

#### Law Department Kerri Kirschbaum

Consolidated Edison Company of New York, Inc. 4 Irving Place New York, NY 10003-0987 (212) 460-1077 (212) 677-5850 Fax kirschbaumk@coned.com

August 30, 2021

Honorable Michelle L. Phillips Secretary State of New York Public Service Commission Three Empire State Plaza Albany, NY 12223-1350

> 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 second quarter of 2021.

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

Very truly yours,

"/s/"

Kerri Kirschbaum Associate Counsel



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

Next Generation Customer Experience Progress Report

Q2 2021

Dated: August 30, 2021

#### 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) program¹, 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.<sup>2</sup>

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

<sup>&</sup>lt;sup>3</sup> Ibid

#### II. Quarterly Update Reports

#### 1. <u>Business Intelligence - Data & Analytics</u>

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

<u>Phase 3 (Q1 2023 – Ongoing)</u> – 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 Q2 2021 Highlights

In the second quarter of 2021, the Company began Phase 2 of its implementation plan for the Data and Analytics program's core capabilities and use cases. During this time, the Company completed the operationalization of an enterprise-wide Data Governance program, continued its cloud infrastructure build activities, began the delivery its formally scoped use cases, and began implementing "Minimum Viable Product" that help showcase the value of the new Enterprise Data Analytics Platform (EDAP) capabilities that this program is building. Lastly, based on the estimated completion date of the Azure EDAP Test (or pre-production) environment, the program decided to schedule use case release and training to a limited set of Customer Operations staff in September 2021.

#### Azure EDAP Infrastructure Build

The infrastructure build workstream completed the build out of the solution's development environment and began building the solution's test environment. In Q2, the Company completed multiple deliverables including:

- Deployed all cloud resources of the solution's architecture in the test environment
- Identified, architected, and implemented security enhancements to the test environment by changing application integration authentication mechanisms from local admin accounts to active directory-based authentication
- Delineated and documented the naming convention of each solution component to define what component is associated with EDAP and which components are application components specific to the NGCX Analytics program. As these new EDAP capabilities support more than just NGCX Analytics, the number of application components will also grow (e.g., PowerBI workspaces, service accounts, distribution lists)

As noted in the Q1 2021 update, the Company successfully deployed the entire analytics solution in its development environment in Q1. These Azure based components are managed by IT and over time will support more than the Customer Operations Data and Analytics program. Due to this, the analytics solution is considered an extension of the Company's EDAP and will be referred to as "Azure EDAP" in future updates.

#### Use Case Release

The use case release workstream is focused on delivering the 14 customer analytics use cases that were defined in this program's white paper. This workstream began in Q1 with pilots of the program's foundational use cases that serve as inputs to future use case development. The work effort in Q2 transitioned this workstream from focusing on pilots to formal use case delivery. An additional pilot was also completed at the end of Q1 which demonstrated that these foundational use cases will also greatly benefit ad- hoc data analyses and self-service reporting performed by business users of the system.

The Company addressed the following use cases in Q2:

- 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 Q2 the program ingested and modeled the Genesys (I3), OKTA, and Message Broadcast data sources into the Customer Analytic Record. Additionally, the Company instituted a new visual tracker to view the status of source system data activation, ingestion, and modeling.
  - The Company also extended and added additional data sources into "CAR 3 of 4" with a goal of activating, ingesting, modeling, and outputting all 14 scoped data sources into the CAR model by the end of 2021. This use case will now begin on August 1st 2021 and end on December 31st 2021.
- 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.
  - O In Q2, the Company began the next iteration of the Customer Segmentation use case which was focused on creating customer segmentations based on "unsupervised machine learning." This modeling uses data and statistics to identify what account attributes drive differences in the characteristics of a customer account and what account attributes do customers have in common with one another. This second iteration of the use case is expected to be completed by July 2021.
  - Additionally, this work tested the machine learning capabilities of the Azure EDAP environment and the framework used to achieve these insights can be leveraged for future machine learning based use cases.

#### Data Governance Workstream

The Company defined the data governance structure and practices needed to support the Next Gen Customer Experience Data and Analytics program and best practices for enterprise-grade data governance. In Q2, the Company completed its efforts and fully transitioned current and future Data Governance responsibilities to IT's Enterprise Architecture group.

#### Change Management Workstream

In Q2, the Company began its Change Management Workstream which is focused on communications and training on the Next Gen CX Analytics program, the new EDAP capabilities, and the program's analytics use cases. This began with the development of a change management strategy, the creation of a "Change Network" made up of key stakeholders across Customer Operations, Marketing, and Customer Energy Solutions, and a scenario gathering exercise to help identify how business users will interact with completed Next Gen CX Use Cases in the future.

For additional information on the workstreams and associated timelines for projects within each of the phases please see Appendix A.

#### 1.3 Planned Work for Q3 021

In the third quarter of 2021, the Company plans to continue activities for delivering projects associated with Phase 2 of the program, including: building higher environments of Azure EDAP, defining and managing a role-based access processes, adding new data sources to the CAR, finalizing the second iteration of the Customer Segmentation use case, completing the use case iteration of Measuring Improvements to the Digital Customer Experience, and rolling out access and use case training to 30+ power users of the Next Ggen CX Analytics system. The third quarter of 2021 will be a critical period for the Company's Next Gen CX as it looks to complete the technical, process, and people-oriented activities needed for a successful end user release in September 2021.

#### 2. <u>Omni-Channel Optimization</u>

#### 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" development process that focuses on a customer-centric design approach. Agile is an iterative, incremental method of managing the design and build activities of a project that is characterized by the division of tasks into short phases of work and frequent adaptation and reassessment of plans. 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. The incorporation of PI planning improves the Company's ability to plan and align projects on a 3-6-month outlook. 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. Following this process, the Company's technical, communications, and business resources work together throughout each planned sprint 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 Q2 2021 Highlights

Our second quarter's improvements continue to optimize, expand, and adapt the Company's digital experience and offerings to meet customer and regulatory needs. This work touches functionalities across multiple digital channels and focuses on enhancements to the My Account and native app experiences. These updates create a more convenient, simplified, and customized platform for our customers with emphasis on our enhanced self-service options.

#### Billing and Payment

In DCX, a key focus is striving to improve our customers' billing and payment experience by expanding access to our direct mobile/web applications, enhancing communication, offering payment options, and evolving with our customer's needs and requests. One of the Q2 mobile billing enhancements for Con Edison allows native mobile application users to have a simplified and streamlined flow from our native IOS and Android apps to the third-party site for credit card payments. This aligns to improvements implemented on web that signs customers directly into the third-party site without requiring re-authentication if already logged in. This is also planned for O&R.

The Company is also changing its payment processing partner from an unsupported legacy application to a new vendor platform. This transition revealed opportunities for a number of changes and enhancements across both web and native app experiences. For instance, the transition created the opportunity to expand the number of account digits taken for a bank account. Prior to this, customers with 17-digit account numbers were required to call for processing payments. There were also several business rules updated to align with requirements and performance needs with the integration to the vendor payment processing system. One of the most notable implemented this past quarter was not a direct result of the new integration, but rather an observation made related to the processing performance of payments and the customer experience when using the multi-pay functions for both Con Edison and O&R. Customers submitting large batches of payments through the multi-pay tool did not have transparency into the progress of their payments. Now across both web and mobile, customers have the ability to see the progress of their payments and even stop processing on the native apps if desired. The overall transition to the new payment processor is planned to be completed in Q3 2021. This will involve retiring legacy integrations of the unsupported platform to the more

modern and reliable integration provided by the vendor across various channels.

Another enhancement that was delivered to our Native App users this last quarter for both Companies is the proactive prompt for enrollment in billing and payment notifications. This proactive prompt targets users that are making overdue payments to enroll in notification to help avoid late payment charges in the future.

In the second quarter, we also, the Company made enhancements for its larger complex billed customers, providing these customers with improved portfolio views and navigation on the portal through a third party offering. This enhancement simplified navigation on the white label page for commercial customers that offers a number of data visualization and energy management tools. O&R customer were also given the added functionality to view data at master account level with the corresponding sub account interval data.

Finally, DCX implemented Day Ahead Peak Demand Forecast Visual for Con Edison customers enrolled in demand response incentives programs who visit the Smart Usage Rewards page. The Day Ahead Peak Demand Forecast is an informational tile that displays next day demand details. Currently, this information already exists on the O&R site. The dynamic tile is also planned to be enriched with additional forecast information to align with customer needs.

#### **Account Management**

Con Edison continues expanding the functionality of My Account to better enable customers to manage their service accounts, while providing a positive-customer experience that is personalized and simple to use. The Q2 enhancements allow for greater flexibility with name fields for CECONY and O&R customers. This allows for customers to transact with less restrictions on name entry and replaces current functionality that required 3 or more letters, prohibiting some customers from completing the transaction online.

We also continued to remain focused on security and website performance by adding Re Captcha on the Reset Password Page for Con Edison and O&R. This is a standard rolled out to unauthenticated transactional pages to protect the Company and websites from DNS attacks to safeguard site performance and availability.

In Q2, the Company also launched the newly designed Market Supply Calculator for Con Edison. Residential and commercial customers will now have an updated experience more aligned to our web standards to evaluate their electric costs to obtain their market supply price.

Additionally, Con Edison and O&R customers have new capabilities to export a list of all their accounts on their profile. This export feature was first made available to third parties using Third Party My Account and was expanded to customers. The export includes account number, service address, full account balance, accounts status and email associated with the account. This functionality provides greater account transparency with just one click and allows our customers to get a quick snapshot of their account portfolio balances.

The Company continues to improve its emergency support through more detailed data collection during outage reporting by realigning emergency ticket codes input by digital channels for Con Edison. This realignment of data collected, and ticket codes enable back office prioritization and efficiencies.

Additionally, the Company established consistency for our customers to identify if others in their neighboring vicinity were affected by an outage and/or wire down locations. These efforts improve reporting details and create parity across channels when reporting service problems.

Finally, DCX launched the ability for Con Edison customers to track their Life Sustaining Equipment and Medical hardship submissions through the native mobile apps, which was previously launched on web in the prior quarter.

#### Accessibility

The Company continues to progress in 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, or motor challenges. This past quarter we added navigation enhancements on the main tabs of My Account for both Con Edison & O&R. This update allows Assistive technology (ex: screen reader) users to be provided with better information when criteria and content is accessed. Additionally, we addressed issues on the Manage portion of My Account. This feature enhancement ensures that link text is meaningful within context it is displayed (provided by Assistive Technology). Another new feature implemented that helps all customers is more transparency around Session Timeout. On Coned.com and O&R.com, after 13 minutes of inactivity, a logged in customer is now warned with message indicating they are about to be logged out, within an additional two minutes before timing out. The control enhancements also provide keyboard focus, and these are operable without the use of a mouse, allowing for customers to compare previous month's usage and track trends. Finally, for customers using assistive technology on both Company sites, such as screen readers, the keyboard user's navigation experience has been updated on the Homepage, Notification, Payment Agreement and Footer section, as well the site search feature.

#### Other Enhancements

DCX continues to be adaptable and scalable with the infrastructure that supports the digital experiences. The team addressed streamlined Microsoft's Azure DevOps workstream tier pipelines. The integration of this Microsoft's Azure DevOps tool and the functionality it provides helps streamline the development across all the initiatives that fall under the DCX umbrella to simplify delivery efforts of functionality and enhancements to end users. Within this project management application, we have converted out previous DevOps to YAML. Moving towards these capabilities and reusing codes creates less errors, enhances trackability, and allows for improved turnaround on issues.

DCX also performed enhancements this past quarter to the CSR My Account tool called DCX Assist by adding transparency in customer activity log details for Customer Service Representatives (CSRs). This allows CSRs to better understand the customer actions online around registration and logging in, enabling better opportunity for issue resolution. During this period, there was also a profile launch for Con Edison's human resource users to assist and troubleshoot any profile discrepancies or difficulties that has restricted functionality to only profile management. The Company also made an enhancement to improve the experience for customers participating in our Rate Pilots by creating new demand charts with tabular formats, as well as a graphical display. DCX Performance Update

Tables 1-4 below reflect 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 presents 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.

<u>Table 1 – Web Metrics Overview</u>

Metric	Q3 2020 Con Edison	Q4 2020 Con Edison	Q1 2021 Con Edison	Q2 2020 Con Edison	Q3 2020 ORU	Q4 2020 ORU	Q1 2021 ORU	Q2 2021 ORU
Sessions	7.1M	5.7M	6.3M	6.6M	1.3M	395K	597K	539K
Page views	28.1M	22.7	25.1M	24.3M	4.1M	1.5M	2.3M	2.1M
Average Bounce Rate	22.7%	25.07%	22.62%	28.62%	22.88%	26.24%	24.69%	25.07%
Average Page Load Time (sec)	3.68	3.26	3.19	3.91	3.62	3.18	3.24	3.21
Registrations	121,321	104,201	113,77 8	110,268	12,984	10,046	9643	7,664
NPS Score*	38	49	50	49	50	53	54	57

Data Source: Google Analytics

<sup>\*</sup>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 other

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.

Table 2– Mobile Metrics Overview

Metric	Q3 2020 Con Edison	Q4 2020 Con Edison	Q1 2021 Con Edison	Q2 2020 Con Edison	Q3 2020 ORU	Q4 2020 ORU	Q1 2021 ORU	Q2 2021 ORU
iOS Downloads	41,397	45,692	37,474	37,625	5,507	2,887	2,437	2,03 8
iOS Uninstalls	14, 581	8,345	8,611	6,828	1,083	587	840	390
Android Downloads	14,625	11,519	12,920	12,565	1,930	1,143	1,002	792
Android Uninstalls	9,913	12,262	12,517	12,520	1,323	1,142	960	1,38 6
iTunes Store Rating	4.8	4.8	4.8	4.82	4.8	4.8	4.8	4.8
Google Play Store Rating	4.8	4.8	4.8	4.82	4.7	4.8	4.8	4.7

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

<u>Table 3– Digital Transaction Volumes</u>

Quarter	Q3 2020 Con Edison	Q4 2020 Con Edison	Q1 2021 Con Edison	Q2 2021 Con Edison	Q3 2020 ORU	Q4 2020 ORU	Q1 2021 ORU	Q2 2021 ORU
Start	87.1K	77.3K	80K	105.8 K	1.5K	1.2K	0.5K	1.0K
Stop	92.2K	61.4K	44K	63K	1.2K	908	0.3K	0.9K
Transfer	8.8K	6.4K	8.2K	14.4K	N/A	N/A	N/A	N/A
Report Outage	269.7K	44.1K	28.1K	27.7K	73.6K	25.8K	8.5K	10.0 K

Data Source: Customer Information System, updated Q1 & Q2 columns to reflect totals for each Quarter.

<u>Table 4 – Percentage of Transactions Completed Digitally (% of Total Transactions)</u>

Quarter	Q3 2020 Con Edison	Q4 2020 Con Edison	Q1 2021 Con Edison	Q2 2021 Con Edison	Q3 2020 ORU	Q4 2020 ORU	Q1 2021 ORU	Q2 2021 ORU
Start	35%	37%	54%	57%	10%	8%	3%	8.38%
Stop	37%	36%	42%	49%	14%	14%	5%	15.74%
Transfer	24%	21%	35%	50%	N/A	N/A	N/A	N/A
Report Outage	51%	43%	35%	36%	42%	46%	43%	44.68%

<sup>\*</sup>Data Source: Customer Information System

<sup>\*</sup>For additional web metrics and details see Appendix A

#### 2.1.2 Planned Work for Q3 2021

The Company identified the following features and enhancements for development and/or implementation in the Q3 2021. Note that the planned work below may shift or change to meet evolving customer or regulatory needs around the resumption of collections. The features started may be delivered within the quarter or shortly thereafter.

#### Account Management

The following features are planned to start Q3 2021:

- Legacy Unauthenticated Market Supply Calculator enhancement: (CE) Update to retrieve the MSC look-up file from new location to fully remove dependencies from legacy experience.
- Report Outage Confirmation Page Enhancement: (CE): Enhancements and updates to
  confirmation template for report outage to provide a more relevant information, including an
  updated design and re-formatting of the information presented around Estimated Times of
  Restoration (ERT).
- NYISO Day Ahead Pricing Calculator (CE): Move the legacy NYISO Day Ahead Pricing Calculator to the My Account experience for a unified customer experience.
- Cold AMI Meter Messaging (CE): New functionality to provide more contextual information during
  the transactional journey with dedicated messaging in the instance when they have an AMI meter
  which is "off" and can be completed via remote connect capability for start and transfer service.
- Address Lookup Optimization Start Service O&R: (O&R): New address lookup functionality to allow customers to easily locate their address to start service with new type ahead search functionalities in line with recent enhancements to Con Edison.
- OUA/ Obvient Migration (CE): To update our report outage processing, we will be updating our stored procedures that currently reside within an Obvient database to a new Oracle Utility Analytics Data Warehouse (OUA).
- New duplicate report outage ticket messaging (CE): Provide messaging to let customers know that they are attempting to submit a duplicate outage ticket.
  - The Company has also made, or is in the process of making, enhancements to account management required as part of the Joint Proposal adopted by the 2019 Rate Order. For instance, as mentioned above, customers can now track applications for LSE and Medical Hardship submissions. The ability for customers to complete Financial Statement Forms online is targeted for Q4 2021.

#### Billing and Payment:

The following features are planned to start Q3 2021:

- Commercial Payment Agreement Enhancements (CE & O&R)
- COVID Small Business Attestation: Net new functionality to allow commercial customers to identify as a small business that has been financially impacted by COVID in order to receive protections against late payment charges and disconnects
- Small Business \$0 Down Payment Agreement: New \$0 down payment agreement offer for customers that attest as a small business and financially impacted by COVID

- Commercial Payment Agreement Negotiation: New functionality to allow commercial customers the ability to negotiate down payment and installment terms on standard payment agreements.
- Notification Solicitation After Overdue Bill Pay (CE & O&R): New functionality to prompt users
  who pay an overdue bill to enroll in bill reminder notifications if they are not already enrolled
- Day Ahead Peak Demand Temperature Variable (CE): Add Day Ahead Temperature Variable to existing Day Ahead Peak Demand visualizations

#### Accessibility:

The following features are planned to start Q3 2021:

- Third Party Dashboard (CE): Enhancements for keyboard and screen reader for third parties.
- LOFL Buildings of Public Assembly (CE): Enhancements for keyboard and screen reader for users enrolled in the Leave on for Landlord (LOFL) program.
- Forms Enhancements (CE & O&R): Enhancements for keyboard and screen reader users when filling in online forms.
- Manage Tab (CE & O&R): Enhancements for users with disabilities when navigating the manage tab on the flagship mobile apps.
- Rate Pilots (CE): Enhancements for users with disabilities when navigating user's unique My Account experiences on the flagship mobile apps.
- Global Enhancements (CE & O&R): Enhancements for users with disabilities when navigating across flagship mobile apps.
- iOS dynamic type (CE & O&R): Enhancements for users with disabilities when resizing on the iOS flagship mobile app.

#### Other:

The following features are planned to start Q3 2021:

- DCX Assist (CE): Large Customer Role and Add/Remove account: New functionality to create a new role in DCX Assist to provide access to large customer profiles and add/remove accounts.
- SiteCore Automation Deployment through DevOps (CE & O&R): Development for release
  automation on the Sitecore platform that includes My Account. Deployments will be automated
  to allow for quicker moves to production. Downtime on the website will be significantly reduced
  during deployments, thereby reducing the amount of time customers will not be able to access
  self-service features.
- Service Layer Health Check End Points (CE & O&R): Health checks will be established to proactively determine the health of services across the My Account experience. This will help to identify any issues that may cause service disruptions with the customer experience.

#### 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 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 Q2 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.
  - User and business requirements have been defined and approved, and handed over to Internal IT, Paymentus and Service Link to begin software development.
- Pro-active email campaign to drive customers to self-serve
  - Our customer research showed that our customers in high density boroughs, like Manhattan, move more frequently. We designed a Pro-active email campaign to make our customers aware of their self-service options when moving or transferring service. The email was sent on their one-, two- and three-year anniversary of their original start service date. The graph below shows an uptick in digital transfers since the campaign began (See Figure 1).





**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.

- Created new messaging flow for smart meter customers either confirmed still out of power or predicted out of power based on individual smart meter information.
- Email as a Complimentary Outage communication channel project started for customers with an email address on file to receive email outage notifications complimentary to text messages or voice calls. We have begun creating email message content, and technical architecture specifications with internal IT and Message Broadcast, the third-party vendor for outage communication delivery.

#### 2.2.2 Planned work for Q3 2021

- Complete and test technical design for taking credit card payments in the field in anticipation of starting collections from commercial customers in October 2021.
- Launch email as a complimentary outage communications channel
- Continue to improve outage messaging for our smart meter customers, emergency events and other outage events.
- Emergency Messaging Contact Center to provide personalized outage messaging for a specific group of customers.
- Design improvements for smart meter outage messaging based on customer research.

#### 2.3 <u>Virtual Assistant</u>

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 interactions currently performed by CSRs on the phone.

#### 2.3.1 Q2 2021 Highlights

During the second quarter of 2021, the Virtual Assistant team launched the second major release of the program, which provides our customers with more opportunities to interact with us and an escalation path to our call center representatives.

Wider Release of Watt

During the second quarter, the Company successfully launched the next phase of the project. This phase includes the following features:

 A variety of use cases have been added to Watt to provide customers with additional ways to selfserve using bot. New transaction types now available to customers include (See Figure 2)

- View and pay bill Provide customers with their balance, relevant alerts, and various options to pay, including bank account or credit card.
- Pay as a guest For customers that are looking to make payments towards another account, we have added the opportunity to make a payment as a guest.
- Enroll in a Payment Agreement Customers that are behind on their bills and eligible, can
  enroll in a Payment Agreement. They will also have an option to let Watt know if they were
  impacted by Covid, to get terms that may be more beneficial to them.
- Request a Payment Extension Customers that are eligible for additional time to pay their bill will have the opportunity to use Watt to extend their payment date.
- Integration with our live chat agents customers wishing to speak to a person, during normal business hours, now have the option to interact with a representative within the same Watt window.
- Additional pages Watt is now available to customers across 12 additional pages of the Con Edison website.

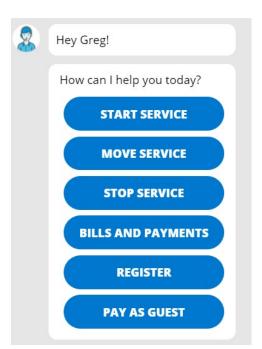


Figure 2: Additional Ways to Self-Serve Using Bot

#### Release 3 Planning

During the second quarter, the team started the design and build for release 3, scheduled for Q4 2021. Post release 3 deployment, customers calling into the IVR will have the opportunity to be routed directly to the virtual assistant. Customers that choose to interact with Watt will receive a link sent to their cell phone where they can seamlessly continue their transaction with the bot, rather than waiting to be transferred to a call center representative.

Another feature in release 3 will allow customers an option to interact with Watt in Spanish. All use cases will be translated and available to customers starting in the Q4 2021 on both the web and from the IVR.

#### Accessibility Review

During the second quarter, our accessibility partner conducted an additional review focused on the use cases from release 2. As previously done for the initial review, accessibility violations were prioritized and will be incorporated into sprint planning for remediation.

#### 2.3.2 Planned Work for Q3 2021

#### Release 3 Planning and Testing

As stated above, the team has started its work on release 3, which will incorporate an integration with the IVR and the availability of all use cases in Spanish. During Q3 design, build and testing activities will be the focus of the team with an anticipated launch of Q4.

#### Continuous improvement

As the team gathers feedback from customers and reviews transcripts, we will look for additional opportunities to contain conversations within the virtual assistant by identifying breaking points in the flow and training the bot to answer requests before escalating to a representative. A planned hot fix to address defects has been scheduled for Q3 2021.

#### Watt Reporting

In the third quarter, the team will work to ensure that a VA reporting dashboard is created, with the aim to provide a breakdown of transactions both by use case and success rate. These metrics will help to drive future enhancements and provide insight to how well the bot is performing.

#### 2.4 Bill Redesign

The Bill Redesign successfully launched on April 9, 2021. Leading up to the launch, the Bill Redesign project team collaborated with CSRs to be prepared to explain new bill features and enhancements to customers. DPS Staff and Call Center personnel were notified of the change and received samples of the new bill design. Feedback from CSRs when speaking with customers with general billing questions were positive in regard to the new modernized design.

The team continues to work on developing the O&R bills to the new bill redesign format.

As of March 2021, there are 2.098 million accounts enrolled in eBill, approximately 63.58% of our 3.6 million total accounts.

#### 3. <u>Back Office Automation & Agent Tools</u>

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 Q2 2021 Highlights

In the second quarter, we have identified three process automations which are currently in development. The process automations address the following topics

- Automation for Addressing Meter Issues in MDMS
  - This effort is aimed at reducing estimated bills.
  - Meter readings being addressed on time for accurate billing.
- Processing Tax Remittance Credits: Credit process is responsible to ensure the correct tax rates are applied
- Statement Generation: Process will be streamlined across the business areas.

#### 3.1.2 Planned Work for Q2 2021

During the third quarter of 2021, the back-office automation team will work on the following enhancements:

Identify processes for automation opportunities

#### 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 opportunity 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	June 30 YTD Spending	2021 Budget
Data & Analytics	\$2,666,800	\$5,332,000
DCX*	\$5,805,553	\$11,031,000
Journey Mapping	\$205,170	\$736,125
Virtual Assistant	\$1,808,067	\$3,751,000
Bill Redesign	\$252,584	\$200,000
Back Office Automation	\$345,000	\$612,000
Total	\$11,083,174	\$21,662,125

<sup>\*</sup>Approximately 95.5% CECONY and 4.5% O&R

### **O&M Spending**

Program	June 30 YTD Spending	2021 Budget
Data Analytics	\$0	\$685,000
DCX*	\$4,664,345	\$6,899,000
Journey Mapping	\$196,341	\$665,000
Virtual Assistant	\$0	\$485,000
Bill Redesign	\$34,550	\$50,000
Back Office Automation	\$0	\$0
Total	\$4,895,236	\$8,784,000

<sup>\*</sup>Approximately 93% CECONY and 7% O&R

#### IV. BCO Savings

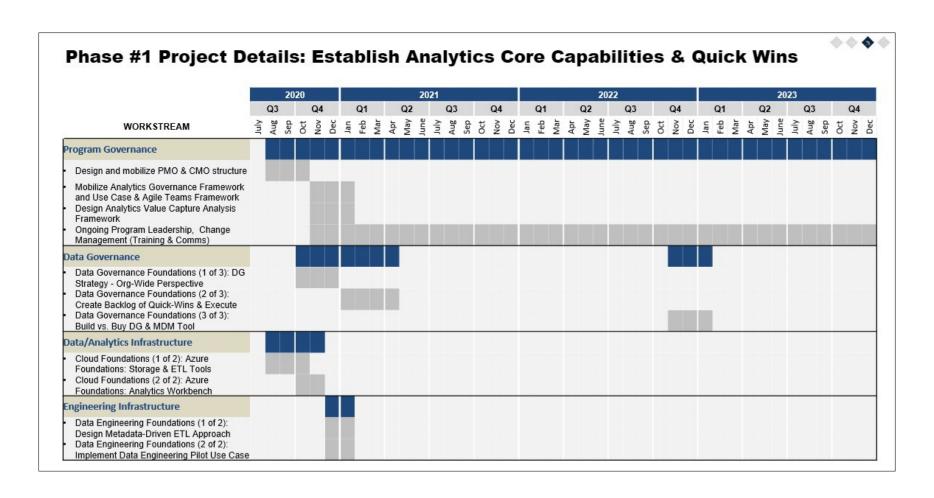
The 2019 Rate Order requires the Company to identify BCO savings achieved. BCO goals are broken into three cost savings categories: Self-Service Optimization, Workforce Management, and Back Office Automation.

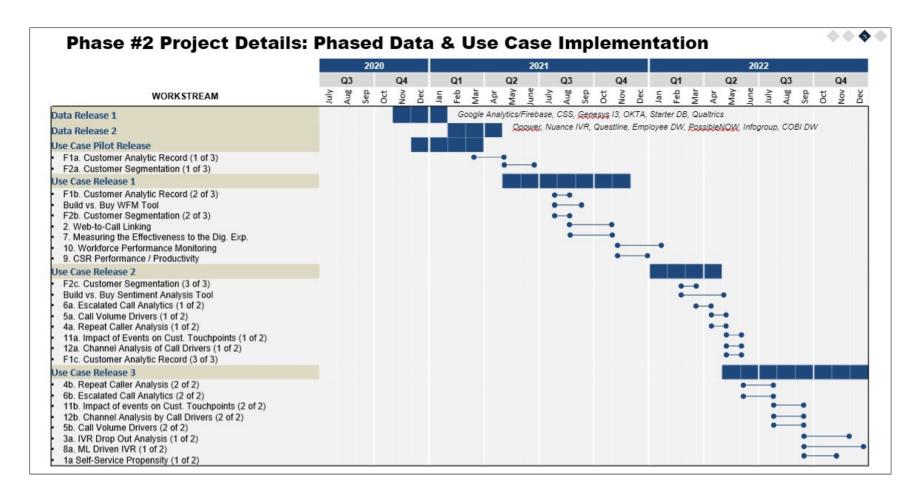
<u>Self-Service Optimization</u> – Allows customers to self-serve through a variety of channels, rather than speaking with a CSR, with a focus on reduction of calls to the Call Center. Savings for Self-Service Optimization in the first quarter and second quarter of 2021 were approximately \$1,250,000.

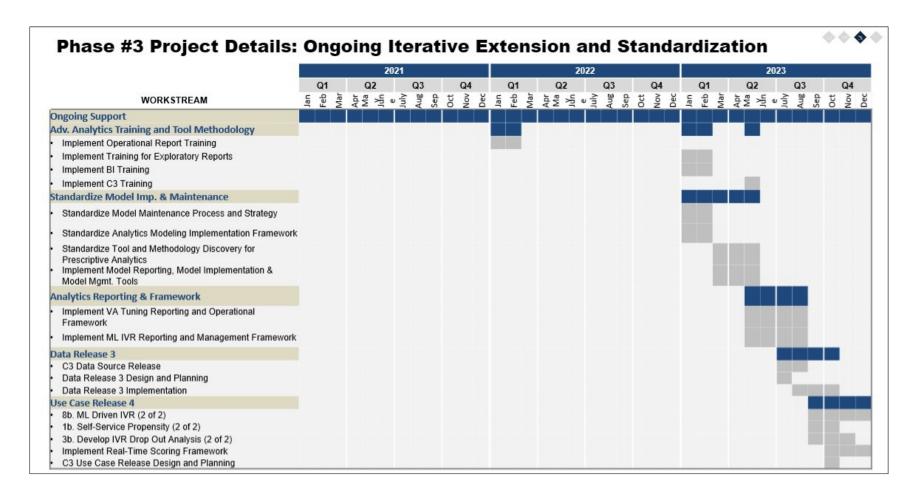
<u>Workforce Management</u> – Savings in this category are a result of identifying and using data analytics, call volume forecasting and scheduling efficiencies to decrease the staffing required to handle customer inquiry demand. Workforce Management focuses on labor cost savings and optimizing staffing and schedules. Savings for Workforce Management in the first and second quarters of 2021 were approximately \$80,000.

<u>Back Office Automation</u> – 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. With continued progress made on these backlogs we anticipate the Company will begin to see savings in this category later in 2021.

#### **Appendix A: Data & Analytics Implementation Plan Details**







# Next Gen CX Progress Report – Q2 2021 Appendix B: DCX Enterprise Dashboards

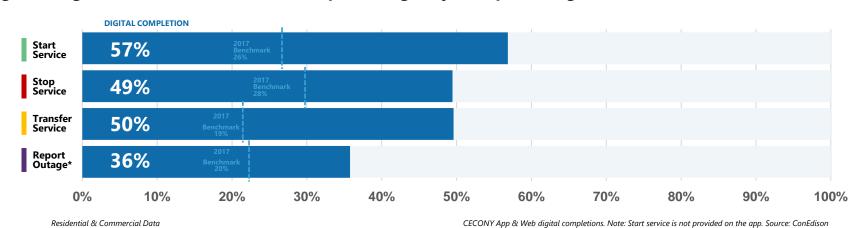
# Con Edison DCX Enterprise Dashboard

**Start Service Completion Stop Service Completion BUSINESS COST OPTIMIZATION Report Outage Completion E-Bill Adoption Completion Payment Agreement Completion Start Service NPS Overall Site NPS Stop Service NPS iOS App Rating Report Outage NPS Android App Rating CUSTOMER SATISFACTION IMPROVEMENTS E-Bill Adoption NPS Home Energy Enrollees Home Energy Gas Report CUSTOMER EMPOWERMENT Home Energy Electrical** Report **Monthly Average Users O-Power Usage** 

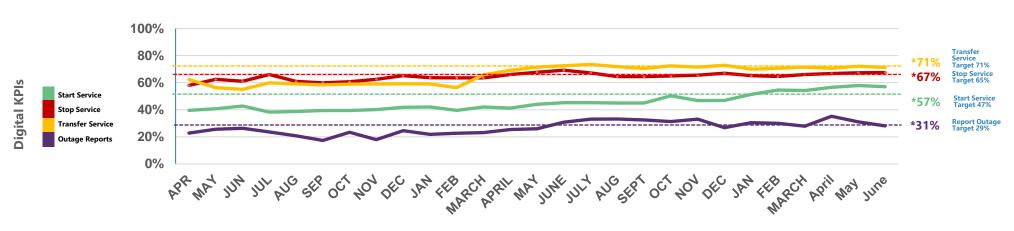
**BUSINESS COST OPTIMIZATION** 

## Digital Usage (Q1 2021): Transactions completed digitally, as a percentage of Total Transactions





## Digital Success Rates: Percentage of Digital Transaction Attempts Successfully Completed, by month

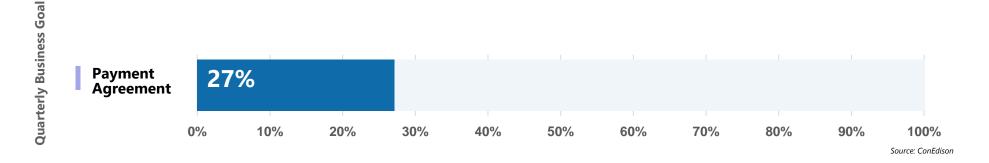


\*Numbers are cumulative averages of March '20 – March '21 Users starting a transaction on the web divided by successful completions. Start Service & Report Outage have "intent" actions tagged. Source: Google Analytics \*Report Outage includes IVR

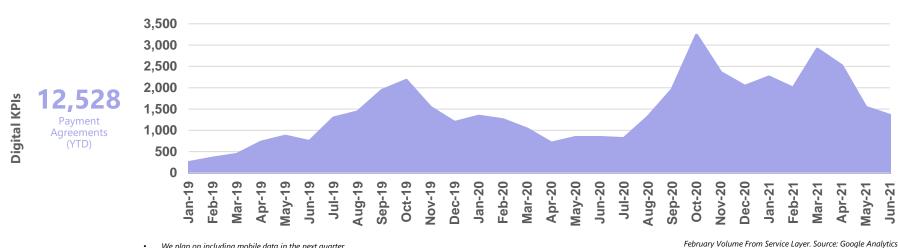


**BUSINESS COST OPTIMIZATION** 

Quarterly Digital (Online and IVR) Payment Agreement Usage (Q2 2021): Customers completing Payment Agreement Digitally, as a Percentage of Total Agreements



## Digital Payment Agreement Completions: Volume of Payment Agreements successfully completed online (web only), by month



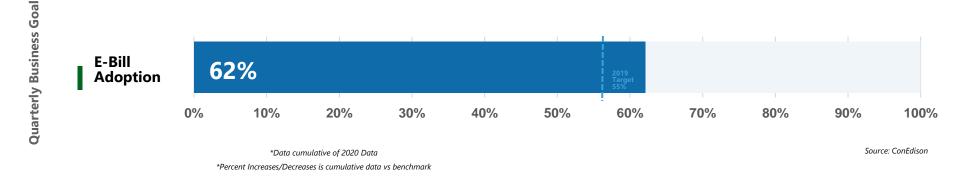
· We plan on including mobile data in the next quarter



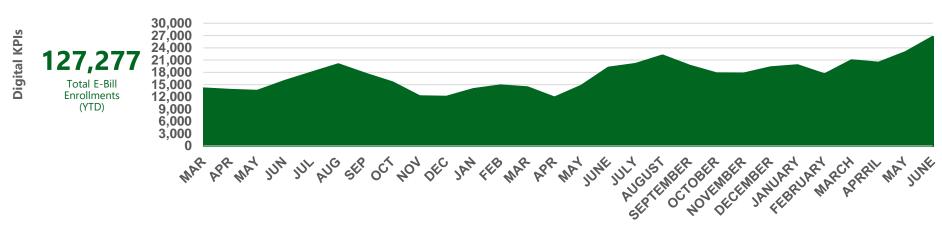
Numbers have been updated from October 2020 to June 2021 due to change in tagging specifications

**BUSINESS COST OPTIMIZATION** 

## Quarterly E-Bill Usage (Q2 2021): 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

**CUSTOMER SATISFACTION IMPROVEMENT** 

## **Quarterly CSAT scores (Q2 2021)**

**Quarterly Business Goal** 



**49** NPS **Overall Site** NPS



Mandated **CSAT** 



4.8/5 iOS App Rating

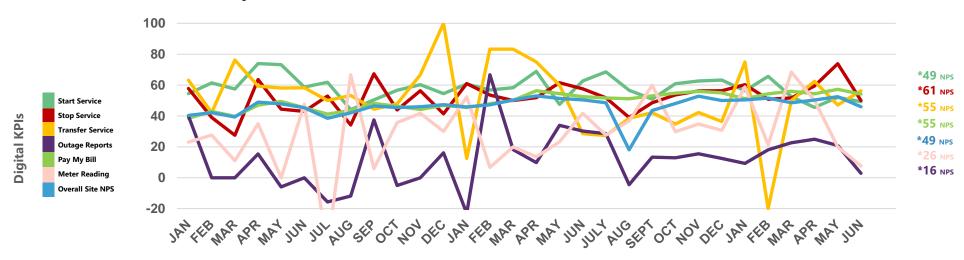


Android App Rating

\*Numbers are cumulative averages of Q1 2020 data

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

## **Net Promoter Scores, by month**



\*Numbers are cumulative averages of Q1 2021 data

Source: Qualtrics



**CUSTOMER EMPOWERMENT** 

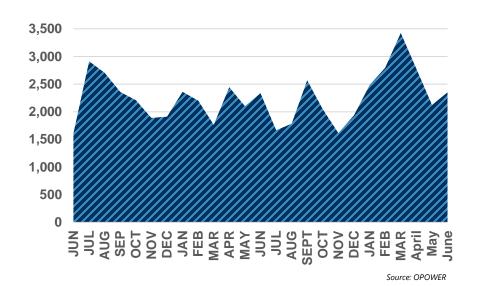
## **Quarterly Home Energy Analysis Survey (Q2 2021)**



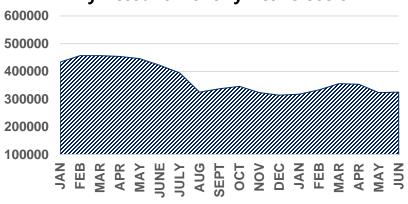
**7,258**k

Home Energy Analysis Completions

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

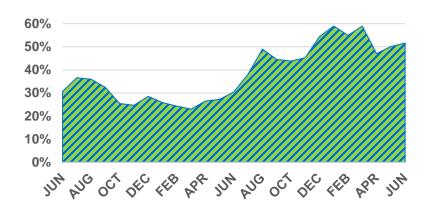


## **My Account Monthly Active Users**



- Customers logged into My Account. Source: OKTA

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



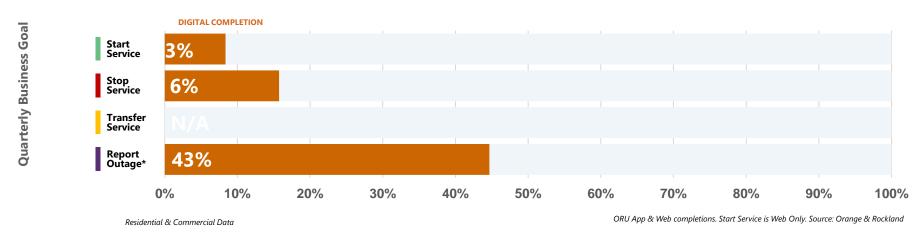
Customers who have clicked on the Usage tab in My Account: Source: OKTA, Google Analytics

**Start Service Completion Stop Service Completion BUSINESS COST OPTIMIZATION Report Outage Completion E-Bill Adoption Completion Payment Agreement Completion** Start Service NPS **Overall Site NPS Stop Service NPS iOS App Rating Report Outage NPS Android App Rating CUSTOMER SATISFACTION IMPROVEMENTS E-Bill Adoption NPS Home Energy Enrollees Home Energy Gas Report CUSTOMER EMPOWERMENT Home Energy Electrical** Report **Monthly Average Users O-Power Usage** 

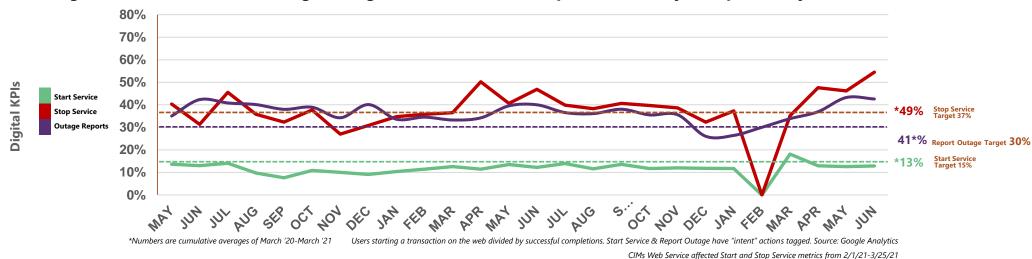


**BUSINESS COST OPTIMIZATION** 

## Quarterly Digital Usage (Q2 2021): Transactions completed digitally, as a percentage of Total Transactions

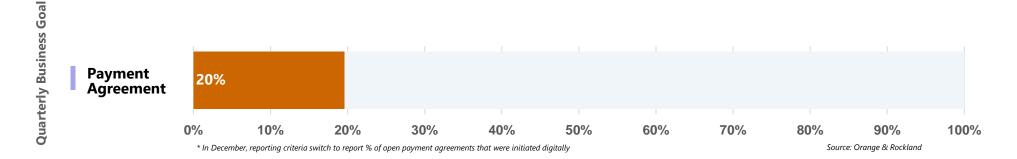


## Digital Success Rates: Percentage of Digital Transaction Attempts Successfully Completed, by month

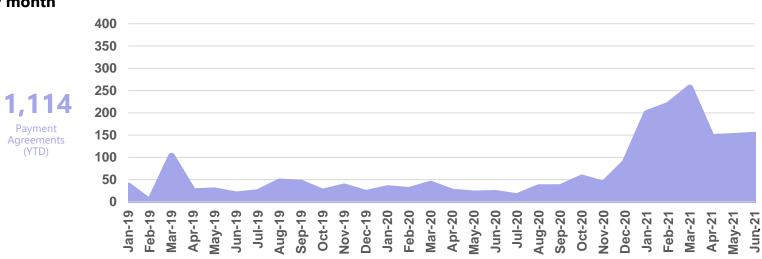


**BUSINESS COST OPTIMIZATION** 

Quarterly Digital Payment Agreement Usage (Q2 2021): Customers completing Payment Agreement Digitally\*, as a Percentage of Total Customers



## Digital Payment Agreement Completions: Volume of Payment Agreements successfully completed online (web only), by month



We plan on including mobile data in the next quarter

Numbers have been updated from October 2020 to June 2021 due to change

Source: Google Analytics

\*Adjusted PAGR eligibility beginning in Q4 2020 contributed to increase in digital payment agreements

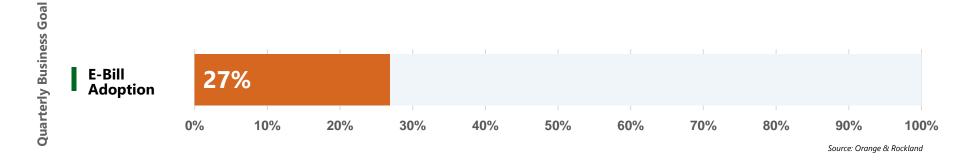


Digital KPIs

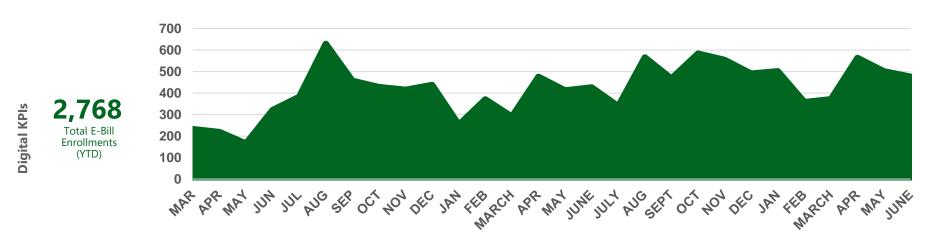


**BUSINESS COST OPTIMIZATION** 

## Quarterly E-Bill Usage (Q2 2021): 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 enrollments only. Source: Google Analytics Site Maintenance affected Start and Stop Service metrics from 2/1/2021-3/25/21

**CUSTOMER SATISFACTION IMPROVEMENT** 

## **Quarterly CSAT scores (Q2 2021)**

**Quarterly Business Goal** 



**57** NPS **Overall Site** NPS



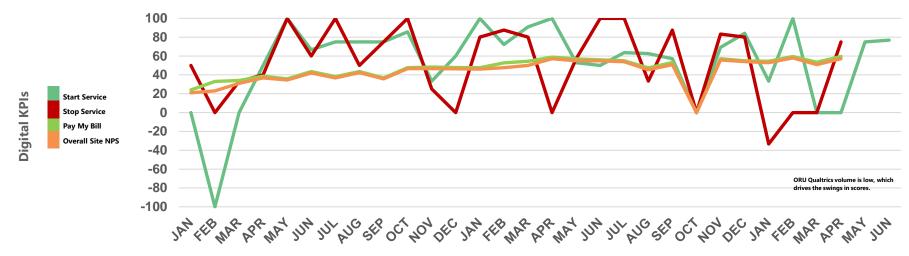
iOS App Rating



Android App Rating

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

## **Net Promoter Scores, by month**



\*Numbers are cumulative averages of Q3 2020

\*\* ORU site intercepts increased to 40% mid-September 2019

Source: Qualtrics



**CUSTOMER EMPOWERMENT** 

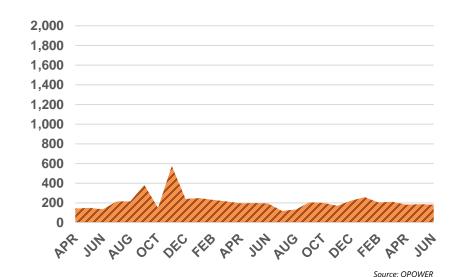
## **Quarterly Home Energy Analysis Survey (Q2 2021)**



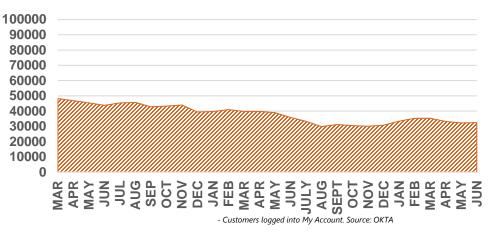
554

Home Energy Analysis Completions

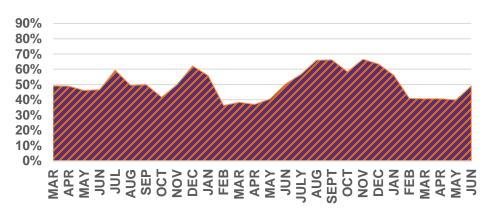
# Home Energy: Volume of Customers who complete the Home Energy Analysis, by month



## **My Account Monthly Active Users**



# 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

