Case Nos. 18-E-0067 & 18-G-0068

ORANGE AND ROCKLAND UTILITIES, INC.

EARNING ADJUSTMENT MECHANISMS PANEL
REBUTTAL – ELECTRIC & GAS

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INTRODUCTION

Q. Would the members of the Earning Adjustment Mechanisms ("EAMs") Panel ("Panel") please state your names.

A. Charmaine Cigliano, Kristen M. Barone and Michael McGuire.

Q. Have you previously submitted testimony in this proceeding?

A. Yes. We submitted direct testimony as the Panel on behalf of Orange and Rockland Utilities, Inc. ("Orange and Rockland," "O&R" or the "Company").

Q. What is the purpose of the Panel's rebuttal testimony?

A. The purpose of this rebuttal testimony is to respond to the direct testimonies of the following parties:

- Department of Public Service Staff ("Staff") Earning Adjustment Mechanisms Panel (" Staff EAMP");
- Utility Intervention Unit EAM and Customer Service Panel ("UIU EAMP"), and;
- Mr. Robert Wyman.

EAM STRUCTURE

Q. Please summarize Staff EAMP's recommendations related to the overall structure of the Company's proposed EAMs.

A. Staff makes five recommendations on the overall structure of the Company's EAMs. First, Staff recommends that EAM basis point ("BP") values be expressed in terms of absolute dollars once O&R's capital structure, allowed rate of return, equity ratio, and net plant in service targets are known. Second, Staff recommends establishing a gas EAM metric related to the Company's gas energy efficiency ("EE") program. Third, Staff recommends an EAM related to higher adoption of environmentally beneficial electrification ("EBE") technologies in the Company's service territory. Fourth, Staff recommends a reduction in incentive levels for the Company's electric EAMs from a maximum of 100 BPs to 50 BPs. Staff recommends up to 10 BPs for the Company's Gas EAM. Fifth, Staff recommends that EAM metrics, targets, and financial incentives be set for three-

years regardless of whether this proceeding results in a one-year or multi-year rate plan. However, Staff recommends that the EAM targets be reconsidered as part of a collaborative in the event that the Commission authorizes significant new programs or substantial increases to the budgets for existing programs as a result of ongoing statewide policy proceedings.

Q. Does the Company agree with the Staff EAMP's first recommendation that BPs should be expressed in absolute dollars?

A. Yes. The Company supports conversion of incentive BPs to absolute dollars once the capital structure and rate base are determined in these rate proceedings. However, in the interim the Panel will continue to express incentives in terms of BPs throughout this rebuttal testimony.

Q. Does the Company agree with Staff's second recommendation related to establishing a Gas EAM?

A. Yes. However, the Company proposes to modify Staff's approach in developing the Gas EAM targets. We discuss these modifications later in this rebuttal testimony.

Q. Does the Company agree with Staff's third recommendation related to establishing an EAM for encouraging EBE technologies?

A. Yes. While Staff put forth only illustrative targets, the Company has proposed targets for the electric vehicle ("EV") portion of the EBE EAM that we discuss later in this rebuttal testimony.

Q. Was Staff's recommendation for an EBE metric proposed by any other party?

A. Yes. Mr. Wyman proposed splitting the Distributed Energy Resources ("DER") Utilization metric to form an EBE metric consistent with Staff's proposal.

Q. Does the Company agree with Staff's fourth recommendation on the revised EAM incentive BPs?

A. The Company supports Staff's recommended Gas EAM incentive of up to ten BPs. However, the Company opposes Staff's proposed reduction in incentives for electric EAMs. The Company continues to support

maximum incentives of 100 BPs for its proposed electric EAMs. As discussed in the Panel's Direct Testimony (p. 12), the Company's proposal of incentives of up to 100 BPs is consistent with the Commission's guidance in the REV Track Two Order[1] that EAM incentives should be "financially meaningful and structured such that they encourage enterprise-wide attention at the utility and encourage strategic, portfolio-level approaches beyond narrow programs." To support the achievement of EAM targets, the Company has proposed initiatives that achieve market outcomes through innovation and collaboration with stakeholders including third-party DER developers. The Company believes that earning opportunities of up to 100 BPs provides the Company with incentives to pursue these initiatives and go above and beyond the traditional business model to achieve REV objectives and customer benefits in a rapidly evolving market.

[1] Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision* ("REV Proceeding"), Order Adopting a Ratemaking and Utility Revenue Model Policy Framework (issued May 19, 2016)("REV Track Two Order")(p. 68).

Q. Has the Company updated its proposed allocation of BPs to EAM metrics?

A. Yes. The Company has updated the proposed allocation of BPs based on the benefit-cost analysis ("BCA") conducted for the Company's revised EAM proposal presented in this rebuttal testimony in Exhibit _ (EAMP-4R).

Q. Does the Company agree with Staff's fifth recommendation on setting the EAM metrics, targets, and incentives for three years?

A. Yes, the Company supports establishing EAM metrics, targets, and incentives for three years. The Company also agrees that the EAM targets should be reconsidered as part of a collaborative if the programs supporting the EAMs are significantly impacted by Commission decisions in ongoing statewide proceedings. However, as noted in the Panel's direct testimony (p. 50), regardless of the ongoing statewide proceedings, the Company has proposed to perform an evaluation and review of the EAMs by June 1, 2020 to

determine if any changes or modifications to the EAMs may be warranted.

Q. What is the rationale behind Company's proposal for the evaluation and review of EAMs by June 1, 2020?

A. As discussed by the Staff EAMP (p. 13), there are risks involved in setting multi-year EAM metrics, targets, and financial incentives. For example, there is a substantial risk that the EAM targets, especially related to outcome-based metrics, may be set too strictly for the utility, such that the utility is unable to achieve such targets regardless of its efforts due to constraints beyond the Company's control. While Staff proposes to mitigate this risk through the target setting process, the Company finds it more practical to conduct an evaluation and review midway through the three-year term to share lessons-learned, and propose modifications to EAMs, if necessary.

Q. Is there any additional recommendation by the UIU EAMP or Mr. Wyman that the Panel wishes to address before separately discussing each EAM metric?

A. Yes. The Panel wishes to address Mr. Wyman's proposal to establish a Managed Decapitalization EAM that incentivizes the Company for retirement of its gas business assets at an accelerated rate and conversion of gas customers to beneficial electric use.

Q. Does the Company support Mr. Wyman's proposed Managed Decapitalization EAM?

A. No. The Company does not support Mr. Wyman's proposed Managed Decapitalization EAM. The Company finds this EAM to be inconsistent with Commission's guidance in the REV Track Two Order. In addition, Mr. Wyman's proposal is fundamentally inconsistent with the Company's obligation to provide gas service, as discussed in the rebuttal testimony of the Company's Policy Panel.

System Efficiency EAM

Q. Please restate the metrics related to the Company's proposed System Efficiency EAM ("SE EAM").

A. The Company proposed three SE EAM metrics: (1) MW Peak Load Reduction; (2) Distribution Circuit Peak Load Reduction; and (3) DER Utilization.

MW Peak Load Reduction

Q. Please summarize Staff's recommendations on the MW Peak Load Reduction metric.

A. Staff proposes that the MW Peak Load Reduction metric be an outcome-oriented metric measuring reduction based on the Company's weather-normalized peak load coincident with New York Independent System Operator's ("NYISO") designated Zone G-J Locality (instead of the overall New York Control Area ("NYCA") peak). Staff developed its recommended minimum, mid-point, and maximum targets for the MW Peak Load Reduction metric based on Staff's proposed targets for Solar Photovoltaic ("PV"), demand response, and EE programs. Staff also recommends that the demand reductions related to Energy Intensity and Time-of-Use ("TOU") Rate Enrollment metrics be included in the MW Peak Load Reduction targets.

Q. How did Staff develop targets for the peak reduction metric?

A. Staff developed revised targets for peak reduction metrics in five computational steps. First, Staff developed a baseline forecast by applying the ten-year Compound Annual Growth Rate ("CAGR") for NYISO Zone G-J to the Company's historical 2017 weather-normalized Zone G-J Locality peak demand. Staff also adjusted the baseline forecast for the impacts of Company's current Efficiency Transition Implementation Plan ("ETIP") EE programs, forecasted incremental solar installations, and current Demand Response ("DR") program enrollment. Second, Staff calculated the peak demand impacts of the Staff's recommended targets for the Solar PV, Incremental EE, and Energy Intensity metrics. Third, Staff revised the Company's DR targets based on the last five years' experience from Consolidated Edison Company of New York, Inc.'s ("Con Edison") CSRP enrollment data. Fourth, Staff calculated the peak reduction impacts of increased TOU rate enrollment based on the Staff's proposed participation targets.

Fifth, Staff subtracted the peak demand impacts developed in steps two through five from the baseline peak demand forecast developed in step one to determine the minimum, mid-point, and maximum peak demand MW targets.

Q. Does the UIU EAMP make any recommendations regarding the MW Peak Reduction metric?

A. Yes. The UIU EAMP also recommends that the peak load reduction metric should be completely outcome-oriented.

Q. Does the Company agree with Staff's and UIU EAMP's recommendation for the MW Peak Load Reduction metric to be completely outcome-oriented?

A. Yes. The Company supports the MW Peak Load Reduction metric to be completely outcome-oriented based on reduction in the Company's weather-normalized peak load coincident with NYISO designated Zone G–J Locality. In addition, the Company supports Staff's recommendation to include the peak impacts of the TOU enrollment in the MW Peak Load Reduction metric.

Q. Does the Company propose any enhancements in Staff's first computational step to develop the baseline forecast for the MW Peak Load Reduction metric?

A. Yes. The Company is proposing three enhancements. First, the Company has provided in Exhibit _ (EAMP-1R) revised historical weather-normalized peak data based on an updated weather-normalization methodology. The loads provided in the Company's response to Staff interrogatory DPS-414 were not weather-adjusted, and should not be used. Second, instead of applying ten-year annual CAGR of the Zone G peak load forecast or the Zone G-J Locality load forecast, the Company is proposing to utilize its coincident peak load for the baseline forecast. Third, the Company is proposing to measure the peak load reduction as a percentage decrease in year-over-year peak load in each of the three years to determine the annual incremental peak reduction. This approach is similar to the Energy Intensity metric. The proposed targets are set forth in EAMP-2R.

Q. Is the Company proposing any revisions to the peak demand impacts from the Energy Storage technologies and other DG/CHP?

A. Yes. The Company has updated the peak demand impacts related to Energy storage technologies and other DG/CHP for the revised targets proposed in this Rebuttal Testimony. The revised targets of Battery Storage, and CHP/other DG are in line with the revised targets of the DER Utilization Metric and the details are discussed the DER Utilization section of this Rebuttal Testimony. The Company proposes that the Energy Storage peak reduction target be given a 20% discount in order to account for losses and coincident operation of the storage technologies with the O&R peak that would not been realized in an outcome oriented approach as described above.

Q. Does the Company support Staff's recommended peak demand impacts from EE?

A. No, the EE peak demand impacts directly corresponded to the MWH targets, of which the Company is not

proposing any changes. Please see the Company's EE Rebuttal Testimony for details.

Q. Does the Company support Staff's recommended peak demand impacts from Solar PV?

A. No, the Company recommends their original targets for Solar PV peak demand impact. The peak demand impacts of Solar PV are in line with the targets of the DER Utilization Metric and the details are discussed the DER Utilization section of this Rebuttal Testimony.

Q. Does the Company support Staff's recommended DR targets?

A. Yes. However, the Company believes that if DR is not called on the measured peak day, then the average DR performance on actual events or tests should be included in measurement of peak load reduction. The Company notes that current DR enrollment for the 2018 program is 16.5 MW. While this level exceeds Staff's proposed maximum target of 16.4 MW in 2021, the current DR enrollment is not a guarantee of future DR enrollment as customers must re-enroll each year in DR programs. For example, if numerous DR events are

called for in a particular year due to an abnormally hot summer and it proved to be uneconomical for a customer who was not anticipating that many events, that customer may not re-enroll. For another example, a manufacturing customer may not re-enroll in the program if its production schedules can no longer accommodate shedding their committed MW load.

Q. Has the Company revised Staff's peak reduction impacts of increased TOU rate enrollment?

A. Yes. The Company revised the TOU participation targets as part of the TOU Enrollment metric. The revisions to participation targets are discussed the TOU Enrollment metric section of this rebuttal testimony. For each TOU participant, the peak reduction impacts are estimated to be 0.2 kW.

Circuit Peak Load Reduction

Q. Please summarize Staff's recommendations on the Circuit Peak Load Reduction metric.

A. Staff does not support the Circuit Peak Load Reduction metric for three reasons. First, Staff does not find any indication that overall system load factor is a reasonable target. Second, Staff favors a relatively

small number of metrics with larger BP awards. Third, Staff states that there are other measures like Non-Wire Alternatives ("NWAs") that the Company can use to achieve load reductions on these circuits without the need for a specific EAM metric.

Q. Does the UIU EAMP make any recommendations regarding the Circuit Peak Load Reduction metric?

A. Yes. The UIU EAMP recommends the elimination of the Circuit Peak Load Reduction metric, because the Commission has not approved it for any other utility. The UIU EAMP also raises concerns that the metric may result in a double incentive as the Company is also incentivized to reduce circuit peak impacts as part of its NWA initiatives.

Q. What is the Company's position on its proposed Circuit Peak Load Reduction metric?

A. The Company continues to support it. The Company designed this metric to achieve significant reliability benefits to specific areas in its electric distribution system. The Company selected the circuits following a detailed analysis of the Company's

electric distribution system, and determined that reducing peak loads in the areas served by these circuits will result in significant system and customer reliability benefits. The six selected circuits are usually in the top 70 worst performing circuits on an annual basis. Peak reduction on these circuits allows the Company to operate and manage load more efficiently to maintain reliability year-round. Peak reduction also improves the Company's ability to backup these circuits in the event of a circuit and/or bank contingency, whereas without these reductions, back up would not be available.

Q. Are the proposed circuit load reductions a reasonable target for the selected circuits?

A. Yes. The proposed circuit load reductions alleviate operating risks for these circuits under contingency conditions, and should result in reliability improvements.

Q. Does the Circuit Peak Load Reduction metric result in a double-count with incentives tied to NWA initiatives?

A. Not necessarily. First, there is no guarantee that the proposed circuits will be included in an NWA. Second, even if the proposed circuits are included in an NWA the potential overlap is likely to be small considering the scope of the circuit peak load reduction metric. NWAs have a broader focus of deferring infrastructure needs through substantial MW peak reductions over a certain period of time. In contrast, the circuit peak load metric is designed to maximize reliability benefits in selected circuits with much smaller and focused peak reduction. Third, the Company plans to propose different circuits for this EAM in future rate cases with additional reliability risks after completion of this initial three-year EAM term.

Q. Does the Company believe that the Circuit Peak Load Reduction metric should be eliminated?

A. No. The REV Track Two Order (p. 62) provides each utility the opportunity to present innovative programs and initiatives in its service territory to achieve REV policy objectives and customer benefits.

Specifically, the Commission states: "…outcome-based incentives encourage innovation by the utility, as opposed to merely conforming to plans approved or ordered by the Commission." The Circuit Load Reduction metric presents a unique opportunity for the Company to target certain circuits in Company's system, where reducing peak load will result in maximum reliability benefits. The Company is also proposing to increase the incentive associated with this metric to a maximum of 5 BPs to allow for a more meaningful incentive.

DER Utilization

Q. Please summarize Staff's recommendations on the DER Utilization metric.

A. Staff agrees with the general framework for the DER Utilization metric, but proposes several modifications. First, Staff disagrees with the inclusion of MWh produced by residential Solar PV installations, and MWh used for charging purposes for EVs and energy storage systems in the DER Utilization metric. Second, Staff proposes to consider EVs in the newly proposed EBE metric. Third, Staff has proposed revised targets for the DER Utilization metric.

Q. What changes does Staff propose to the Solar PV targets for the DER Utilization metric?

A. Staff proposes to include only non-residential Solar PV in the DER Utilization metric. Staff states that the residential solar market is mature and does not require additional incentives for market development. Staff considered non-residential Solar PV to be 23.0 percent of total solar installations based on the historical data provided by the Company in its response to interrogatory DPS-267. Staff developed the non-residential Solar PV targets by establishing a forecast based on second order polynomial trend of Company's historic Solar PV nameplate MW installations. The minimum, mid-point, and maximum targets were set using standard error multipliers of 0.25, 1.0, and 1.75. The MW targets were converted to MWH using 13.4 percent solar capacity factor.

Q. Does the Company agree with Staff's recommendation to only include non-residential solar in the DER Utilization metric?

A. No. The Company believes that it will continue to play a substantial role in the development of the residential solar market. For example, the Company has the vision for its My ORU Store Marketplace to become a centralized customer transactional platform, including for Solar PV installations. To encourage growth in the residential solar market, the Company is exploring a unique opportunity to expand upon its current services by offering a new solar platform that would educate customers about solar and enable them to connect with qualified providers in the territory. The project will increase education and awareness in Company's customers, and provide tools to make informed financial decisions.[2] The Commission has also directed Staff to work with stakeholders to develop a transition away from Net Metering for mass market customers, to be in place by January 2020 through the Value of DER proceeding.[3] The Company has been an

[2] For more details, see O&R REV Demonstration Project: Customer Engagement Marketplace Platform Q1 2018 Report, filed April 30, 2018 in Case 14-M-0101 (p. 15)
[3] Case 15-E-0751, *In the Matter of the Value of Distributed Energy Resources*.

active participant in this process. This new retail tariff would impact the maturity of DER in mass market segment. Considering the Company's innovative solutions for the residential solar market and the upcoming VDER Phase 2, the residential solar should be a part of the DER Utilization metric.

Q. Are there additional reasons the Company believes it is inappropriate to include only non-residential PV in the DER Utilization metric?

A. There is not always a clear distinction between residential and non-residential PV. For example, Community Distributed Generation ("CDG") projects can have both residential and commercial subscribers, which would make these projects difficult to classify. In addition, the solar market continues to evolve, thus it is very difficult to project the ratio between residential and non-residential projects.

Q. Does the Company agree with the Staff's target setting methodology for Solar PV?

A. No. First, the Company does not support Staff's forecast based on a second order polynomial trend.

Staff's statistical methodology does not acknowledge several important factors driving the solar market. Some of these factors include changing costs, site and project permitting constraints, and changing tax credits. The Company recommends that the baseline be based on the Company's solar forecast that considers these factors.

Second, Staff's proposed standard error multipliers for target setting reflect unreasonable expectations, based upon the Company's initiatives to achieve these targets. The Company proposes to maintain its recommended standard error multipliers of 0.0, 0.25, and 0.50 at minimum, mid-point, and maximum target levels. The Company continues to support their original Solar PV targets.

Q. What changes does Staff propose for the energy storage targets?

A. Staff considers the Company's proposed energy storage targets for Rate Year 1 (or RY1) (*i.e.*, calendar year 2019) to be reasonable, but those for Rate Year 2 (or RY2) (*i.e.*, calendar year 2020), and Rate Year 3 (or

RY3) (*i.e.*, calendar year 2021) to be unreasonable. Staff has set the energy storage targets to be constant for Rate Year 1, Rate Year 2 and Rate Year 3.

Q. Does the Company support Staff's proposed energy storage targets?

A. Yes. The Company supports Staff's energy storage targets.

Q. What are the changes proposed by Staff for the other DG targets?

A. Staff agrees with the Company's proposed other DG targets for RY2 and RY3, but disagrees with RY1 other DG targets of zero. Staff recommends setting other DG targets in RY1 as one-half of the RY2 targets.

Q. Does the Company support Staff's proposed other DG targets?

A. Yes. The Company support Staff's approach to setting other DG targets.

Q. Does the UIU EAMP make any recommendations regarding the DER Utilization metric?

A. Yes. The UIU EAMP recommends eliminating Solar PV generation from the DER Utilization metric. The UIU

EAMP states that there is no need for Solar PV incentives, as the amount of installed Solar PV has already shown significant growth over the last few years. Furthermore, by including Solar PV generation in the DER Utilization metric, the Company may be eligible for double-rewards, as Solar PV is also part of the MW Peak Reduction metric.

Q. Does the Company agree with the UIU EAMP's recommendation to eliminate Solar PV from the DER Utilization metric?

A. No, Solar PV will continue to play an important role in achieving New York State's clean energy goals, as well as system efficiency goals, as outlined in the REV Track Two Order (pp. 71-77). An EAM based on Solar PV is appropriate as the Company continues to play a significant role in solar market development.

Q. Does the Company agree that including Solar PV in both the MW Peak Reduction and DER Utilization metrics results in a double-reward?

A. No. Having Solar PV in both the MW Peak Reduction and DER Utilization metrics does not result in a double-

reward. Rather, these metrics result in providing incentives for all aspects of Solar PV benefits. For example, the MWH generation from Solar PV results in avoided wholesale energy costs and avoided carbon costs. Achievement of these benefits is incentivized through the DER Utilization metric. Peak reduction from Solar PV results in avoided generation capacity and avoided transmission and distribution infrastructure benefits. Achievement of these benefits is incentivized through the MW Peak Reduction metric. Hence, Solar PV needs to be included within both metrics.

Energy Efficiency ("EE") EAM

Q. Please restate the metrics related to the Company's EE EAM.

A. The Company's proposed EE EAM consists of two metrics: MWH Reduction and Energy Intensity. Staff recommended a third DTH Gas Reduction metric based on the Company's gas efficiency programs.

MWH Reduction

Q. Please summarize Staff's recommendations on the MWH Reduction metric.

A. Staff agrees with the general framework of the Company's proposed MWh Reduction metric but disagrees on how the specific targets should be set. Staff has proposed revised targets based on historic $/MWH run rates achieved by the Company from 2012 through 2017. Specifically, Staff has set the minimum target based on the average run-rate achieved by the Company of $182.53/MWH, maximum target based on the minimum run-rate achieved by the Company of $137.41/MWH, and mid-point targets based on $159.97/MWH which is the average of minimum and average run-rates. Staff also recommends that the Company should be required to maintain the current Estimated Useful Life ("EUL") of its electric ETIP portfolio (*i.e.*, 13.2 years) as a precondition to earning any incentives through this metric.

Q. Does the Company agree with Staff's target setting approach?

A. No. The Company continues to support its target setting methodology. Staff's methodology assumes that the Company will be able to achieve the $/MWH run-rates it has achieved in the past. However, as discussed in the Direct Testimony of the Company's EE Panel (pp. 30-33), the Company was able to obtain lower cost MWh savings in the past because of Commercial and Industrial customers installing low-cost lighting solutions. Moving forward, the Company expects the run-rates to be much higher as the 'low-hanging fruit' (*i.e.,* lighting upgrades described above) have already been achieved. Staff's target setting approach limits the Company's ability to engage with its customers and move them beyond lighting to deeper energy savings through newer technologies, albeit at a higher cost. Please refer to the rebuttal testimony of the Company's EE Panel for additional details.

Q. Has the Company proposed any modifications to the MWH Reduction targets?

A. No, please refer to the rebuttal testimony of the Company's EE Panel.

Q. Does the Company support Staff's proposed requirement for the Company to maintain the current EUL of its electric ETIP portfolio (*i.e.*, 13.2 years)?

A. No. The Company's current EUL is one of the highest in the New York State, and trying to maintain it would limit the Company's new programs with potentially shorter EULs (*e.g.*, behavioral programs). Please refer to the Company's Energy Efficiency Panel's rebuttal testimony for additional discussion regarding this issue.

DTH Gas Savings

Q. Please summarize Staff's recommendations on the DTH Gas Savings metric.

A. Staff recommends that the Company implement an EAM employing a DTH Gas Savings metric related to savings (expressed in MMBtu) achieved by the Company through its gas energy efficiency programs. Staff has proposed gas saving targets based on $/DTH run rates achieved by the Company from 2012 through 2017. Specifically,

Staff has set a minimum target based on the average run-rate achieved by the Company of $34.10/DTH, a maximum target based on the minimum run-rate achieved by the Company of $24.98/DTH, and a mid-point target based on $29.54/DTH which is the average of the minimum and average run-rates. Staff also recommends that the Company should be required to maintain the current EUL of its gas ETIP portfolio (*i.e.*, 11.0 years) as a precondition to earning any incentives through this metric.

Q. Does the Company agree with Staff's target setting approach?

A. No. The Company does not support Staff's target setting methodology based on the same reasons noted above in the discussion of the MWH Reduction metric. The Company has proposed revised targets for the gas saving metric based on Company's expectations and experience with gas efficiency programs. These are set forth in Exhibit _ (EAMP-2R).

Q. Does the Company support Staff's proposed requirement that the Company maintain an EUL of 11.0 years?

A. No. Similar to the Electric EE programs, the Company's current EUL for gas savings programs is one of the highest in the New York State, and trying to maintain it would limit the Company's ability to implement new programs (*e.g.*, behavioral programs). Please refer to the Company's EE Panel's rebuttal testimony for additional discussion regarding this issue.

Energy Intensity

Q. Please summarize Staff's recommendations regarding the Energy Intensity metric.

A. Staff recommends several modifications to the Company's proposed Energy Intensity metrics' methodology. First, Staff recommends using the weather-normalized MWh usage data employed by the Staff Electric Forecasting Panel ("SEFP") to develop the trend line for Residential and Commercial Energy Intensity. Second, consistent with the SEFP's approach, publicly available government data sources should be used to derive the employment series data used to calculate the Commercial Electric Energy Intensity metric. Third, any beneficial electrification should be subtracted from MWH usage

data before estimating the trend line. Fourth, the trend lines used for both the Residential and Commercial Electric Energy Intensity metrics should be based on four-quarter rolling average MWh per customer or employee data beginning in 2011 and continuing through the first quarter of 2018. Fifth, the energy intensity targets should be based on Staff's recommended standard error multipliers of 0.25, 1.0, and 1.75 at minimum, mid-point, and maximum target levels, respectively.

Q. Does the Company agree with Staff's recommendation for establishing Energy Intensity targets, including the use of weather normalized MWH usage data developed by the SEFP, and publicly available government employment data to derive Commercial Electric Energy Intensity metric?

A. The Company does not agree with Staff's recommendations. The Company continues to believe that the trend line should be based on a rolling four quarter average of the Company forecasted energy usage from 2019 through 2021. In addition, the Company

believes that the performance targets including the standard error multipliers should be set in a manner that reflects a reasonable expectation of achieving the energy intensity targets. Staff's weather normalized historical sales data and their sales forecasts are not on the same 10-year normal bases. While Staff normalized historical sales using the 10-year normal weather ending 2016, the sales forecasts were developed using the 10-year normal weather ending 2017. The Company also does not agree with Staff's recommendation to use the employment data that they constructed at this time because a statistically significant relationship between this variable and electric sales could not be established. Please refer to the Forecasting Panel Rebuttal Testimony for additional details

Q: Please explain how the historical actuals usage data should be weather-normalized.

A: For consistency in weather normalization bases for the historical usage data and the sales forecasts, the Company normalized the historical data using the 10-

year normal weather ending 2017 and the updated coefficients for the Residential and Secondary volume models developed by the Company's EFP. This puts the historical actuals on the same weather basis as the Company's updated sales forecasts, which the EAM panel also adopted for this purpose. Please refer to the Forecasting Panel Rebuttal Testimony for additional details.

Q. Does the Company agree that any beneficial electrification be subtracted from MWH usage before establishing the trend line?

A. Yes.

Interconnection EAM

Q. Please summarize Staff's recommendations regarding the Interconnection EAM.

A. Staff recommends that the survey and related targets should be developed through the existing proceeding before the Commission in Case 16-M-0429. A maximum of five BPs appears to be a reasonable reward, because it is identical to the number of basis points for Con Edison's Interconnection EAM.

Q. Does the Company agree with Staff's recommendations on the Interconnection EAM?

A. Yes.

AMI Customer Engagement EAM

Q. Please summarize Staff's recommendations on the AMI Customer Engagement EAM.

A. Staff disagrees with the Company's proposed AMI Customer Engagement metrics, targets, and BP allocations. As a replacement, Staff recommends that the Commission adopt a customer enrollment metric, based on customer enrollment in more advanced time-varying delivery rates including TOU rates and Smart Home Rates.

Q. How did Staff develop targets for its proposed TOU enrollment metric?

A. Staff's TOU enrollment targets are based on the Company's current participation rates, as well as other successful TOU rate programs around the state and across the country. Staff recommends higher targets for the Company in recognition of the impact AMI deployment and the Staff Market and Innovation

Panel's recommendation to reduce the customer charge for TOU rate customers that have had AMI meters installed.

Q. Does the Company agree with Staff's recommendations related to its AMI customer engagement metrics?

A. The Company continues to believe that its proposed AMI customer awareness, weekly AMI report enrollment, and high-bill alert enrollment metrics provide significant customer benefits. The Company would support eliminating the weekly AMI report enrollment and high-bill alert enrollment metrics in the context of its other EAM proposals; however, the Company opposes elimination of the AMI customer awareness metric because customer awareness is important to the success of the AMI program and is consistent with the metric approved in the Con Edison proceeding.

Q. Does the Company agree with Staff's recommendation to establish a TOU enrollment metric?

A. Yes.

Q. Is the Company proposing any adjustment to Staff's proposed TOU enrollment metric?

A. Yes. The Company is proposing to exclude enrollment in Smart Home Rates as part of the TOU enrollment metric. Smart Home Rates is a demonstration project with certain limitations that are designed to research and evaluate Smart Home rates rather than expand enrollment in TOU rates.

Q. Is the Company proposing any modifications to Staff's TOU enrollment targets?

A. Yes. The Company believes that Staff's TOU enrollment targets reflect a steep ramp up in TOU participation targets with maximum targets doubling from 7 percent in 2019 to 14 percent in 2021. The Company has no experience with such steep ramp up in TOU participation and thus has adjusted the targets to reflect a more gradual increase in TOU participation. The Company's proposed TOU participation targets are provided in Exhibit _ (EAMP-2R).

Environmentally-Beneficial Electrification ("EBE") EAM

Q. Please summarize Staff's recommendations regarding the EBE EAM.

A. As discussed earlier, Staff recommends establishing an EBE metric based on the tons of carbon reduced by incremental penetration of EBE technologies, such as ground-source heat pumps ("GSHPs"), air-source heat pumps ("ASHPs"), and EVs. Staff does not recommend any specific targets related to the EBE metric.

Q. Please summarize Mr. Wyman's recommendations regarding the design of the EBE EAM.

A. Mr. Wyman recommends that the DER Utilization metric be split into two distinct metrics. The first metric would measure the MWh generated from DER technology; the second metric would measure a broader spectrum of beneficial uses of electricity, including at a minimum the electric usage from EVs and heat pumps.

Q. Does the Company agree with Staff's and Mr. Wyman's recommendation to establish an EBE metric?

A. Yes. As discussed earlier, Company agrees with establishing an EBE EAM metric based on tons of carbon reduced from EVs, ASHPs, and GSHPs. The Company has proposed EBE targets for EVs in this rebuttal testimony.

Q. How did the Company develop EBE targets for EVs?

A. The Company established EBE targets for EVs based on the Company's EV forecast.

Benefit Cost Analysis

Q. Please summarize Staff's recommendations related to the BCA.

A. Staff used the Company's BCA model revised to reflect Staff's EAM targets and updated assumptions. Staff's updated assumptions included: (a) carbon cost from $24.24 to $21.71 per MWH based on recent Tier 1 REC price on NYSERDA website; (b) Avoided Generation Capacity Cost ("AGCC") based on Staff's ICAP model filed on May 2, 2018 in Case 14-M-0101; (c) discount rate based on Staff's recommendation (see, the Staff Finance Panel's direct testimony).

Q. Does the Panel agree with these recommendations?

A. Yes. The Company agrees with Staff's updated assumptions in Staff's BCA study, except the discount rate. The Company continues to use the discount rate from its direct testimony.

Q. Is the Company presenting an updated BCA study based on its proposal in this rebuttal testimony?

A. Yes. The Company has updated its BCA study for this rebuttal testimony. Specifically, the Company has made three major updates. First, the Company has updated the study for the EAM targets that the Company has included in this rebuttal testimony. Second, the Company has conducted a BCA for the proposed Dth Saving metric. The Company leveraged the BCA conducted for its ETIP filing[4] and used the implied $/Dth benefits and costs to estimate BCA results for Company's Dth savings targets. Third, the Company has conducted a BCA for its proposed EBE metric. The Company leveraged Environmental Protection Agency's Social Cost of Carbon values to estimate the benefits of avoided metric tons of CO2.[5]

Q. Please describe the results of the updated BCA performed by the Company for its EAM metrics.

[4] O&R Final Energy Efficiency Transition Implementation Plan 2017-2020 filed December 22, 2017 in Case 15-M-0252

[5] As provided in Appendix C of *Order Establishing the Benefit Cost Analysis Framework* issued January 21, 2016 in Case 14-M-0101

A. The Company's updated BCA study shows that the EAMs continue to provide significant customer benefits at a societal level. For the Company's electric EAMs, achievement of maximum targets would result in net benefits of $124.7 million with a Benefit-Cost ratio of 2.0. For Company's Gas EAM, achievement of maximum targets would result in net benefits of $1.3 million with a Benefit-Cost ratio of 1.5. The detailed results for the BCA are included in Exhibit _ (EAMP-3R).

Cost Recovery

Q. Please summarize Staff's recommendations related to the EAM cost allocation and recovery proposed by the Company.

A. Staff agrees with the general framework for EAM cost allocation and recovery proposed by O&R. However, Staff recommends a more granular method for allocating earned EAM cost recovery among Service Classifications ("SCs"). First, Staff recommends that the Peak Reduction metric should be allocated to each SC group based on the group's transmission demand allocator. Second, the MWh Reduction metric, Residential Electric

Energy Intensity metric, Commercial Electric Energy Intensity metric, and EBE metric should be allocated to SC groups using the energy allocator. Third, the DER Utilization metric, Interconnection metric, and TOU Enrollment metric should be allocated using the following three allocators: transmission demand, non-coincident peak demand, and energy, with each carrying equal weight.

Q. Does the Company agree with Staff's recommendation related to EAM cost allocation and recovery?

A. No, the Company does not agree with Staff's recommendation. Since EAMs would be earned through the performance of a variety of programs and initiatives, the Company recommends that the EAMs be tracked, managed, recovered, and reconciled together. Allocating the EAM incentives in the more granular method as proposed by Staff would unnecessarily complex. We recommend the implementation of the Company's proposed recovery method.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.