Orange and Rockland Utilities, Inc. Earnings Adjustment Mechanisms First Quarter Report, Calendar Year 2020

Cases 18-E-0067 and 18-G-0068

May 29, 2020

I. <u>INTRODUCTION</u>

Pursuant to the New York State Public Service Commission's (the "Commission") Rate Order in its most recent electric and gas base rate cases, Orange and Rockland Utilities, Inc. ("O&R" or the "Company") submits this report for the first quarter of calendar year 2020, (*i.e.*, the quarter ended March 31, 2020) ("Q1 2020"), regarding the Company's electric and gas earnings adjustment mechanisms ("EAMs").

The EAMs incentivize O&R to deliver beneficial outcomes to customers through system efficiency, customer engagement, interconnection, electric and gas energy efficiency, and environmentally beneficial electrification. The Company developed the EAMs to facilitate the achievement of the Commission's Reforming the Energy Vision ("REV")² objectives, and provide customer benefits discussed in the Commission's REV Track Two Order,³ while also reflecting the unique characteristics of the Company's customers, its service territory, and its operational capabilities and constraints.

This quarterly report describes the Company's progress toward achieving the EAMs, including the actions the Company took during Q1 2020, as well as a forecast of whether the Company will meet the annual EAM targets.

O&R's annual electric EAM minimum, midpoint, and maximum targets and associated incentives, adopted by the Commission in the Rate Order, are set forth in Table 1 below.

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¹ Cases 18-E-0067 and 18-G-0068, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Orange and Rockland Utilities, Inc. for Electric and Gas Service*, Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plans ("Rate Order")(issued and effective March 14, 2019) (see, Joint Proposal, Appendix 16).

² Case 14-M-0101, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision

³ Id., Order Adopting a Ratemaking and Utility Revenue Model Policy Framework, (issued May 19, 2016)("Track Two Order").

Table 1: EAM Incentives and Targets⁴

ELECTRIC EAM		INCENTIVE (\$)			TARGET		
Metric (Unit)		RY1	RY2	RY3	RY 1	RY 2	RY 3
Peak Reduction	Min	\$202,623	\$209,226	\$218,827	0.86%	0.73%	0.99%
(% Year over Year Reduction)	Mid	405,247	418,452	437,653	1.19%	1.11%	1.38%
	Max	810,493	836,903	875,306	1.64%	1.54%	1.85%
	Min	-	\$59,779	\$62,522	TBD based on Commission		
Storage Roadmap	Mid	-	179,336	187,566	Order regarding Storage		
	Max	-	298,894	312,609	Roadmap		
	Min	\$86,839	\$89,668	\$93,783	10,345	9,877	13,751
DER Utilization (MWh)	Mid	289,462	298,894	312,609	13,206	12,737	15,598
	Max	492,085	508,120	531,436	16,066	15,598	19,472
Electric Energy Efficiency	Min	\$202,623	\$209,226	\$218,827	38,036	43,432	53,076
(MWh Reduction)	Mid	434,193	448,341	468,914	43,400	49,557	60,561
	Max	868,385	896,682	937,828	50,525	57,693	70,503
Residential Energy Intensity	Min	\$57,892	\$59,779	\$62,522	1.40%	1.42%	1.44%
(% Year Over Year Reduction)	Mid	173,677	179,336	187,566	1.90%	1.93%	1.95%
	Max	289,462	298,894	312,609	2.43%	2.46%	2.49%
Commercial Energy Intensity	Min	\$57,892	\$59,779	\$62,522	0.87%	0.85%	0.86%
(% Year Over Year Reduction)	Mid	173,677	179,336	187,566	1.45%	1.43%	1.44%
	Max	289,462	298,894	312,609	2.06%	2.05%	2.06%
	Min	\$57,892	\$59,779	\$62,522			
Interconnection	Mid	173,677	179,336	187,566	To be determined		
	Max	289,462	298,894	312,609			
Residential Innovative	Min	\$57,892	\$59,779	\$62,522	2.14%	3.88%	5.10%
Rates Participation	Mid	173,677	179,336	187,566	3.00%	5.24%	6.96%
(%)	Max	289,462	298,894	312,609	3.87%	6.61%	8.83%
Beneficial Electrification	Min	\$57,892	\$59,779	\$62,522	29,001	44,855	65,846
(Tons of Carbon Reduced)	Mid	173,677	179,336	187,566	31,003	49,786	72,880
	Max	289,462	298,894	312,609	33,308	55,333	80,764
TOTAL ELECTRIC DOLLARS	Min	\$781,545	\$866,794	\$906,569			
	Mid	1,997,287	2,241,703	2,344,572			
	Max	3,618,273	4,035,069	4,220,224			

GAS EAM		INCENTIVE (\$)			TARGET		
Metric (Unit)		RY1	RY2	RY3	RY 1	RY 2	RY 3
Gas Energy Efficiency	Min	\$75,178	\$78,888	\$82,392	22,853	22,853	22,853
(Dth)	Mid	150,356	157,776	164,783	26,860	26,860	26,860
	Max	300,712	315,552	329,567	31,764	31,764	31,764

⁴ The Commission eliminated the Interconnection EAM in April 2019, as discussed in more detail in Section II. A, below. 2

II. EAM PROGRESS AND ACTION TAKEN

A. Electric EAMs

System Efficiency EAM

The System Efficiency EAM is composed of the following three metrics:

- Peak Reduction;
- Distributed Energy Resources ("DER") Utilization; and
- Storage Roadmap.

Peak Reduction Metric

The Peak Reduction metric is an outcome-based metric which incentivizes O&R to reduce its peak load for its service territory on a year-over-year percentage basis. Achievement of this metric is calculated as follows:

Percent Change (%) =

(weather normalized, DR adjusted peak load in measured RY – weather normalized, DR adjusted peak load in prior RY)

(weather normalized, DR adjusted peak load in prior RY

O&R continues to complete and interconnect solar projects and other resources that will assist in reducing its system peak in advance of the summer peak season. The Company interconnected over 17.2 megawatt ("MW") nameplate of solar photovoltaic ("PV") from May 2019 through March 2020, which the Company estimates will provide 7.5 MW of peak reduction in 2020. Based on projects started prior to the COVID-19 pandemic, the Company expects to install approximately 11.0 MW nameplate of solar PV in the second quarter of 2020, before the summer peak is likely to occur. The Company has estimated that energy efficiency programs will provide approximately 9.4 MW of peak reduction through March 2020 and expects to provide an additional 0.52 MW of peak reduction in the second quarter of 2020. The Company also anticipates at least 20.9 MW of peak reduction based upon 2019 enrollment in dynamic load management program participants, with a potential for additional participant enrollment through May 2020. Based on current performance indicators, the Company currently does not expect to achieve the minimum peak reduction target by December 31, 2020.

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⁵ As of the May 1, 2020 deadline for Commercial System Relief Program ("CSRP") enrollment, there is approximately 22 MW enrolled in 2020 program.

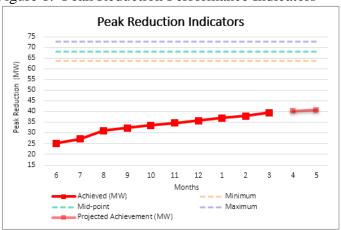


Figure 1: Peak Reduction Performance Indicators

DER Utilization Metric

The DER Utilization metric focuses on the Company's efforts to expand the use of DERs in the Company's service territory by working with third-party DER providers. This metric measures the sum of the incremental annualized megawatt-hours ("MWh") from several types of DERs within the Company's service territory, including solar PV, Community Distributed Generation ("CDG"), combined heat and power ("CHP"), electric energy storage resources and other Distributed Generation ("DG") such as wind, hydro and fuel cells.

The DER Utilization metric is calculated as follows:

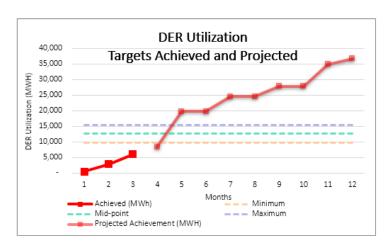
DER Utilization (MWh) =

Community and Commercial Solar PV MWh annualized production

- + Combined heat and power MWh annualized production
- + Other DG (including Fuel cell, wind, etc.) MWh annualized production
- + Battery storage MWh annualized discharge

As of March 2020, there is approximately 31.4 MW nameplate of non-residential DER installed and in the interconnection queue. The majority of this is comprised of solar PV CDG projects. Of the 31.4 MW total, the Company has interconnected 5.3 MW of non-residential DER projects through March. The Company currently expects that it will achieve the maximum target for DER Utilization of 15,598 MWh by December 31, 2020.

Figure 2: DER Utilization Achieved and Projected



Storage Roadmap Metric

The Storage Roadmap metric is an outcome-based metric which has been designed to achieve reliability benefits and is focused on improving selected circuit load factors that provide significant benefits to isolated areas. This metric measures the average load factor, as compared to the system load factor, of six selected circuits in Blooming Grove and Warwick where there are significant customer and system benefit opportunities.

The Storage Roadmap metric is calculated as follows:

Load Factor will be calculated for the Blooming Grove and Warwick Circuits over the June 1 to July 31 period (*i.e.*, 1,464 hours) based upon the top five load hours of Blooming Grove and Warwick Circuits in aggregate.

$$\label{eq:circuits Average Load MWh} \textit{Circuits Load Factor} = \frac{\textit{Circuits Average Load MWh}}{\textit{Aggregate of Circuits Top Five Peak Loads Average MW}} \\ \textit{Circuits Average Load MWh} = \frac{\sum_{June~1}^{July~31} \textit{MW for all circuits}_{hourly}}{\sum_{June~1}^{July~31} \textit{number of hours}} \\ \textit{Aggregate of Circuits Top Five Peak Loads Average MW} \\ \frac{\sum_{Peak~1}^{Peak~5} \textit{MW of aggregate of selected circuits}_{June/July}}{5}$$

System Load Factor will be calculated for the entire system over the same June 1 to July 31 period based upon the same top five hours of the aggregate circuit peaks as set forth below.

$$System\ Load\ Factor = \frac{System\ Average\ Load\ MWh}{System\ Average\ of\ Peak\ Loads\ at\ Aggregrate\ Circuit\ Peaks\ MW}$$

$$System\ Average\ Load\ MWh = \frac{\sum_{July\ 31}^{July\ 31} MW_{hourly}}{\sum_{June\ 1}^{July\ 31} number\ of\ hours}$$

$$System\ Average\ of\ Peak\ Loads\ at\ Aggregrate\ Circuit\ Peaks\ MW = \frac{\sum_{Peak\ 5}^{Peak\ 5} MW_{June/July}}{5}$$

The Company will compare the Circuits Load Factor to the System Load Factor as follows:

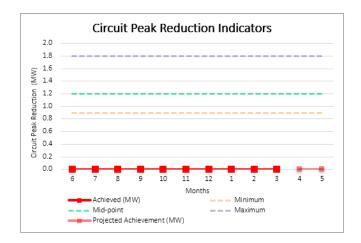
$$\textit{Circuits Load Factor to System Load Factor Ratio} = \frac{\textit{Circuits Load Factor}}{\textit{System Load Factor}}$$

Finally, the Company will calculate the percentage change in the above ratio as compared to the previous year.

$$Percent Change (\%) = \frac{(Ratio in measured RY - Ratio in prior RY)}{Ratio in prior RY}$$

The Company is in the process of building programs and developing strategies to support the achievement of this metric. Since these new programs and strategies are still evolving, the Company currently does not expect to achieve the minimum target for this metric by December 31, 2020.

Figure 3: Storage Roadmap Circuit Peak Reduction



System Efficiency Strategy

The Company continues to identify opportunities and develop programs which have the potential to reduce peak demand and improve load factors on the targeted circuits. Among the programs being considered are the installation of behind-the-meter solar with storage systems that can be aggregated and then dispatched during peak load periods. The Company is also exploring opportunities to entice large scale solar developers to install battery storage as part of their proposed projects in the target areas. Demand response and time-of-use rate enrollment will also be considered to reduce peak demand on the targeted circuits. The Company will actively monitor system load factor and the individual components to identify trends which may affect this EAM outcome.

The Company continues to interconnect DER, which is considered essential work according to the Governor's "New York State On PAUSE" Executive Order. The Company's Technology Engineering Department is continuously improving the process and procedures for DER interconnection. In addition, the Company continues to monitor federal and state policies regarding solar and energy storage impacts to the

⁶ Executive Order 202.6, issued March 18, 2020.

grid and actively engages in developing solutions to interconnection issues that are raised at monthly policy and technical working group meetings.

Electric Energy Efficiency EAM

The Electric Energy Efficiency EAM is composed of the following three metrics:

- Electric Energy Efficiency;
- Residential Energy Intensity; and
- Commercial Energy Intensity.

Electric Energy Efficiency Metric

The Electric Energy Efficiency ("EE") metric focuses on achieving customer energy efficiency savings for each Rate Year. The metric is measured as the sum of MWh savings achieved from the Company-administered electric EE programs. This includes an expansion of the existing Energy Transition Implementation Plan⁷ ("ETIP") programs as described in the Company's February 2019 ETIP filing. As a precondition to earning this incentive, the Estimated Useful Life ("EUL") of the Company's EE portfolio must be at least ten years.

Through March 31, 2020, O&R has achieved approximately 40 percent of the minimum Electric Energy Efficiency target. The achievement in Q1 is a direct result of initiatives that were ramped in during 2019 and are now producing significant savings. Midstream residential and commercial initiatives are complimenting downstream initiatives exceeding our forecast for Q1 2020. Given the impact of the COVID-19 pandemic and the resulting New York State On PAUSE Executive Order, the Company considers the attainment of this metric to be at risk, because all in-person installation services and customer contact was put on hold in March 2020. Therefore, the Company currently does not expect to achieve the minimum Electric Energy Efficiency target of 43,432 MWh by December 31, 2020.

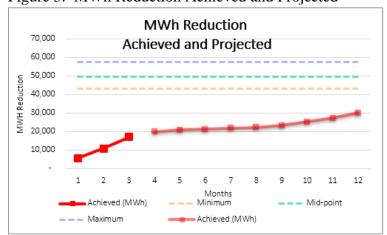


Figure 3: MWh Reduction Achieved and Projected

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⁷ ETIP Plan filed February 19, 2019 in Case 15-M-0252.

Residential Energy Intensity Metric

The Residential Energy Intensity metric seeks to incentivize reductions to residential customers' total annual usage on a per customer basis. The metric is measured as the year-over-year percentage change in usage per customer for the residential customer class, measured on a kilowatt hour ("kWh") basis. Within this calculation the annual MWh sales will be (1) normalized to correct for the weather related impacts on electricity sales and billing days, (2) reduced by the aggregate MWh produced by CDG resources and allocated to residential customers, and (3) adjusted to exclude the impacts of beneficial electrification such as new load from heat pumps and electric vehicles ("EVs").

The Company currently does not expect to achieve the minimum targeted reduction by December 31, 2020.

Commercial Energy Intensity Metric

The Commercial Energy Intensity metric focuses on reducing commercial customers' total usage on a per employee basis. The metric is measured as the year-over-year percentage change usage per employee for the commercial customer class, measured on a kWh basis. Within this calculation, the annual MWh sales will be (1) normalized to correct for the weather related impacts on electricity sales and billing days, (2) reduced by the aggregate MWhs produced by CDG resources and allocated to commercial customers, and (3) adjusted to exclude the impacts of beneficial electrification such as new load from heat pumps and EVs.

The Company will continue to evaluate the data trends and may have additional insights in Q2 2020 but currently does not expect to achieve this metric by December 31, 2020.

Energy Efficiency Strategies

The EE program enhancements and go-to-market strategies that were initiated 2019, which benefit both the MWH Reduction and the Energy Intensity Metrics, continued in 2020. Some highlights of these efforts include the following:

- 1. A midstream C&I lighting initiative;
- 2. An upstream residential lighting initiative;
- 3. Behavioral residential electric initiatives;
- 4. Trade ally engagement; and
- 5. Software data analytics.

The Company will continue to use various methods to reduce kWh sales on a per customer and per employee basis for the Energy Intensity metrics. The EE portfolio plays a significant role in reducing use per customer. For example, EE program participants' energy needs are reduced after the installation of high efficiency measures and the resulting impact of small residential behavioral changes across the customer base. DER initiatives also reduce customer usage as solar PV, CHP, and energy storage solutions are installed across the Company's service territory.

Customer Engagement EAM

Residential Innovative Rates Participation Metric

The Innovative Rates Participation metric incentivizes the Company to increase residential customer participation in innovate rates including Voluntary Time of Use ("VTOU") rates and new voluntary rate

options related to Value of DER and Advanced Metering Infrastructure ("AMI") deployment. This metric measures the percentage of O&R residential customers that sign up for such innovative rates.

To meet the minimum target, VTOU rate participation must increase by over 4,500 customers in 2020; historically the Company has experienced a steady decrease in customers taking service under VTOU rates. The Smart Home Rate pilot project is an opportunity to add incremental customers to VTOU rates. The impact of this pilot is anticipated to occur in late 2020, however significant additional incremental customers will be needed to attain this metric. In addition, the impact of the COVID-19 pandemic and the current environment will make it difficult to attain this metric in 2020. The Company currently does not expect to meet the minimum target for increased participation of 3.88% by December 31, 2020.

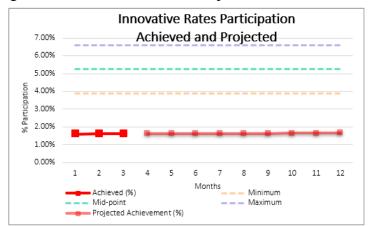


Figure 4: Innovative Rates Participation Achieved and Projected

Customer Engagement Strategies

While the Company's current projections do not predict achieving the Innovative Rate metric, the Company is engaging in strategies to increase customer participation which may help achieve future Rate Year targets. Some of these strategies include identifying and targeting the type of customer who would benefit from the existing VTOU rate.

Environmentally Beneficial Electrification EAM

The Environmentally Beneficial Electrification ("EBE") metric focuses on facilitating greater penetration of electric technologies that reduce carbon emissions relative to traditional technologies that rely on carbon-intensive fuel sources. The metric is calculated as the lifetime short tons of avoided carbon dioxide from environmentally beneficial electrification technologies such as EVs, air source heat pumps and ground source heat pumps.

This metric measures incremental battery EVs and plug-in hybrid vehicles registered in O&R's service territory, as well as incremental heat pumps installed in O&R's service territory. The lifetime short tons of avoided carbon dioxide are then calculated based on the number of incremental EVs and heat pumps.

Through Q1 2020, the Company has recorded 76 new EV sales in its service territory. EV adoption in 2020 is expected to be lower than originally forecast due to the impact of the COVID-19 pandemic which

has caused the closure of EV manufacturing facilities and dealerships.

Incremental heat pumps are measured by the number of rebates provided to customers participating in NYSERDA's heat pump rebate program, receiving the O&R Rate Impact Credit, or participating in O&R's Carbon Reduction Program. Rebates are designed to increase awareness of the long-term benefits and value of heat pump technology as compared to fossil fuel alternatives. Similar to the Company energy efficiency programs, in-person installation services, rebates, and customer contact were placed on hold in Q1 due to the COVID-19 pandemic. While the Company is currently projecting to achieve the minimum target of 44,855 tons of carbon reduced for Beneficial Electrification by December 31, 2020, the attainment of this metric is at risk.

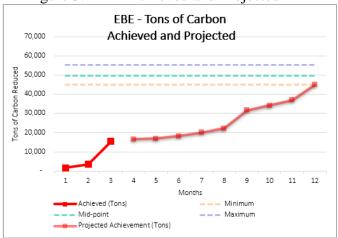


Figure 5: EBE Achieved and Projected

Environmentally Beneficial Electrification Strategies

The Company continues to leverage and develop customer education materials, as well as to participate in outreach events to promote EVs. In February 2020, the Company attended the Rockland County Suburban Home Show where it partnered with Nissan to promote EVs and available rebates. Nissan allowed for a display of a Nissan Leaf to showcase at the event. Based on the success of the collaboration, the Company plans to expand these types of partnerships to other auto manufacturers. The Company also plans to expand the online EV marketplace experience to include instant rebates on level 2 electric vehicle supply equipment.

Electric Car Ride and Drive events were a large part of the Company's outreach efforts in 2019 and plans were in place to continue these events in 2020. Unfortunately, the Ride and Drive events scheduled for April and July of 2020 have been canceled due the COVID-19 pandemic. The team is currently anticipating being able to hold an event in September during National Drive Electric Week. The team will explore additional opportunities to expand outreach and education to maintain customer enthusiasm for electric vehicles.

In January 2020, the New York Public Service Commission released the whitepaper regarding Electric Vehicle Supply Equipment and statewide "Make-Ready Program". This whitepaper defines the expected role for utilities in realizing the goals established. The Company collaborated with members of the Joint Utilities and industry stakeholders to determine the best approach to incentivize level 2 and direct current fast charging stations throughout the state. Throughout 2020, the Company will continue to work with the

New York State Department of Public Service Staff and stakeholders to implement the Make-Ready program.

The Company has engaged numerous stakeholders and offered heat pump incentives in conjunction with the NYSERDA Clean Heat Program in Q1 2020. Effective April 1, the Company has taken over implementation of the statewide Clean Heat Pump Program. However, program launch has been delayed in response to the COVID-19 pandemic and the planned contractor and distributor training will now take place virtually. The Company also sponsored the NY Geothermal Heat Pump conference that was postponed until the fall. In Q1 2020, the Company incentivized two ground source heat pumps, and 113 air source heat pumps.

Interconnection EAM

On April 24, 2019, the Commission issued an order⁸ eliminating Interconnection EAMs for all utilities. The Joint Proposal adopted by the Commission in the Rate Order established a maximum incentive of five basis points for the Company, for the achievement the interconnection EAM. The Interconnection EAM Order eliminates the opportunity and prohibits the Company from reallocating these five basis points to other EAMs.

B. Gas EAM

Incremental Gas Energy Efficiency EAM

The Gas Energy Efficiency EAM focuses on achieving customer energy savings resulting from the Company's expanded ETIP programs. This metric measures the Dth savings achieved from all of O&R's administered gas ETIP energy efficiency programs. As a precondition to earning this incentive, the EUL of the Company's ETIP portfolio must be at or greater than ten.

Through March 31, 2020, O&R has made significant progress and achieved approximately sixty percent of the minimum Gas Energy Efficiency target. While the Company has a robust pipeline of projects, completion of these projects is at risk due to the impacts of the COVID-19 pandemic. In addition, equipment installations ceased in March, with the exception of emergency heating and water heating equipment failures. As a result, the Company currently considers the attainment of this metric to be at risk.

⁸Case 16-M-0429, In the Matter of Earnings Adjustment Mechanism and Scorecard Reforms Supporting the Commission's Reforming the Energy Vision, Order Eliminating Interconnection Earning Adjustment Mechanisms (issued April 24, 2019)

("Interconnection EAM Order").

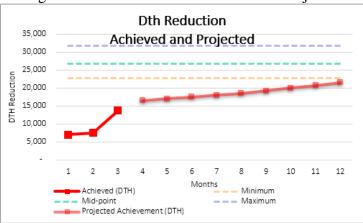


Figure 6: Dth Reduction Achieved and Projected

Gas Energy Efficiency Strategy

The Company implemented several gas EE program enhancements and go-to-market strategies in 2019 which continued into 2020. Some highlights of this work include: an expansion of the residential gas HVAC program to include prescriptive and custom measures for commercial and industrial customers, and a behavioral initiative to educate customers on the impact that small changes have on reducing energy use. These efforts were ramped up in 2019 and produced significant savings in Q1 2020. In light of the impact of the COVID-19 pandemic, the Company may need to modify these strategies in order to increase customer participation in Q3 and Q4 of 2020.

III. <u>EAM FORECAST AND OUTLOOK</u>

The Company developed comprehensive forecasts and a detailed tracking tool that includes calculators and dashboards to monitor EAM achievement and projection. As discussed above, the Company is working to develop and implement initiatives and strategies designed to achieve the targeted outcomes. The Company maintains a formal internal governance structure, including senior management, to support and oversee initiatives and strategies.

As of Q1 2020, the Company has not earned any of the minimum targets (Table 2). However, the Company currently projects that by December 31, 2020, it will achieve the maximum target on one of the nine metrics. As discussed above, the continuing adverse impacts associated with the COVID-19 pandemic serve to undermine the Company's ability to achieve many of these targets. The Company will continue to monitor and update performance as the year progresses.