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**BY E-MAIL**

May 31, 2022

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 submits its Customer Experience Report, which includes a description of their Digital Customer Experience program, for the first quarter of 2022.

If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

Edward Sherwin

Enclosure



Cases 19-E-0065, 19-G-0066, 18-E-0067 and 18-G-0068  
Next Generation Customer Experience Progress Report  
Q1 2022

Dated: May 31, 2022

## **I. Next Generation Customer Experience Program Summary**

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 customers' 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 a 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<sup>1</sup>, 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 resources 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.<sup>2</sup>

## **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

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<sup>1</sup> 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.

<sup>2</sup> 2019 Rate Order, Attachment A – Joint Proposal, pp. 95-96.

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 2021, 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 (beginning Q1 2023) – 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 Q1 2022 Highlights**

In the first quarter of 2022, the Company continued its plans for Data and Analytics across 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 workstream completed the buildout of the solution's development environment and began completing the environment enhancements to optimize the platform. In Q1 2022, the Company completed multiple deliverables, including:

- Completed production environment deployment and an had an operational go-live. End users were officially able to utilize production data and the production reports that were built in 2021 and Q1 2022.
- Performed a Databricks and Azure resource and cost analysis.
- Deployed Machine Learning environment for customer segmentation.

### *Use Case Release*

The use case release workstream continued its efforts to further build out the Customer Analytic Record, completed its first use case to support Customer Assistance Center operations, scoped and completed a First Call Resolution report, completed its Web-to-Call linking use case, and continued development on Customer Segmentation.

- **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), providing a unified view of all customer interactions, profiles, service usage and other attributes and pinpointing 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 Q1, the program implemented OPower and PossibleNow data into the Customer Analytic Record.
- **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 Q1, the Company aligned on creating customer personas specific to different experiences customers have with Con Edison. The focus of this customer segmentation use case was bill payment, as this is a core transaction in which all customers take part.
  - The delivery timeline for this use case was extended and multiple iterations of data clustering techniques were utilized to identify which data fields provide statistically relevant differences in customer payment activity.
- **Measuring the Effectiveness of Improvements to the Digital Experience** – Evaluating the success of self-service initiatives by connecting digital experience with call-in numbers and customer satisfaction, and by comparing results to managed service transactions.
  - In Q1, the Company completed and went live with this use case.

- **Customer Service Representative Performance and Productivity** – Dashboard and reporting with KPIs by agent, workgroup (AHT, escalation, repeat, # calls, talkover %, silent %, call routing accuracy)
  - In Q1, the Company went live with this use case and then identified a data issue with the data feeds coming from the Employee Data Warehouse (EDW) system. Initial training is scheduled for April of this report, but it will be more about the functionality of the report, as it is not ready for daily usage until the EDW issues are resolved.
- **First Call Resolution** – This report is intended to provide 1-day, 3-day, and 7-day first call resolution metrics for all customer service representatives. Customer inquiries that resulted in a call back can also be viewed and exported for further investigation.
  - In Q1, the program team identified this as a valuable use case for the Call Center Quality Assurance group and delivered this use case instead of the Escalated Call Analytics (1 of 2) project, as the final data sources needed to support Escalated Call Analytics were not fully completed at this time.
  - The sprint team delivered this report in two sprints and performed initial business validation testing for the reports. Full quality assurance testing and consumer training for this use case will occur in Q2 2022.

#### *Data Source Activation*

In Q1, the Company continued its data source activation, ingestion, and modelling efforts under its data activation plan. The data activation team completed modelling and business validation of PossibleNow and OPower data sources, promoted additional Questline and EDW data sources to Test, and successfully ingested the large volume of Google Analytics data for the first time. Additional data from the Customer Service System (CSS) was also identified as a must-have for certain Customer Operations business teams. This workstream began requirements design for an additional six data tables from CSS in this sprint.

#### *Change Management Workstream*

In Q1, the Company continued its Change Management Workstream which implemented continuous weekly interactive training sessions, went live with an informational resource page on the Company's intranet, and planned and delivered a the multi day power user Train-the-Trainer training and began supporting power users on training their teams on how to utilize the NGCX analytics reports and data model. At the end of Q1, 31 stakeholder teams were represented in the change management contact list with over 40 individual Power Users.

### **1.3 Planned Work for Q2 2022**

In the second quarter of 2022, the Company plans to continue activities for delivering projects associated with Phase 2 of the program, including: enhancements and optimization of Azure EDAP, delivering multiple programs use cases, continuing the delivery of use cases based on the program's project plan shown in Appendix A, scheduling and completing consumer training through the program's power user network, and starting to formally measure value of the program. Overall, the

program sees Q2 2022 as a key moment to work with business teams on how to best utilize the program's use cases and available data to support their business needs.

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

## **2. Omni-Channel Optimization**

### **2.1 DCX**

The Company established the DCX program in 2016 to improve the digital experience for customers through a redesign of the conedison.com and 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 to, among other things, 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.

#### *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 2021, the team improved its use of agile development through the implementation and use of Scaled Agile Framework (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 customers’ trust, while maximizing usability, is a central objective of DCX.

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 Q1 2022 Highlights**

In Q1, 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 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 customers’ 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 customers’ ever-changing needs.

**Payment Agreement Renegotiation** – Our BCO team initiated this feature to strategically plan call reduction to customer service representatives (CSR) for renegotiation of payment agreements. Con Edison residential customers who have a pending broken payment agreement notice (BNA) may now renegotiate a new agreement on My Account. Giving customers flexibility to renegotiate their payment agreement creates a positive experience for our customers, as they do not need to speak with a CSR, can use self-service options, and can complete their transaction on their preferred channel of communication. The current alert banner will now provide context on eligibility and there is logic in place that allows a customer to renegotiate an agreement multiple times in a configurable period to allow for flexibility. As a result, the logic behind the renegotiation configuration is smartly built to allow for the flexibility our customers may need in financially challenging times.

**Claim Form Submission Improvements** – For Con Edison customers, who identify as being adversely affected by an event other than an outage, when submitting a claim form, two additional criteria areas have been provided: A check box for Motor Vehicle and space for additional information for contractor information. Once the customer fills out the relevant information and submits the form, the system sends the completed claim form to specific back-office teams for evaluation. The Company



created new business routing rules to address the claims more directly and efficiently direct forms to the correct groups.

**Data Visualization Enhancement** – We made an update for Con Edison and O&R residential usage and billing visualizations to use OAuth authentication and implement the newest version of the widgets. This enhancement will allow users to view usage and billing data regardless of third-party cookies and provide more flexibility for configuring look and feel and future capabilities.

#### *Account Management*

DCX implemented some specific enhancements for Con Edison customers, expanding functionalities of My Account to better enable customers to manage their service accounts.

**Allow Deposits for O&R Start Service** – This enhancement allows O&R customers to start service online without providing positive identification. Customers will be informed a deposit is required in lieu of providing their Social Security number (SSN) and that they will be able to pay the deposit once they are billed. Previously, if a customer could not provide a SSN, they would be asked to come into the walk-in center to complete their transaction. This functionality allows for an increase in the success rate of customers starting service online and decreases calls to the call center. This also further aligns the Con Edison and O&R customer experiences.

**Energy Affordability Program (EAP) Application Web Form** – This feature is for customers who receive benefits from eligible governmental assistance programs to self-identify for enrollment in the low-income rate classification. The form aligns to the statewide regulatory mandate to provide an EAP enrollment option online. The qualifying programs include Supplemental Nutrition Assistance Program, Supplemental Security Income, Temporary Assistance for Needy Families, Home Energy Assistance Program, Medicaid, Federal Public Housing Assistance, and Veterans Pension and Survivors Benefit. Con Edison My Account customers can complete the EAP application online and attach supporting documents to the application. Once the customer submits the form, the system generates an email and sends it to back office-personnel for review.. This process allows the Company to determine whether the customer qualifies for EAP without having to wait for a quarterly update from a government agency. We plan to launch the web form for O&R as we address other priorities. At this time, O&R has a PDF form available for customers.

**Energy Affordability Enrollment Messaging** – This functionality helps identify Con Edison customers who are enrolled in an assistance program and provides customers with insight into their enrollment status and the credits they are receiving. Previously, customers could see their discounted rate only on their bill. This new messaging will help customers find this information within My Account. This will be considered for O&R in future iterations, after CC&B implementation.

**Outage Platform Migration** – This backend upgrade to our report/check outage processing updates our stored procedures that currently reside within a legacy database to a new environment that will improve resiliency and performance for these critical customer experiences.

**Enhancements to Outage “Check Status” Page** – We continue our commitment to improve communication with our Con Edison and O&R customers, especially during outages. We have made updates to align the outage "check status" page with design improvements that we recently implemented for the Report Outage confirmation screen. We created the new page design after

receiving feedback from customers and conducting user testing. The new page presents clearer information in a simpler format, making it easier for users to understand.

**Upgrade to new version of mobile telephone validation** – Upgrade to new vendor web service that validates Con Edison customers' mobile numbers for outage preference offerings.

**Cold AMI Turn On** – This feature allows customers to process a start service transaction on the web even when the meter is locked in the areas of Manhattan where the Company has recently deployed AMI.

**Log-in Update** – Removal of final legacy username and password functionality on web for both Con Edison and O&R customers.

### *Accessibility*

The Company is committed to supporting our customers with visual, cognitive, or motor challenges. This past quarter, we introduced global enhancements for web and mobile users. Mobile app enhancements included background colors, button updates, underlining all links, contrast requirements, and alerts. Mobile customers now have a more accessible experience when navigating to calendars and various other headers in the navigation. These improvements include iOS dynamic type enhancements for users with disabilities when resizing on Con Edison's and O&R's iOS mobile apps. With this, the Company has completed remediation and is performing validation across platforms in collaboration with a third-party accessibility partner.

### *Other Enhancements*

DCX continues to have adaptable and scalable infrastructure to support the digital experiences. The following enhancements have been delivered this past quarter to allow for greater performance, code and content delivery, and general enhancements.

**Streamlining of DevOps Pipelines** – Per Microsoft's recommendations, we will continue to convert our classic DevOps pipelines to YAML pipelines. A DevOps pipeline is a set of automated processes and tools that allows developers to collaborate on building and deploying code to a production environment. YAML allows our developers to revert a pipeline back to a functioning state if a breaking change is introduced. It also allows our developers to test and modify their modifications without interfering with other teams that might be working on the same pipeline. This helps our developers work more efficiently in an agile setting, as requirements can change quickly.

**Power Ready Electric Vehicle Program Interest Form** – The Company is accelerating the move toward electric vehicle ownership by connecting thousands of new public and customer-owned charging stations. Supporting one of the EV programs, DCX collaborated with the Power Ready team at Con Edison to repurpose an existing/unused web form and update the backend configuration. This form will allow for developing structure of the intake process, managing inquiry collection, and focusing and researching interest in the program.

**Infrastructure Improvements** – We have successfully upgraded our API pipelines from .NET version 4.5.2 to .NET version 4.8. The .NET 4.5.2 version is slated for end of life by April 26, 2022, with Microsoft discontinuing support for those applications still utilizing that framework. This upgrade

allows us to stay up to date with the most current technology and avoid any disruption in service or potential security risks that could arise with an out-of-support framework.

**Green Button Connect API Performance Updates** – To improve API performance issues experienced by GBC third parties, the Company made enhancements to the GBC API. These included the introduction of throttling and caching and the removal of lock statements from the code.

**Outage SLA Improvements** – The Company created a new dedicated Azure storage account to store SLA reports separately from other documents, thereby minimizing exposure and limiting access to these reports to necessary personnel.

**Sitecore Security Vulnerability Update** – After discovering a Sitecore security vulnerability within our Sitecore 8 and Sitecore 10 environments, the Company applied patches to mitigate any cyber exposures.

**Clean Energy template update** – To better highlight the Company’s Clean Energy Commitment, we added a button element to an existing template to display this information more prominently to customers.

Tables 1-4 below reflect the 2021 and 2022 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	Q2 2021 Con Edison	Q3 2021 Con Edison	Q4 2021 Con Edison	Q1 2022 Con Edison	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU	Q1 2022 ORU
Sessions	6.6M	7.34M	6.64M	7.2M	539K	615K	535K	567K
Page views	24.3M	26.3M	23.5M	27.2M	2.1M	2.4M	2.16M	2.34M
Average Bounce Rate	28.62%	31.12%	30.3%	27.6%	25.07%	23.41%	23.90%	22.41%
Average Page Load Time (sec)	3.91	4.12	4.17	4.63	3.21	3.24	3.36	3.66
Registrations	110,268	127,436	106,515	119,390	7,664	9,707	8,034	8,252
NPS Score*	49	46	48.7	40	57	56	55.5	43

*\*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.

<b>Pageviews</b>	A pageview (or pageview hit, page tracking hit) is an instance of a page being loaded (or reloaded) in a browser.
<b>Average Bounce Rate</b>	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.
<b>Average Page Load Time (sec)</b>	Total amount of load time on average across all pages.
<b>Registrations</b>	Total number of digital My Account Registrations.
<b>NPS Score</b>	An index ranging from -100 to 100 that measures the willingness of customers to recommend a company's product or services to others.

Table 2 – Mobile Metrics Overview

Metric	Q2 2021 Con Edison	Q3 2021 Con Edison	Q4 2021 Con Edison	Q1 2022 Con Edison	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU	Q1 2022 ORU
iOS Downloads	37,625	47,849	36,390	38,038	2,038	2,659	2,044	2,268
iOS Uninstalls	6,828	8,129	6,699	6,719	390	442	454	340
Android Downloads	12,565	14,863	13,117	14,412	792	1,161	855	1,052
Android Uninstalls	12,520	15,173	13,987	12,732	1,386	1,045	1,220	1,151
iTunes Store Rating	4.8	4.8	4.83	4.83	4.8	4.8	4.78	4.78
Google Play Store Rating	4.8	4.8	4.83	4.83	4.7	4.7	4.68	4.72

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

Table 3 – Digital Transaction Volumes

Quarter	Q2 2021 Con Edison	Q3 2021 Con Edison	Q4 2021 Con Edison	Q1 2022 Con Edison	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU	Q1 2022 ORU
Start	105.8K	135.4K	87.2K	76.2K	1.0K	1.47K	1.03K	1.1K
Stop	63K	63.6K	42K	40.2K	0.9K	1.3K	1.05K	984
Transfer	14.4K	12.7	7K	6.2K	N/A	N/A	N/A	N/A
Report Outage	27.7K	55.1K	18.1K	31.4K	10K	13.6K	8.6K	8.5K

For additional web metrics and details, see Appendix B

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

Quarter	Q2 2021 Con Edison	Q3 2021 Con Edison	Q4 2021 Con Edison	Q1 2022 Con Edison	Q2 2021 ORU	Q3 2021 ORU	Q4 2021 ORU	Q12022O RU
<b>Start</b>	57%	60%	53%	53%	8%	9%	7%	7%
<b>Stop</b>	49%	50%	45%	47%	16%	18%	15%	15%
<b>Transfer</b>	50%	52%	45%	48%	N/A	N/A	N/A	N/A
<b>Report Outage</b>	36%	44%	32%	21%	45%	43%	45%	48%

Data Source: Customer Information System

### 2.1.2 Planned Work for Q2 2022

The Company identified the following features and enhancements for development and/or implementation in Q2 2022. Over the next two quarters, work will be more focused on design and navigational change as we prepare for a production release “freeze” to take place starting in Q4 2022 through CC&B implementation. During this time, DCX will scale down development to be focused on delivering value to a pre-production environment that will launch with the integrations for CORE. This will be clearly identified in future filings of the quarterly report for transparency.

The Company plans to commence work on and potentially deliver the features listed below within the quarter or shortly thereafter. The planned work for Q2 2022 may shift or change, however, to meet evolving customer or regulatory needs.

#### *Account Management*

**Outage Journey Enhancements** – DCX implemented dynamic messaging to Con Edison customers who submit tickets for an already-reported outage. Customers who report an outage that had previously been submitted will see a message advising them we have a record of the outage. The goal of presenting this message is to give customers confidence that their reports are received and that there is no need to submit multiple reports. Additionally, the “check status” page has been updated to show updated messaging that a customer is part of a predicted outage region with specific ETR information.

**Legacy Form Migration for O&R** – Migration from legacy online form submission provider to new process requiring development and upgrade of the backend architecture to a more secure alternative.

#### *Billing and Payment*

**New Feature Customer Messaging** – New functionality to inform customers about newly released features on My Account for both Con Edison and O&R customers. When customers log into My Account for the first time after new features have been added, they will see a message informing them of what’s new on the site. Providing this message will give the customer insight into new features they can take advantage of while on the site and continue promoting self-service.

**Payment Journey Streamlining** – This development allows for Con Edison and O&R customers to go to one location to make payments either as a guest or as a My Account customer. Combining these two payment flows makes a more unified experience and allows customers to process different types of payments more easily.

**O&R Billing History Migration** – Moving O&R bill image retrieval from the internal legacy solution to Con Edison and O&R's shared bill print vendor, Broadridge. This aligns both companies to the same retrieval process and infrastructure.

**Share My Data Traction Enhancement** – This update allows traction (transit) accounts to show on the authorization flow for Share My Data.

*Other*

**Platform Enhancements** – We are making technical enhancements to our content management system that will allow us to quickly create simple webforms, better support marketing goals, and automate how we review site performance metrics.

**Batch Job Performance Improvements** – DCX uses batch jobs (overnight processes) to manage text and email communications to our customers. In the event one of those batch jobs fails, we have developed a process to obtain and store the failed file so that we can manually distribute it our partner (Message Broadcast) to retrigger the notification.

**Biztalk Upgrade** – Our existing version of Biztalk (middleware system that helps to automate our business processes) is version 2013. This version is coming to end of life in July 2023. This means that any issues that arise after this end-of-life date will not be supported by Biztalk. To stay up to date and mitigate potential issues and security risks with a non-supported version, we will be upgrading to Biztalk 2020.

**Virtual Assistance Maintenance Mode Automation** – We are adding new functionality to our content management system to enable certain resources to automatically turn off the Virtual Assistant on coned.com during code updates. Currently, we need to manually turn off this feature within the content management system because we cannot preschedule a time for deactivation.

**.net CORE Upgrade** – .net CORE version 3 is coming to end of life by December 2022. To stay up to date and mitigate potential issues and security risks with a non-supported framework, we have upgraded our .net CORE to version 6.

**Keyvault Certificate Management** – To manage the web app certificates for mutual authentication between APIM and the web applications, a PowerShell script was created that goes through all Keyvault instances managed under DCX under a specific environment resource group and updates the certificate thumbprint to the new certificate thumbprint. This reduces the amount of manual intervention required each year and ensures there is no disruptions from a customer experience perspective.

## **2.2 Journey Mapping**

Customers are increasingly comparing their 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 resulting increases in customer satisfaction and loyalty.

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 customer 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 Q1 2022 Highlights**

Con Edison implemented many meaningful improvements to the customers' experience in Q1 2022. 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.
  - Finished User Acceptance Testing (UAT) for devices and payment.
  - Started incremental soft launch of devices in the field.
  - Monitored for any technical or customer issues to address in production.

#### *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.

- Mapped the journey for customers experiencing low voltage or flickering lights to identify improvements.

- Performed operational data analysis.
- Surveyed customers that reported flickering lights or low voltage in the past two years.
- Conducted a workshop with Electric Operations to come up with potential improvements for the short, medium and long term.

### **2.2.2 Planned Work for Q2 2022**

- Continue with credit card device roll out in all boroughs.
- Continue to improve outage messaging for smart meter customers, emergency events and other outage events.

### **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 Q1 2022 Highlights**

##### *Release 3 Build Completion and Testing*

During Q1, the Virtual Assistant team successfully deployed its largest release, which integrates the phone system with the Virtual Assistant, named Watt. Customers who call into the 800 number from a smart phone will now have the option to switch over to the Virtual Assistant to self-serve. The transactions that are available to customers include:

- Start Service
- Stop Service
- Move Service
- Enroll in a payment agreement
- Make a payment
- Request a payment extension

Customers that call for one of the transactions listed above will hear a prompt letting them know that they can use Watt to walk through the process step-by-step without waiting. If the customer accepts the offer, they will get a text with a link they can launch to chat with Watt. If at any time a customer has an issue using the bot or has a question that it can't answer, they can simply request a representative and ask for a call back or connect directly to an agent. Customers will know the



estimated wait time when making a request to speak to a representative to help drive whether they want to call into the call center or receive a call back.

As a result of this release, the Virtual Assistant has seen a tremendous uptick in transactions completed and dollars collected through the channel. See table below which represents 60 days before the deployment and 60 days after:

VA Statistics	Pre-Deployment	Post-Deployment	% Increase
	11/25/21 - 1/23/22	1/25/22 - 3/26/22	
Completed Transactions	4,500	14,400	320%
Dollars Collected	\$213,400	\$685,920	321%

The other major enhancement that rolled out in release 3 provided our Spanish-speaking customers the opportunity to interact with Watt in Spanish. All of the existing Virtual Assistant use cases were translated and are now available both on the web and as a deflection option within the Interactive Voice Response (IVR) system. Since this feature has been introduced, over 1,400 transactions have been processed using the Virtual Assistant in Spanish.

#### *Improved Reporting*

With the deployment of release 3, we have updated our existing dashboards to provide insight into the new features that are now available to customers. The team can easily gain knowledge on the starting channel that customers use to interact with Watt, their success rate, and their language of choice. We are also able to see customers’ willingness to accept the offer to use the Virtual Assistant from the IVR and the overall impact that the Virtual Assistant has on digital transactions across all use cases. With these improved metrics, we can identify continuous improvements, which will lead to increased containment within the Watt channel.

#### *Renegotiated Payment Agreements*

During Q1, the Virtual Assistant team rolled out an improvement that allowed residential customers who have broken their payment agreements to re-enroll with new agreement terms. This update gives eligible customers greater flexibility in their payment terms.

### **2.3.2 Planned Work for Q2 2022**

#### *Infrastructure Improvements*

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 remain available to our customers.

Another enhancement will improve the logging of abandoned chats to provide insight into when in the conversations customers couldn’t complete their transactions. This information will be used to develop targeted answers that the virtual assistant will be equipped to deliver to customers to help improve containment.

## *Designing New Test Cases and FAQs*

The team will start to design additional self-service use cases that will be available to customers in English and Spanish. Along with additional use cases, the development of FAQs will begin in Q2. FAQs will give customers direct answers and lead them to the appropriate parts of the website where they can find the information they are looking for.

### **2.4 Bill Redesign**

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

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

As of March 31, 2021, there are 2.17 million accounts enrolled in eBill, approximately 64.8% of our approximately 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 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 Q1 2022 Highlights**

In the first quarter, we identified three process automations for enrolling solar customers onto our new billing system, which are currently in development. The process automations address the following topics:

- Ensuring customers meet all requirements to participate in the VDER program.
- Onboarding customers and all related accounts into both CSS and the new Customer Care and Billing system.
- Checking to ensure all accounts have been updated in the billing systems.

### 3.1.2 Planned Work for Q2 2022

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

- We are going live with the three process automations we began development work on during Q1 of 2022.
- We will continue to identify opportunities to automate processes.

### 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 handle exception management by assigning work to CSRs via "To Dos."

### 3.3 Agent Tools

The Company started a new effort to create an automated process for the Gas Service 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	March 31 YTD Spending	2022 Budget
Data & Analytics	\$1,264,900	\$5,000,000
DCX	\$2,833,066*	\$12,104,000
Journey Mapping	\$111,212	\$600,000
Virtual Assistant	\$358,133	\$1,410,000
Bill Redesign	\$0	\$0
Back Office Automation	\$0	\$0
<b>Total</b>	<b>\$4,567,311</b>	<b>\$19,114,000</b>

\*Approximately 96% CECONY and 4% O&R

### O&M Spending

Program	March31 YTD Spending	2022 Budget
Data & Analytics	\$216,207	\$866,000
DCX	\$3,023,659*	\$6,925,000
Journey Mapping	\$278,215	\$600,000
Virtual Assistant	\$77,457	\$598,000
Bill Redesign	\$0	\$0

<b>Back Office Automation</b>	\$0	\$0
<b>Total</b>	\$3,595,538	\$8,989,000

\*Approximately 93% CECONY and 7% O&R

#### **IV. BCO Savings**

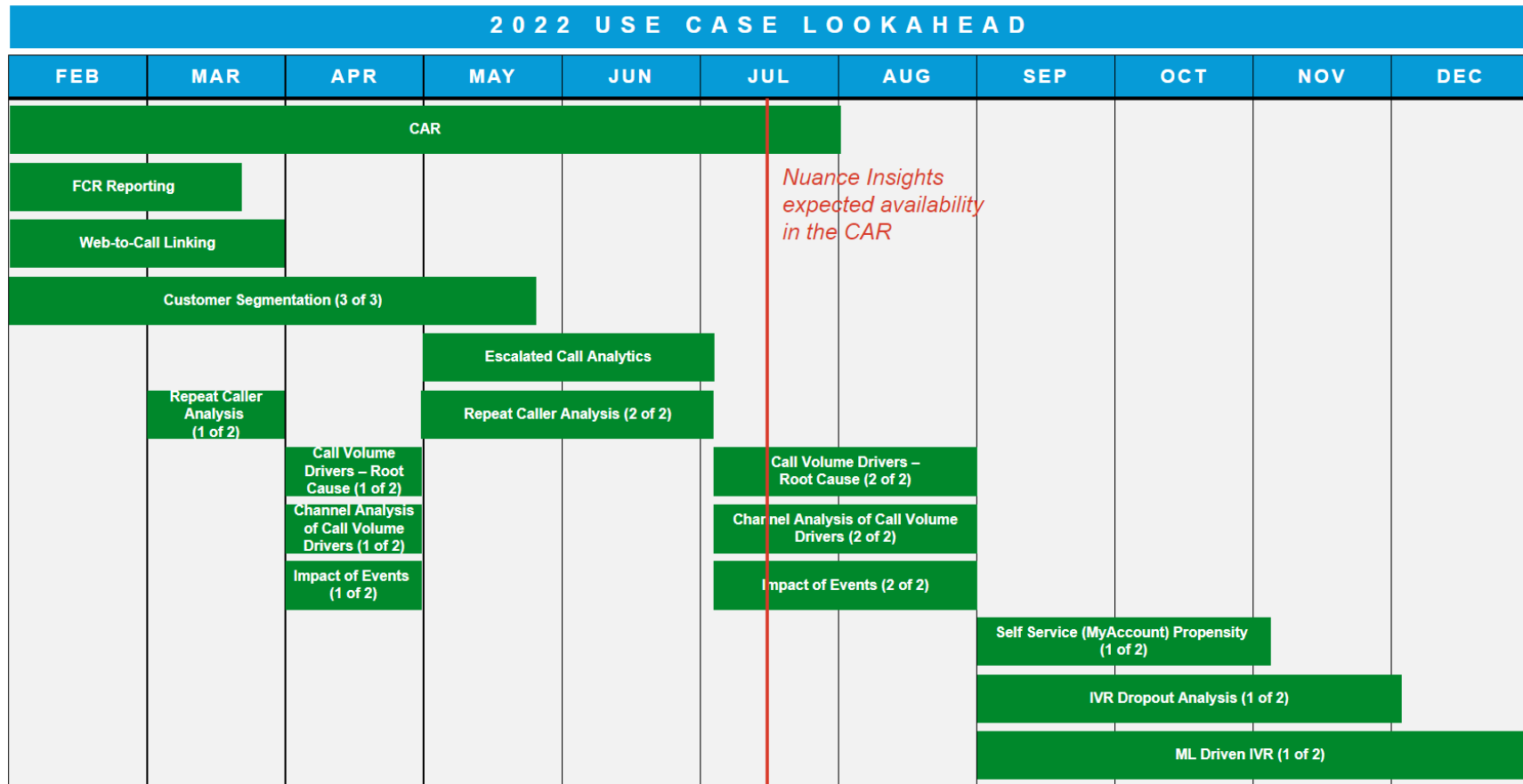
The 2019 Rate Order requires the Company to identify BCO savings achieved. BCO goals are broken into three cost savings categories: Self-Service Optimization, Workforce Management, and Back Office Automation.

**Self-Service Optimization** – Allows customers to self-serve through a variety of channels, rather than speak with a CSR, with a focus on reduction of calls to the Call Center. Savings for Self-Service Optimization for the first quarter of 2022 were approximately \$900,000.

**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. There were no savings realized for Workforce Management in the first quarter of 2022.

**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**



SIX MONTH LOOKAHEAD						
WORKSTREAM	MARCH	APRIL	MAY	JUNE	JULY	AUGUST
DATA PLATFORM	Data Engineering Foundations – Immediate Operational Enhancements	Data Engineering Foundations – Platform Performance and Configuration Enhancements			Data Engineering Foundations – Accelerator Enhancements	
	CAR					
DATA ACTIVATION	Data Release 2b (CSS)*			Data Release 2c (Nuance IVR, ADW, CORE)*		
USE CASE RELEASE	FCR Reporting					
	Customer Segmentation (3 of 3)					
	Web-to-Call Linking					
	Repeat Caller Analysis (1 of 2)					
		Pre-planning	Escalated Call Analytics			
		Pre-planning	Repeat Caller Analysis (2 of 2)			
	Pre-planning	Call Volume Drivers – Root Cause (1 of 2)		Pre-planning	Call Volume Drivers – Root Cause (2 of 2)	
	Pre-planning	Channel Analysis of Call Volume Drivers (1 of 2)		Pre-planning	Channel Analysis of Call Volume Drivers (2 of 2)	
Pre-planning	Impact of Events (1 of 2)		Pre-planning	Impact of Events (2 of 2)		
CHANGE MANAGEMENT		Change Network Meeting		Change Network Meeting		Change Network Meeting
	Program Newsletter (4 <sup>th</sup> Edition)		Program Newsletter (5 <sup>th</sup> Edition)		Program Newsletter (6 <sup>th</sup> Edition)	
		Power User-Led Consumer Training				

\* ADW is currently getting planned as an additional data source. This timeline may extend to incorporate ADW.

# ENTERPRISE DASHBOARD – CON EDISON

## 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

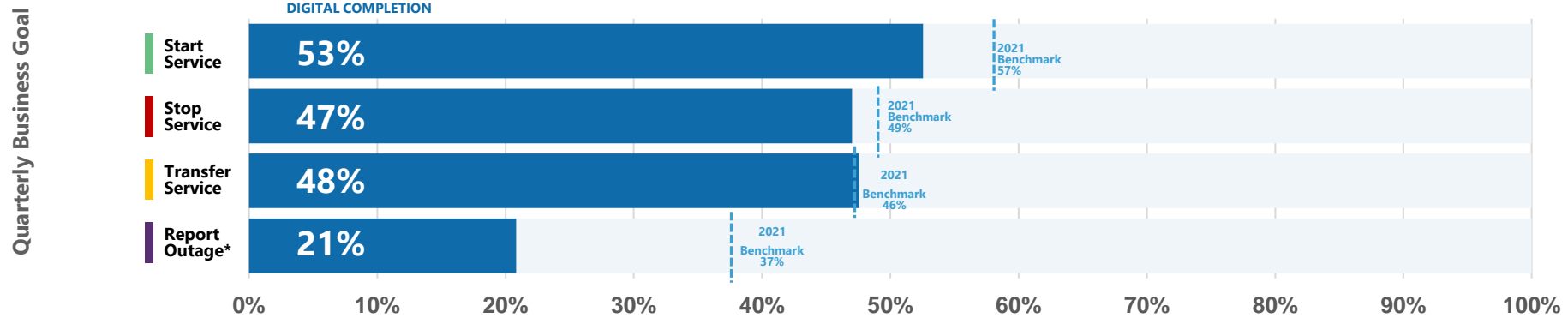
## CUSTOMER EMPOWERMENT

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

# ENTERPRISE DASHBOARD – CON EDISON

## BUSINESS COST OPTIMIZATION

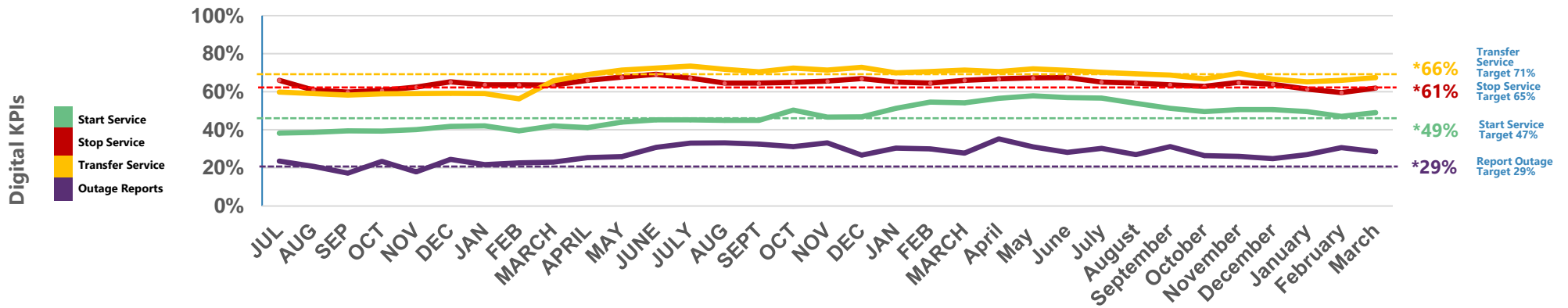
### Digital Usage (Q1 2022): Transactions completed digitally, as a percentage of Total Transactions



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

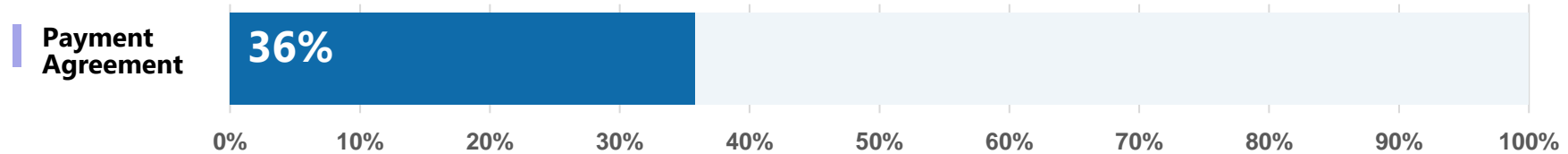


# ENTERPRISE DASHBOARD – CON EDISON

## BUSINESS COST OPTIMIZATION

Quarterly Digital (Online) Payment Agreement Usage (Q1 2022): Customers completing Payment Agreement Digitally, as a Percentage of Total Agreements

Quarterly Business Goal

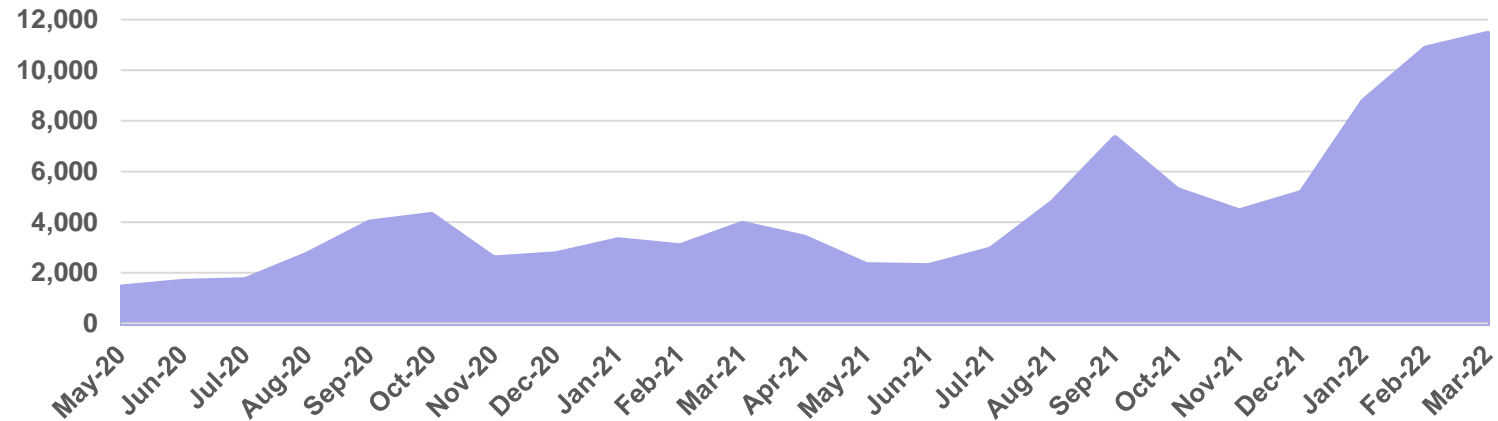


Source: ConEdison Online + IVR + VA

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

Digital KPIs

**31,032**  
Payment Agreements (YTD)

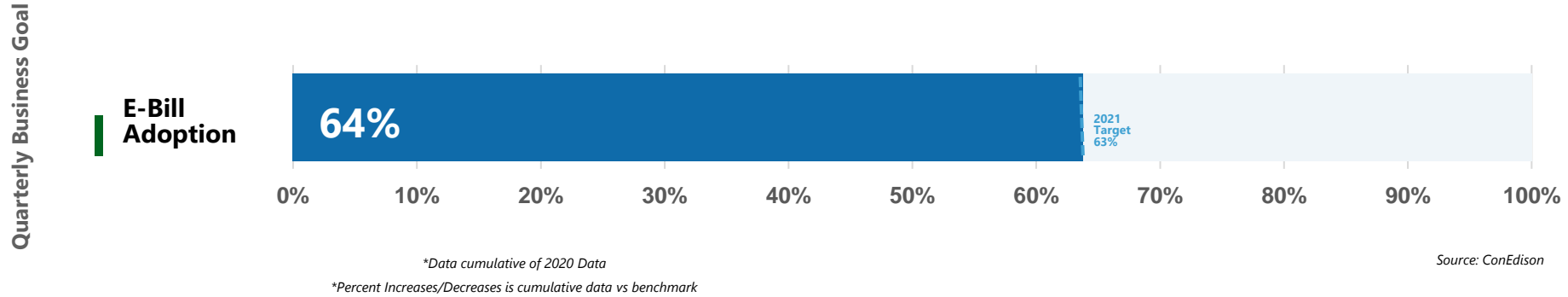


Source: Google Analytics

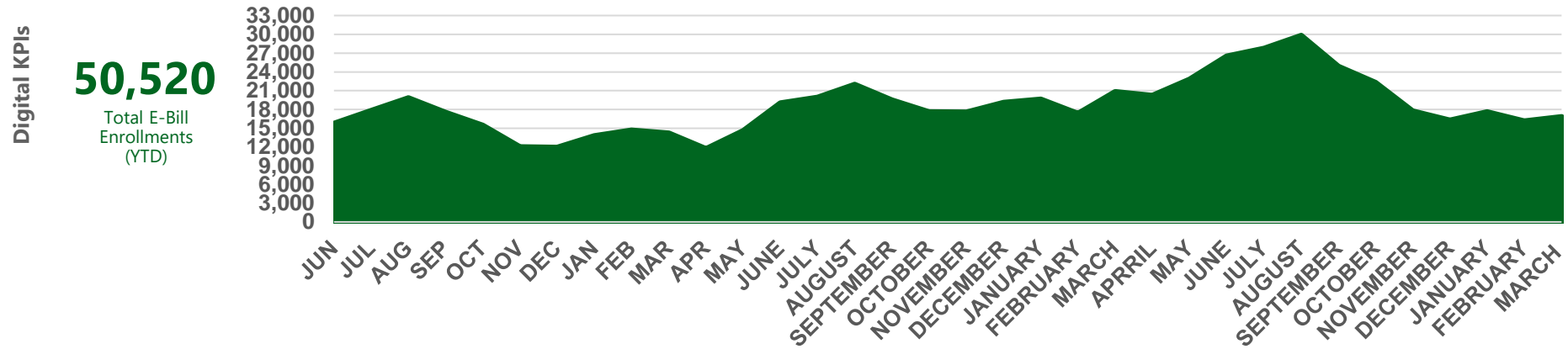
# ENTERPRISE DASHBOARD – CON EDISON

## BUSINESS COST OPTIMIZATION

Quarterly E-Bill Usage (Q1 2022): Customers who receive E-Bill, as a percentage of all customers



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



New enrolments only. Source: Google Analytics  
\*2019 E-bill Enrollments includes enrollments during Start Service transaction

# ENTERPRISE DASHBOARD – CON EDISON

## CUSTOMER SATISFACTION IMPROVEMENT

### Quarterly CSAT scores (Q1 2022)

Quarterly Business Goal



**40** NPS

Overall Site  
NPS



**3.8** / 5

State  
Mandated  
CSAT



**4.8**/5

iOS App  
Rating



**4.8**/5

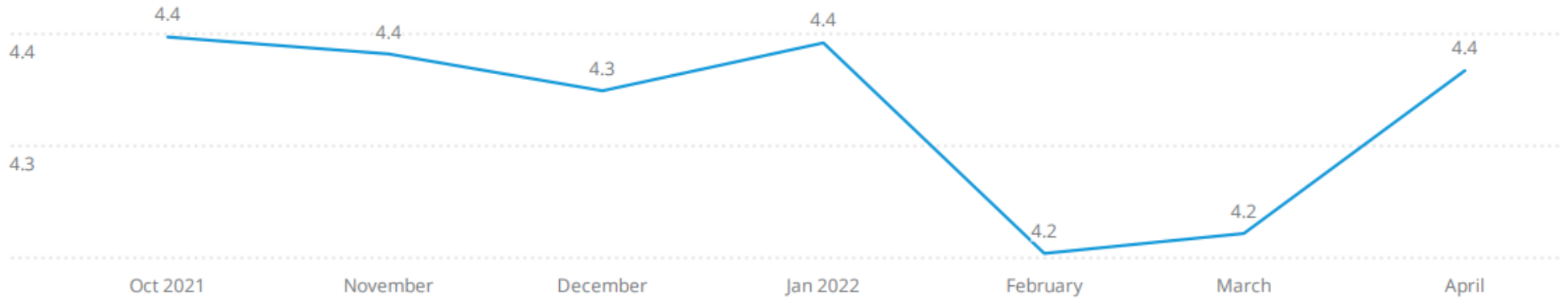
Android App  
Rating

*\*Numbers are cumulative averages of Q1 2020 data*

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

### Q1 Effort Score

Q1 4.27



*Source: Qualtrics*

# ENTERPRISE DASHBOARD – CON EDISON

## CUSTOMER EMPOWERMENT

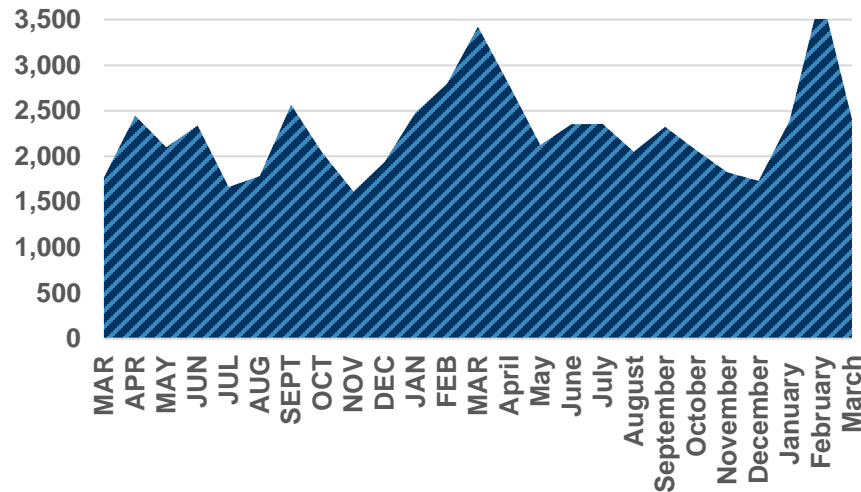
### Quarterly Home Energy Analysis Survey (Q1 2022)



8,596k

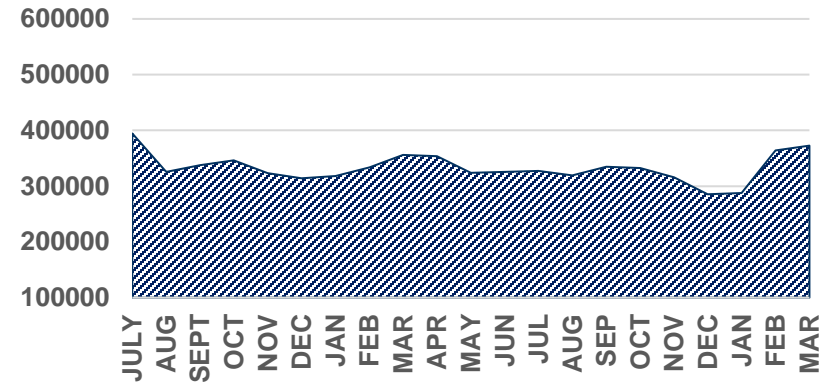
Home Energy  
Analysis Completions

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



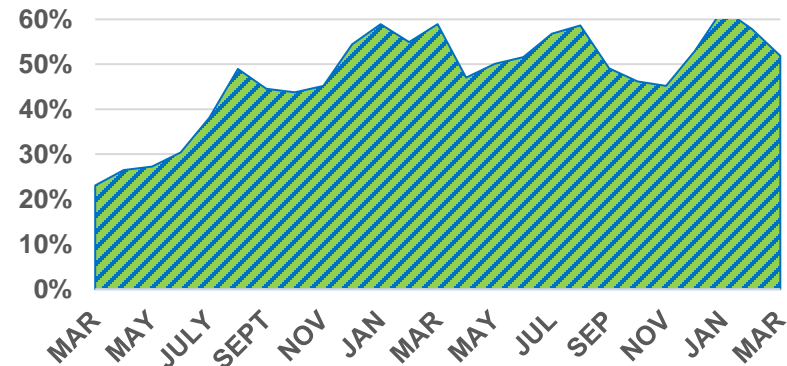
Source: OPOWER

### 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

# 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

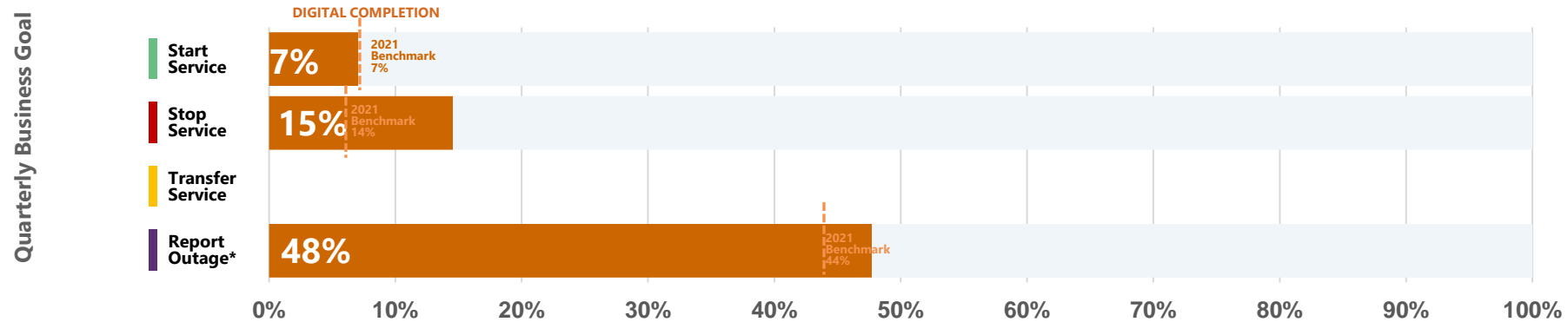
## CUSTOMER EMPOWERMENT

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

# ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

## BUSINESS COST OPTIMIZATION

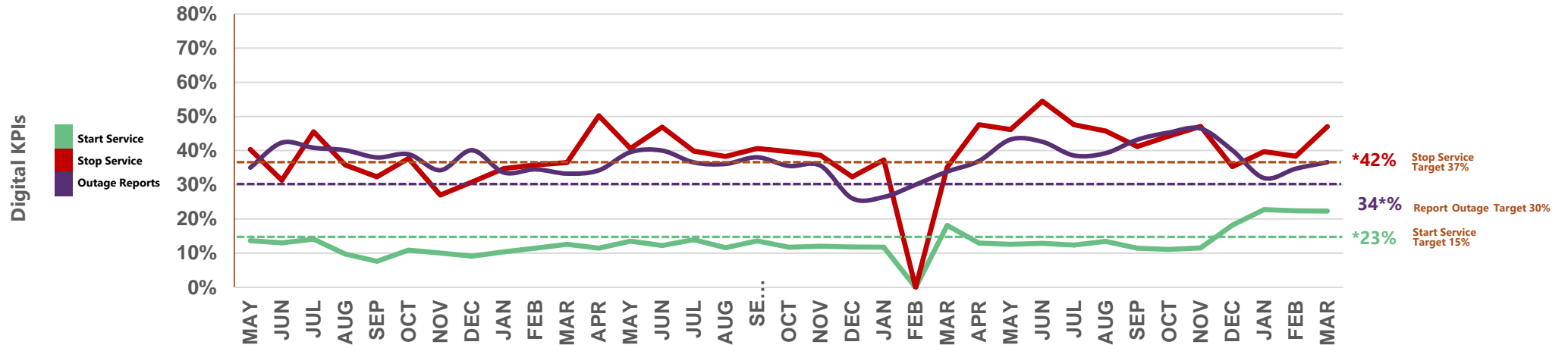
### Quarterly Digital Usage (Q1 2022): Transactions completed digitally, as a percentage of Total Transactions



Residential & Commercial Data

ORU App & Web completions. Start Service is Web Only. Source: Orange & Rockland

### 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

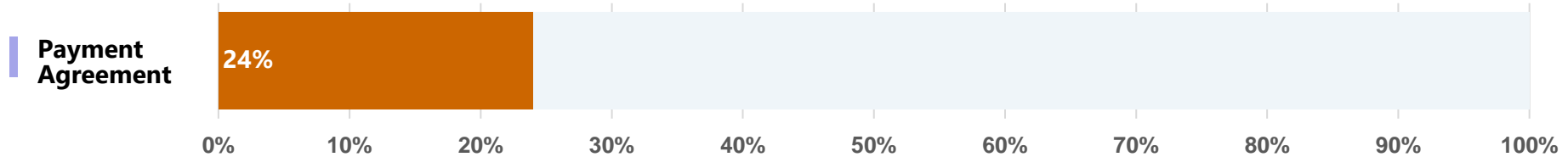
CIMs Web Service affected Start and Stop Service metrics from 2/1/21-3/25/21

# ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

## BUSINESS COST OPTIMIZATION

Quarterly Digital Payment Agreement Usage (Q1 2022): Customers completing Payment Agreement Digitally\*, as a Percentage of Total Customers

Quarterly Business Goal



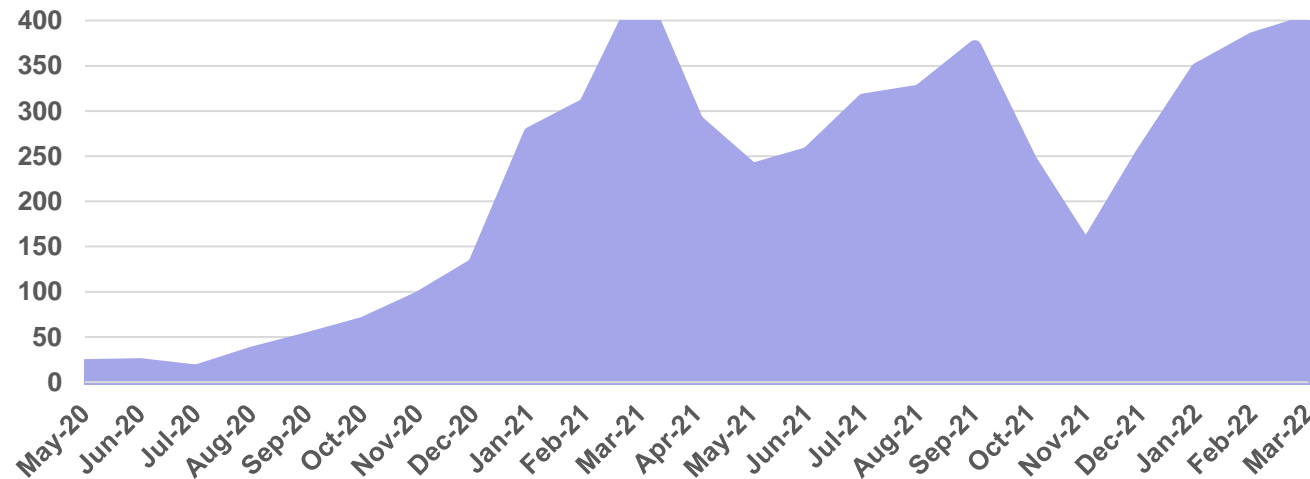
\* In December, reporting criteria switch to report % of open payment agreements that were initiated digitally

Source: Orange & Rockland

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

Digital KPIs

1,125  
Payment Agreements (YTD)



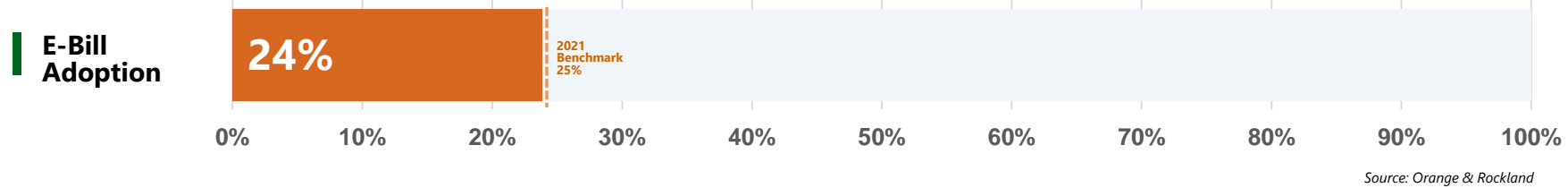
Source: Google Analytics

# ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

## BUSINESS COST OPTIMIZATION

### Quarterly E-Bill Usage (Q1 2022): Customers who receive E-Bill, as a percentage of all customers

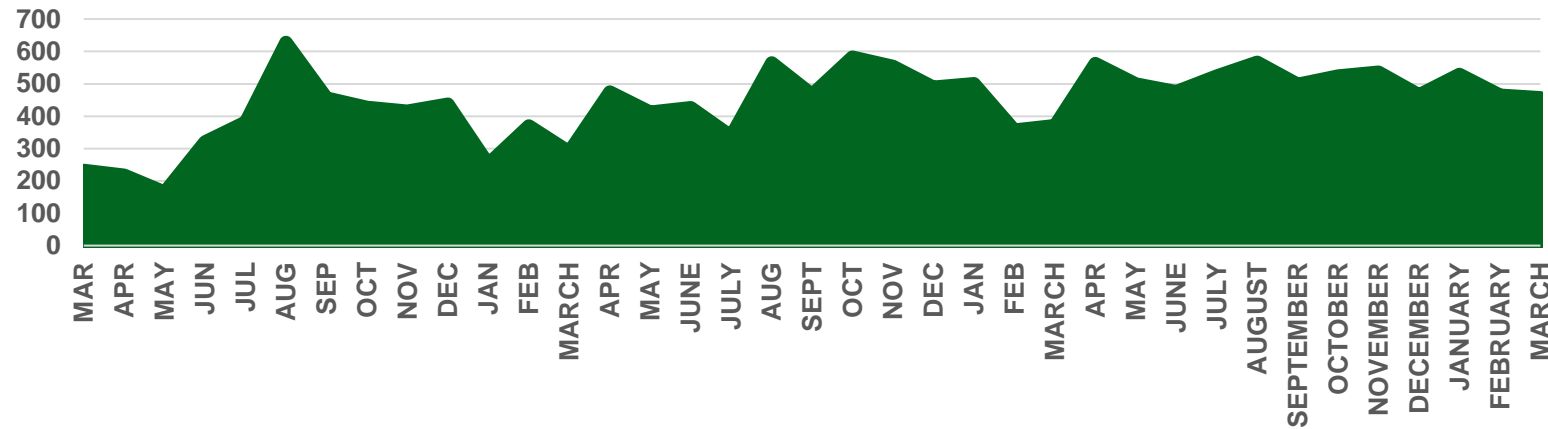
Quarterly Business Goal



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

Digital KPIs

**1,451**  
Total E-Bill Enrollments (YTD)



New enrollments only. Source: Google Analytics  
Site Maintenance affected Start and Stop Service metrics from 2/1/2021-3/25/21



# ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

## CUSTOMER SATISFACTION IMPROVEMENT

### Quarterly CSAT scores (Q1 2022)

Quarterly Business Goal



**55** NPS  
Overall Site  
NPS



**4.8**/<sub>5</sub>  
iOS App  
Rating

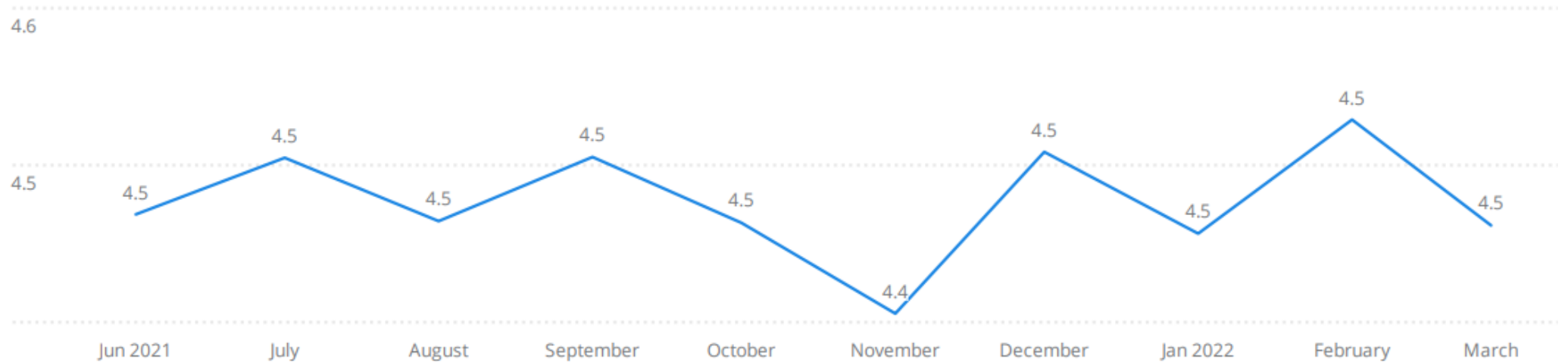


**4.7**/<sub>5</sub>  
Android App  
Rating

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

### Q1 Effort Score

Q1 4.5



Source: Qualtrics

# ENTERPRISE DASHBOARD – ORANGE & ROCKLAND

## CUSTOMER EMPOWERMENT

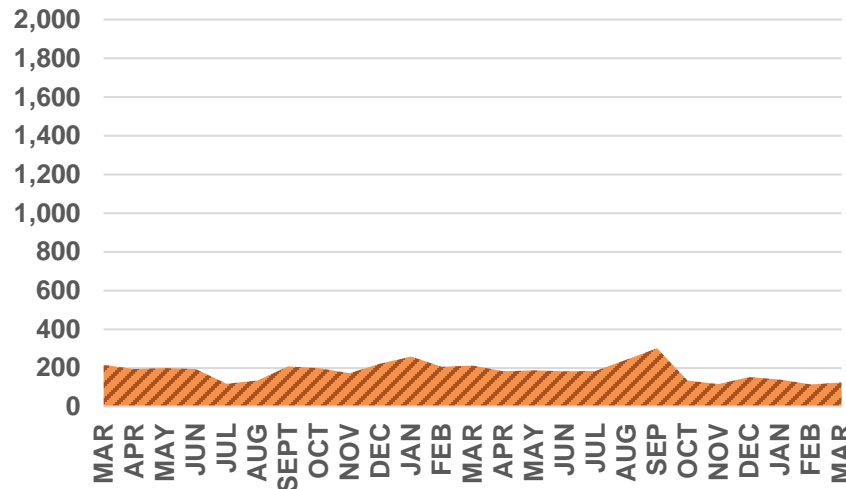
### Quarterly Home Energy Analysis Survey (Q1 2022)



379

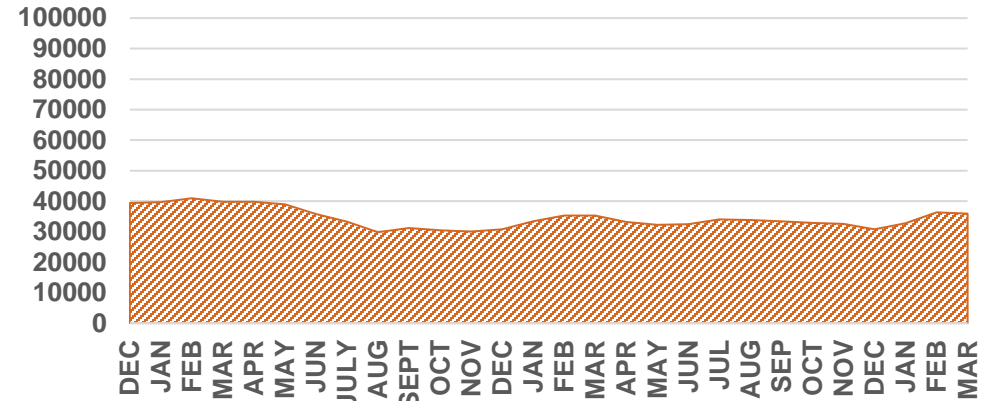
Home Energy  
Analysis Completions

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



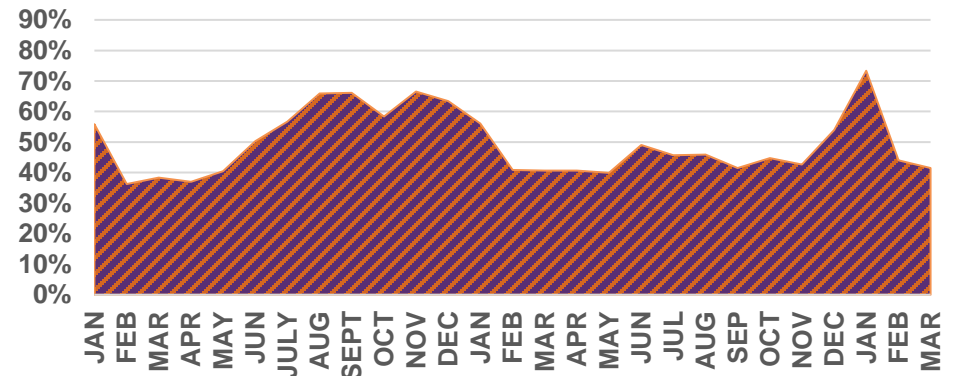
Source: OPOWER

### 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

# **Next Gen CX Progress Report – Q1 2022**

## **Appendix B: DCX Enterprise Dashboards**