APPENDIX 22: EARNINGS ADJUSTMENT MECHANISMS

Beginning January 1, 2023, the Company will have seven Earnings Adjustment Mechanisms ("EAMs") during the Rate Plan. Achievement of EAMs will be measured on a calendar year basis for RY1, RY2, and RY3.

1.0 Basis Points

1.1.1 Summary

The following is a summary of the commodities and basis points associated with each EAM; details regarding the EAMs, including metrics, associated achievement, and basis points are more fully described further below. EAM incentives are provided in absolute dollars in section J.8 of the Proposal. In addition to the EAMs described herein, the Company will have the opportunity to earn EAM incentives related to the Electric Vehicles Make Ready Program during Rate Year 3.[1]

EAM	Commodity	Level	RY1 (2023)	RY2 (2024)	RY3 (2025)
Smart Building Electrification	Electric	Min	2.5	2.5	2.5
		Mid	3.5	3.5	3.5
		Max	6	6	6
Smart Building Electrification	Gas	Min	2.5	2.5	2.5
		Mid	3.5	3.5	3.5
		Max	6	6	6
Demand Response	Electric	Min	2	2	2
		Mid	4	4	4
		Max	7	7	7
Light-Duty Vehicle Emissions	Electric	Min	2	2	2
		Mid	4.5	4.5	4.5
		Max	7	7	7
Transportation Interconnection Timeline	Electric	Min	2	2	2
		Mid	3	3	3
		Max	6	6	6
Managed Charging[2]	Electric	Min	TBD		
		Mid			
		Max			
DER Utilization Solar	Electric	Min	1	1	1
		Mid	3	3	3
		Max	7	7	7
DER Utilization Storage	Electric	Min	1	1	1
		Mid	3	3	3
		Max	7	7	7

[1] The Commission has reserved up to 15 basis points of maximum EAM award in total related to two Make Ready Program Share the Savings EAM metrics, as directed in the Commission's Make Ready Order in Case 18-E-0138.
[2] Up to a maximum of 10 basis points per year reserved, with minimum and midpoint basis point totals to be determined through collaborative process described herein.

1.1.2 Value of a Basis Point

The table below provides a summary of the value of a basis point for each Rate Year for electric and gas. These values will be used to calculate EAM earnings over the term of the Joint Proposal.

Value of an EAM basis point	RY1 (2023)	RY2 (2024)	RY3 (2025)
Electric ($ million) [RY$_x$ $ BP Electric]	$1.753	$1.876	$1.973
Gas ($ million) [RY$_x$ $ BP Gas]	$0.645	$0.697	$0.740

1.1.3 Earned EAM

The Company will receive a financial reward if the Company meets the minimum target for a given Rate Year, and will receive increasing financial rewards up to the maximum achievement for the Rate Year. The EAM financial reward earned at min, mid, and max levels of achievement are set in section J.8 of the Proposal. For all other EAM achievement levels, the Company will calculate the dollar incentive earned in a given Rate Year for each EAM as follows:

a) If RY$_x$ Achievement is less than RY$_x$ Target$_{Min}$, then the Company will not receive an EAM.

Where,

x   1, 2, or 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.

RY$_x$ Achievement   EAM achievement in Rate Year x, calculated as outlined under "Achievement" for each EAM

RY$_x$ Target$_{Min}$ Minimum target for EAM in Rate Year x

b) If RY$_X$ Achievement is between the RY$_x$Target$_{Min}$ and RY$_x$Target$_{Mid}$, then

The Smart Building Electrification EAM will be calculated as follows:

$$RY_x \, EAM \, (\$) = [RY_x \, BP_{Min} + RY_x \, BP \, Slope_{Min\text{-}Mid} * (RY_x \, Achievement - RY_x \, Target_{Min})] * (RY_x \, \$ \, BP_{Electric} + RY_x \, \$ \, BP_{Gas})$$

Where,

RY$_x$ EAM ($)   Company incentive in dollars for EAM achievement in Rate Year x

$RY_x \ Target_{Mid}$	Midpoint target for EAM in Rate Year x
$RY_x \ BP \ Slope_{Min\text{-}Mid}$	$\dfrac{RY_xBP_{Mid} - RY_x \ BP_{Min}}{RY_xTarget_{Mid} - RY_x \ Target_{Min}}$
$RY_x \ BP_{Min}$	Minimum basis points allocated to EAM in Rate Year x (see section 1.1.1)
$RY_x \ BP_{Mid}$	Midpoint basis points allocated to EAM in Rate Year x (see section 1.1.1)
$RY_X \ \$ \ BP_{Electric}$	\$ per basis point in Rate Year x for Electric (see section 1.1.2)
$RY_X \ \$ \ BP_{Gas}$	\$ per basis point in Rate Year x for Gas (see section 1.1.2)

The Demand Response, Light-Duty Vehicle Emissions, Transportation Interconnection Timeline, Managed Charging, DER Utilization Solar and DER Utilization Storage EAMs will be calculated as follows:

$$RY_x \ EAM \ (\$) = [RY_x \ BP_{Min} + RY_x \ BP \ Slope_{Min\text{-}Mid} * (RY_x \ Achievement - RY_x \ Target_{Min})] * RY_x \ \$ \ BP_{Electric}$$

c) If RY_x Achievement is between the $RY_x \ Target_{Mid}$ and $RY_x \ Target_{Max}$, then

The Smart Building Electrification EAM will be calculated as follows:

$$RY_x \ EAM \ (\$) = [RY_x \ BP_{Mid} + RY_x \ BP \ Slope_{Mid\text{-}Max} * (RY_x \ Achievement - RY_x \ Target_{Mid})] * (RY_x \ \$ \ BP_{Electric} + RY_x \ \$ \ BP_{Gas})$$

Where,

$RY_x \ BP \ Slope_{Mid\text{-}Max}$	$\dfrac{RY_xBP_{Max} - RY_xBP_{Mid}}{RY_xTarget_{Max} - RY_x \ Target_{Mid}}$
$RY_x \ BP_{Max}$	Maximum basis points allocated to EAM in Rate Year x (see section 1.1.1)

The Demand Response, Light-Duty Vehicle Emissions, Transportation Interconnection Timeline, Managed Charging, DER Utilization Solar and DER Utilization Storage EAMs will be calculated as follows:

$$RY_x \ EAM \ (\$) = [RY_x \ BP_{Mid} + RY_x \ BP \ Slope_{Mid\text{-}Max} * (RY_x \ Achievement - RY_x \ Target_{Mid})] * RY_x \ \$ \ BP_{Electric}$$

d) If RY_x Achievement is greater than or equal to the $RY_x \ Target_{Max}$, then the Company will earn the EAM maximum financial reward set forth in section J.8 of the Proposal.

2.0 EAMs

2.1 Smart Building Electrification EAM

2.1.1 Description

The Smart Building Electrification ("SBE") EAM drives the acquisition of a higher proportion of energy savings from energy efficiency ("EE") and heating electrification measures that support a more cost-effective transition to building electrification.

The measure categories included in the scope of the EAM reduce operating costs for customers and minimize grid impacts from electrified heating load. The Smart Building Electrification measure categories included in this EAM are described in the table below.

Table 1. SBE Measure Categories

Measure Categories	Description
Building Envelope	Upgrades to the building's thermal envelope. Includes retrofit projects in commercial, multifamily, small business, and residential buildings. Excludes new construction projects (except when paired with Ground Source Heat Pumps) and excludes pipe insulation measures.
Ground Source Heat Pumps	Ground source heat pumps ("GSHPs") installed in commercial, multifamily, small business, and residential buildings.[3]
Waste Heat Recovery	Heat recovery from air and wastewater that is used for space and water heating. Excludes heat recovery within industrial processes and thermal energy network pilots.[4]
Advanced Controls	Controls that provide automatic and optimized start, stop, and adjustment of building electric heating equipment associated with heat pumps, using sensors, control logic, or algorithms, as well as two-way communication between the control system and the building equipment.

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[3] Includes single-family residential projects that may have a combination of ground-source and air-source heat pumps, such as those used to heat and cool previously unconditioned spaces (*e.g.,* attics or basements), at the same property.
[4] This refers to pilots conducted as part of the Utility Thermal Energy Networks proceeding. *See* Case 22-M-0429, *Proceeding to Implement the Utility Thermal Energy Network and Jobs Act.* If the Commission requires the Company to use Clean Heat program funding for equipment used in the utility thermal energy networks pilots, the Company will count the energy savings associated with the Clean Heat funded equipment toward its achievement of this EAM.

2.1.2 Metric

The SBE metric is lifetime[5] energy savings measured in British Thermal Units ("Lifetime Million Btu" or "LMMBtu"), acquired through the Company's EE and heating electrification programs, and which come specifically from the measure categories included in Table 1. The metric includes lifetime energy savings from both low- and moderate-income ("LMI") and non-LMI projects.

The acquired lifetime energy savings for the SBE EAM in each Rate Year ("RY_X SBE Acquired LMMBtu") will be calculated as follows:

$$RY_x \text{ SBE Acquired LMMBtu} = [\sum RY_x \text{ SBE Acquired AMMBtu}] * RY_x \text{ SBE Portfolio EUL}$$

Where,

X	1, 2, and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.
RY_x SBE Acquired AMMBtu	Annual energy savings for LMI and non-LMI electric and gas EE, and the Clean Heat program, acquired from SBE measures in Rate Year x. The energy savings are determined by the applicable Technical Resource Manual ("TRM") at the time the energy savings are acquired. The metric is expressed in First Year Savings (*i.e.*, Annual Million Btu or "AMMBtu"[6]).
RY_x SBE Portfolio EUL	The weighted average portfolio Effective Useful Life ("EUL"), weighted on a savings-by-measure-basis, as determined by the applicable TRM at the time the energy savings are acquired in Rate Year x calculated as: $$\frac{\sum(RY_x \text{ SBE Measure EUL} * RY_x \text{ SBE Measure Acquired AMMBtu})}{\sum RY_x \text{ SBE Acquired AMMBtu}}$$
RY_x SBE Measure EUL	The individual SBE measure EUL as determined by the applicable TRM[7] at the time the SBE measure savings are acquired in Rate Year x.
RY_x SBE Measure Acquired AMMBtu	The acquired annual verified gross savings for LMI and non-LMI electric and gas EE, and acquired annual gross energy savings for the Clean Heat program, in AMMBtu, of the individual SBE measure in Rate Year x.

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[5] Savings over the full lifetime of an installed measure.
[6] NENY targets are First Year Savings, which is energy saved during the first full year post installation of the EE or electrification measure.
[7] In cases where the TRM does not include an applicable EUL it is established based on other state TRMs, industry standards (such as ASHRAE), or engineering judgement.

2.1.3 Measurement

The acquired lifetime energy savings for the SBE EAM in each Rate Year ("RY_x Acquired SBE LMMBtu") and the associated variables ("RY_x SBE Acquired AMMBtu", "RY_x SBE Portfolio EUL") will be reported in the Company's annual EAM Report, along with supporting work papers.

Lifetime energy savings acquired through the Company's LMI and non-LMI electric and gas EE programs, except the Clean Heat program, must be evaluated (*i.e.,* must be verified gross savings) to count toward the SBE EAM achievement. Table 2 below outlines the Company's planned evaluation schedule for current EE programs that contain in scope measures for the SBE EAM. The schedule below will be updated quarterly, as needed, through filings in the NENY Proceeding.[8]

Table 2. Planned Evaluation Schedule, as of January 2023

Program	Estimated Evaluation Completion Date
Multifamily Gas	Q1 2023
Commercial & Industrial	Q2 2023
Multifamily (Non-Lighting Electric)	Q3 2023
Residential Weatherization	Q4 2024
Statewide LMI Multifamily (AMEEP)	TBD

2.1.4 Targets

Table 3 below outlines the targets for the SBE EAM ("RY_x SBE Target") for each Rate Year. The targets are expressed in LMMBtu and are shown for the minimum, midpoint, and maximum level of achievement.

Table 3. SBE EAM Targets, in LMMBtu

Level	RY_1 (2023)	RY_2 (2024)	RY_3 (2025)
Min	5,161,874	7,508,181	9,385,226
Mid	9,854,487	10,793,010	11,731,532
Max	16,424,145	16,424,145	16,424,145

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[8] Case 18-M-0084, *In the Matter of a Comprehensive Energy Efficiency Initiative* ("NENY Proceeding")*,* Order Authorizing Utility Energy Efficiency and Building Electrification Portfolios Through 2025 (issued January 16, 2020).

2.1.5 Achievement

EAM achievement will be based on lifetime energy savings acquired from the SBE measure categories in each Rate Year ("RY_X SBE Acquired LMMBtu"), as defined in section 2.1.2 above.

Additionally, the Company must demonstrate it is on pace to achieve its cumulative 2020-2025 NENY first year annual energy savings target in each Rate Year to earn any SBE EAM reward in that Rate Year. See "Additional Condition to Earn" section below for more details.

The Company will report achievement using the following steps:

- Step 1: SBE EAM achievement in a given Rate Year ("RY_x SBE Acquired LMMBtu"), will be calculated as described in section 2.1.2 above.

- Step 2: The Company will calculate the earned financial reward in a given Rate Year, if any, using the approach set forth in section 1.1.3.

The Company is limited to two filings for each Rate Year of achievement for this EAM, unless otherwise directed by Department of Public Service Staff ("DPS Staff").

Additional Condition to Earn

To be eligible to earn the SBE EAM in RY_x, the Company's cumulative acquired first-year verified gross energy savings for LMI and non-LMI electric and gas EE, and first-year gross energy savings for the Clean Heat program, between 2020 and through the end of RY_x must be greater than the Cumulative First-Year NENY Energy Savings Target for the same period (per Table 5 below).

Table 4 below summarizes the Company's First-Year NENY Energy Savings Targets (for each portfolio and in total), expressed in AMMBtu, as well as the Cumulative First-Year NENY Energy Savings Targets. Any changes to the Company's NENY energy savings targets in the NENY Interim Review[9] will replace the targets in Table 4.

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[9] Case 14-M-0094 et al., *Proceeding on Motion of the Commission to Consider a Clean Energy Fund*, Order Initiating the New Efficiency: New York Interim Review and Clean Energy Fund Review (issued September 15, 2022).

Table 4. First-Year NENY Energy Savings Targets (AMMBtu)

Year	First-Year NENY Energy Savings Target	Cumulative First-Year NENY Energy Savings Target for RY_1-RY_3 (*EAM Additional Condition to Earn*)
2020	2,167,272	
2021	2,970,491	
2022	4,396,635	
2023 (RY_1)	4,077,211	13,611,609
2024 (RY_2)	3,941,817	17,553,426
2025 (RY_3)	3,994,812	21,548,238
Total	**21,548,238**	

2.1.6 Adjustments to Metric/Targets due to the NENY Interim Review

If the NENY Interim Review process and/or a generic EAM proceeding results in the Commission eliminating the SBE EAM, or in the implementation of a replacement EE and/or heating electrification EAM metric(s), or modifications to this specific EAM metric design or its associated targets, such changes shall supersede the metric, design and targets provided for in this Joint Proposal.

2.2 Demand Response EAM

2.2.1 Description

The Demand Response ("DR") EAM encourages the Company to achieve greater growth in Demand Response programs by increasing the total megawatts ("MW") of demand reduction participating in the programs. This EAM promotes grid flexibility by developing a larger and more reliable demand response resource that can be called on to reduce peak demand and during system contingencies. The metric will measure the growth of demand response programs on a MW basis, including the Company's DR programs such as the Commercial System Relief Program ("CSRP"), Distribution Load Relief Program ("DLRP"), the Term-and Auto-Dynamic Load Management ("DLM") programs, the Direct Load Control ("DLC") program and the NYISO Special Case Resource ("SCR") program.[10]

2.2.2 Metric

The DR EAM is the total incremental MW of demand reduction from the Company's demand response programs and NYISO's SCR program in any given Rate Year compared to the prior Rate Year calculated as:

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[10] To the extent that new Company DR programs are launched during the rate period or modifications are made to existing programs, MWs participating in these programs will also count towards metric achievement.

$$RY_x \text{ Incremental MW Reduction} = RY_x \text{ MW Reduction} - RY_{x-1} \text{ MW Reduction}$$

Where,

X	1, 2 and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.
RY_x Incremental MW Reduction	The total incremental MW load reduction in Rate Year x.
RY_x MW Reduction	The total MW load reduction in Rate Year x from the Company's DR programs, as calculated using the methodology that the Company has employed when reporting 2017 – 2022 DR program data in its Annual Report plus the total MW load reduction in Rate Year x from NYISO's SCR program, using the lesser of the Installed Capacity ("ICAP") Equivalent Average Hourly Response MW and Obligated ICAP MW, Zone J, average coincident load ("ACL") baseline data published in NYISO's Annual Report on Demand Response Programs.
RY_{x-1} MW Reduction	The total MW load reduction in the year prior to Rate Year x from the Company's DR programs, as calculated using the methodology that the Company has employed when reporting 2017- 2022 DR program data in its Annual Report plus the total MW load reduction in the year prior to Rate Year x from NYISO's SCR program, using the lesser of the ICAP Equivalent Average Hourly Response MW and Obligated ICAP MW, Zone J, ACL baseline data published in NYISO's Annual Report on Demand Response Programs.

2.2.3 Measurement

The Company will use data calculated using the methodology that the Company has employed when reporting 2017 – 2022 DR program data in the Company's Annual Demand Response Program report to measure incremental MW from Company DR programs. The Company will use data published in NYISO's Annual Report on Demand Response Programs to measure incremental MW from NYISO's SCR program in Zone J.

2.2.4 Targets

Targets for each Rate Year are determined based on exceeding the historic program growth rate ("Annual DR Growth Rate") using the years 2017, 2018, 2019 and 2022, and are updated each Rate Year based on the prior year's actual performance. Targets will be set at multiples of 1.4, 1.8, and 2.2 above the baseline for the minimum,

midpoint, and maximum targets, respectively. The following table outlines the Demand Response EAM targets for RY 1, 2 and 3 respectively, expressed in annual incremental MW above the baseline.

	Level	RY₁ (2023)	RY₂ (2024)	RY₃ (2025)
DR (Incremental MW)	Baseline	63	Determined formulaically based on prior years actual performance	
	Min	88		
	Mid	113		
	Max	138		

Where,

x	1, 2 and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.
RY_x Baseline	The incremental MW load reduction baseline in Rate Year x calculated as follows: $$RY_{x-1} \text{MW Reduction} \times (1 + \text{Annual DR Growth Rate})$$
Annual DR Growth Rate	The adjusted growth rate from 2017 to 2022, using 2017, 2018, 2019 and 2022. This value is x percent (calculation shown below). $$\left(\frac{2022 \text{ MW Reduction}}{2017 \text{ MW Reduction}}\right)^{1/3} - 1$$
2022 MW Reduction	The total MW load reduction in 2022 from the Company's DR programs - as calculated using the methodology that the Company has employed when reporting 2017 -2022 DR program data in the Annual Report - and NYISO's SCR program, as shown below:

	2022 MW
Company DR Programs	702
NYISO SCR Program	381
Total	1,083

2017 MW Reduction	The total MW load reduction in 2017 from the Company's DR programs - as calculated using the methodology that the Company has employed when reporting 2017-2022 DR program data in the Annual Report - and NYISO's SCR program, as shown below:

	2017 MW
Company DR Programs	484
NYISO SCR Program	431
Total	915

2.2.5 Achievement

The Company will report achievement using the following steps:

- Step 1: Incremental MW reductions from the Company's DR programs and the NYISO SCR Program in a given Rate Year (RY_X Incremental MW Reduction), will be calculated as described above in section 2.2.2.

- Step 2: The Company will compare the reductions achieved to the targets set forth in section 2.2.4 above and calculate the earned financial reward in a given Rate Year, if any, using the approach set forth in section 1.1.3.

2.3 Light-Duty Vehicle ("LDV") Emissions EAM

2.3.1 Description

The Light-Duty Vehicle ("LDV") Emissions EAM encourages Company efforts that will accelerate light-duty electric vehicle adoption and lead to a decrease in lifetime CO_{2e} (carbon dioxide equivalent) emissions on a marginal emissions basis. For the purpose of this EAM, LDV includes Battery Electric Vehicles ("BEV") and Plugin Hybrid Electric Vehicles ("PHEV") with a Gross Vehicle Weight of less than 10,000 lb.

2.3.2 Metric

The LDV emissions metric is the total lifetime CO_{2e} emissions reductions provided by the adoption of light-duty electric vehicles in any given Rate Year.

RY_x lifetime CO_{2e} Reduction (metric tons)
$$= RY_x \text{ BEV lifetime } CO_{2e} \text{ emissions reductions}$$
$$+ RY_x \text{ PHEV lifetime } CO_{2e} \text{ emissions reductions}$$

Where,

X	1, 2 and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.
RY_x Lifetime CO_{2e} Reduction	Total avoided lifetime CO_{2e} emissions in metric tons due to incremental LDVs in Rate Year x.
RY_x BEV lifetime CO_{2e} emission reductions	Total avoided lifetime CO_{2e} emissions in metric tons due to incremental BEVs in Rate Year x.
RY_x PHEV lifetime CO_{2e} emission reductions	Total avoided lifetime CO_{2e} emissions in metric tons due to incremental PHEVs in Rate Year x.

2.3.3 Measurement

The total lifetime CO_{2e} emissions reductions will be measured in metric tons and will be calculated by summing the lifetime CO_{2e} emissions reductions provided by the adoption of light-duty electric vehicles in the applicable Rate Year. The table below gives the Annual Tons CO_{2e} avoided per unit based on the more detailed calculations found in Appendix 22 Attachment A.

EV Technology	Annual Tons CO_{2e} Avoided per unit
BEV	2.33
PHEV	2.04

2.3.3.1 BEV

The BEV measurement will consider all incremental light-duty BEVs on the road in the Company's service territory during each Rate Year. The Company primarily tracks vehicles on the road in its service territory using Atlas' EValuateNY, a NYSERDA funded tool that uses vehicle registration data from the New York State Department of Motor Vehicles, and may supplement with any other available sources.[11] If multiple sources are used, the Company will demonstrate in its annual report to the Commission the actions it has taken to avoid double counting vehicle registrations.

2.3.3.2 PHEV

The PHEV measurement will consider all incremental light-duty PHEVs on the road in the Company's service territory during each Rate Year. The Company primarily tracks vehicles on the road in its service territory using Atlas' EValuateNY, and any other available sources, and may supplement with any other available sources. If multiple sources are used, the Company will demonstrate in its annual report to the Commission the actions it has taken to avoid double counting vehicle registrations.

2.3.4 Targets

Targets are based on a combination of market forecasts and policy goals for adoption of light-duty electric vehicles. The baseline and targets for the LDV Emissions EAM ("RY_x LDV Target") for each Rate Year, expressed as ton CO_{2e} are shown below for the minimum, midpoint, and maximum level of achievement.

	Level	RY$_1$ (2023)	RY$_2$ (2024)	RY$_3$ (2025)
LDV (ton CO_{2e})	Baseline	496,642	578,380	643,898
	Min	521,474	607,299	676,093
	Mid	624,640	921,156	1,385,881

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[11] Atlas EValuate: https://atlaspolicy.com/evaluateny/

	Max	727,806	1,235,013	2,095,669

Where,

RY$_x$ LDV Baseline — The level of adoption of electric vehicles projected using the Electric Power Research Institute ("EPRI") light-duty vehicle forecast. The incremental vehicle increases are converted to lifetime CO_{2e} reductions as described in section 2.3.3 above to determine a lifetime CO_{2e} ton baseline.

RY$_x$ LDV Target$_{Min}$ — The minimum targets are set at 5% above the baseline.

RY$_x$ LDV Target$_{Mid}$ — The Rate Year midpoint lifetime ton CO_{2e} reduction targets are based on the average of the rate year's minimum and maximum targets, calculated as follows:

$$(RY_x \text{ LDV Target}_{Min} + RY_x \text{ LDV Target}_{Max}) / 2$$

RY$_x$ LDV Target$_{Max}$ — Based on the Company achieving its share of the light-duty electric vehicle adoption policy target of 850,000 LDVs statewide, or 229,232 vehicles in the Con Edison service territory. This policy target was set based on meeting the goals under the 2013 Zero Emission Vehicle (ZEV) multi-state memorandum of understanding (MOU)[12]. A regression analysis assuming exponential growth was performed to extrapolate the trendline between the end of 2022 forecast and 2025 ZEV MOU target for cumulative LDVs. The incremental vehicle increases are converted to lifetime CO_{2e} reductions as described in section 2.3.3 above to determine the target lifetime CO_{2e} ton reductions.

2.3.5 Achievement

The Company will report achievement using the following steps:

- Step 1: Incremental lifetime CO_2 emissions reductions associated with incremental LDV sales in a given Rate Year will be calculated as described in section 2.3.2 above.

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[12] State Zero-Emission Vehicle Programs, Memorandum of Understanding (October 24, 2013). At: dec.ny.gov/docs/air_pdf/zevmou.pdf

- **Step 2:** The Company will compare the levels calculated in Step 1 to the targets set forth in section 2.3.4 above and calculate the earned financial reward in a given Rate Year, if any, using the approach set forth in section 1.1.3.

2.4 Transportation Interconnection Timeline EAM

2.4.1 Description

The Transportation Electrification Interconnection Timeline ("TE Interconnection") EAM incentivizes the Company to reduce the average timeline for transportation electrification projects from application to energization, relative to a historical baseline, for transportation electrification projects 300 kilowatts (kW) and larger each rate year. For the purpose of this EAM, transportation electrification projects refer to cases for which the electric vehicle load request is one-half or more of the total load request, and the 300 kW threshold refers to the total transportation electrification load and does not include any non-transportation electrification load.

2.4.2 Metric

The TE Interconnection EAM metric will measure reductions in the interconnection timeline for transportation electrification projects of 300 kW and larger from application to energization for six distinct categories of work performed for the interconnection. The performance in each rate year will be assessed as a percent improvement in the timeline for all transportation electrification projects completed in that year compared to the baseline, developed as the average historical timelines from January 1, 2019, through August 31, 2022. The six work categories are described below:

Work Category	Description
New Secondary Service Install	New service cable(s) and conduit(s) and associated trenching required to service new customer loads.
New Secondary Service Install & System Upgrade	New service cable(s) and conduit(s) and grid reinforcement required to service new customer load; grid reinforcement may include installing new transformers, extending primary feeders, and/or new service cable and conduit.
New Overhead Service Install & System Upgrade	A new overhead service and grid reinforcement required to service new customer load; grid reinforcement may include installing new poles, overhead transformers, extending primary feeder, and/or new overhead service cable.
Service Adequate – High Tension	The customer's existing high tension installation is adequate to support the additional load being requested. Limited utility work required.

| New Vault Service Install | New underground transformers are required to service the customer load. These installations may be in the franchise area or on customer property and provide power at 120/208V or 265/460V. This may also require some level of downstream grid reinforcement. |
| New High Tension Service | A new high tension installation is needed to support the load requested by a customer. The customer is fed from the utility at the primary level (4KV, 13KV, 27KV, 33KV) and will have customer owned step down transformers. This may also require some level of grid reinforcement. |

The metric is calculated as the weighted average timeline to complete the transportation electrification projects from application to energization. The weight is based on the number of MWs completed in each of the work categories. In RY1, performance will be measured with a straight MW weighting; in RY2 and RY3, the number of MWs completed in the New High Tension service category will be doubled to provide additional weight to this category.

The weighted average timeline is defined as:

RY_x Weighted Average TE Timeline

$$= \sum_{y=category}^{6} (RY_x \text{ Average Time Work Category}_y * RY_x \text{ MW Weight Work Category}_y)$$

Where,

x	1, 2 and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.
y	New Secondary Service Install, New Secondary Service Install & System Upgrade, New Overhead Service Install & System Upgrade, Service Adequate – High Tension, New Vault Service Install and New High Tension Service.
RY_x Average Time Work Category$_y$	The average time in calendar days to complete projects for each of the six respective work categories, calculated as follows: $$\frac{\sum \text{Days to complete all projects in work category}_y \text{ in } RY_x}{\sum \text{Total number of projects completed in work category}_y \text{ in } RY_x}$$

RY$_x$ MW Weight Work Category$_y$	The MW weighting for each of the six respective work categories, calculated as follows:

$$\frac{RY_x MW_y}{RY_x MW_{total}}$$

RY$_x$ MW$_y$	Total number of MWs of all projects completed in work category$_y$ in the rate year.
RY$_x$ MW$_{total}$	Total number of MWs of all projects completed in all six work categories in the rate year.

For RY2 and RY3, if there are completed New High Tension Service project(s), this work category will be double weighted. This can be accomplished by doubling the number of MWs in the New High Tension Service work category prior to performing all calculations.

2.4.3 Measurement

The Company will develop the timeline data for each project from its Customer Project Management System ("CPMS") which tracks project timelines from application submission to energization. The interconnection timeline for each project completed in the given rate year will be measured based on the timelines in CPMS, and the calculation for the metric will be completed as described above in section 2.4.2.

2.4.4 Targets

Targets ("RY$_x$ TE Interconnection Target") for performance will be set as a percent improvement in the weighted average interconnection timeline relative to the historical baseline. The percent improvements for the minimum, midpoint, and maximum in each Rate Year are shown in the table below.

	Level	RY$_1$ (2023)	RY$_2$ (2024)	RY$_3$ (2025)
TE Interconnection (Percent Improvement in Timeline (Weighted))	Min	8%	9%	13%
	Mid	15%	18%	20%
	Max	25%	30%	35%

The baseline for each rate year will developed based on the weighted average historic average number of days from project application to energization for all load request projects completed by Con Edison across the six work categories from January 1, 2019 to August 31, 2022. The MW weighting will be applied to the historic averages to serve as a proportional comparison to the performance of each respective Rate Year.

The baseline is calculated as follows:

Baseline Weighted Average Transportation Electrification Timeline

$$= \sum_{y=category}^{6} \big(\text{Historic Average Time Work Category}_y$$

$$* \; RY_x \text{ MW Weight Work Category}_y \big)$$

Where,

x	1, 2 and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.
y	New Secondary Service Install, New Secondary Service Install & System Upgrade, New Overhead Service Install & System Upgrade, Service Adequate – High Tension, New Vault Service Install and New High Tension Service.
Historic Average Time Work Category$_y$	Averages of all projects completed by the Company for each of the respective six work categories from January 1, 2019 to August 31, 2022 (shown in Table 6 below).
RY$_x$ MW Weight Work Category	The MW weighting for each of the six respective work categories, calculated as follows:

$$\frac{RY_x MW_y}{RY_x MW_{total}}$$

MW$_y$	Total number of MWs of all projects completed in work category$_y$ (shown in Table 6 below).
MW$_{total}$	Total number of MWs of all projects completed in all six work categories.

The historic averages and total MW completed for the work categories are outlined in the table below:

Table 6. Historic Interconnection Timeline and MW Completed

Category	Average timeline (calendar days)	Total MW completed
New Secondary Service Install	594	104
New Secondary Service Install & System Upgrade	741	103
New Overhead Service Install & System Upgrade	774	37
Service Adequate – High Tension	925	32
New Vault Service Install	1156	167
New High Tension Service	2266	23

2.4.5 Achievement

The Company will report achievement using the following steps.

- Step 1: The Company will collect data on the total number of MWs completed in each Rate Year for each work category and the average number of days to complete jobs in each work category from CPMS. The RY_x Weighted Average Transportation Electrification Timeline and Baseline Weighted Average Transportation Electrification Timeline will be calculated as described above. The reduction between baseline and RY_x will be expressed as a percentage and calculated as follows:

    RY_x Performance

    $$= \frac{\left(\begin{array}{c} \text{Baseline Weighted Average Transportation Electrification Timeline } - \\ \text{RYx Weighted Average Transportation Electrification Timeline} \end{array} \right)}{\text{Baseline Weighted Average Transportation Electrification Timeline}}$$

- Step 2: The Company will compare the RYx Performance calculated in Step 1 to the targets set forth in section 2.4.4 above and calculate the earned financial reward in a given Rate Year, if any, using the approach set forth in section 1.1.3.

2.5 Managed Charging EAM

2.5.1 Description

The Managed Charging EAM is intended to decrease peak coincident electric vehicle charging demand through grid beneficial behavior in the Company's Managed Charging program(s).

The details of the Managed Charging EAM(s) for all three years of managed charging program will be developed through a collaborative to be commenced within 30 days from January 19, 2023, with the objective of completing work within 60 days of commencement. Meetings will be held weekly or as otherwise determined by the participants. If needed, the parties may agree to extend the 60 day period.

In the event the collaborative reaches consensus on the EAM(s), the Company, working with collaborative participants, will prepare a consensus report for filing with the Commission describing that agreement no later than 10 days after agreement is reached. The report will include a detailed description of the metrics, targets and basis points. If the collaborative does not reach consensus on the EAM(s) , parties may file comments on the collaborative discussion and/or recommendations to the Commission regarding the EAM(s) 15 days after the collaborative ends. Parties also may file reply comments 7 days thereafter. The parties will endeavor to file either a consensus document or comments prior to a Commission ruling on the Joint Proposal so that the EAM(s) can be addressed in the Commission decision on this Joint Proposal.

A maximum of 10 basis points will be reserved for the EAM(s).

2.6 Distributed Energy Resource ("DER") Utilization (DERU) Solar EAM

2.6.1 Description

The Distributed Energy Resource ("DER") Utilization ("DERU") Solar EAM encourages the Company to work with DER providers and expand the use of solar DER in its service territory for the purposes of reducing customer reliance on grid-supplied electricity.

2.6.2 Metric

The DERU Solar metric is the annual, incremental nameplate alternating current ("AC")-MW capacity of solar photovoltaics ("solar PV") interconnected in Con Edison's territory, calculated as follows:

RY_x DERU Solar $= \sum RY_x$ Solar PV MW interconnections

Where,

x	1, 2, and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively.
RY_x DERU Solar	Summation of solar PV projects interconnected within Con Edison's service territory in Rate Year x, via the New York State Standardized Interconnection Requirements ("SIR") process, measured in AC-MW.
RY_x Solar PV MW interconnections	The AC-MW capacity of each solar PV project interconnected in Rate Year x through the SIR process.

2.6.3 Measurement

Solar PV interconnections will be measured by the nameplate AC-MW capacity of each project that completes the SIR process and is approved to commence operation, as reported in the Company's SIR Inventory Report for each Rate Year.

2.6.4 Target

The EAM baseline and targets for DERU Solar ("RY_x DERU Solar Target") for each Rate Year are shown below for the minimum, midpoint, and maximum level of achievement.

	Level	2023 (RY₁)	2024 (RY₂)	2025 (RY₃)
	Baseline	88.55	97.18	105.82

DERU Solar (AC-MW)	Min	95.19	104.47	113.75
	Mid	110.68	121.48	132.27
	Max	132.82	145.77	158.73

The baseline for the DERU Solar EAM was developed based on a regression trendline using actual 2017-2022 annual solar interconnections. For each Rate Year, the baseline is greater than 56.25 MW, which is the annual apportionment of the goal to install 450 MW of incremental solar in Con Edison's service territory by 2030, per the NY-Sun Expansion Order.

Targets are set at 7.5 percent, 25 percent, and 50 percent above the baseline for the minimum, midpoint, and maximum targets, respectively.

2.6.5 Achievement

The Company will report achievement using the following steps:
- Step 1: Report the capacity of solar PV installations that complete the SIR process and are approved to commence operation in a given Rate Year, measured in AC-MW.
- Step 2: Compare the capacity determined in Step 1, RY_x DERU Solar, to the baseline and targets set forth in Section 2.6.4, and calculate the earned financial reward in a given Rate Year, if any, as detailed in section 1.1.3.

2.7 DERU Storage EAM

2.7.1 Description

The DERU Storage EAM incentivizes the Company to support the installation of customer-sited energy storage systems ("ESS") of 5 MW or less (excluding Non-Wires Alternatives projects).[13]

2.7.2 Metric

The DERU Storage metric is the incremental nameplate AC-MW capacity of customer-sited ESS of 5 MW or less interconnected in Con Edison's service territory, calculated as follows:

$$RY_x \text{ DERU Storage} = \sum RY_x \text{ ESS MW interconnections}$$

Where,

| x | 1, 2, and 3 for Rate Year 1, Rate Year 2, or Rate Year 3, respectively |

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[13] Con Edison uses the marketing term "Non-Wires Solutions."

RY$_x$ DERU Storage	Summation of ESS projects' capacity that complete the SIR process and are approved to commence operation within Con Edison's service territory in Rate Year x, measured in AC-MW.
RY$_x$ ESS MW interconnections	The AC-MW capacity of each ESS project that completes the SIR process and is approved to commence operation within Con Edison's service territory in Rate Year x.

2.7.3 Measurement

The capacity of ESS installations will be measured by the inverter AC nameplate rating of each project that completes the SIR process and is approved to commence operation, as reported in the Company's SIR Inventory Report for each Rate Year. The Company will identify in its EAM filing any incremental interconnected capacity (AC-MW) from projects less than or equal to 5 MW that are under contract with Con Edison through its Non-Wires Alternatives programs, and those MW will be removed from the measurement.

2.7.4 Target

The EAM targets for DERU Storage ("RY$_x$ DERU Storage Target") for each Rate Year are shown below for the minimum, midpoint, and maximum level of achievement.

	Level	**RY$_1$ (2023)**	**RY$_2$ (2024)**	**RY$_3$ (2025)**
DERU Storage (AC-MW)	Baseline	9.83	15.47	24.36
	Min	10.81	17.02	26.80
	Mid	12.28	19.34	30.45
	Max	14.74	23.21	36.54

The targets are based on an exponential growth curve to achieve a 2030 goal for SIR storage interconnections in Con Edison's service territory. The minimum, midpoint, and maximum targets are set at 10 percent, 25 percent, and 50 percent above the baseline.

2.7.5 Achievement

The Company will report achievement using the following steps:

- Step 1: Report the capacity of ESS projects that complete the SIR process and are approved to commence operation in a given Rate Year, measured in AC-MW.

- Step 2: Compare the capacity of ESS projects determined in Step 1, RY_x DERU Storage, to the baseline and targets set forth in Section 2.7.4, and calculate the earned financial reward in a given Rate Year, if any, as detailed in section 1.1.3.

Appendix 22 - Attachment A

Data inputs are consistent with the Beneficial Electrification EAM from the 2020 - 2022 rate period and were originally developed through a collaborative process with DPS and other stakeholders during 2017 - 2019 rate period.

kg CO2e avoided / MWh Light Duty BEV Analysis

Item	Value
Btu / gallon gasoline	123,000
Btu / kWh	3,414
kWh / gallon gasoline	36.03
Gallons / MWh	27.76
kg CO2e emissions / liter gasoline	2.425
kg CO2e emissions / gallon gasoline	8.50
kg CO2e emissions / MWh (gasoline fuel)	235.93
Passenger vehicle efficiency (miles per gallon gasoline)	24.20
miles per MWh (gasoline car)	671.70
kg CO2e / mile (gasoline car)	0.35
Passenger BEV efficiency (kWh / mile)	0.32
EPA eGrid figure Emission Rate (kg / kWh)	0.46
kg CO2e/mile (electric car)	0.15
kgCO2e savings/mile (gas-electric)	0.2035
Miles traveled / vehicle / year	11,467
Net kg CO2e avoided / per EV per year	**2,334**

kg CO2e avoided / MWh Light Duty PHEV Analysis

Item	Value
Btu / gallon gasoline	123,000
Btu / kWh	3,414
kWh / gallon gasoline	36.03
Gallons / MWh	27.76
kg CO2e emissions / liter gasoline	2.425
kg CO2e emissions / gallon gasoline	8.50
kg CO2e emissions / MWh (gasoline fuel)	235.93
Passenger vehicle efficiency (miles per gallon gasoline)	24.50
miles per MWh (gasoline car)	680.02
kg CO2e / mile (gasoline car)	0.35
Passenger PHEV efficiency (kWh / mile)	0.37
EPA eGrid figure Emission Rate (kg / kWh)	0.46
kg CO2e/mile (electric car)	0.17
kgCO2e savings/mile (gas-electric)	0.1776
Miles traveled / vehicle / year	11,467
Net kg CO2e avoided / per EV per year	**2,036**