A request for a change in VDER Value Stack Capacity Component compensation submitted by a Customer-Generator with intermittent generation is subject to the following limitations:

- (i) A project compensated under Alternative 1 may switch to compensation under Alternative 2 or to Alternative 3;
- (ii) A project compensated under Alternative 2 may switch to Alternative 3;
- (iii) A project compensated under Alternative 2 cannot switch to Alternative 1; and
- (iv) A project compensated under Alternative 3 cannot switch to Alternative 1 or Alternative 2.

**(3) Environmental Component**

- (a) Customers with generation that is eligible to receive Renewable Energy Standard Tier 1 Renewable Energy Credits ("RECs") must elect, by the date of interconnection, to either retain all RECs generated, or to sell these RECs to The Authority. For customers who elect to transfer their RECs to The Authority and for CDG Satellite Accounts who's CDG Host Account elects to transfer their RECs to The Authority, will receive the Environmental Component.
- (b) The environmental component will be determined as of the in service date of the Customer-generator and will be the greater of either:
  - (i) NYSERDA posted Tier 1 REC market price or
  - (ii) Social Cost of Carbon net of the Regional Greenhouse Gas Initiative ("RGGI")
- (c) The value shall be fixed for the Customer-generator's first twenty-five (25) years of compensation under the Value Stack. The Environmental Component Credit per (\$/kWh) will be summed for all hours of the Customer-generator's billing month and added to Value Stack Calculation Bill Credit posted to the Customer-generator's account.
- (d) For all other customers that choose to retain their RECs, the Environmental Component Rate is \$0/kWh.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):****(4) Value of Distribution**

Demand Reduction Value (DRV) and Locational System Relief Value (LSRV) will be based on the utility Marginal Cost of Service (MCOS) studies per Service Classification, and will be determined as follows:

- (a) For eligible Customer-generators, the DRV compensation will be calculated by multiplying the sum of the project's net injections (kWh) for each of the DRV/LSRV Contracted Hours by the project's DRV Value Stack rate (\$/kWh). The project's DRV rate will be set at the current DRV value as of the in-service date for ten (10) years. After the first ten (10) years eligible Customer-generators will be compensated with the then-applicable DRV rate and hours. The rate will be updated in a Statement of Value Stack Credits.
- (i) Customer-generators may choose to waive the DRV compensation of the Value Stack and opt-in to the Commercial System Relief Program (CSRP). This voluntary election is a one-time, irreversible decision that may be made at any point during the project's Value Stack compensation period. The Customer-generator must notify the Authority of its intention to opt in to the CSRP.
- (b) Customer-generators located in designated project locations will receive a LSRV payment based on Load Relief when a LSRV Planned Event is called. PSEG Long Island will notify the Customer-generators of an Event twenty-one (21) hours in advance and the window may be between one (1) to four (4) hours long.
  - (i) Customer-generators will receive payments based on the lowest hourly net kW injection during each call.
  - (ii) The LSRV (\$/kW-year) is currently set at 50% of the DRV value identified in Statement of Value Stack Credits for all LSRV areas.
  - (iii) There must be a minimum of ten (10) calls each year. The \$/kW-year will be divided by ten (10) to determine the value of each call window. If there are less than ten (10) calls, at the end of the period identified in the DRV/LSRV Contracted Hours, the Customer-generator will be compensated for the calls that did not occur at the lowest hourly net kW injection for a total of ten (10) calls in their October Value Stack Bill Credit.
  - (iv) The LSRV payment shall be fixed for a ten (10) year term of compensation for the Customer-generator, after which time the LSRV payment will be reset based on the then applicable LSRV.
  - (v) The LSRV will only be available to projects located in LSRV areas. Eligible LSRV areas that have been identified by the Authority may be found on Statement of LSRV Areas.
- (c) For each Customer-generator's billing period, the sum of the above listed components from 1.C.18 (4) (a) to (b) will be added to Value Stack Calculation Bill Credit posted to the Customer-generator's account.

**(5) CDG Community Credit**

- (a) CDG Large Offsite Projects will receive a CDG Community Credit (\$/kWh) as part of their Value Stack Calculation Bill Credit for 25 years from their in-service date.

**I. General Information (continued):****D. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued):**

- (b) Mass Market participants in CDG projects receiving the Value Stack Calculation Bill Credit will receive an additional CDG Community Credit (\$/kWh) for 25 years from the project's in-service date.
- (c) The value of the CDG Community Credit is identified in Statement of Value Stack Credits.

**d) Value Stack Billing**

At the conclusion of a billing period, a Customer will be billed for the total consumption of energy measured at the rates specified in the customer's otherwise applicable Service Classification, including applicable demand charges. If there is a Value Stack Calculation Bill Credit for the month, such credit will be applied as a direct monetary credit to the Customer's current utility bill for any outstanding energy, customer, demand, or other charges. If the Customer's current month's Value Stack Calculation Bill Credit plus any prior period Value Stack Calculation Bill Credit exceeds the current bill, the remaining monetary credit will be handled as follows:

- (1) Large On-Site Customers, See Section C.15.h).(2)
- (2) For Remote Net Metered accounts, See Section C.16.b).(5)
- (3) For CDG accounts, See Section C.17.g)

**e) Storage**

- (1) Customers with stand-alone storage that is sized not to exceed 115% of the customer's peak hourly consumption load may be on any rate for which they qualify and will be compensated at the Value Stack minus the Environmental credit and the CDG Community Credit for all excess generation.
- (2) Customers with stand-alone storage that is sized at 115% or above of the customer's peak hourly consumption must be on a qualifying Time Of Use rate and will be compensated at the Value Stack minus the Environmental credit and the CDG Community Credit for all excess generation.
- (3) For customers who pair energy storage systems with eligible electric generating equipment ("Hybrid Facility"), the Authority will calculate the Environmental Component Credit and the CDG Community Credit, pursuant to the rules set forth below. All other Value Stack components, including Energy Component Credit, Capacity Component Credit, DRV Component Credit, and LSRV Component Credit, will be calculated as specified in section I.C.18.c).(4) above. Consistent with section I.C.18.c).(3), the Environmental Component Credit will only be provided where the electric generating equipment is eligible to receive Tier 1 RECs, the Community Credit will only be provided for eligible customers and consistent with the Community Cred rate applicable to the customer and the Capacity Component will be calculated based on Alternative 1, Alternative 2 or Alternative 3 based on customer election.

**I. General Information (continued):****C. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued)****Storage (continued):**

- (4) Customers operating Hybrid Facilities have the opportunity to elect one of the four compensation methodologies described below in (4).(a), (4).(b), (4).(c), or (4).(d). Customers will make this election at the same time they select a capacity compensation methodology in accordance with section I.(C).18.c).(2). The default option, if no other election is made by the customer, is compensation methodology (4).(d). below.

Customers operating Hybrid Facilities have a one-time option to change their initial election of (4).(a) or (4).(b) to election of (4).(c). This one-time election may be made at any time following the initial election but will not become effective until such time that any required metering or telecommunications is installed.

- (a) Storage Exclusively Charged from Eligible Generator – For customers operating Hybrid Facilities who are able to demonstrate that the energy storage system charges exclusively from the qualified electric generating equipment, Environmental Component Credit and the CDG Community Credit will be based on net hourly injections to the Authority's electric system as measured at the Authority's meter located at the point of common coupling ("PCC").
- (b) Storage Controls Configuration – For customers operating Hybrid Facilities who install appropriate controls to ensure that net hourly injections are only made with energy produced from eligible technologies, the Value Stack Environmental Component Credit and the CDG Community Credit will be based on net hourly injections to the Authority's system and calculated as described in section I.C.18.c).(2).



**II. General Information (continued):****D. General Terms and Conditions (continued):****Value of Distributed Energy Resources (VDER) (continued)****Storage (continued):**

- (c) Storage Import Netting Configuration - For customers operating Hybrid Facilities with a separate Authority-approved revenue grade interval meter and appropriate telemetry on the AC side of the inverter of the Hybrid Facility and whose storage configuration does not meet the requirements of (4).(a) or (4).(b) above, the Value Stack Environmental Component Credit and the CDG Community Credit is determined by reducing the net hourly injections, as measured at the Authority's meter located at the Customer's PCC with the Authority's system, by the monthly consumption of energy recorded on the Authority's separate Hybrid Facility meter.
- (d) Storage Default Configuration - For all other Customers with energy storage paired with electric generating equipment, the Value Stack Environmental Component Credit and the CDG Community Credit is based on netting of all metered consumption and injections at the PCC over the applicable billing period.
- (e) Reference the (a) – (d) above, the Customer is responsible for any costs associated with additional metering requirements and telemetry. Customers shall be responsible for any work required to accommodate the appropriate controls and/or multiple meter configuration. This controls demonstration may require separate Authority revenue grade interval meter(s) and appropriate telemetry on the AC side of the applicable inverter(s) and explicit Authority acceptance.

## A. Commercial System Relief Program

### 1. Purpose and Availability

The Commercial System Relief Program is being offered by the Authority to enable participating eligible customers to be compensated for reducing their load under certain conditions when called upon by the Authority to do so.

The program is available to any Customer served at transmission, primary or secondary voltage and taking service under one of the Service Classifications shown below; and to any Aggregator that meets the requirements of this Rider.

Service Classification No. 1 (Rate Codes 180, 380, 580, 880; excluding 480, 481)

Service Classification No. 1-VMRP(L) (Rate Codes 181, 182, 184)

Service Classification No. 1-VMRP(S) (Rate Codes 188)

Service Classification No. 2 (Rate Code 280)

Service Classification No. 2-VMRP (Rate Code 288)

Service Classification No. 2-L (Rate Codes 281, 291, 283)

Service Classification No. 2L-VMRP (Rate Codes 282, M282)

Service Classification No. 2-MRP (Rate Codes 284, 285, M284, M285)

Service Classification Nos. 11, 12, and 13 (Rate Codes 289, 680, 681, 278)

Service Classification No. 16-AMI (Rate Code M188, M288)

Customers who take service pursuant to Direct Load Control Program are not eligible to participate in this program.

Customer-generators subject to Value Stack compensation may choose to waive the DRV compensation of the Value Stack and opt-in to participating in the Commercial System Relief Program (CSRP). Opting into the CSRP program is a one-time irreversible decision which may be made at any point during the project's Value Stack compensation period.

The Metropolitan Transportation Authority for Traction Power Service to the Long Island Rail Road and Brookhaven National Laboratories pursuant to a Sale for Resale agreement between the Authority and the New York Power Authority (both as referenced on Leaf 271) are not eligible to participate.

### 2. Definitions:

Aggregator: A party other than the Authority that represents and aggregates the load of Customers who collectively have a Load Relief potential of 50 kW or greater in an Authority Designated Area and is responsible for the actions of the Customers it represents, including performance and, as applicable, repayments to the Authority. A Direct Participant may combine multiple customer locations to meet the Load Relief potential requirements of an aggregator.

Authority Designated Area: An electrically defined area determined by the Authority to be approaching system capacity limits during peak periods. A current list of the Authority Designated Areas will be listed on the Manager's website and payments by area are listed on the Statement of Commercial System Relief Program Payments.

Capability Period: The period during which the Authority can request Load Relief. The Capability Period will be from May 1 through September 30.

**Long Island Power  
Authority**

**Statement of Value Stack Credits (VSC)**

Applicable to those Rate Codes and Customers

Subject to the Phase One Value Stack as set forth in the Tariff for Electric Service

Applicable to all metered accounts with Customer-generators subject to the Value Stack with rate codes within Service Classification Nos. 2-L, 2L-VMRP, 2-MRP or 12.

<b>Energy Component</b>		
Average Monthly Energy Component (based on published day ahead NYISO hourly zonal LBMP energy prices) [averaged by zone]. <a href="http://www.nyiso.com/public/markets_operations/market_data/pricing_data/index.jsp">http://www.nyiso.com/public/markets_operations/market_data/pricing_data/index.jsp</a>		
<b>Capacity Component</b>		
Alternative 1 August 2019 Rate		\$0.018/ kWh
Alternative 1 Proxy Capacity Factor		34.3%
Alternative 1 Solar Production (kWh/kW) (see table below)		1,260 hours
Alternative 2 Rate		\$ .2074/ kWh
Alternative 3 –August - 2019 Monthly Market Price		\$0. / kW Monthly
<b>Environmental Component</b>		\$0.02741 / kWh
<b>Demand Reduction Value (DRV)</b>	For injection during DRV/LSRV contracted hours	\$ .338- / kWh
<b>Demand Reduction Value (LSRV)</b>	For the lowest hourly net kW injection during LSRV events	\$5.49/ kWh per event
<b>Community Credit</b>		\$0.0120 / kWh

Alternative 1 Table for Monthly Solar Production per NY State Public Service Commission Order Regarding Value Stack Compensation in Case 15-E-0751 issued April 18, 2019:

Monthly Solar Production	
Month	(kWh/kW)
1	56
2	71
3	113
4	123
5	143
6	148
7	147
8	141
9	112
10	90
11	66
12	51
<b>Total</b>	<b>1260</b>

Note: 1) SC-12 customer will pay the rate of a similar size customer on SC-2L, 2L-VMRP or 2-MRP.



**Department of  
Public Service**

125 East Bethpage Road, Plainview, NY 11803  
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**John B. Rhodes**  
Chair and  
Chief Executive Officer

**Thomas Congdon**  
Deputy Chair and  
Executive Deputy

**John J. Sipos**  
Acting General Counsel

**Kathleen H. Burgess**  
Secretary

July 23, 2019

Via Email and U.S. Mail

Honorable Ralph V. Suozzi, Chairman  
Board of Trustees  
Long Island Power Authority  
333 Earle Ovington Blvd.  
Uniondale, New York 11553  
[REDACTED]

Re: Matter No. 19-01145 - Recommendations Regarding Long Island Power Authority's  
Proposed Modifications to its Tariff for Electric Service.

Dear Chairman Suozzi:

Enclosed please find the recommendations of the New York State Department of Public Service (DPS or the Department) regarding the Long Island Power Authority's (LIPA or the Authority) proposed modifications to its Tariff for Electric Service (tariff), effective August 1, 2019. The LIPA Reform Act (LRA) authorizes the Department to make recommendations regarding the operations and terms and conditions of service provided by the Authority and its Service Provider.<sup>1</sup> The Department recommends adoption of the Authority's proposals as discussed below.

The Authority submitted a proposal to modify compensation under its Value of Distributed Resources ("VDER") tariff to conform to various New York Public Service Commission Orders regarding VDER.<sup>2</sup> The Authority proposes modifications to the calculation of the Capacity Value, Demand Reduction Value (DRV) and Locational System Relief Value (LSRV). The Authority also proposes increasing the eligibility of Phase One Net Energy Metering (NEM) compensation to projects with a maximum rated capacity of 750 kW AC, expanding

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<sup>1</sup> Public Service Law §3-b(3)(a).

<sup>2</sup> Case 15-E-0751, In the Matter of the Value of Distributed Energy Resources, Order Regarding Value Stack Compensation (issued April 18, 2019) (April VDER Order); Case 15-E-0751, Order on Value Stack Eligibility Expansion and other Matters (issued September 12, 2018) (September VDER Order); Case 15-E-0751, Order Implementing Hybrid Energy Storage System Tariff (issued December 13, 2018) (December VDER Order).

eligibility of the Value Stack to Tier 1 resources under the Clean Energy Standard (CES),<sup>3</sup> and introducing a new Community Credit to encourage Community Distributed Generation (CDG) projects.

### Capacity Value Payments

The April 18, 2019 Public Service Commission (Commission) Order on Value Stack Compensation (April VDER Order) directed Investor Owned Utilities (IOUs) to adopt a more consistent method to calculate Capacity Value payments under the Value Stack.<sup>4</sup> The Commission directed the IOUs, among other things, to utilize published monthly New York Independent System Operator (NYISO) auction prices and Photovoltaic (PV) load curves provided by the New York State Energy Research and Development Authority (NYSERDA), to estimate the likely Installed Capacity (ICAP) contribution from the “fleet” of distributed intermittent generation during certain peak times, as well as to determine the number of kWhs over which the value should be spread.

The Authority currently offers three alternative capacity payment options from which customers with eligible resources may choose: Alternative 1, Alternative 2, and Alternative 3. LIPA’s current Alternative 1 rate is calculated based upon the previous year’s annual spot market capacity price and coincident demand, and current year’s forecasted sales applicable to large demand customers.

The Authority’s proposal would adopt the Commission’s methodology for calculating payments under Alternative 1. More specifically, LIPA’s proposal calculates the Alternative 1 capacity value as the monthly NYISO auction prices times a “proxy capacity factor,” divided by the expected monthly kWh per kW for a typical solar generating unit. The proxy capacity factor is an estimate of the capacity factor for a typical kW solar generator in LIPA’s service territory during either 240 or 245 peak hours available that year. The on-peak period consists of the hours of 2:00 PM to 7:00 PM, weekdays, June 24<sup>th</sup> to August 31<sup>st</sup>, excluding holidays.

The modifications to Alternative 1, as proposed by the Authority, are consistent with the methodology adopted by the Commission. Further, LIPA’s new Alternative 1 will be based on a clearly delineated auction price with a clear method of calculation. For these reasons, Staff recommends adoption of LIPA’s modifications to Alternative 1 as proposed.

The Commission also ordered modifications to the Alternative 2 capacity value in the April VDER Order. LIPA’s current Alternative 2 capacity value calculation is based on Alternative 1, divided by the percentage of peak summer hours load (defined as the 460 hours from 2:00 PM to 7:00 PM, every day, June 1<sup>st</sup> through August 31<sup>st</sup>) attributed to the total annual sales for small commercial customers (i.e., Rate 280).

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<sup>3</sup> Case 15-E-0302, Proceeding to Implement a Large-Scale Renewable Program and a Clean Energy Standard, Appendices to Order Adopting a Clean Energy Standards, August 1, 2016.

<sup>4</sup> Case 15-E-0751, In the Matter of the Value of Distributed Energy Resources, Order Regarding Value Stack Compensation (issued April 18, 2019).

LIPA proposes to modify the Alternative 2 capacity compensation calculation to base it on a smaller amount of peak annual sales. The total \$/kW-year value would be determined each year based on the sum of the most recently available monthly NYISO \$/kW-Month auction prices for the prior 12 months as of May 31 of each year, divided by 240 or 245 hours, based on the number of peak hours available that year. The available peak hours would be from 2:00 PM to 7:00 PM on non-holiday weekdays from June 24 to August 31. LIPA's proposal is consistent with the methodology set forth in the April VDER Order, and therefore Staff recommends the proposal be adopted as proposed.

LIPA also proposes to eliminate the Alternative 3 Top Ten Hour compensation option. Under the existing Tariff, this option compensated customer generators for capacity based on performance during the top ten load hours, which were identified only after the summer season was over. LIPA states that since the top ten load hours were identified after the fact, project owners were not afforded the opportunity to react proactively to pricing and therefore LIPA proposes to eliminate the option, Staff agrees and recommends that the proposal to modify Alternative 3 be adopted as proposed.

#### Demand Reduction Value (DRV)

In the April VDER Order, the Commission adopted several modifications to the DRV that were proposed by Staff.<sup>5</sup> The Commission adopted a DRV methodology similar to Capacity Alternative 2, with the \$/kW-year compensation divided between approximately 240 likely peak hours between June 24 and August 31. Further, the Commission extended the lock-in period for the DRV for ten years; once the ten-year period ends the DRV will transition to the methodology in effect at that time.

Under LIPA's current tariff, the DRV is based on injections made during the top ten peak load hours, which prevents developers from effectively predicting DRV compensation. LIPA proposes, instead, that the \$/kW-year DRV compensation be spread over 320 to 325 hours, to reflect an on-peak period of 2:00 p.m. to 7:00 p.m., each non-holiday weekday, from June 1<sup>st</sup> to August 31<sup>st</sup>. Although these days are different from those of other utilities, which begin their on-peak period on June 24<sup>th</sup>, PSEG LI noted that the system peak has occurred in early June twice in the last ten years. PSEG LI also noted this issue in stakeholder comments from the April VDER Order. The Commission found that utility-specific peak hours is appropriate concerning DRV, although such modifications for capacity compensation are not.<sup>6</sup>

Under the new methodology, the DRV calculation will be based on injections from the project for the known hours for which a peak will likely occur and will allow project owners the opportunity to better develop their projects based on more predictable calculations. Consistent with the April VDER Order, LIPA proposes to extend the DRV rate lock to ten years from the current three-year rate lock to provide for greater project financing stability.

The April VDER Order also considered, as an alternative to DRV compensation, an option for projects to make an irreversible one-time decision to opt-in to the Commercial System Relief

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<sup>5</sup> Case 15-E-0751, Whitepaper Regarding Capacity Value Compensation (filed December 14, 2018).

<sup>6</sup> April VDER Order, p. 33.

Program (CSRP). While this voluntary option may result in reduced compensation, it allows project owners to select an option which has a smaller number of called Demand Response events. Project owners may now select the best fit for their projects. Consistent with the Commission's April VDER Order, LIPA also proposes to implement this one-time opt-in option for project owners.

LIPA's proposed DRV changes are consistent with the April VDER Order, and therefore Staff recommends LIPA's proposal be adopted as proposed.

#### Local System Relief Value (LSRV)

In the April VDER Order, the Commission considered Staff recommendations to modify LSRV compensation to increase its effectiveness. The Commission considered how best to enhance the methodology for calculating the LSRV to ensure that it offers meaningful price signals to incentivize and compensate projects that create actual value.

To increase LSRV effectiveness, the April VDER Order modified LSRV compensation to create additional predictability by directing the IOUs to adopt a call system which includes a compensation level equal to a minimum of ten events and directed the IOUs to calculate the LSRV by dividing the existing \$/kW-year value by ten, to determine the compensation during each call event. Events will be called at least 21 hours in advance, with each call lasting between one to four hours. Compensation is based on the lowest hourly net kW injection during the call.

Consistent with the April VDER Order, LIPA proposes to update the LSRV calculation by introducing a call system, adopting the \$/kW-value divided by ten, and other LSRV modifications as adopted by the Commission. The modifications to the LSRV will allow project owners to maximize their compensation since they will know in advance when an event will occur. As noted in the April VDER Order, LSRV is most significant for dispatchable resources, particularly projects that include storage.<sup>7</sup> In addition, LSRV may also incentivize developers of intermittent resources like solar PV to design projects in a way that will maximize system value. LIPA's proposed modifications are expected to effectuate additional predictability and allow project owners to maximize benefits under the LSRV. Staff recommends that LIPA's proposed modifications be adopted as proposed.

#### Phase One Net Energy Metering (NEM) Eligibility

Through recent VDER orders, the Commission has continued to expand eligibility for Phase One NEM for certain customers in light of the transitional nature of Value Stack compensation. Expansion of Phase One NEM helps smaller developers of eligible resources to avoid complications resulting from variable and time-dependent compensation inherent to Value Stack compensation. To that end, Staff proposed Phase One NEM eligibility be expanded to include:

[T]hose projects that: (a) have a rated capacity of 750 kW AC or lower; (b) are at the same location and behind the same meter as the electric customer whose usage they are

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<sup>7</sup> Id., p. 19.

designed to off-set; and (c) have an estimated annual output less than or equal to that customer's historic annual usage in kWh.<sup>8</sup>

The Commission adopted Staff's proposal and noted that the Value Stack is a new compensation model, which as it evolves, may not be well-suited for use in all cases and market segments. Therefore, according to the Commission, it is prudent to reflect on the viability of opportunities under VDER policy for smaller demand-metered non-residential customers that desire to offset their own usage with on-site DER technologies.

Further, the Commission adopted PSEG LI's recommendation that eligibility should include on-site load of less than or equal to 110% of the customer's annual usage, which provides more flexibility for a customer's future growth needs beyond the 100% threshold proposed by Staff.

LIPA's proposal to extend Phase One NEM eligibility as described above is consistent with the April VDER Order, and therefore Staff recommends the proposal be adopted as proposed.

#### Expanded Eligibility for Value Stack Crediting

In the September and December VDER Orders, the Commission expanded the Value Stack crediting eligibility to include additional generation technologies that satisfy the requirements for Tier 1 resources under the CES. The September VDER Order expanded eligibility to tidal energy generators, biomass anaerobic food waste digestors, stand-alone energy storage, regenerative breaking, and Vehicle-to-Grid technologies. The Commission's December VDER Order also expanded eligibility to include Hybrid Energy Storage Systems, noting that such expansion:

will encourage the development of Hybrid Facilities in New York State and will ensure that those Facilities receive appropriate compensation for the values that they provide to the utility system and to society. Robust deployment of Hybrid Facilities, along with other distributed energy resources, will support the State's goals of creating an increasingly green, distributed, reliable, and cost-effective energy system.<sup>9</sup>

LIPA's proposal would expand eligibility to include similar technologies. LIPA's proposal is therefore consistent with the provisions of both Orders and Staff recommends adoption as proposed.

#### Introduction of a Community Credit

In the April VDER Order, the Commission adopted a new Community Credit applicable to new CDG projects in order to facilitate large CDG projects.<sup>10</sup> The credit is applicable to all CDG subscribers in eligible territories, both residential and commercial.

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<sup>8</sup> Id., p. 9.

<sup>9</sup> December VDER Order, p. 12.

<sup>10</sup> Id., p. 24.



Similarly, LIPA proposes to add a Community Credit of \$0.012 to large customers that are hosts or subscribers in a CDG project. The Community Credit as proposed by LIPA reflects 75% of the difference between the VDER rate and the retail energy rate (including Power and Delivery) for LIPA's large commercial and commercial time-of-use customers. The Commission stated that the Community Credit will create benefits by incentivizing the development of more projects at the same or lower net revenue impact. Further, the establishment of a Community Credit and DRV applicability across utilities will also improve the simplicity of Value Stack compensation for new projects.

LIPA's proposal to create a Community Credit for CDG projects is consistent with the April VDER Order. Staff therefore recommends the proposal be adopted as proposed.

### Conclusion

Based upon the Department's review, LIPA's Tariff modifications are consistent with applicable Commission Orders, and will help align LIPA's VDER tariff with IOUs. In addition, the proposed modifications will provide developers and other market participants with appropriate price signals and compensation, thereby encouraging the design and development of projects that provide a net benefit to the electric distribution grid and that appropriately compensate investors for those benefits. Further, the modifications will increase the transparency, consistency, and accuracy of Value Stack compensation. Together, these modifications are a significant step towards advancing the State's goals for a cleaner, more distributed electric system.

The Department recommends adoption of the Authority's Tariff modifications by the LIPA Board of Trustees as proposed.

Respectfully submitted,



John B. Rhodes  
Chief Executive Officer

cc: Thomas Falcone, LIPA Chief Executive Officer  
Anna Chacko, LIPA General Counsel  
Bobbi O'Connor, LIPA Secretary to the Board  
Daniel Eichhorn, PSEG LI President and Chief Operating Officer  
Guy Mazza, DPS LI Director



# VALUE OF DER TARIFF UPDATES

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*July 24, 2019*

# REFORMING THE ENERGY VISION TIMELINE



**Subject of today's  
Board proposal**

**April 2014**

New York REV is launched

**December 2015**

Proceeding launched on successor to net metering

**May 2016**

Track Two order outlines utility business model modernization

**August 2016**

PSC adopts Clean Energy Standard

**March 2017**

PSC issues VDER Phase 1

**December 2017**

LIPA adopts VDER Phase 1

**June 2018**

Energy Storage Roadmap

**September 2018**

PSC issues Value Stack Eligibility Order

**December 2018**

PSC issues Hybrid Energy Storage System Order

**April 2019**

PSC issues Value Stack Compensation Order

# VALUE OF DISTRIBUTED ENERGY RESOURCES

## New York's path to the grid of the future

### **TODAY:**

- Value stack
- Non-wires alternatives
- Phase 1 Net Metering
- Rate design pilots

### **TOMORROW:**

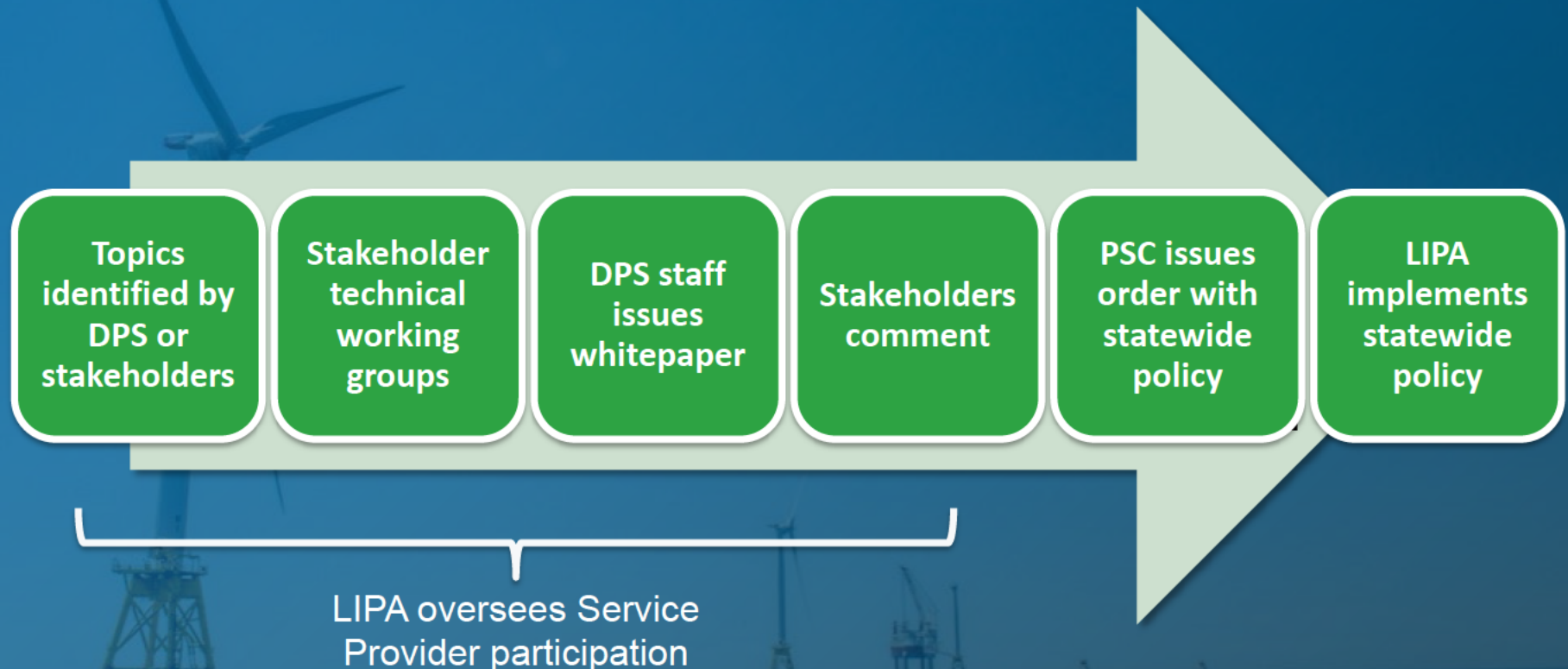
- Value stack improvements
- Continue statewide rate design working groups

### **FUTURE:**

- Distributed System Platform
- Dual participation with wholesale markets
- Bridge & mass market tariffs

# OUR PROCESS

## New York's Reforming the Energy Vision Proceedings



# UPDATES TO VALUE STACK

- **Increase certainty and predictability** of distribution value compensation
  - **Lock in the Demand Reduction Value compensation rate** for ten years and set pre-defined peak hours
  - Move to **call system** for **Location Specific Relief Value**
- **Encourage anchor tenant participation** in Community Distributed Generation projects with added **Community Credit**
- **Standardize capacity payment approach** across utilities
- **Extend to Phase One Net Metering** availability to small (under 750 kW) onsite projects for demand-metered commercial customers
- **Expand eligibility** to additional clean energy technologies, storage, and electric vehicle-to-grid



The background of the slide is a blue-tinted image of a car's instrument cluster. It features several analog gauges, including a speedometer on the left and a tachometer on the right. Below the gauges, there is a digital display showing the number '0359'. The text 'THANK YOU' is centered in the middle of the slide in a white, bold, sans-serif font.

# THANK YOU