Summary of NYS SIR Cost Sharing 2.0 Proposal

By Industry for the March 17 PSEGLI IWG meeting.

Background, Sources, Industry Comments

These comments are all as of the writing of this document, date above.

The following is a summary of the joint DPS filing (20-E-0543 & Case 19-E-0566) by the DER industry and the Joint Utilities. This summary takes data from these three primary documents:

- "Petition of the IPWG Members Seeking Approval of the Cost-Sharing 2.0 Amendment to the New York State Standardized Interconnection Requirements"
- "Joint Utilities Responsive Filing of Proposed Hosting Capacity Map Adjustments"
- "Joint Utilities Responsive Filing Proposed Cost Reimbursement Mechanism"

The Status of NYS Implementation is as follows:

- IPWG Cost Sharing 2.0 petition, JU reports on reimbursement mechanism & JU report on Hosting capacity maps adjustment are under PSC review process.
- NYS aims to have an approved draft in the month of April 2022.

Industry has the following general position on CS2.0 as of the writing of this document:

- Industry is in generally supportive and eager to see CS 2.0 officially implemented by all NYS utilities
- However, we believe in principle that all ratepayers benefit from the connection of DER assets
 and developers should not solely bear the cost of upgrades related to planned DER capacity, as
 the current proposal is written. We look forward to discussions with PSEGLI and LIPA on this
 topic.

Purpose & Benefits

The overarching purpose of this proposed cost sharing mechanism is to fairly allocate the cost of upgrades that increase the hosting capacity of the distribution system by building new or upgrading existing infrastructure. This will lower the per kW interconnection cost to individual projects, facilitating the deployment of additional DERs. This approach will:

- 1. Remove the "first-mover" burden on an Interconnecting Customer, except as otherwise unavoidable
- 2. Provide cost certainty to both the first in queue and all subsequent queued interconnecting customers as to the cost upgrades for which they will be responsible

The upgrades are divided into two categories: Utility-Initiated Upgrades and Market-Initiated Upgrades. Both categories use a pro rata approach that consists of taking the estimated cost of an upgrade and dividing that cost by the total increased Hosting Capacity created by an upgrade, thereby creating a dollar per kW cost which will then be multiplied by an individual project's AC nameplate rating in kW to determine the applicant's pro rata cost share.

I. Utility-Initiated Upgrade

The category of Utility-Initiated Upgrades consists of substation transformer bank (bank) installations or replacements and proactive zero sequence voltage (3V0) installations.

Each year, when the CIP is filed with the Commission, the utility will publish a link to the CIP on its system data portal and a list of those substations included in the CIP that are eligible for cost sharing as Utility-Initiated Upgrades where the utility plans to complete engineering within the next twenty-four (24) months.

Utility Initiated Upgrade Types

1. Bank Upgrades (Proposed Multi-value Distribution Projects)

- Prior to filing the CIP, at the time when the utility identifies the need to install or replace a bank, based on DER interest the utility will consider options to upgrade the asset for greater hosting capacity rather than replace in-kind.
- If an asset is upsized, the utility will fund the cost of the baseline project. Participating Projects will fund the difference between the baseline and the MVD project cost.
- Participants in cost sharing will include the Triggering project, defined as the first project
 or portion of the first project to exceed the capacity rating of the existing transformer, and
 Sharing projects, defined as projects with a queue position after the Triggering project
 that would require the upgrade. Participating projects will pay a pro-rated share based on
 project size and the incremental cost difference between replacing the asset in kind and
 the costs associated with upgrading to a larger unit.

2. Proactive 3V0 Upgrades

- The CIP will proactively identify substations at which the utility needs to install 3V0 upgrades.
- The utility will accept applications at a substation designated for a 3V0 upgrade up to the maximum capacity available at the site for reliable and safe operation.

DER Cost allocation

• The Utility will calculate a cost per kW for shared upgrades identified for each project, which is the incremental cost of upgrade divided by incremental hosting capacity. This

- estimated cost per kW multiplied by the project size will be used for the study estimate for each participating project.
- Based on the number of DG applicants that commit to pay, the Utility will have the discretion to move ahead with the upgrade.
- No costs shall be refunded to Triggering or Sharing projects that cancel after making the
 full payment until/unless a subsequent project(s) take their place by making their full
 payment.

Example

For example, if a utility is replacing a 25MVA transformer in kind due to an asset condition issue, the Utility will review market interest and determine if they can upgrade to a 40MVA transformer. If they can, then the Utility will pay for the cost of a 25MVA transformer replacement, and any cost difference between the 25MVA bank and a 40 MVA bank will be the responsibility of participating projects. In this example, if the incremental difference between a 25MVA bank and 40MVA bank is \$750,000, and creates 15MVA of additional capacity, then the Triggering and Sharing projects will contribute \$50,000 per MW of project capacity.

The following information on Utility-Initiated upgrades will be posted on the hosting capacity maps:

- 1. A planned upgrade's location;
- 2. Its anticipated impact in terms of capacity availability;
- 3. The in-service date of the planned upgrade; and
- 4. The known or estimated costs of the planned upgrade.

II. Market-Initiated Upgrade

Qualifying Upgrades will be limited to those which result in an increase to the hosting capacity of the distribution system beyond that required to interconnect the triggering project. Qualifying Upgrades are upgrades that can be shared by multiple DG/ESS projects, increase Hosting Capacity, and are greater than \$250,000.

The mechanics of the Cost Sharing shall be somewhat different for each type of Qualifying Upgrade, as set forth in the "CESIR Process" section below. These "Qualifying Upgrades" shall include, but are not limited to the following.

Qualifying Market-Initiated Upgrades Types:

- **1. Substation Upgrades** Other than Substation Transformer Installation/Upgrade
 - a. 3v0 substation upgrades.
 - b. Substation LTC or Relay Modifications.
 - c. Substation modifications allowing for the implementation of advance inverter or command/control schema.
- **2. Substation Transformer Installation/Upgrade** (size increase) and associated equipment installation /upgrades.

- 3. Underground Secondary Network Upgrades.
- 4. Distribution/ Sub Transmission Line Upgrade.
 - a. Three phase extensions.
 - b. Three phase line reconductoring.
 - c. Three phase new feeders.

CESIR Process for Utility and Market Initiated DER Upgrade Mechanism:

- When, throughout the course of normal study, the determination is made that a Qualifying
 Upgrade is required to interconnect the "Triggering Project", the Utility will discuss the upgrade
 required with the triggering project and if agreed, proceed with a more detailed study to provide
 an estimated cost for required upgrade.
- The utility will determine the Qualifying Upgrade Cost and the net increase in Hosting Capacity that would result from the construction of that modification. The utility shall have up to forty (40) Business Days to conduct the additional study to assess the Qualifying Upgrade and complete the CESIR.
- Once the Utility has identified the need for a Qualifying Upgrade, the Utility will present the use case and specifics in an Exhibit to the CESIR and publish a "Qualifying Upgrade Disclosure" that shall also include the following items:
 - 1. The technology option(s) considered to address the electric system impacts;
 - 2. The Qualifying Upgrade selected by the utility;
 - 3. The estimated Qualifying Upgrade Cost and increase in Hosting Capacity;
 - 4. The estimated Capacity Increase Shared Cost (per kW AC); and
 - 5. A Preliminary Milestone schedule for the Qualifying Upgrade.
- For all substation upgrades other than a transformer installation/upgrade, the utility shall proceed once Participating Project payments total at least 25% of the estimated Qualifying Upgrade Cost
- For a substation transformer installation/upgrade, if the 75% threshold is not collected within twelve (12) months of an applicant paying its full construction contribution, then the applicant may request a refund, which the utility shall process within sixty (60) Business Days of the request.
- No Qualifying Upgrade payments will be refunded to Triggering Projects or Sharing Projects that are withdrawn from the queue after making such payments until/unless a subsequent project(s) take their place by making MVD Qualifying Payments that equal or exceed the MVD Qualifying Payments received by those withdrawing Participating Projects.

Market-Initiated Cost Sharing 2.0 Mechanisms

Market- Initiated Qualifying Upgrade	CESIR Cost Responsibility		Mobilization Threshold	Refundability and Reconciliation
	Triggering Project	Sharing Project		
Distribution and Sub-Transmission Lines and Underground Secondary Network Upgrades	100% of Qualifying Upgrade Cost	Pro-Rata Share based on kW Capacity and Footage	Upon payment of 100% of Qualifying Upgrade Cost by Triggering Project	Qualifying Upgrade Costs are non-refundable for the Triggering Project until a Sharing Project provides payment such that the utility has receipt of 100% of Qualifying Upgrade Cost. Upon receipt of additional payments by Sharing Projects the utility shall reconcile with the Triggering Project based on a calculated estimated prorata share. Remaining reconciliation for Qualifying Upgrade Cost to occur pursuant to Section I-C of the SIR.
Transformer Bank	Pro-Rata Share of Qualifying Upgrade Cost based on kW Capacity	Pro-Rata Share of Qualifying Upgrade Cost based on kW Capacity	Upon payment of 75% of Qualifying Upgrade Cost by Triggering Project and Sharing Project(s)	Qualifying Upgrade Costs are non-refundable until another Sharing Project provides payment such that the utility has received payments equal to the pro-rata share of the Qualifying Upgrade. Remaining reconciliation for Qualifying Upgrade Cost to occur pursuant to Section I-C of the SIR.
Other Qualifying Substation Upgrades	Pro-Rata Share of Qualifying Upgrade Cost based on kW Capacity	Pro-Rata Share of Qualifying Upgrade Cost based on kW Capacity	Upon payment of 25% of Qualifying Upgrade Cost by Triggering Project and Sharing Project(s)	Qualifying Upgrade Costs are non-refundable until another Sharing Project provides payment such that the utility has received payments equal to the pro-rata share of the Qualifying Upgrade. Remaining reconciliation for Qualifying Upgrade Costs to occur pursuant to Section I-C of the SIR.

Allocation / Recovery of Unrecovered Costs

- The Utility will determine the Interconnection Fee (\$/kW) by dividing the sum of the total costs of the qualifying upgrades at the designated locations by a factor representing the sum of the total hosting capacity in kW of that designated location.
- The Utility will reconcile the outstanding upgrade costs.
- In a case where project elects to pay more than 100% of its pro-rata share to reach mobilizing cost, the reimbursement would only begin once all sharing projects have made their 100% payment (as per the proposed reimbursement mechanism) or PSC approved mechanism.
- In a case where the minimum threshold has been met to begin the upgrade, but the available Hosting Capacity has not been completely filled and thus utility customers contribute to the unassigned costs, then any additional Sharing Projects that use available Hosting Capacity up to five (5) years after the upgraded asset is placed in service will be required to fund their pro-rata share prior to interconnection
- Unrecovered costs will be limited to no more than 2% of a utility's distribution/sub-transmission electric capital investment budget per fiscal year. The cap will be calculated as a rolling five-year average of each utility's forecasted distribution/sub transmission electric capital investment for the impacted year and the next four years according to each utility's current capital plan. The cap will be updated annually.
- If unrecovered costs exceed 2% of a utility's distribution/sub-transmission electric capital
 investment budget per fiscal year, Qualifying Upgrades would require full (100%) funding from
 Triggering Projects and Sharing Projects prior to utility mobilization for such projects'
 construction work.

Capital Project Queue

If the utility upgrade is planned more than 24 months out in the capital review process, and the Utility does not have the resources to pull the upgrade forward, the Utility will create a Capital Project queue at the substation or feeder level for DG projects unable to interconnect due to the upgrade.

- 1) The Utility will note on the Hosting Capacity map within the Notes section that the station/feeder is impacted by the Capital Project queue due to future work, and Hosting Capacity is currently "0".
- 2) If a DG project submits an application via the SIR process, the application will follow the normal SIR process, including the assignment of an Application Approved Date. At the preliminary analysis stage, the DG project will be placed into a Capital Project queue. Standard SIR timelines will be suspended for projects in the Capital Project queue.
- 3) When the utility upgrade is within 18 months of expected completion date, the Capital Project queue will be dissolved for that station. SIR timelines will be unsuspended. Projects will be considered and studied based on their original Application Approved Date.