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March 1, 2022

<u>**VIA EMAIL**</u>

Honorable Michelle L. Phillips
Secretary
State of New York
Public Service Commission
Three Empire State Plaza
Albany, NY 12223

RE: Case 19-E-0065, Case 19-G-0066, Case 18-E-0067, Case 18-G-0068
Con Edison Next Generation Customer Experience Report

Dear Secretary Phillips:

As required by Section M(1) of the Joint Proposal adopted by the New York State Public Service Commission in its January 16, 2020 *Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan* and Section J(9) of the Joint Proposal adopted by the Commission its March 14, 2019 *Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plans*, Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. hereby submit their Next Generation Customer Experience Report, which includes a description of their Digital Customer Experience program, for the fourth quarter of 2021.

Please contact me if you have any questions about this report.

Very truly yours,

Susan Vercheak

*Admitted only in New Jersey

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Cases 19-E-0065, 19-G-0066, 18-E-0067 and 18-G-0068

Next Generation Customer Experience Progress Report

Q4 2021

Dated: March 1, 2022

I.   <u>Next Generation Customer Experience Program Summary</u>

The Next Generation Customer Experience (Next Gen CX) program discussed herein is a portfolio of investments that will allow Consolidated Edison Company of New York, Inc. (Con Edison or the Company) and Orange and Rockland Utilities, Inc. (O&R) to continue to meet customer's rising expectations, facilitate policy goals, and drive operational efficiencies. The three major categories of investments included in the Company's Next Gen CX initiative are Business Intelligence, Omni-Channel Optimization, and Back Office Automation and Agents Tools. Business Intelligence is an investment in a Data and Analytics program that uses advanced data and analytics to drive new customer and business insights. Omni-Channel Optimization enables a seamless multi-channel self-service experience for customers with investments in the ongoing Digital Customer Experience (DCX) program[1], Journey Mapping, Virtual Assistants, and Bill Redesign. Back Office Automation and Agent Tools includes the development of intelligent tools designed to improve processes and operational efficiency and concentrate on value-add customer focused activities.

The Next Gen CX program has two overarching benefits for customers. First, customers will see more streamlined, prompt, and accurate customer service in the customer's channel of choice (e.g., web, phone, text, chat). This includes, for example, new enhanced self-service tools for managing payments and faster resolution of inquiries when interacting with the Company. Overall, customers will see more choice, control, and convenience when managing their energy usage and interacting with the Company.

Second, customers will benefit from cost savings realized through operational efficiencies such as resolution of issues on lower-cost self-service channels, and automation of back-office work. In addition, Next Gen CX supports the Company's Business Cost Optimization (BCO) initiative through cost savings.

As required by Joint Proposal approved by the Commission in its January 16, 2020 *Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan* ("2019 Rate Order") in Cases 19- E-0065 and 19-G-0066, the following report summarizes the status of the Next Gen CX initiative, including recent and planned activities, costs, BCO savings achieved, and non-financial benefits achieved.[2]

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[1] For purposes of this filing, all Next Gen CX investments, costs and associated BCO savings described are related to Con Edison only, with the exception of the DCX program which covers both Con Edison and O&R.
[2] 2019 Rate Order, Attachment A – Joint Proposal, pp. 95-96

II. **Quarterly Update Reports**

1. **Business Intelligence - Data & Analytics**

The Data and Analytics program is a key enabler to improving the customer experience and reducing operating costs by gaining a deeper understanding of customer needs through robust business intelligence. The Company has previously had success understanding customer needs by conducting direct customer research such as surveys, focus groups and interaction with the Company's online Con Edison Advisory Community. However, to meet rising customer expectations, best-in- class companies across industries are now utilizing advanced data analytical tools in addition to traditional customer research to gain a deeper understanding of customer needs and improve service.

Through the Data and Analytics program, Con Edison is using modern data and analytics platforms to connect these data sources, and sort through data to identify patterns, trends, correlations and relationships. This connected data can then be utilized to develop a better understanding of customer pain points and predict current and future needs for all customer types.

1.1 **Implementation Plan**

The delivery of this business intelligence program will be broken up into three phases, outlined below, that are intended to deliver iterative value to customers and the Company. Given that some of the underlying platform technology is new to Con Edison, this program is supported by the Company's Customer Operations and Information Technology (IT) organizations to ensure a standard and enterprise extensible technical architecture. In Q1 the program continued the competitive bid process for its Phase 2 implementation projects and selected West Monroe Partners as the system integrator for this effort. Phase 2 began in Q2 2021.

Phase 1 (Q3 2020 – Q1 2021) – Establish Analytics Core Capabilities and Quick Wins

- Establish program governance, analytics delivery teams, and design program metrics
- Stand up Data and Analytics infrastructure, and deliver data engineering quick wins
    - Design data governance operating model
    - Integrate initial data sources and begin pilot use cases for foundational analytics capabilities. These use cases are summarized as:
        - Customer Analytic Record – Ability to consolidate multiple data sources into a single record of a customer account
        - Customer Segmentation – Ability to sort and filter customer lists based on key account attributes

Phase 2 (Q4 2020 – Q4 2022) – Phased Data & Use Case Implementation

- Integrate data sources
- Iterative releases of use cases based on value and complexity

Phase 3 (Q1 2023 – Ongoing) – Iterative Extension and Analytics Standardization

- Standardize and provide training on advanced analytics tools
- Enable advanced analytics (i.e., machine learning) models for applicable use cases

1.2   Q4 2021 Highlights

In the third quarter of 2021, the Company continued its plans for Data and Analytics across the following four main delivery workstreams: continuing the Azure EDAP platform build, data source activation, use case release, and change management. During this time, the program went live with its test (pre-production) environment, completed two use case delivery projects, enabled eight data sources for analytics, and provided initial system access to over 30 users.

Azure EDAP Infrastructure Build

The infrastructure build workstream completed the build out of the solution's development environment and began completing the Company's go-live checklist to fully opertationaiize the production environment. In Q4, the Company completed multiple deliverables, including:

- Configured, smoke tested, and resolved bugs (where applicable) across all parts of the test environment's components
    - IBM Sterling for File Transfer (RDX)
    - Azure VM (FTPs)
    - Azure Data Lake
    - Databricks
    - Azure SQL Database
    - Power BI v net Gateway
    - Azure Active Directory
    - Azure Key Vault
    - Fortigate Firewall

- Migrated over 1 billion records of data from the Development environment to the Test environment
- Rebuilt the test environment to enable auto-scaling using private IP addresses to improve the security and enterprise scalability of the platform. Test rebuild took two days, in comparison to the 15 days of build time in Q3.

Use Case Release

The use case release workstream continued its efforts to further build out the Customer Analytic Record, completed its 1st iteration of the "Measuring improvements to the Digital Experience" Customer Segmentation, and began its first use case focused on the Customer Assistance Center.

- Customer Analytic Record (CAR) – The CAR concept embodies the datasets required to develop customer models and analysis. It is a customer-centric view (neither account nor premises centric) and provides a unified view of all customer interactions, profiles, service usage and other attributes, and pinpoints those that will be useful in a particular situation. The CAR combines information from disparate data sources into a single data model and serves as the framework for analytic processes.
    - In Q4, the program implemented two key processes associated with modeling source data into the customer analytics record.

- The first is detailed tracker to support data modeling handoffs between teams and gain insight into sprint team capacity based on data modeling efforts
- The second is the introduction of preliminary and final "business validation testing" to ensure that data sources being moved into Production are immediately usable by our business stakeholders or use cases

- Customer Segmentation – Categorize customers based on attributes or activities perception and behaviors into groups that perceive and respond to specific offerings in a similar way
  - In Q4 the Company began planning its final Customer Segmentation use case which will begin in January

- Measuring the Effectiveness of Improvements to the Digital Experience – Evaluating the success of self-service initiatives by connecting digital experience with call in numbers, customer satisfaction, and comparing results to managed service transactions
  - The Company began its second of the "Measuring the Effectiveness of Improvements to the Digital Experience" use case which focused on new measures, new transactions, and updates to the reporting experience creating in the first iteration

- Customer Service Representative Performance and Productivity - Dashboard and reporting with KPIs by agent, workgroup (AHT, escalation, repeat, # calls, talkover %, silent %, call routing accuracy)
  - In Q4 the Company built the four reports to help with evaluating the performance of the Call Center with four views Regional Call Centers, Section Managers, Supervisors, and independent Agents. Major milestones of this use case were completed in Q4 but user acceptance testing identified a difference in how First Call Resolution was being calculated. The program is still evaluating the differences in these calculations and this work will continue into Q1 2022

Data Source Activation

In Q4, the Company continued its data source activation, ingestion, and modelling efforts according to its data activation plan. The data activation team spent a significant amount of time this quarter understanding the Google Analytics data source and how its data can be exported utilizing Google's native analytics tool – Big Query. During this time the program also completed data activation and ingestion of OPower, PossibleNOW, Virtual Assistant, and Questline data sources.

Change Management Workstream

In Q4, the Company continued its Change Management Workstream which implemented a second "Power User" training focused on building reports in Power BI, continued its Change Network and program newsletter communications, and began a brand-new training program focused on 1-hour weekly interactive training sessions.

The Change Management Workstream showed its agility to enabling success of the program based on organizational change management best practices and end user feedback. As a result of the Power User training in September, the program identified that the originally planned "Train the Trainer" training was pre-mature and would have required Power Users to train their team members on a system that the Power Users are still not comfortable with. As a result of this and

feedback from the November training where Power Users requested more practice building their own reports, the program planned weekly 1-hour interactive training sessions. This training program began in December and will run through February with a focus on teaching users more about available data sources in CAR & building simple reports to answer general business questions (e.g., What is the customer satisfaction of customers paying their bill online?).

1.3.   Planned Work for Q1 2022

In the first quarter of 2022, the Company plans to continue activities for delivering projects associated with Phase 2 of the program, including: the operational go-live of Azure EDAP, delivering the CSR Performance and Productivity and Measuring Improvement to Digital use cases, continuing the delivery of use cases based on the program's project plan, completing the change management workstream's interactive training sessions, and delivering a train-the-trainer training to Power Users. Overall, the program sees its work in Q1 2022 as a transitionary period between technical platform development, data modeling, and governance to delivering business value from production use cases and enabling users with access to start going to the Next Gen CX Analytics program for answers to key business questions.

Please See Appendix A for an overview of the use case delivery schedule and a 6-month workstream look ahead.

2.   Omni-Channel Optimization

2.1   DCX

The DCX program was established in 2016 to improve the digital experience for customers through a redesign of the www.conedison.com and www.coned.com external websites (with a new mobile-enabled design), the My Account portal, and mobile apps (iOS and Android). Quarterly reports filed by the Company in Cases 16-E-0060 and 16-G- 0061 provide additional information on the first three years of the program.

For the 2020-2022 rate plan, the DCX program continues to optimize and expand the Company's digital platforms in order to offer additional online self-service tools, enhance mobile app functionality, provide customers with more personalization and control, consolidate additional existing legacy applications into the DCX program scope, and expand customer payment options, among other things.

Project Management and Guiding Principles
The Company's approach to digital transformation departs from traditional project management methods by using an "Agile" methodology. During Q3 of 2021, the team improved its use of agile development through the implementation and use of Scaled Agile Framework or SAFe. This methodology is the world's leading framework for scaling agile and aligns organizational needs, creating alignment, collaboration, and delivery across multiple agile teams focused on delivering customer value. This framework continues to keep the customer at the center of the work. Consistent with a "customer first" philosophy, each quarterly planning phase or "program increment" starts with an examination of what customers have told us they want. For additional

information on the Agile process as applied in the DCX program, see the DCX Quarterly Reports filed in Cases 16-E-0060 and 16-G-0061.

Across workstreams and program increments, there are six principles that continue to guide DCX program efforts:

- **Customer First** – Through surveys, in-depth interviews, personas and journey mapping, Con Edison customers are guiding us to a best-in-class digital customer experience.
- **Simplicity** – One login is all a customer should need for access to intuitive services that minimize customer effort and have a consistent look and feel.
- **Personalization** – Data-enabled analytics and customer-driven optionality to allow customers to continually view highly relevant content and tailored solutions.
- **One Company -** The DCX operating model enables a collective, cross-functional approach and delivers a digital experience that is consistent across the entire website/app.
- **Agility** – Underlying solution architecture and an Agile operating approach allow the Company to quickly adapt to changes in customer preferences, markets, regulatory requirements, etc.
- **Security** – Safeguarding customer information – and maintaining

With these principles as guideposts, the Company has incorporated Program Increment (PI) planning, an Agile planning tool that also falls within the SAFe Agile methodology. The incorporation of PI planning improves the Company's ability to plan and align projects on a 3–6-month outlook and aligns the agile teams to work together with common objectives and focus. This is achieved through routine team updates on business context and vision, followed by planning breakouts where teams create iteration plans and objectives for the upcoming Program Increment, while outlining dependencies between teams delivering customer value. Following this process, the Company's technical, communications, and business resources work together throughout each planned sprint through various agile ceremonies with a shared vision, allowing the team to adapt to changes quickly and reshuffle priorities to remain in line with customer needs and business objectives.

2.1.1 Q4 2021 Highlights

In Q4, the Company continued optimizing, expanding, and adapting the Company's digital experience and offerings to meet customer and regulatory needs. This work encompasses functionalities across multiple digital channels and focuses on enhancements to the My Account, web, and native app experiences. These updates create a convenient, simplified, and customized platform for our customers, placing emphasis on enhanced self-service options.

Billing and Payment

DCX continues focusing on deploying functionalities that improve our customer's billing and payment experience. To maximize our service adoption with our customers, our team continues to pursue opportunities to improve digital experiences, implement efficient communication strategies, expand payment option resources, and evolve with our customer's ever-changing needs. A focus in the early part of Q4 was centered around customers and the impacts of COVID-19, particularly our commercial customers. For both web/mobile commercial accounts at Con Edison, the Company implemented additional logic on commercial payment agreements when the customer did not attest to experiencing a financial impact caused by COVID-19 online. Additional

feature work was also completed around offering commercial customers more flexible Payment Agreements outside of the static options we previously offered. Commercial customers at Con Edison and O&R can modify their initial standard payment agreement terms so that they can accept an agreement that works best for their financial situation. Customers can make these changes to their initial down payment and the number of installments for the agreement within certain thresholds. This work was also delivered to native mobile users across IOS and Android platforms. The mobile feature that aligns to the same web functionality to allow commercial customers the ability to negotiate down payment and instalment terms on standard payment agreements.

Con Edison has also delivered on its commitment from the Joint Proposal in Cases 19-E-0065 and 19-G-0066 to make Financial Statement Forms available online to customers. Con Edison's customers now have access to an Online Financial Statement form. This form allows customers the ability to enter and submit detail on monthly income and expenses for evaluation to obtain special agreement terms or to be referred to agencies for assistance. Upon completion and submission, the form is sent directly from the web to the back office team for review. If a customer qualifies, they can be offered special payment agreement terms (considerations up to $0 down payment with $10/month installments). The aim is to increase the ease for customers to access the form that once was only available if sent by a CSR and emailed or faxed back for processing. This process was introduced to make the evaluation process simpler for customers. The team is currently reviewing enhancements and future opportunities to streamline this process further. The team will also be evaluating the same options for O&R customers.

A new Automated Clearing House (ACH) payment system, Fiserv, was introduced during this quarter for Con Edison. (O&R has a different and supported process for ACH at this time.) The transition from a legacy system called ICheck to Fiserv ACH payment processing occurred in mid-December. This decision was made to mitigate risk associated with outdated technology; the company has decided to replace ICheck with Fiserv to process all ACH payments. This initiative will impact all payment channels - not just DCX. To prepare for the transition, DCX has been actively introducing features over the past several quarters noted in previous reports. This is the final deliverable for launch, which is now in production processing customer ACH payments.

Account Management

The Company implemented specific enhancements for our customers, expanding functionalities of My Account to better enable customers to manage their service accounts. Some of the features released this quarter focused on the transition from legacy platforms to DCX for regulatory calculators used by customers to check sub-metering bills and to obtain NYICO pricing data. The Sub-metering Bill Calculator is a regulatory calculator that allows for an un-authenticated user living in a building that is sub-metered to calculate what their electric charges would be if billed by Con Edison directly. This is to verify that these customers are not being over-billed. Additional analytics are also available to track customer usage of this calculator. The second calculator enhanced was The New York State Independent System Operator (NYISO) Day Ahead Pricing Calculator for Con Edison's customers. The NYISO regulates the sale and purchase of electricity in New York state. This NYISO calculator allows our customers insight into the price of electricity for today or day ahead. The effort here like the other calculator is to move the NYISO Day Ahead Pricing Calculator from the legacy experience for a unified customer experience within the DCX architecture aligning to design and usability standards. Both calculators were delivered also ahead of the new CIS implementation for planned integration with DCX rather than outdated legacy

platforms.

Orange & Rockland was delivered an address optimization feature for Start Service. This experience aligns with the Con Edison address lookup functionality. A new type- ahead feature will be presented with a list of prepopulated addresses for customers to choose from. This replaces an awkward experience where customers need to select multiple inputs to find an address. This change in its short time in production have provided an increase in self-service with a 46% increase in finding their service address.

Finally, DCX continued to enhance its many offerings, including Our Leave on For Landlord (LOFLL) provided at Con Edison. This update was a backend enhancement to the LOFLL business rules to identify an eligible parent account, all parent accounts must have a phone number and email address on our Customer Information System (CIS) to be eligible to be a parent account in the program. This makes it easier for administrative purposed and allows for the program to send necessary notifications to the parent account.

Accessibility

The Company continues to progress its accessibility updates throughout ConEd.com, O&R.com, and conedison.com on both transactional and non-transactional experiences, as part of our commitment to supporting our customers with visual, cognitive, and motor challenges. This past quarter global enhancements were introduced for web and now native mobile users. Mobile app enhancements placed emphasis on background colors, button updates, underlining all links, contrast requirements, and alerts. While navigating the mobile app, specifically to calendars and various iOS titles, customers now have a more accessible, user friendly experience. Additionally, the voiceover and talkback functionalities where enabled.

On the website, various forms were also enhanced for accessibility improvements. Examples are the following: Connected Devices RFI Form, Smart Energy Plan, O&R Business Energy Survey Form, O&R saving programs Form, O&R Empower Form, O&R How to Read Your Meter Form, O&R Inspection Appointment Form, O&R Sign in form, O&R Update Account Form, O&R Gas Conversion Form. The updates to these forms have links and focus indicators that can be selected with the keyboard. There were also updates to radio buttons on the site, which now allow for better announcing of radio buttons for users with screen readers. This closed out remediation on the website, but the DCX team will continue testing and focus on delivering new features with accessibility. Currently, the team is validating the work with a third party to confirm delivery on its commitments.

Other Enhancements

DCX continues to be adaptable and scalable with the infrastructure that supports the digital experiences. As previously mentioned, DCX implemented a Scaled Agile Framework, also known as SAFe. The framework is a body of knowledge that includes structured guidance on roles and responsibilities, how to plan and manage the work, and values to uphold. It was formed around three primary bodies of knowledge: agile software development, lean product development, and systems thinking.

DCX also performed enhancements in Q4 to the CSR My Account tool called DCX Assist. DCX launched the Bulk Upload Feature Option. This function allows bulk account uploads for Con Edison

Customer's account numbers to their existing profile via csv excel file formatting for Customer Service Representatives (CSR). This feature includes multiple messaging that communicates the various status of a request (Warning, Loading, and Confirming). After an unsuccessful account addition, the CSR will receive a notification both from the Download and Email with the account numbers that failed to be added.

Improvements were also introduced specifically targeting payment re-processing. When situations such as a payment transaction fail (due to either network failures or other issues that would cause the payments in a status of unprocessed). These transactions are now re-processed to help reduce the number of failures. Implementing a reprocessing schedule will allow for less intervention of manual processing that is normally resubmitted by our Information Technology team.

DCX in partnership with Demand Response launched a Demand Response Lead Generation / Aggregator Form. This form provides Con Edison Residential and Commercial customers with ability to express interest in demand response and be connected with aggregators via an online form. Customers will be able to select the companies to contact them with program offers. From an Analytics perspective, tracking will be implemented for customer submissions and aggregators selected. This is now in production but remains unpublished as the Company plans a communication plan launching this to both aggregators and customers.

DCX launched an updated Market Supply Calculator for Con Edison, seen in the previous report filing. We have improved the experience with internal notifications on errors related to files that drive the calculations. This will allow the

The Company also has updated our virus scanning capabilities. The Company implemented a change to Opswat from Symantic to help govern and secure transfers of files and devices across networks. This change in vendor had impact to DCX, since DCX currently uses Symantec to scan all file uploads/attachment. Finally, DCX completed its cutover to an upgraded version of Sitecore, which is the companies' web experience management system or more commonly known as a Content Management System (CMS). This was a significant achievement for DCX, moving the site to cloud infrastructure improving reliability and scalability. DCX moved to Sitecore 10 as our current version nears end of support. This includes development for release automation on the Sitecore platform that includes My Account. Deployments will be automated to allow for quicker moves to production. Additionally, downtime on the website will be significantly reduced during deployments, thereby reducing the amount of time customers won't be able to access self-service features during scheduled releases.

Tables 1-4 below reflect the 2020 and 2021 performance trends for the DCX web and mobile platforms, broken out by company. Additional performance information can be found in Appendix B, which covers topics such as online Deferred Payment Agreements, visits to the 'Billing & Usage' tab that present customers' interval usage, volume of customers completing the Home Energy Analysis survey, online eBill enrollments, customer satisfaction survey scores, and transaction success rates, among other things.

Table 1 – Web Metrics Overview

Metric	Q1 2021 Con Edison	Q2 2021 Con Edison	Q2 2021 Con Edison	Q4 2021 Con Edison	Q1 2021 ORU	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU
Sessions	6.3M	6.6M	7.34M	6.64M	597K	539K	615K	535K
Page views	25.1M	24.3M	26.3M	23.5M	2.3M	2.1M	2.4M	2.16M
Average Bounce Rate	22.62%	28.62%	31.12%	30.3%	24.69%	25.07%	23.41%	23.90%
Average Page Load Time (sec)	3.19	3.91	4.12	4.17	3.24	3.21	3.24	3.36
Registrations	113,778	110,268	127,436	106,515	9643	7,664	9,707	8,034
NPS Score*	50	49	46	48.7	54	57	56	55.5

Data Source: Google Analytics

Metric	Metric Description
Sessions	A session is a group of user interactions with your website that take place within a given time frame.
Pageviews	A pageview (or pageview hit, page tracking hit) is an instance of a page being loaded (or reloaded) in a browser.
Average Bounce Rate	Bounce rate is single-page sessions divided by all sessions, or the percentage of all sessions on your site in which users viewed only a single page and triggered only a single request to the Analytics server.
Average Page Load Time (sec)	Total amount of load time on average across all pages.
Registrations	Total number of digital My Account Registrations.
NPS Score	An index ranging from -100 to 100 that measures the willingness of customers to recommend a company's product or services to others.

The NPS score is an index ranging from -100 to 100 that measures the willingness of customers to recommend a company's products or services to others

Table 2– Mobile Metrics Overview

Metric	Q1 2021 Con Edison	Q2 2021 Con Edison	Q2 2021 Con Edison	Q4 2021 Con Edison	Q1 2021 ORU	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU
iOS Downloads	37,474	37,625	47,849	36,390	2,437	2,038	2,659	2,044
iOS Uninstalls	8,611	6,828	8,129	6,699	840	390	442	454
Android Downloads	12,920	12,565	14,863	13,117	1,002	792	1,161	855
Android Uninstalls	12,517	12,520	15,173	13,987	960	1,386	1,045	1,220
iTunes Store Rating	4.8	4.8	4.8	4.83	4.8	4.8	4.8	4.78
Google Play Store Rating	4.8	4.8	4.8	4.83	4.8	4.7	4.7	4.68

Data Source: Qualtrics, AppFigures, iTunes, Google Play Store

Table 3– Digital Transaction Volumes

Quarter	Q1 2021 Con Edison	Q2 2021 Con Edison	Q3 2021 Con Edison	Q4 2021 Con Edison	Q1 2021 ORU	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU
Start	80K	105.8K	135.4K	87.2K	0.5K	1.0K	1.47K	1.03K
Stop	44K	63K	63.6K	42K	0.3K	0.9K	1.3K	1.05K
Transfer	8.2K	14.4K	12.7	7K	N/A	N/A	N/A	N/A
Report Outage	28.1K	27.7K	55.1K	18.1K	8.5K	10K	13.6K	8.6K

For additional web metrics and details see Appendix B

Table 4 – Percentage of Transactions Completed Digitally (% of Total Transactions)

Quarter	Q1 2021 Con Edison	Q2 2021 Con Edison	Q3 2021 Con Edison	Q4 2021 Con Edison	Q1 2021 ORU	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU
Start	54%	57%	60%	53%	3%	8.38%	9%	7%
Stop	42%	49%	50%	45%	5%	15.74%	18%	15%
Transfer	35%	50%	52%	45%	N/A	N/A	N/A	N/A
Report Outage	35%	36%	44%	32%	43%	45%	43%	45%

Data Source: Customer Information System

2.1.3 Planned Work for Q1 2022

The Company identified the following features and enhancements for development and/or implementation in Q1 2022. The planned work below may shift or change to meet evolving customer or regulatory needs. These features listed below are planned to have commenced and potentially be delivered within the quarter or shortly thereafter.

Account Management

The following features are planned to start Q1 2022:

- O&R Start Service Enhancement (O&R): O&R start service process will be improved with the offering of a re deposit in lieu of a social security number. This will enable customer to self-serve whereas they previously needed to come into offices to complete this transaction.
- Oracle Utility Analytics Data Warehouse (OUA)/ Obvient Migration (CE): This is a backend upgrade to our report/check outage processing; we will be updating our stored procedures that currently reside within a legacy database to a new environment that will improve resiliency and performance.
- Duplicate report outage ticket messaging (CE): Messaging will be added to let customers know that they are attempting to submit a duplicate outage ticket while reporting an outage. The message is informational and will not prevent the customer from proceeding to submit the outage report. Within Con Edison we have the capability to inform the customer a report was already received and avoid them trying to submit duplicates also giving them confidence that we have their issue recorded.
- Return Predictive records with Predictive Flag (CE): Added functionality for check status page to return ETR information for customers in predicated outages. This may be delivered early Q2 with development underway.
- Energy Affordability Program (ESP) Enrollment Form (CE): Net new functionality for qualifying customers to be able to apply to submit an enrollment form for the low-income program via the My Account experience.
- Low Income Customer Messaging (CE): Added functionality for customers to identify if they

are enrolled in an EAP and the monthly bill adjustment within My Account.
- Upgrade Mobile Telephone Validation (CE): Upgrade to the new vendor web service provided to validate mobile numbers for outage preference offering.

Billing and Payment

The following features are planned to start Q1 2022:

- Data Visualization widget upgrade (CE and O&R): Update existing residential usage and billing visualizations to use Oauth authentication and implement upgraded widgets so users can view usage and billing data regardless of 3rd party cookies, and provide more flexibility for configuring look & feel, additional features and metrics. This is planned to be extended to native mobile in Q2 of 2022.
- Broken Payment Agreement Renegotiation (CE): Net new functionality to provide customers who have broken their payment agreement the option to enter into a new agreement with different terms. This will be made available on both web and native mobile experiences.
- Check Outage Communication Enhancements (CE and O&R): Improve the check outage customer experience on native mobile and web through an improved design that offers outage status and ETR on existing transaction.
- Additional Options on Customer Claims Form (CE): Provide customers the ability to choose Motor Vehicle and Con Edison contractor options when submitting a claims form in order to expedite their request .
- New Feature Customer Messaging (CE and O&R): Net new functionality to inform customers through dynamic messaging on Web about newly released features on My Account. This will be made available on both web and native mobile experiences.
- Log-in Update (CE and O&R): Removal of legacy username and password functionality on native mobile for full cutover from legacy experience to current DCX log-in.

Accessibility

The following features are planned to start Q1 2022 for both Con Edison and O&R:

- Accessibility Validation (CE & O&R): DCX will be undergoing accessibility remediation validation on mobile and web apps with third party.
- iOS dynamic type (CE and O&R): Enhancements for users with disabilities when resizing on the iOS flagship mobile apps.

2.2   Journey Mapping

Customers are increasingly comparing the experience with their utility to that of other industries such as banking and telecommunications. The Company's Journey Mapping program aims to not only get to the heart of what customers want, but to also provide *optimal* customer touchpoints. Companies that consistently offer best-in-class customer experiences see a variety of business improvements associated with the increases in satisfaction and loyalty from consistent positive experiences.

Journey mapping is a process improvement method that explores the full sum of a customer's experience when interacting with a company, not just discrete interactions or transactions (referred to as customer touchpoints). A full customer experience, or "journey," is when a starts and finishes a transaction with no additional wants or needs from a company. For example, beyond looking at the discrete action of a customer requesting utility service with a phone call, a journey mapping team would review what caused the customer to call in the first place, the actual call experience, and any additional steps up to the point where the customer receives and understands their first bill.

2.2.1   Q4 2021 Highlights

Con Edison implemented many meaningful improvements to the customers' experience in Q2 2021. All improvements and enhancements are based on in-depth customer research, operational data, and root cause analysis.

Payment Assistance Journey

The Company's objective for this journey is to provide our customers in need of payment assistance with convenient and easy ways to pay; clear, consistent, personalized payment information and options across all channels (phone, web, app); and payment assistance options that help get customers out of the cycle of defaulting on their bill.

- Credit card payment in the field
  - Currently, credit card payments during field collections can be received if a customer calls a specific phone number or goes online. This project will enable the customer, at the time of collection, to use their credit card with mobile devices carried by Company Field Representatives.
  - Software development has been completed by internal IT, Service Link, and Paymentus. We are currently in the final stages of end to end testing in anticipation of the first launch in the Bronx for collection from commercial customers in March 2022.

Outage *Communication Journey*

The Outage Communication Journey is aimed at better communicating with customers via the channels of their choice (i.e., phone, text and/or web), increasing the frequency of communications,
and simplifying the process for customers to communicate with Con Edison during a power outage. Here are some of the improvements we have made to customer experience.

- Developed and implemented Emergency Free Form messaging to use during an emergency or unexpected event, or climate event, Con Edison now has the ability to create a message specific to the event and get it out to customer quickly.
  - Benefit: Customers receive up to date information specific to the emerging or unique situation. They will feel more informed and prepared should an emergency event affect them.

- Increased the number of customers we reach with the Pre-storm Proactive text message campaign to a total of 2.1M customers
  - 300k additional customers reached
  - Benefit: more customers now have the opportunity to be informed and prepared for an event, with easy access to reporting an outage if needed (See Figure 1).

Figure 1: Increase in Text Outage Communications

2021 in numbers

Move to Text

91%
of all electric outage restoration messages were sent via text message
  o Starting August 31, 2021, 70% of customers also received a complimentary restoration email

88%
of all electric outage update messages were sent via text message
  o Starting August 31, 2021, 53% of customers also received a complimentary update email

15.4M
Over 15.4M texts were delivered as part of the Pre-Storm Proactive Text Campaign
  o 47% increase over 2020

- Developed and implemented a process to send customers a message when Con Edison, for emergency reasons, needs to shut off power in a specified area. Giving customers some warning and transparent communications regarding the outage.

2.2.2 Planned work for Q1 2022

- Complete and test technical design for taking credit card payments in the field in anticipation of starting collections from commercial customers in March 2022.
- Continue to improve outage messaging for our smart meter customers, emergency events and other outage events.
- Design improvements for smart meter outage messaging based on customer research.
- Journey Map the customer's experience when they have flickering lights or low voltage that affect their electricity supply to identify pain points and create improvements.

2.3 Virtual Assistant

The Next Gen CX Virtual Assistant program is focused on leveraging artificial intelligence (AI) to expand communication channels with customers. A virtual assistant, or 'bot,' is a conversational virtual agent that provides a unique, interactive, and personal way for customers to obtain answers and assistance across multiple channels, 24 hours a day, 7 days a week, 365 days a year. Virtual assistant functionality will provide the Company with a new form of frontline customer support that automates many of the simple transactions currently performed by CSRs over the phone.

2.3.1 Q4 2021 Highlights

Release 3 Build Completion and Testing

During Q4, the Virtual Assistant team completed the infrastructure build required for release 3 and finalized a deployment plan with an anticipated release scheduled for late January. This release, will feature a major enhancement for our customers calling into the IVR. In the future, these customers will have an opportunity to be routed directly to the virtual assistant to complete specific transactions without waiting for a representative. Customers that choose to interact with Watt will receive a link sent to their cell phone where they can seamlessly continue their transaction with Watt. If a customer has any issue completing their transaction, they can request to be connected to a CSR. Based on the estimated wait time, the customer can decide to stay on the line or receive a callback. In either scenario, the representative that handles the escalation will receive a transcript of the conversation that the customer had with Watt, which will minimize the amount of time it will take to serve the customer.

Another feature in release 3 will provide our Spanish-speaking customers with the opportunity to interact with Watt in Spanish. All of the virtual assistant use cases have been translated and will be available both on the web and as a deflection option within the IVR in Spanish.

The team completed over 1,500 test cases to validate that all pieces of the IVR integration and Spanish functionality were working as intended. Test phases successfully accomplished during Q4 included:

- System integration testing
- User acceptance testing
- Cyber review
- Preliminary performance/stress testing

2.3.2 Planned Work for Q1 2022

Release 3 Deployment

As mentioned above, the team is focused on delivering the IVR/VA integration and Spanish translation of existing use cases during Q1 2022.

Improved Reporting

After release 3 is implemented, updates will be made to the existing dashboards to include statistics on customers willingness to accept the offer to use the Virtual Assistant from the IVR and the impact that the VA has on digital transactions across all use cases.

Infrastructure Improvements

In order to make future enhancements to the Virtual Assistant more efficient, the team will be making updates to the infrastructure of the VA. One of those improvements will focus on the separation of the bot's skills. Currently, when an enhancement or fix is required, the bot needs to

be removed from the website entirely. In the future, we will be able to isolate the specific use case that requires remediation while the other use cases and skills of the bot will remain available to our customers.

2.4   **Bill Redesign**

The Bill Redesign successfully launched on April 9, 2021 and the team has been performing post monitoring hyper care through September 30, 2021.

The Bill Redesign Capital Project was officially closed out on September 30, 2021

As of December 31, 2021, there are 2.15 million accounts enrolled in eBill, approximately 65% of our 3.6 million total accounts.

3.   **Back Office Automation & Agent Tools**

The Back Office Automation and Agent Tools program encompasses a collection of investments in software and new systems that will automate repetitive back office tasks, improve the accuracy and efficiency of exception management processes, enhance tools used by the Company's CSRs and centralize knowledge sharing in order to provide more consistent experiences for customers and employees. Specific work streams include implementation of robotic process automation ("RPA") technology, a new exception management tool, and enhancements to the tools used to guide CSRs through customer interactions.

3.1 Robotic Process Automation

Improvements in RPA technology have enabled the Company to build processes that take many business rules into consideration and perform actions across several software programs. In this program, the Company has begun to implement a number of automation opportunities using RPA tools, based on a consideration of the overall effort involved in development of the RPA tool, and the associated customer satisfaction and cost saving value.

3.1.1 Q4 2021 Highlights

In the third quarter we have identified three process automations which have been developed. The process automations address the following topics:

- Automation for Addressing Meter Issues in MDMS

- This automation will assist in generating actual billsMeter readings being addressed on time for accurate billing

Processing Tax Remittance Credits: Process is responsible to ensure the correct tax rates are applied on customer accounts

- Statement Generation: Process will be streamlined across the business areas to generate historical statements

3.1.2 Planned Work for Q1 2022

During the first quarter of 2022, the back-office automation team will work on the following enhancements:

- Identify processes for automation opportunities

- We plan on going live with the three processes automations we began development work on during the fourth quarter of 2021

3.2 Exception Management

The Company is no longer exploring an exception management tool at this time as it was determined that the Company's new billing system will be handling exception management by assigning work to CSRs via "To Dos."

3.3 Agent Tools

A new process improvement effort began, to create an automated process for the Gas Line inspection project. The Strategic Ops team is currently working with Gas Operations to develop a new application using the PEGA platform. This new project will fall under the Back-Office Automation effort.

III.   Next Gen CX Cost Summary

Capital Spending

Program	December 31 YTD Spending	2021 Budget
Data & Analytics	$5,248,367	$5,282,000
DCX*	$10,292,976	$10,875,000
Journey Mapping	$724,363	$736,125
Virtual Assistant	$3,516,504	$3,683,000
Bill Redesign	$234,252	$200,385
Back Office Automation	$345,000	$612,000
Total	$15,735,525	$21,896,125

*Approximately 96% CECONY and 6% O&R

O&M Spending

Program	December 31 YTD Spending	2021 Budget
Data Analytics	$550,034	$685,000
DCX*	$6,798,084	$6,921,000
Journey Mapping	$347,693	$665,000
Virtual Assistant	$530,138	$485,000
Bill Redesign	$46,746	$50,000
Back Office Automation	$0	$0
Total	$8,272,695	$8,806,000

 *Approximately 92% CECONY and 8% O&R

IV.   BCO Savings

The 2019 Rate Order requires the Company to identify BCO savings achieved. BCO goals are broken into three cost savings categories: Self-Service Optimization, Workforce Management, and Back Office Automation.

Self-Service Optimization – Allows customers to self-serve through a variety of channels, rather than speaking with a CSR, with a focus on reduction of calls to the Call Center. Savings for Self-Service Optimization in 2021 were approximately $3,640,000.

Workforce Management – Savings in this category are a result of identifying and using data analytics, call volume forecasting and scheduling efficiencies to decrease the staffing required to handle customer inquiry demand. Workforce Management focuses on labor cost savings and optimizing staffing and schedules. Savings for Workforce Management in 2021 were approximately $117,000.

Back Office Automation – These initiatives streamline and automate back-office processes, consolidate work functions and eliminate manual tasks, thereby reducing labor and other expenses. As described above RPA use cases have been deployed and are beginning to shrink the backlog of billing exceptions requiring investigation. Additionally, the volume of exceptions caused by the Company's ongoing AMI deployment is declining..

Appendix A: Data & Analytics Implementation Plan Details

Next Gen CX Progress Report – Q4 2021
Appendix B: DCX Enterprise Dashboards

ENTERPRISE DASHBOARD – CON EDISON

Digital Usage (Q4 2021): Transactions completed digitally, as a percentage of Total Transactions

Residential & Commercial Data

CECONY App & Web digital completions. Note: Start service is not provided on the app. Source: ConEdison

Digital Success Rates: Percentage of Digital Transaction Attempts Successfully Completed, by month
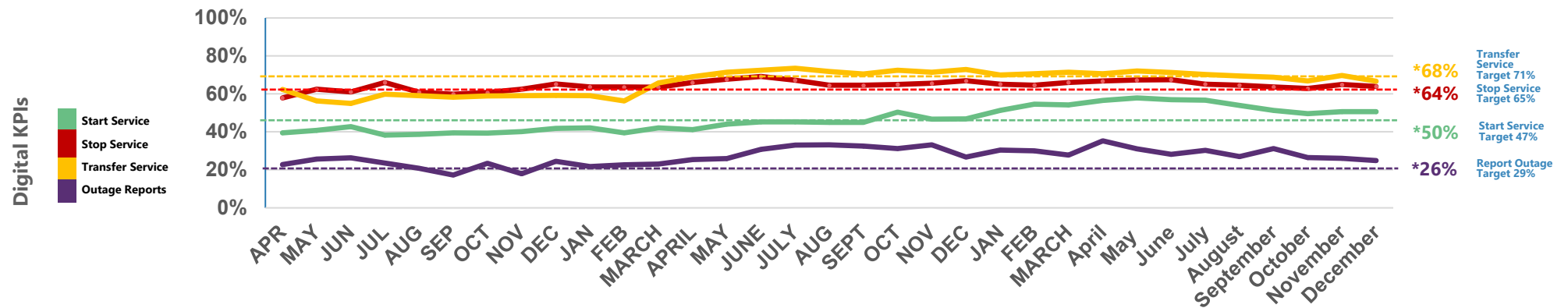
*Numbers are cumulative averages of March '20 – March '21   Users *starting* a transaction on the web divided by successful completions. *Start Service & Report Outage have "intent" actions tagged. Source: Google Analytics*

*Report Outage includes IVR

ENTERPRISE DASHBOARD – CON EDISON

Quarterly Digital (Online) Payment Agreement Usage (Q4 2021): Customers completing Payment Agreement Digitally, as a Percentage of Total Agreements

Quarterly Business Goal

Payment Agreement

29%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
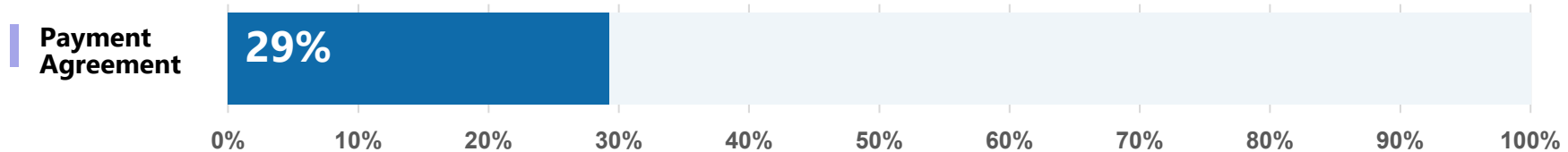
Source: ConEdison Online + IVR + VA

Digital Payment Agreement Completions: Volume of Payment Agreements successfully completed online (Web and Mobile), by month

Digital KPIs

47,869
Payment Agreements (YTD)
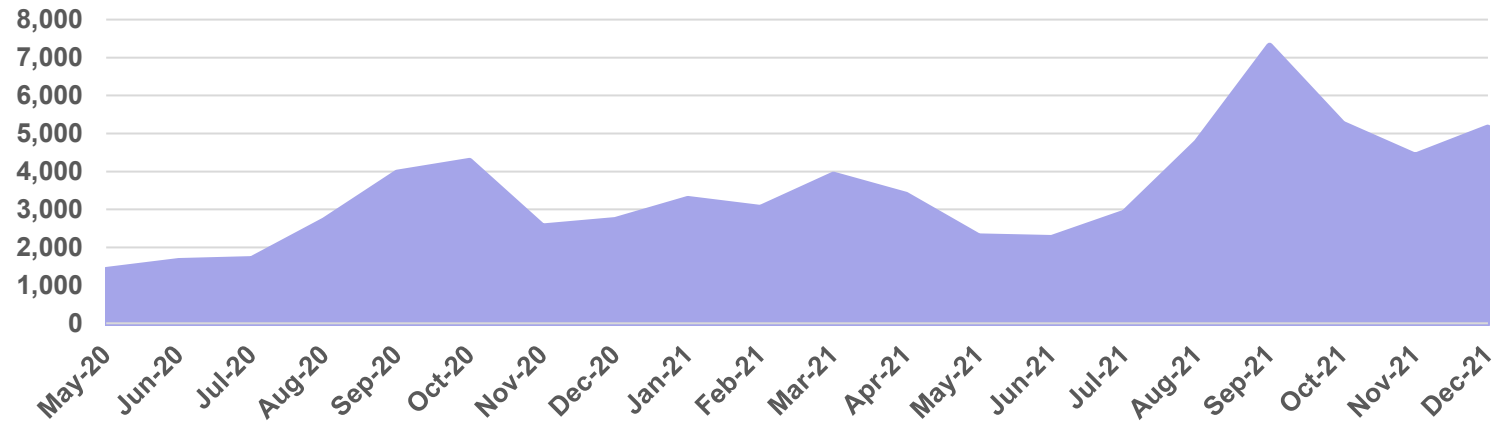
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0

May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21

.Source: Google Analytics

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ENTERPRISE DASHBOARD – CON EDISON

Quarterly E-Bill Usage (Q4 2021): Customers who receive E-Bill, as a percentage of all customers

Quarterly Business Goal

E-Bill Adoption

65%

2019 Target 55%

| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |

Data cumulative of 2020 Data

Percent Increases/Decreases is cumulative data vs benchmark

Source: ConEdison
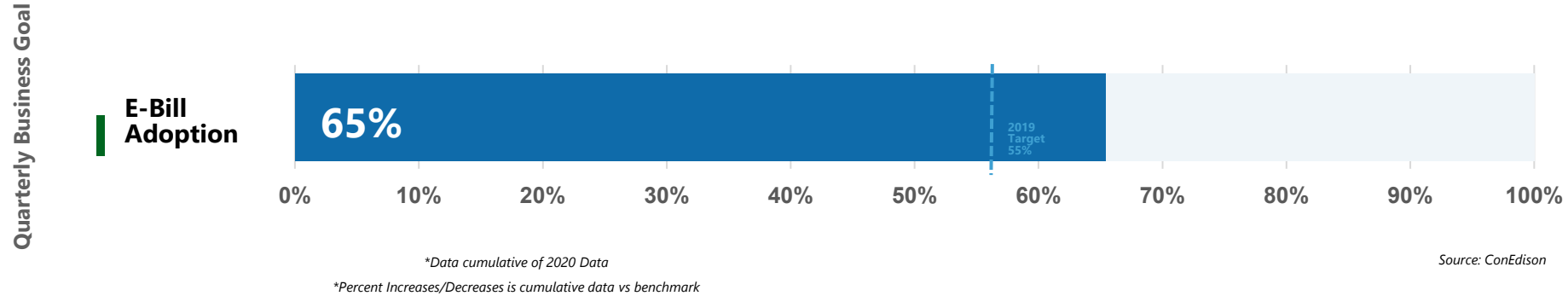
E-Bill Enrollments: Volume of My Account Customers who enroll in E-Bill digitally, by month

Digital KPIs

265,968

Total E-Bill Enrollments (YTD)

New enrolments only. Source: Google Analytics

2019 E-bill Enrollments includes enrollments during Start Service transaction

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ENTERPRISE DASHBOARD – CON EDISON

Quarterly CSAT scores (Q4 2021)

Quarterly Business Goal

49 NPS
Overall Site
NPS

4.1 / 5
State
Mandated
CSAT

4.8/ 5
iOS App
Rating

4.8/ 5
Android App
Rating

Numbers are cumulative averages of Q1 2020 data

Source: Qualtrics, JD Power, iOS App Store, Google Play Store

Q3 Effort Score

Q4   4.36

4.4

4.4

4.4

4.4

4.4

4.4

4.4

4.3

4.4

| Jul 2021 | August | September | October | November | December | Jan 2022 |

Source: Qualtrics

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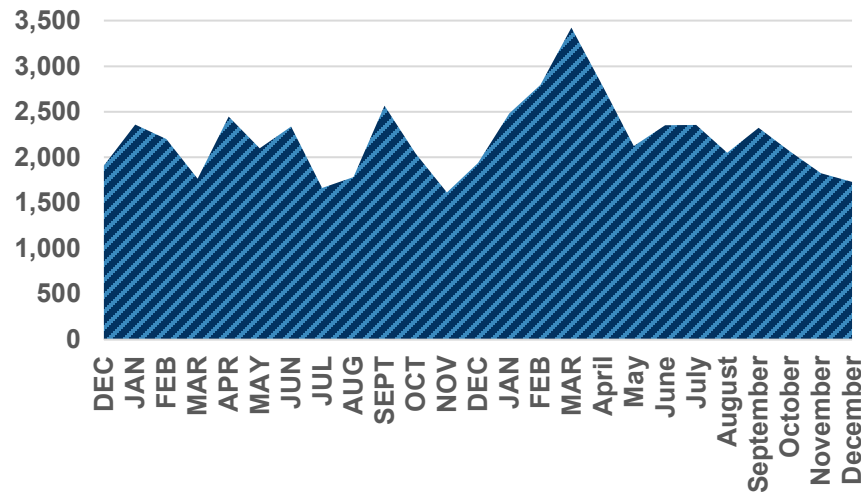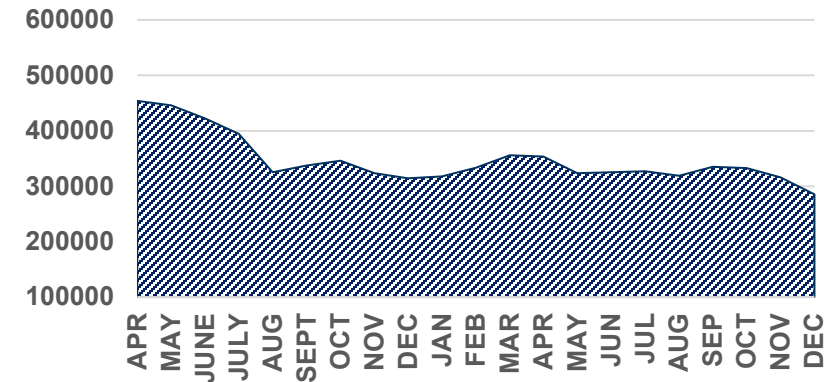
ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

BUSINESS COST OPTIMIZATION

Start Service Completion
Stop Service Completion
Report Outage Completion
E-Bill Adoption Completion
Payment Agreement Completion

CUSTOMER SATISFACTION IMPROVEMENTS

Start Service NPS   Overall Site NPS
Stop Service NPS   iOS App Rating
Report Outage NPS   Android App Rating
E-Bill Adoption NPS

CUSTOMER EMPOWERMENT

Home Energy Enrollees
Home Energy Gas Report
Home Energy Electrical Report
Monthly Average Users
O-Power Usage

ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

Quarterly Digital Payment Agreement Usage (Q4 2021): Customers completing Payment Agreement Digitally*, as a Percentage of Total Customers

Quarterly Business Goal

Payment Agreement | 21%

0%   10%   20%   30%   40%   50%   60%   70%   80%   90%   100%
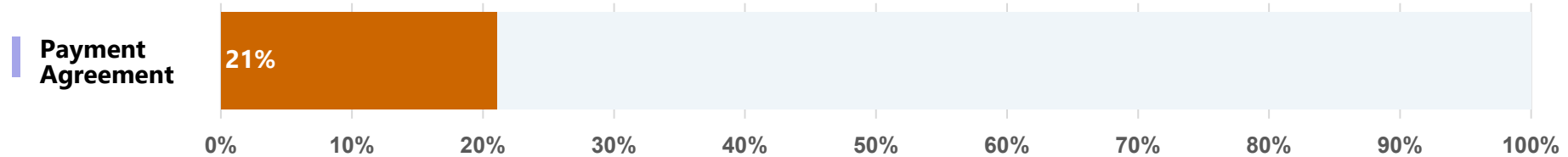
* In December, reporting criteria switch to report % of open payment agreements that were initiated digitally

Source: Orange & Rockland

Digital Payment Agreement Completions: Volume of Payment Agreements successfully completed online (Web and Mobile), by month

Digital KPIs

3,443
Payment Agreements (YTD)

400
350
300
250
200
150
100
50
0

May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21

Source: Google Analytics

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ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

Quarterly CSAT scores (Q4 2021)

Quarterly Business Goal

54 NPS
Overall Site
NPS

4.8/ 5
iOS App
Rating

4.7/ 5
Android App
Rating

Source: Qualtrics, JD Power, App Store, Google Play Store

Q3 Effort Score

Q4   4.47

Jan 2021	February	March	April	May	June	July	August	September	October	November	December
4.5	4.5	4.4	4.5	4.6	4.5	4.5	4.5	4.5	4.5	4.4	4.5

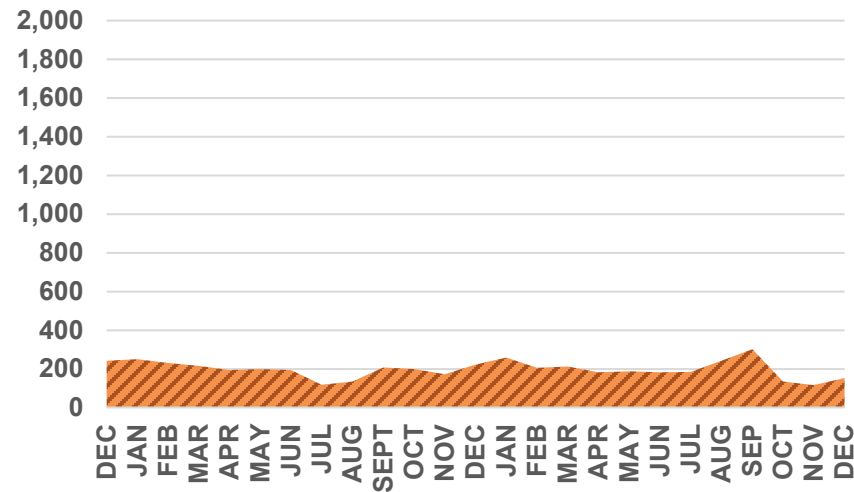# ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

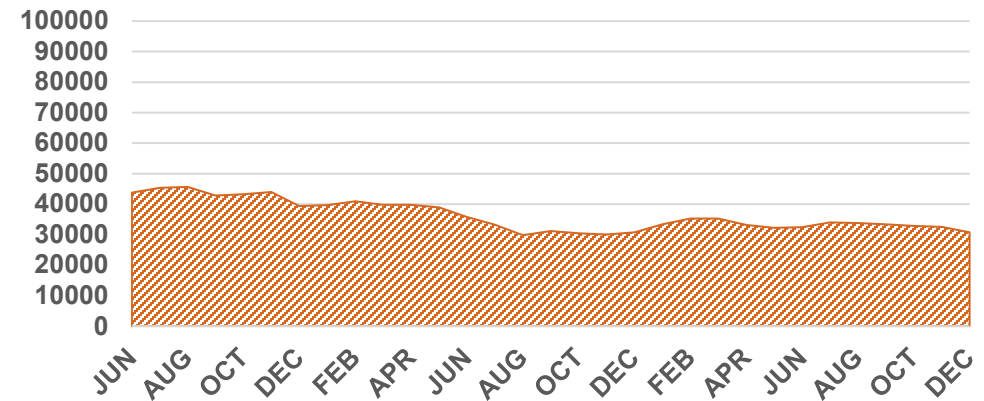**Quarterly Home Energy Analysis Survey (Q4 2021)**

403

Home Energy
Analysis Completions

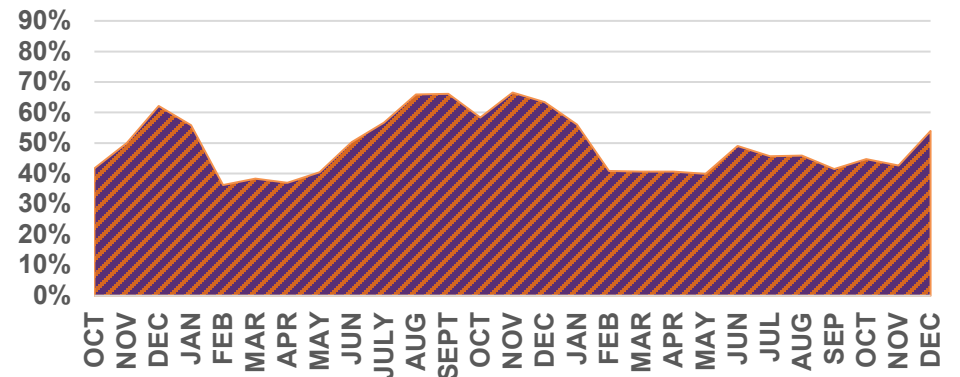**Home Energy: Volume of Customers who complete the Home Energy Analysis, by month**

Source: OPOWER

My Account Monthly Active Users

- Customers logged into My Account. Source: OKTA

Billing & Usage Tab Users as a percentage of MAUs, by month

Customers who have clicked on the Usage tab in My Account: Source: OKTA, Google Analytics

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