

July 29, 2020

#### BY ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

RE: Docket 4770 – Cyber Security and Information Technology Modernization Programs

<u>Capital Investment Quarterly Report – Third Quarter of Rate Year 2</u>

Dear Ms. Massaro:

On behalf of National Grid,<sup>1</sup> I have enclosed the Company's Cyber Security and Information Technology Modernization Programs Capital Investment quarterly report for the third quarter of Rate Year 2, pursuant to Article II, Section C.13.d. of the Amended Settlement Agreement, approved by the Commission at its August 24, 2018 Open Meeting.<sup>2</sup>

Thank you for your attention to this matter. If you have any questions, please contact me at 781-907-2121.

Very truly yours,

Raquel J. Webster

**Enclosures** 

cc: Docket 4770 Service List Linda George, Division John Bell, Division Al Mancini, Division Christy Hetherington, Esq. Leo Wold, Esq.

<sup>&</sup>lt;sup>1</sup> The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

<sup>&</sup>lt;sup>2</sup> Per practice during the COVID-19 emergency period, the Company is providing a PDF version of this transmittal. The Company will provide the Commission Clerk with one hard copy and, if needed, additional hard copies at a later date.

# The Narragansett Electric Company d/b/a National Grid

# Cyber Security and Information Technology Modernization Programs

Capital Investment Quarterly Report Third Quarter of Rate Year 2

July 29, 2020

Docket No. 4770

#### **Submitted to:**

Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020

### **Table of Contents**

I.	Introduction
II.	Development and Approach of the IT Capital Investment Plan
III.	Program Categories/Spending Rationales
IV.	Formal Sanctioning Support and Oversight of Projects Included in the Investment Plan 3
V.	Overview of Budget to Actual Spending for FY21 YTD
	A. Business Programs and Projects
VI.	Portfolio Calibration

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 1 of 13

#### I. <u>Introduction</u>

The Narragansett Electric Company d/b/a National Grid (the Company)<sup>1</sup> submits this Information Technology (IT) Capital Investment Quarterly Report (IT Quarterly Report) for the second quarter of the rate year.<sup>2</sup> Pursuant to Article II, Section C.13.d. of the Amended Settlement Agreement filed in Docket No. 4770 and approved by the Rhode Island Public Utilities Commission (PUC) at its Open Meeting on August 24, 2018, the Company must provide quarterly reports to the PUC regarding its IT capital projects and investments. The IT Quarterly Report provides an explanation of the following: the Narragansett Gas and Electric overall IT investment plan approach and status; descriptions of program investment categories; a comparison of budgeted to actual spending, including explanations of variances; identification of allocations to the Company; and a report on any budget exceptions.

IT capital projects and investments that are shared investments across National Grid USA's (National Grid) operating companies are implemented and owned by National Grid USA Service Company, Inc. (Service Company). The costs of these shared investments are allocated to the benefiting US operating companies, including Narragansett Electric and Narragansett Gas, in the form of Service Company rent expense once the investments are in-service. The Service Company rent expense includes a return on the capital investment (net of deferred taxes) plus booked depreciation expense.

The IT Capital Investment Plan for Fiscal Year 2021 (FY21 Plan) upon which the budgeted spending reflected in this IT Quarterly Report is based is comprised of in-flight projects that will require capital spending for completion and new projects that will be sanctioned and incur capital charges during the fiscal year. In total, the FY21 Plan reflects Service Company capital expenditures of \$178.7 million across National Grid's US operating companies.

#### II. Development and Approach of the IT Capital Investment Plan

To determine which projects to include in the FY21 Plan, IT engaged in an iterative process that involved collaboration with Jurisdictional representatives and the functional business areas (*e.g.*, Operations, Customer and Digital, Network Strategy, and Finance and Shared Services) to identify the investments of highest priority for inclusion in the Plan.

<sup>&</sup>lt;sup>1</sup> The term "Company" refers to The Narragansett Electric Company's electric and gas distribution operations on a collective basis. The electric and gas operations of The Narragansett Electric Company together represent the entirety of the regulated operations conducted in Rhode Island by the Company. In this report, the regulated entity is referred to as the Company. Where there is a need to refer to the Company's individual electric and gas distribution operations, the terms "Narragansett Electric" or "Narragansett Gas," respectively, are used in this report.

<sup>&</sup>lt;sup>2</sup> The third quarter of Rate Year 2 is March 1, 2020 through May 31, 2020 (Q3).

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 2 of 13

The FY21 Plan assesses infrastructure requirements, sequencing, resource availability and capability, size and impact of investment requests, and the overall benefit of the investments. Specifically, IT did the following to develop the FY20 Plan:

- First, IT identified the amount of work remaining and the delivery timeline for in-flight multi-year investments.
- Second, IT added new investments to address compliance with a legal or regulatory requirement/mandate or an open corporate risk.
- Third, IT added investments that focused on IT infrastructure and would create reliability in systems and fix foundational capabilities necessary for the Company's operational and/or future aspirations. These investments were ones that primarily upgraded, replaced, or added investment capabilities necessary for operational and/or future aspirations of the business.
- Finally, IT worked closely with the Jurisdiction and business functions to prioritize their project requests.

After this analysis, IT distributed a draft investment plan to business functions, Jurisdictional representatives, and other key stakeholders for feedback on the FY21 Plan. A final Investment Plan review occurs each fiscal year with the Jurisdictional Presidents, Jurisdictional delegates, and business functions. Once the Jurisdictional Presidents and business function executives review and approve the Investment Plan, the consolidated financial information from the Plan, which is organized by jurisdiction and company, is incorporated with the IT operation and maintenance (O&M) requirements into the IT budget. The IT budget is then reviewed and approved by the US Chief Information Officer (CIO), Global CIO, and Corporate Finance, and incorporated into a consolidated National Grid budget.

#### **III.** Program Categories/Spending Rationales

The Company's FY21 Plan is organized by major program spending category/spending rationale. The Company classifies IT capital projects into the following program categories/spending rationales based on their primary investment driver:

- (1) Regulatory, Legal, and Compliance Mandates;
- (2) Business Programs and Projects; and
- (3) Technology/Infrastructure Foundation and Reliability.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 3 of 13

Descriptions of each program category and spending rationale are below.

#### Regulatory, Legal, and Compliance Mandates

This program category/spending rationale includes IT projects that are initiated annually as a direct result of, or are driven by, the need to comply with regulations, laws, tariffs, orders, agreements, or other matters promulgated by federal, state, or local governmental agencies.

#### **Business Programs and Projects**

This program category/spending rationale includes investments that are identified internally and required to meet the Company's needs and to provide service to customers. IT Business Partners work closely with the Jurisdictional Presidents and functional leadership on an ongoing basis to determine the Company's IT needs and the costs and timing for the required investments. The investments are then prioritized against overall expenditure targets.

#### Technology/Infrastructure Foundation and Reliability

This program category/spending rationale includes investments to replace and upgrade aged applications and infrastructure components required to enhance the Company's ability to improve operation of the electric and gas distribution systems and respond to evolving business and market demands. These investments will modernize the technology and infrastructure to support day-to-day business requirements, enable the delivery of new business programs, and ensure that the platforms are resilient to cyber security threats.

## IV. Formal Sanctioning Support and Oversight of Projects Included in the Investment Plan

Throughout the year, IT projects are subject to a formal governance process that includes a review and approval for all projects greater than \$30,000. Within IT, there is an internal team that reviews all IT projects before forwarding the project to the appropriate sanctioning authority for approval using the following criteria:

- Projects less than \$1 million are approved by the US CIO or his designee under his delegation of authority.
- Projects between \$1 million and \$25 million are approved by the U.S. Sanctioning Committee (USSC).
- Projects between \$25 million to \$203 million are approved by the Senior Executive Sanctioning Committee (SESC), under delegation of authority by the National Grid USA Board of Directors.

Typically, IT projects are sanctioned initially for Requirements and Design work (also referred to as Partial Sanction). IT projects then undergo a Development and Implementation sanction (also referred to as Sanction or Full Sanction). If project scope and costs are well understood

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 4 of 13

(e.g., upgrades to hardware that do not necessitate requirements and design work or projects for which cost estimates can be reliably informed by similar previous installations), a project may proceed directly to "Full Sanction." If a project is forecasted to exceed its sanction amount, it must return to the appropriate Governance Committee for "Re-Sanction" consideration. When a project is completed, a "Closure" paper is prepared that details the financial and objective outcomes of the project.

The Investment Plan includes all IT projects that progress from initial Feasibility & Analysis phases to ultimate closure to plant in service, as defined below. The Investment Plan is supported by the formal sanctioning and governance process discussed above.

- **Feasibility & Analysis** A study conducted in cases where a significant level of analysis is required to better determine the direction or approach for a project. Because such a study is likely to have a significant impact on IT resources and spend, the effort is treated as a project to be included in the Investment Plan.
- Requirements & Design This phase includes requirements definition and completion of analysis, confirmed project scope, agreed functional design, and technology solution to meet business and technical requirements. This phase also includes the confirmed plan for Development and Implementation, confirmed production handover, support strategy, and sourcing approach.
- **Development & Implementation** This phase includes development to the specified designs, testing, preparation for training, deployment of the solution to the business, and post-implementation support.
- **Project Closure** This phase closes the project, including capturing ongoing run the business costs, completing post implementation review and lessons learned, closing open actions and change requests, implementing a decommissioning plan for replaced technologies, and submitting a closure paper to the appropriate sanctioning committee.

Cost estimates for projects that have completed the Requirements & Design stage with full scope and solution design generally have +/- 10% cost estimates. Other projects at earlier stages and the budgets for those projects are less refined and are more susceptible to changes in scope and budget. The projects in the IT Investment Plan are reviewed continuously for changes in assumptions, constraints, project delays, accelerations, and overall performance. The sanctioning process includes a further evaluation of the total expected costs of a project at key points in the project's lifecycle, including whether there is enough funding included in the annual budget. Changes to an individual project's scope are made only with approval of the Project Board established for each project, which consists of Project Sponsor, IT Project Manager and Business Client Lead. Changes usually are made to address changes in business requirements or

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 5 of 13

to find a more cost-effective way to deliver the project according to the original project scope. IT projects with scope increases or decreases that are approved by the Project Board and result in the project exceeding pre-determined risk margin ranges of +/- 10% must be re-sanctioned at the higher or lower sanctioned amount.

### V. Overview of Budget to Actual Spending for FY21 YTD

Attachment 1 includes projects placed in-service during the post Historic Test Year through May 31, 2020 and the associated rent expense charged to Narraganset Electric and Narragansett Gas. As explained above, although project actuals reflect capital investment for the respective projects to date, allocation of rent expense to Narragansett Electric and Narragansett Gas is based on a return on, and depreciation of, the cumulative capital investment that benefits the Company and does not occur until an investment is placed in-service. As shown in Attachment 1, the Company will allocate rent expense of \$4,055,678 to Narragansett Electric and \$1,626,138 to Narragansett Gas for projects closed to plant in-service through the second quarter of Rate Year 2. National Grid evaluates the need for a deferral monthly and books in line with the Rate Year quarter end, as needed. To date, the amounts deferred for future recovery by National Grid for Narragansett Electric and Narragansett Gas are \$1,258,552 and \$211,479, respectfully.

Attachment 2 includes detail on budgets and actual spending for each of the major program spending categories and for the top ten projects (based on allocation to Narragansett) by budget within the program categories, including explanations of variances between budgets and actual spending for the April 2020 – May 2020 period. Since National Grid budgets on a fiscal year basis, which runs from April 1 – March 31, the project budget and actual information reflect the current fiscal year, and there is a summary of the top 10 projects within each category.

From April 1, 2020 to date, National Grid spent \$22.0 million compared to a total Service Company budget of \$30.2 million, which reflects an underspend of \$8.2 million. The underspend through May 2020 was caused primarily by project delays due to the COVID pandemic (Pandemic).

Details regarding activity in key programs and projects are below.

#### A. Business Programs and Projects

<u>Customer Experience Transformation Web Self Service (INVP 4750J)</u> – This project is part of the Customer Experience Transformation program that will deliver several technology improvements including a new Content Web platform, a new Transaction Web Portal to support MyAccount Minimum Viable Product (MVP) functionality, and other technology enhancements that set the foundation for future processes and technology improvements to the customer experience. The Web Self

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 6 of 13

Service project will provide a better User Experience Portal that is accessible through desktop and mobile devices. It will replace unsupported infrastructure and provide customer system integration services to support the new user experience.

Several customer centric web capabilities have been delivered including modernized customer identity access management solution and CSS CSR admin tools benefiting customers and contact center agents, improved response outage communication, one-click E-bill and discount rate enrollment marketing campaign capabilities. Spending is higher than budget due to the high number of defects identified during testing cycles as well as increased resource costs.

#### **Customer Contact Center Technology Upgrade Implement Solution**

(INVP 3932) – This project will replace core Call Center technologies, hardware, and software that were being utilized by National Grid's U.S. Customer Contact Centers and third-party vendors or shared among other business units, such as Dispatch, Accounts Processing, Payroll, Procurement, Human Resources, and Collections. These technologies are either no longer supported by the vendor or not available in the market. Some of the technologies that will be replaced with upgraded offerings and transitioned to a single vendor support model include the Automatic Call Distribution system, Interactive Voice Response (IVR), Computer Telephony Integration (CTI), Call Center Workforce Management (WFM), and Call Recording/Quality Monitoring.

Phase one of the project that deployed core functionalities at the NG Contact Centers was completed in July 2019. Phase two of the project, which includes direct dialogue and natural language speech tuning, is in-progress. In addition, this phase will deliver scope to enable third-party vendors to manage call volumes on a new platform. Hardware has been installed successfully, after the Company experienced delays that resulted in higher project costs. The hardware was also tested to enable secure connections. Delays experienced in software delivery to the third-party agents has caused the delivery schedule to shift from Q2-2020 to Q3-2020.

AMAG HW and SW Upgrade (INVP 5466) – This project will upgrade the Physical Access Control System (PACS) infrastructure, supporting tools AMAG application version to 9.01 (AMAG is the Physical Access Control and Alarm Monitoring System), Cluster software version to 3.4 and upgrade servers to a supported version. The Year-To-Date (YTD) project overspend is due to an accounting error that will be adjusted in the next quarter. The YTD project spend is in-line with the budget.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 7 of 13

<u>US Control-Transmission Outage Application (INVP 4483)</u> – National Grid publishes planned and unplanned Transmission Outage information using the Sun-Net Transmission Outage Application (TOA). The current version of TOA utilizes components that will no longer be supported beginning June 2020. At that time, no fixes or patches (including security patches) will be made to the application. This investment will upgrade the current TOA application to the new Sun-Net web-based version iTOA.

The updated iTOA software product requires Web-enabled Infrastructure. The project team performed additional analysis of Hyper Convergent Infrastructure as a possible solution. This unplanned task delayed the project by 3-4 months as additional analysis took place. Reduced labor costs during this period resulted in the underspend.

<u>Customer Connection Program (INVP 5125)</u> – This program is a continuation of the New Customer Connections program (INVP 4411), which implemented the Salesforce Customer Application Portal (nCAP) platform, which allows trade allies and customers to self-service the submission of Distributed Generation (DG) interconnection applications and other connection requests. INVP 4411 implemented the minimum viable product to allow online customer connection interactions. This program will fully optimize and automate the processes, including engineering, design, construction, and witness testing for complex DG applications. Delays due to resource availability resulted in delays to the project start date, which, in turn, resulted in the underspend.

<u>Blackline – US Implementation (INVP 5380A)</u> – The current application that monitors, documents and stores monthly account reconciliations, records reconciling items, and provides inputs to quarterly financial aggregation analysis is out of support, creating risk to the financial close process. This project will implement the Blackline application, including the account reconciliation and close management modules, to replace the existing application. This project will begin later in the fiscal year.

#### **New Storms Response Management System Implementation**

(INVP 5274A) – This project will deliver a new Storms Response Management System. This new solution will replace the Resource on Demand (RoD) tool, which is no longer supported by the vendor, replace a slow and inefficient home-grown "Storm Tool", and automate manual storm restoration processes. This project will begin later in the fiscal year.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 8 of 13

<u>Bill Print and Bill Composition Implementation (INVP 5345B)</u> –This project will implement a new vendor, RR Donnelly, to handle the bill print and bill composition services. The existing vendor software is inefficient due to the amount of work required to adjust the existing software to meet the Company's needs and the fact that the vendor lacks the expertise to continue maintaining the software. Third-party vendor contract execution delays have resulted in the project underspend.

EMS Lifecycle Hardware and Software Upgrade (INVP 4914) – This project is an initiative to upgrade the current Energy Management System (EMS) and requires replacement of the application and networking hardware. The hardware and software supporting EMS and related networks is no longer supported by vendors, which creates a risk that the system could not be recovered if an incident or system failure occurs. A failure could lead to the inability to monitor and control the transmission and distribution electric systems and the potential for customer service interruptions. Project underspend is the result of a delayed milestone payment that has been pushed into Q2 FY21. This project was placed in-service in May.

<u>Personalization (INVP 4750K)</u> – This project will deliver a personalized energy experience to customers using energy analytics and "Next Best Action" recommendations. National Grid has contracted with Uplight to implement the project. Integrations are being built with National Grid systems to share customer energy usage data with Uplight for analytics and recommendations. Delivery challenges, including resource turnover, have resulted in increased spend. The first go live, planned for September 2020, will include both the Syracuse and Long Island contact centers.

#### B. Regulatory, Legal, and Compliance Mandates

Identity and Access Management (INVP 5870) – Identity and Access Management (IAM) is a fundamental control in protecting the Company's systems, data, and Critical National Infrastructure (CNI) from cyber risks. IAM helps ensure that the Company's global workforce has access to only the systems and data that they need, when they need it. Access is provided quickly and removed when no longer required. This project will implement a single capability and Access Control Group that will integrate the business and process aspects of IAM. Provisioning and de-provisioning will be automated. The top applications will be migrated from the legacy Single Sign On to new enterprise tooling. This project will begin later in the fiscal year.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 9 of 13

<u>Capitalized Equipment Installs (INVP 3617)</u> – This investment represents the annual capital replacement program for Physical Security. Physical Security is responsible for protecting National Grid's personnel and assets and incorporates a security system as part of the overall security plan. To fulfill this responsibility, it is necessary to ensure that all security-related equipment and assets in New England are in good condition. This project replaces assets that are at or near end of life and/or assets that are no longer under vendor warranty. This annual blanket project will be placed in-service at the end of the fiscal year. Delays due to COVID-19 and the related work from home order resulted in lower than planned project spend.

#### **Security Orchestration Automation and Response (SOAR)**

(INVP 3683USN) – This project will deliver alignment to the business strategy of hosting software in the cloud, while also delivering an "on-premises" hosting solution to ensure that CNI data are kept safe and secure. The project will implement a new provider (Splunk) to provide greater System Orchestration Automation and Response (SOAR) capability for the business, by providing a replacement to the existing Security Incident and Event Management (SIEM) tooling. The new tooling provides automation with minimal change to fit with National Grid's architecture and network. The project plan assumed that hardware spending would be spent throughout the lifecycle of the project; however, the hardware that is being used required upfront payment, thereby resulting in the project overspend.

<u>Malware Defense System Hardening (INVP 5702USC)</u> – This project will deliver security protections of laptops, desktops and servers against malware (including device management) ensuring that adequate network security is in place for web access and email as well as secure configuration of the machines. These protections will include hardening of infrastructure that hosts critical applications and user endpoints. Delays to the rollout of privileged Access Workstations in CNI due to the risk of interpersonal contact and transmission of COVID-19 resulted in lower than planned project spend.

Annual HR & Payroll Mandatory Service Pack Upgrade (HRSP) – FY21 (INVP 5690) – This project funds a budget for fiscal year 2020 that will be managed by the Project Delivery Team and Business Process Support (BPS) to ensure timely delivery of upgrade components for the Human Resources modules, which include the required tax, payroll, legal, and regulatory reporting changes throughout the year.

This project will begin later in the fiscal year.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 10 of 13

<u>MyHub Compliance & Enhancements (INVP 5158)</u> – This project will implement enhancements to MyHub to improve user experience, improve reporting and integration challenges, and address control issues. A standard configuration process will be implemented as well as processes and integrations within the IT architecture. This project will begin later in the fiscal year.

#### <u>Document Management System (DMS) Replacement – Delivery</u>

(INVP 4408) – This project will deploy the OpenText Document Management System. Deployment of the new Document Management System will provide a secure and reliable storage solution to serve the needs of the gas and electric business units. The Document Manager Systems used to store, retrieve and update electric, gas and power plant engineering drawings and documents are beyond their useful lifespan. The project underspend is due to Cloud Hosting and other project costs, which have not yet been billed.

<u>Malware Defense – Endpoint Protection (INVP 5702USA)</u> – This project will deliver enhanced capabilities to conduct security management on all National Grid laptops and desktops. Using a suite of products, it provides a baseline foundation for cyber resilience. These products will enable National Grid to protect those assets by scanning, patching, detecting malware (Ransomware, file-less malware and malware), managing USB devices and searching machines for indicators of compromise. By performing regular scans, the Company can ensure that any malware outbreaks can be contained in a timely manner from a central location. FY21 project spend is on target.

Network Security Improvements (INVP 3683USH) – The original project scope was focused on a Firewall management tool upgrade for SSN Network, delivering a new instance for Verizon to manage firewall rules and update policy and governance. The scope has increased to onboard critical devices, high-risk internal and CNI firewalls, and updated rules for all these devices. The increased scope has resulted in higher than budgeted spend for FY21.

<u>Data Protection (INVP 5820)</u> – The National Grid Data Protection Program will protect sensitive information by first identifying sensitive data, mapping lineage for those sensitive data elements, managing access to the sensitive data and putting in place a policy to manage data retention. This project will begin later in the fiscal year.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 11 of 13

#### C. Technology/Infrastructure Foundation and Reliability

<u>Substation Network Connectivity & Comms (INVP 5846)</u> – This project will deliver the services to audit, design and propose build recommendations for upgraded Enterprise Network connectivity and communications aligned with the Grid Modernization initiatives to National Grid distribution substations and physical offices. Due to the Pandemic, the expected work that would have been completed in April and May of 2020 for this project was pushed out to later in the year.

Infrastructure Remediation & Lifecycle Refresh (INVP 5873) – This program will deliver refresh and updates to the Data Center Infrastructure to ensure that the services continue to be appropriately secure and maintain the reliability required by the business. This project also includes an expansion of some elements where organic growth is dictating a need to expand. It is estimated that 70% of the infrastructure is out of support and storage is nearing capacity limits. The Company anticipates that resources (funds and people) will not be sufficient to bring the program into support within one year. Therefore, a multi-year program of work is required. The program will prioritize the work and deliver the most critical work first, considering current and future business needs. This project will begin later in the fiscal year.

<u>SOE (Windows) Upgrade and Device Refresh (INVP 4987)</u> – This project will upgrade the Standard Operating Environment (SOE) to Windows 10 from the soon to be unsupported Windows 7 Operating System. In addition, 7,000 devices need to be upgraded or replaced so they can support the new Windows 10 Operating System. Due to the Pandemic, the expected deployments in April and May were delayed, resulting in the project underspend. The deployment strategy has been changed from in-person to "mail out", which will impact future project spend.

Nucleus Project (INVP 5905) – This project will re-engineer the Commercial and Industrial (C&I) customer interaction with billing, payment and energy management using a digital solution that enables customizable, multi-site management and efficient customer support. Using data collected, deeper insights will be developed to create a 360-degree view of the customer and enable NG to become a strategic business partner to C&I customers. Project overspend is due to the impact of the Pandemic, which resulted in additional resources added to coordinate project activities and increased project complexity for system integration work.

On My Way (EBU Digital Solution) (INVP 5912) – This project will implement a mobile work dispatch solution for the electric field force (line workers, supervisors) with features to improve the work assignment, update and closeout process. The solution will be accessible through an app that will connect to the STORMS and

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 12 of 13

ARMScheduler systems. Project overspend is due to the impact from the Pandemic, which resulted in additional resources to coordinate project activities and increased project complexity for system integration work.

<u>Infrastructure New Capability (INVP 5874)</u> – This program will improve and enhance capability within Cloud and Hosting by providing improved flexibility and agility in support of new business projects. This project will begin later in the fiscal year.

WAN Infrastructure Program (INVP 5868) – This program will deliver refresh and updates to the WAN infrastructure through the implementation of a modern SD-WAN architecture. This will ensure that the services continue to be secure, reliable, and efficient while migrating to a modern platform that can support future application and capacity requirements. The SD-WAN provides the ability to leverage multiple and diverse WAN access methods (*e.g.*, MPLS, Internet and cellular to transport corporate applications), which will provide a more cost-effective service. The Company anticipates that the resources (funds and people) will not be sufficient to bring the program into support within one year, therefore a multi-year program of work is required. The program will prioritize the work, delivering the most critical work first, considering current and future business needs. This project will begin later in the fiscal year.

<u>Managed Networks (INVP 5838)</u> – This program will deliver various projects to upgrade and replace equipment to reduce technical debt, improve resilience of communication across sites and achieve high density WiFi coverage. Due to the Pandemic, the expected work that would have been completed in April and May of 2020 for this project was pushed out to later in the year.

Network Security Infrastructure Program (INVP 5867) – This is the Network Security Infrastructure Program that will provide new capabilities and refresh to the Network environment. This program will deliver refresh and capability improvements to the Network Security Infrastructure. To ensure that the services continue to be secure, reliable, and efficient, it is important that the services are maintained within support and new capabilities are added as technology advances. In addition, the changing threat to the landscape and expanding use of cloud-based services requires a change from premise-based security appliances towards more agile cloud and virtual security platforms. This program will prioritize work and deliver the most critical work first, considering current and future business needs. This project will begin later in the fiscal year.

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Cyber Security and IT Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Page 13 of 13

Primavera Upgrade/Stabilization (INVP 4990) – Primavera P6 (Primavera P6 Project Management and Analytics modules) is the project portfolio management software used in the US by gas and electric business units. It is a ten-year-old software and, compared to newer products, it is slow, does not have a user-friendly interface or provide web-based functionality. Primavera P6 also has very limited functionality for project risk management. Gas and electric business units have been negatively affected due to issues arising from instability of the outdated Primavera P6 infrastructure environment. This investment will perform migration of the Primavera P6 Project Management and Primavera P6 Analytics modules to the latest software version on new, high availability cloud infrastructure. Project underspend is due to increased complexity, which has delayed the Develop and Implement phase. Consequently, the spending has been delayed.

Variance explanations for each of the top ten projects based on budget are included in Attachment 2. Attachments 3 and 4 provide details on discontinued investments that are no longer being pursued in the current fiscal year and emerging projects (*i.e.*, walk-ins) approved for inclusion in the FY20 Plan as part of the Portfolio Calibration Management process discussed below.

#### VI. Portfolio Calibration

IT utilizes a formal monthly process referred to as the "Portfolio Calibration Management" process to manage requests for new or additional project funding beyond the FY20 IT Investment Plan budget. Each proposed project or existing project that is seeking incremental funding submits a budget exception request (BER), which is confirmed by the business sponsor and the IT Finance team with a final approval made by either the Head of Program Delivery or the US Chief Information Officer (CIO). The requests for new project funding (*i.e.*, walk-ins) occur for various reasons including, but not limited to, business priority changes and emerging regulatory mandates. Requests for additional funding on an existing project are generally driven by a project scope change, increase in project complexity, or acceleration of a multi-year project. A BER is also required to transfer funding from a program within the Plan that incorporates several IT projects or investments to the individual projects that will utilize the funding. BERs can utilize underspend from other IT projects or programs in whole or in part and can also be funded incrementally by a sponsoring business area budget. Attachment 5 includes a report on budget exception requests by program category and top ten projects based on allocation to the Company.

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Information Technology Capital Investment Quarterly Report
Rate Year 2 - Third Quarter Ended May 31, 2020
Attachment 1
Page 1 of 4

Narragansett Electric Company and Narrangansett Gas Company d/b/a National Grid IT Service Company Capital allocated to Operating Companies as Rent Expense Post HTY Through May 31, 2020

Project Name	INVP#	Actual In Service Date	Allocation Code	Project To Date Cost	G Allocation	G Rent-Return	G Rent - Depn	E Allocation	E Rent-Return	E Rent - Depn	Less IFA Salary & Wage Allocator	T Allocation	T Rent- Return	T Rent - Depn	Less IFA Salary & Wage Allocator
INVP 4411A Distributed Generation Portal	4411A	05/15/17	C198	2,217,136	0.00%	-	-	14.23%	11,364	45,071	(7,709)	0.00%	-	-	-
INVP 4420 US CNI OMS-FocalPoint Infrastructure Upgrade	4420	05/23/17	G198	705,521	0.00%			16.15%	4,186	16,280	(2,796)	0.00%			
INVP 3851 US Control - UNY Electric Control Rooms VoIP	4420	03/23/17	0150	703,321	0.0070			10.1370	4,100	10,200	(2,770)	0.0070			
Phone Upgrade	3851	06/01/17	G181	353,785	0.00%	-	-	0.00%	-	-	-	0.00%		-	-
INVP 4451 Gas Transportation System Phase II	4451	06/30/17	G225	1,229,049	0.00%	-	-	0.00%	-		-	0.00%	-		-
S005242 M112 Systemic Improvement		07/10/17	G012	9,485,306	2.73%	11,390	25,931	7.22%	30,080	68,481	(13,463)	1.97%	8,189	18,645	(3,666)
INVP 4588 US SAP: Solution Manager Upgrade	4588	07/18/17	G020	360,956	2.73%	370	1,527	7.22%	976 35,934	4,033	(684)	1.97%	266	1,098	(186)
INVP 4307 US Win 7 Refresh Ph 3 INVP 4392 PPMI	4307 4392	07/31/17 08/04/17	G020 G020	13,039,925 266,173	2.73%	13,607 278	50,926 1,040	7.22% 7.22%	733	134,493 2,745	(23,280)	1.97%	9,783 200	36,617 747	(6,338)
INVP 4397 Ariba TLS and CI Update	4397	09/11/17	G020	1,727,180	2.73%	1,895	6,745	7.22%	5,005	17,814	(3,117)	1.97%	1,363	4,850	(849)
INVP 4632 US Video Conferencing upgrade for RW	4632	09/12/17	G020	1,856,973	2.73%	2,043	7,252	7.22%	5,395	19,153	(3,353)	1.97%	1,469	5,215	(913)
INVP 4683 RSA Token	4683	09/12/17	G020	536,718	2.73%	589	2,096	7.22%	1,555	5,536	(969)	1.97%	423	1,507	(264)
INVP 3839A NY Retail Access Mandate Phase	3839A	10/20/17	C170	4,830,132	0.00%	-		0.00%	-	-	-	0.00%	-		-
INVP 4676 Hix D/C Improvement Server Refresh	4676	10/21/17	G020	860,086	2.73%	978	3,359	7.22%	2,582	8,871	(1,564)	1.97%	703	2,415	(426)
INVP 4577 Call Manager Upgrade	4577	10/27/17	G020	375,605	2.73%	430	1,467	7.22%	1,136	3,874	(684)	1.97%	309	1,055	(186)
INVP 3683B Cloud Security (Cloud Access Security Broker)	3683B	10/27/17	G020	127,560	2.73%	145	498	7.22%	383	1,316	(232)	1.97%	104	358	(63)
INVP 4645 Refresh of network equipment at Verizon															
supported Sites (transformed sites-core infrastructure sites)	4645	10/30/17	G020	323,529	2.73%	370	1,264	7.22%	978	3,337	(589)	1.97%	266	908	(160)
INVP 4757 Cloud Enhancements (Azure Core Service)	4757	10/31/17	G020	263,501	2.73%	287	1,029	7.22%	759	2,718	(475)	1.97%	207	740	(129)
INVP 3430 US Enterprise Mobility	3430	11/03/17	G020	1,017,559	2.73%	1,156	3,974	7.22%	3,054	10,495	(1,851)	1.97%	831	2,857	(504)
INVP 4217 US SAP: Business Planning	4217	11/13/17	G020	2,589,265	2.73%	2,955	10,112	7.22%	7,805	26,706	(4,714)	1.97%	2,125	7,271	(1,283)
INVP 4222 Governance Risk & Compliance (GRC)				2 444 245	2 5224	2.055	0.004		7.540	25.445	(4.500)	4.050	0.050		(4.00.0)
Optimization/Upgrade INVP 4400 Annual HR & Payroll Mandatory Service Pack	4222	11/20/17	G020	2,464,347	2.73%	2,855	9,624	7.22%	7,540	25,417	(4,502)	1.97%	2,053	6,920	(1,226)
Upgrade (HRSP) - FY18	4400	12/11/17	G020	1,243,084	2,73%	1,447	4.855	7.22%	3,822	12.821	(2,273)	1.97%	1,041	3,491	(619)
INVP 4688 Legacy DMZ Firewalls	4688	12/16/17	G020	558,001	2.73%	650	2,179	7.22%	1,716	5,755	(1,021)	1.97%	467	1,567	(278)
INVP 4449 EPA Portfolio Mgr	4449	12/29/17	C175	495,169	3.77%	808	2,667	6.95%	1,490	4,916	(875)	0.00%	-	-,00	(=)
INVP 4529 Service Now	4529	12/31/17	G020	2,086,939	2.73%	2,356	8,150	7.22%	6,223	21,525	(3,790)	1.97%	1,694	5,860	(1.032)
INVP 4972 Complex Cap	4972	01/08/18	G148	453,469	2.88%	540	1,868	7.67%	1,436	4,968	(875)	2.06%	386	1,336	(235)
INVP 4674 Log Logic	4674	01/10/18	G020	361,190	2.73%	428	1,411	7.22%	1,129	3,725	(663)	1.97%	307	1,014	(181)
INVP 4383 Community Choice Aggregation Reports	4383	01/10/18	C436	751,696	0.00%	428	1,411	0.00%	1,129	3,723	(003)	0.00%	307	1,014	(181)
INVP 4760 Mainframe DR Machine	4383	01/19/18	G020	431,275	2.73%	495	1,684	7.22%	1.308	4,448	(786)	1.97%	356	1,211	(214)
INVP 5029 DXC Capacity Increase	5029	01/31/18	G020	511,178	2.73%	587	1,996	7.22%	1,551	5,272	(932)	1.97%	422	1,435	(254)
		02,02,20					2,000	7.2277	1,000	.,	()			-,	(=# 1)
INVP 4377A Data Centre Migration & Capacity Increase	4377A	01/31/18	G020	858,609	2.73%	986	3,353	7.22%	2,604	8,856	(1,565)	1.97%	709	2,411	(426)
INVP 3718 New Medical System	3718	02/08/18	G027	379,378	2.76%	475	1,496	7.32%	1,259	3,966	(714)	1.98%	340	1,072	(193)
INVP 4124 Auto Remote Net Meter	4124	02/23/18	C198	2,015,289	0.00%	-	-	14.23%	12,552	40,968	(7,311)	0.00%			-
INVP 4280 US VSTIG Bandwidth Ph2	4280	02/23/18	G020	2,294,027	2.73%	2,805	8,959	7.22%	7,407	23,660	(4,244)	1.97%	2,017	6,442	(1,155)
INVP 4274 VSTIG Hardware Refresh	4274	02/23/18	C175	403,507	3.77%	650	2,173	6.95%	1,198	4,006	(711)	0.00%	-		-
INVP 4124 Auto Remote Net Meter	4124	02/23/18	G181	1,368,153	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 4464 Data Visualization	4464	03/16/18	G020	8,182,819	2.73%	10,005	31,957	7.22%	26,422	84,397	(15,138)	1.97%	7,194	22,978	(4,121)
INVP 3901 Virtual Desktop Offshore	3901	03/20/18	G020	253,047	2.73%	324	988	7.22%	854	2,610	(473)	1.97%	233	711	(129)
INVP 4680 WAP Density deployment INVP 4891 Customer Data Visualization Expansion	4680 4891	03/28/18 03/30/18	G020 C175	2,127,711 700,389	2.73%	2,643 1,235	8,310 3,772	7.22% 6.95%	6,980 2,277	21,945 6,954	(3,951)	1.97%	1,900	5,975	(1,076)
INVP 4891 Customer Data Visualization Expansion INVP 5167 Customer Data Visualization DG Expansion	5167	03/30/18	G186	374,837	0.00%	1,235	3,772	12.69%	2,277	6,793	(1,232)	3.71%	651	1,988	(360)
All Companies Physical Security Replacements - FY18	N/A	03/31/18	G020	3,263,492	2.73%	3,875	12,745	7.22%	10,235	33,659	(5,996)	1.97%	2,786	9,164	(1,632)
INVP 3644 Internet Explorer Upgrade	3644	03/31/18	G020	250,447	2.73%	311	978	7.22%	822	2,583	(465)	1.97%	224	703	(127)
INVP 4705 - NG Labs	4705	03/31/18	G020	112,249	2.73%	139	438	7.22%	368	1,158	(208)	1.97%	100	315	(57)
INVP 4749 VSTIG Hardware Refresh - IDS Card Replacement	4749	03/31/18	G020	147,975	2.73%	184	578	7.22%	485	1,526	(275)	1.97%	132	416	(75)
INVP 4771D Risk Software for CCDI	4771D	04/01/18	G148	55,183	2.88%	74	227	7.67%	198	605	(110)	2.06%	53	163	(29)
INVP 4779 Time Entry and Approval Mobility Enablement	4779	04/23/18	G020	4,398,833	2.73%	5.710	17.179	7.22%	15.079	45,369	(8,257)	1.97%	4.105	12.352	(2.248)
INVP 4662 - Concur Licenses	4//9	04/23/18	G020 G020	4,398,833 2,675,114	2.73%	3,472	17,179	7.22%	9,170	45,369 27,591	(8,257)	1.97%	2,497	7,512	(2,248)
INVP 3614D1 Ent Network Security	3614D1	05/01/18	G020	10,767,752	2.73%	13,585	42,053	7.22%	35,876	111.058	(20,071)	1.97%	9,768	30,237	(5,465)
INVP 4364 Wireless Network	4364	05/01/18	G020	2,404,447	2.73%	3,033	9,390	7.22%	8,011	24,799	(4,482)	1.97%	2,181	6,752	(1,220)
INVP 4289 US Network Improvement	4289	05/01/18	G020	1,447,842	2.73%	1,827	5,654	7.22%	4,824	14,933	(2,699)	1.97%	1,313	4,066	(735)
INVP 3956 WIFI for Fleet Services Diagnostic Laptops	3956	05/01/18	G399	520,569	2.77%	667	2,063	7.36%	1,768	5,471	(989)	1.99%	478	1,478	(267)
INVP 4759 MTC and Syracuse Boardrooms & Auditoriums	4759	05/01/18	G020	294,841	2.73%	383	1,151	7.22%	1,011	3,041	(553)	1.97%	275	828	(151)

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Information Technology Capital Investment Quarterly Report
Rate Year 2 - Third Quarter Ended May 31, 2020
Attachment 1
Page 2 of 4

Narragansett Electric Company and Narrangansett Gas Company d/h/a National Grid IT Service Company Capital allocated to Operating Companies as Rent Expense Post HTY Through May 31, 2020

Project Name	INVP#	Actual In Service Date	Allocation Code	Project To Date Cost	G Allocation	G Rent-Return	G Rent - Depn	E Allocation	E Rent-Return	E Rent - Depn	Less IFA Salary & Wage Allocator	T Allocation	T Rent- Return	T Rent - Depn	Less IFA Salary & Wage Allocator
INVP 4584 Electric Demand Response Management System															
Integration	4584	05/01/18	G198	291,310	0.00%	-		16.15%	2,234	6,722	(1,223)	0.00%	-	-	-
INVP 4411B Distributed Generation NE INVP 3486 US MDS-Itron Enterprise Edition (IEE)	4411B 3486	05/03/18 05/04/18	C284 G186	1,469,928 1,675,058	0.00%	-	-	27.17% 12.69%	18,963 9,506	57,054 30,356	(10,384)	0.00% 3.71%	2,781	8,883	(1,593)
INVP 4421 - New Arrearage Forgiveness Plan	3486 4421	05/04/18	G186 G316	575,674	30.68%	8,150	25,229	69.32%	9,506 18,416	57,010	(10,303)	0.00%	2,/81	8,883	(1,593)
INVP 5186 US Field Force Help Desk	5186	05/22/18	G020	372,350	2.73%	491	1,454	7.22%	1,296	3,840	(702)	1.97%	353	1,046	(191)
INVP 4480 US Control-Gas System Operating Procedure	3100	03/22/10	0020	372,330	2.7370	.,,1	1,101	7.2270	1,270	3,010	(702)	1.577,0	333	1,010	(171)
(SOP) Upgrade	4480	05/27/18	G210	256,611	7.02%	868	2,574	0.00%	-	-	-	0.00%	-	-	-
INVP 4448 NY Low Income Order - NIMO	4448	06/22/18	G384	3,563,941	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 4486 General Ledger Interface for CRIS to SAP	4486	06/22/18	G384	612,821	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 4975USE Identity and Access Management (IAM)															
Unified Platform	4975USE	07/11/18	G020	706,875	2.73%	945	2,761	7.22%	2,496	7,291	(1,337)	1.97%	680	1,985	(364)
INVP 4606 Data Visualisation Expansion	4606	07/12/18	G020	3,170,221	2.73%	4,238	12,381	7.22%	11,193	32,697	(5,996)	1.97%	3,048	8,902	(1,632)
INVP 5159 NMPC Rate Case	5159	07/27/18	G114	303,780	0.00%	-		0.00%	-	-	-	0.00%	-	-	-
INVP 4975USD Website Security Protection	4975USD	08/30/18	G020	236,822	2.73%	358	925	7.22%	946	2,443	(463)	1.97%	258	665	(126)
INVP 4478 Mobile Material Assistant Upgrade (MMA)	4478	08/31/18	G020	302,192	2.73%	457	1,180		1,207	3,117	(591)	1.97%	329	849	(161)
INVP 4188 Aging System Stabilize	4188	09/08/18	G148	1,631,887	2.88%	2,494	6,723	7.67%	6,633	17,879	(3,348)	2.06%	1,784	4,808	(900)
INVP 4687 Network Tx-NB/MTC	4687	09/18/18	G020	286,977	2.73%	422	1,121	7.22%	1,114	2,960	(556)	1.97%	303	806	(151)
INVP 4941 Process Auto Implementation	4941 4771C	09/25/18	G020	1,061,574	2.73%	1,675	4,146	7.22%	4,423	10,949	(2,100)	1.97% 2.06%	1,204 2,614	2,981	(572)
INVP 4771C Reporting & Analytics for CCDI		09/28/18	G148	2,196,146		3,655	9,048	7.67%	9,719	24,061	(4,614)		2,614	6,471	(1,241)
INVP 5132 Add Effective Date to CSS (NACHA) INVP 4828 Hicksville Fiber	5132 4828	09/28/18	C434 G020	266,535 278,879	5.43% 2.73%	835 403	2,068	9.99% 7.22%	1,536 1,064	3,804 4,027	(729)	0.00%	290	1,096	(189)
INVP 4750B CXT My Account Service and Billing Functions	4828	10/09/18	G020	278,879	2.73%	403	1,525	1.22%	1,064	4,027	(695)	1.97%	290	1,096	(189)
F&A	4750B	10/12/18	C175	489,978	3.77%	1,066	2,639	6.95%	1,965	4,865	(933)	0.00%	-	-	-
INVP 3986 Cascade Electric Application Upgrade Project	3986	11/05/18	G185	468,706	0.00%	-	-	12.61%	3,452	8,441	(1,625)	3.70%	1,012	2,474	(476)
INVP 3982 doubleARMS	3982	11/14/18	T220	335,261	0.00%	-		0.00%	-	-	-	6.78%	1,328	3,247	(625)
INVP 4771A Contract Management Solution for CCDI	4771A	11/30/18	G148	1,789,564	2.88%	3,052	7,373	7.67%	8,115	19,607	(3,787)	2.06%	2,182	5,273	(1,018)
INVP 4965 Annual HR & Payroll Mandatory Service Pack															
(HRSP) - FY19	4965	12/10/18	G020	1,092,462	2.73%	1,766	4,267	7.22%	4,664	11,268	(2,176)	1.97%	1,270	3,068	(592)
INVP 4706 Apps Interface Remediation	4706	12/11/18	G020	767,618	2.73%	1,241	2,998	7.22%	3,277	7,917	(1,529)	1.97%	892	2,156	(416)
INVP 5214US IAM Privilege Access Management (PAM)				W01150	2 52-1	4.040	2012		224	0.000		4.08-1			
Phase 1 INVP 5223 MA Rate Case	5214US 5223	12/12/18 12/28/18	G020	784,152 611,550	2.73%	1,268	3,062	7.22%	3,347	8,088	(1,562)	1.97%	911	2,202	(425)
INVP 4768 Data Visualization Evolution	5223 4768	01/25/19	G310 G020	2,360,108	2.73%	3,907	9,217	7.22%	10.318	24.342	(4,735)	1.97%	2,809	6,627	(1,289)
INVP 4411C New Electric Connections	4411C	01/28/19	C198	1,469,343	0.00%	3,907	7,217	14.23%	12,661	29,870	(5,810)	0.00%	2,009	0,027	(1,209)
INVP 5180 CRIS Transactional Email	5180	01/28/19	C343	516,723	0.00%	-		0.00%	12,001	27,670	(5,610)	0.00%		-	
INVP 5316 End User - US T430 Refresh	5316	01/28/19	N012	2,324,238	4.21%	4,717	32,617	3.88%	4,347	30.060	(4,700)	0.00%	-	-	
INVP 5582 Data Visualization tools = Licenses	5582	01/31/19	G020	318,484	2.73%	527	1,244	7.22%	1,392	3,285	(639)	1.97%	379	894	(174)
INVP 4003 UPS Replacement for Data Communication		, ,		,					,,,	,					· · · · ·
Closets	4003	02/05/19	G020	195,776	2.73%	324	765	7.22%	856	2,019	(393)	1.97%	233	550	(107)
INVP 4468 Gas Capacity Request Database	4468	02/12/19	C210	1,444,317	7.37%	6,445	15,207	0.00%	-	-	-	0.00%	-	-	-
INVP 5120 NE IPC Phone Upgrade	5120	02/15/19	G272	859,881	0.00%	-		20.10%	10,465	24,689	(4,802)	6.60%	3,438	8,112	(1,578)
INVP 4714 EMM Phase 2	4714	02/28/19	G020	1,403,600	2.73%	2,351	5,482	7.22%	6,208	14,477	(2,826)	1.97%	1,690	3,941	(769)
INVP 3683USA US Endpoint Security	3683USA	02/28/19	G020	1,747,727	2.73%	2,927	6,826	7.22%	7,730	18,026	(3,518)	1.97%	2,105	4,908	(958)
INVP 4975USA Perimeter enhancements	4975USA	02/28/19	G020	289,620	2.73%	485	1,131	7.22%	1,281	2,987	(583)	1.97%	349	813	(159)
INVP 3948 Gas Service Database - LI	3948	03/10/19	G225	403,102	0.00%	- 70 467	180.40	0.00%	-	-	-	0.00%	-	-	-
INVP 3737 US CNI GMS SCADA Upgrade	3737	03/21/19	C210	16,211,649	7.37%	70,467	170,686	0.00%	-	-	- (2.0.10)	0.00%		- 1.450	- (000)
INVP 4461 UNIX51 interface migration	4461	03/22/19	G020	1,481,023	2.73%	2,388	5,784	7.22%	6,306	15,275	(2,948)	1.97%	1,717	4,159	(803)
INVP 4411C New Electric Connections INVP 4975USG Gateway Upgrade US	4411C 4975USG	03/25/19 03/31/19	C284 G020	495,944 497,571	0.00% 2.73%	843	1.943	27.17% 7.22%	8,351 2,226	19,250 5,132	(3,770)	0.00%	606	1.397	(274)
Physical Security	4975036	03/31/19	G020	1,208,204	2.73%	1.944	6,606	7.22%	5,133	17,446	(3,084)	1.97%	1,397	4,750	(840)
INVP 5175 NY Gas Service Line Inspection	5175	04/08/19	G020	951,856	0.00%	1,544	0,000	0.00%	3,133	17,440	(3,064)	0.00%	1,397	4,730	(040)
INVP 5314 US eBond NSSR Service Catalogue	5314	04/26/19	G0207	306,872	2.73%	526	1,198	7.22%	1,389	3,165	(622)	1.97%	378	862	(169)
INVP 4377 Data Centre Clearance D and I (Melville)	4377B	05/01/19	G020	257,647	2.73%	442	1,006	7.22%	1,166	2,657	(522)	1.97%	317	723	(142)
INVP 43778 Melville Data Centre Clearance (Migration and Decommission)	4377B	05/01/19	G020	257,647	2.73%	442	1.006	7.22%	1,166	2,657	(522)	1.97%	317	723	(142)
INVP 5313 US ZScaler ZIA	5313	05/04/19	G020	408,522	2.73%	700	1,595	7.22%	1,849	4,213	(828)	1.97%	503	1,147	(225)
INVP 5199 AIX Upgrade	5199	05/17/19	G020	2,048,005	2.73%	3,510	7,998	7.22%	9,269	21,123	(4,152)	1.97%	2,524	5,751	(1,130)
INVP 5099 EPA Portfolio Manager Integration Phase 2	5099	06/14/19	C175	453,226	3.77%	1,083	2,441	6.95%	1,997	4,500	(887)	0.00%	-	-	(1,230)
INVP 4771 Complex Capital Delivery Phase 2	4771B	06/28/19	G148	2,207,881	2.88%	4,082	9,097	7.67%	10,856	24,190	(4,787)	2.06%	2,920	6,505	(1,287)
INVP 4750D CXT MyAccount MVP	4750D	06/30/19	C175	6,999,934	3.77%	16,919	37,700	6.95%	31,190	69,499	(13,754)	0.00%	-,, -	-	- (-,=37)
INVP 3683USP IAM Role Based Access Control	3683USP	07/11/19	G020	527,392	2.73%	924	2,060	7.22%	2,441	5,439	(1,076)	1.97%	665	1,481	(293)
INVP 4750G CXT MyAccount Two way Outage SMS															
Communications	4750G	07/11/19	C198	741,017	0.00%	-	-	14.23%	6,760	15,064	(2,981)	0.00%	_	-	-

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Information Technology Capital Investment Quarterly Report
Rate Year 2 - Third Quarter Ended May 31, 2020
Attachment 1
Page 3 of 4

Narragansett Electric Company and Narrangansett Gas Company d/b/a National Grid IT Service Company Capital allocated to Operating Companies as Rent Expense Post HTY Through May 31, 2020

Project Name	INVP#	Actual In Service Date	Allocation Code	Project To Date Cost	G Allocation	G Rent-Return	G Rent - Depn	E Allocation	E Rent-Return	E Rent - Depn	Less IFA Salary & Wage Allocator	T Allocation	T Rent- Return	T Rent - Depn	Less IFA Salary & Wage Allocator
INVP 3932 Agent and Interactions Management System	3932	07/17/19	C175	18,881,384	3.77%	45,637	101,690	6.95%	84,131	187,465	(37,100)	0.00%			_
INVP 5354 North Andover Storm Site	5354	07/22/19	G198	63,970	0.00%	45,037	101,090	16.15%	649	2,067	(371)	0.00%		<del></del>	
INVP 3683USAQ Cloud Access Security Broker Phase 2	3683USAQ	07/31/19	G020	987,453	2.73%	1,750	3,856	7.22%	4,621	10,185	(2,022)	1.97%	1,258	2,773	(551)
INVP 4408 Doc Mgmt Systems Replacement Delivery	4408	08/02/19	G149	9,676,023	2.77%	16,545	38,229	7.33%	43,841	101,301	(19,826)	1.98%	11,861	27,407	(5,364)
INVP 4761 US Foundation Hosting Renewal	4761	08/11/19	G020	10,620,981	2.73%	16,646	41,479	7.22%	43,960	109,544	(20,969)	1.97%	11,969	29,824	(5,709)
INVP 5226 AVLS - Old 3G Modem Replacement	5226	08/31/19	G434	2,687,009	4.82%	7,519	18,507	11.95%	18,637	45,871	(8,812)	0.00%			-
INVP 4727 Virtual Desktop DaaS	4727	09/01/19	G020	611,500	2.73%	1,158	2,388	7.22%	3,059	6,307	(1,279)	1.97%	833	1,717	(348)
INVP 5600 ESG Migration to SFTP	5600	09/06/19	G440	317,545	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	- 1
INVP 4811 Supervisor Enablement iPads Roll-out	4811	10/21/19	G148	1,103,924	2.88%	1,077	3,790	7.67%	2,865	10,079	(1,768)	2.06%	771	2,711	(476)
INVP 4821 NY Tax Remittance and Reporting Corrections	4821	10/28/19	C195	1,310,105	0.00%	_	_	0.00%	_	-	_	0.00%	_	_	_
INVP 5310 NetMod Governance	5310	10/28/19	G020	756,379	2.73%	700	2,462	7.22%	1,848	6,501	(1,140)	1.97%	503	1,770	(311)
INVP 5089 Windows 10 Foundation Deployment	5089	10/30/19	N012	691,095	4.21%	943	4,849	3.88%	869	4,469	(729)	0.00%	-	-	- 1
INVP 5312 US SD WAN	5312	10/30/19	G020	1,274,893	2.73%	1,180	4,149	7.22%	3,115	10,958	(1,922)	1.97%	848	2,983	(523)
INVP 4910 MA DOR CRIS	4910	11/08/19	C310	1,004,580	0.00%	-	-	0.00%	-	-	-	0.00%		-	-
INVP 4910A MA DOR CSS	4910A	11/08/19	C277	711,975	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 4563 US SAP FERC on HANA (FOH) Upgrade	4563	11/18/19	G020	5,293,834	2.73%	4,949	15,506	7.22%	13,071	40,950	(7,379)	1.97%	3,559	11,149	(2,009)
INVP 5037 DG IOAP Phase 2 Screens C-F and CYME Server INVP 5260 Rubber Goods Testing Tracking System	5037	11/18/19	C198	350,583	0.00%	-	-	14.23%	1,706	5,345	(963)	0.00%	-	-	-
Replacement	5260	11/18/19	T186	407,302	0.00%	-		6.66%	928	2,906	(524)	1.86%	259	812	(146)
INVP 5712 Rate Case Data Scrub Application	5712	11/22/19	G020	695,822	2.73%	651	2,038	7.22%	1,718	5,383	(970)	1.97%	468	1,465	(264)
INVP 5702USB Secure Email Web Gateway	5702USB	11/30/19	G020	514,457	2.73%	481	1,507	7.22%	1,270	3,980	(717)	1.97%	346	1,083	(195)
INVP 5379 Annual HR and Payroll Mandatory Service Pack Upgrade (HRSP) FY20	5379	12/09/19	G020	952,776	2.73%	891	2,791	7.22%	2,352	7,370	(1.328)	1.97%	640	2.007	(362)
INVP 4398 STORMS iScheduler Stabilization	4398	12/09/19	G160	14.044.986	4.40%	17.403	66,177	11.30%	44.702	169,990	(29,327)	3.23%	12,794	48,650	(8,393)
INVP 5178 Nantucket Substation IS Network for Tesla	4330	12/05/15	G100	14,044,560	4.4070	17,403	00,177	11.50%	44,702	109,990	(29,321)	3.2370	12,794	40,030	(8,393)
Battery and Solar Micro Turbine systems	5178	12/12/19	X541F	417,722	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 3614B7 CNI Network Security US	3614B7	12/24/19	G020	6,730,356	2.73%	5,944	17,523	7.22%	15,698	46,278	(8,466)	1.97%	4,274	12,600	(2,305)
INVP 5177 MA Smart Program	5177	01/28/20	C277	2,753,232	0.00%	-	-	0.00%	-		-	0.00%	-	-	-
INVP 5502 Unix 51 Phase 2	5502	01/31/20	G020	811,222	2.73%	774	1,848	7.22%	2,045	4,881	(946)	1.97%	557	1,329	(258)
INVP 5311 NetMod Infoblox US	5311	02/21/20	G020	3,236,748	2.73%	3,121	6,320	7.22%	8,241	16,692	(3,406)	1.97%	2,244	4,545	(927)
INVP 5521A Verizon Aruba LAN and Wireless LAN (Waltham)	5521A	02/25/20	G020	3,598,455	2.73%	3,469	7,027	7.22%	9,162	18,557	(3,786)	1.97%	2,495	5,052	(1,031)
INVP 3431B Application Lifecycle Management Toolset	3431B	03/31/20	G020	594,736	2.73%	579	968	7.22%	1,530	2,556	(558)	1.97%	416	696	(152)
Physical Security		03/31/20	G020	290,676	2.73%	277	662	7.22%	733	1,749	(339)	1.97%	199	476	(92)
INVP 5793 CNI EMS/OMS Router Replacement	5793	03/31/20	G020	0	0.00%	-	-	0.00%	-	-	-	0.00%	-		-
INVP 5571 Gas Business Enablement Cyber Security															
Enhancements	5571	03/31/20	G210	1,780,572	7.02%	4,454	7,442	0.00%	-	-	- (4.08.0)	0.00%	-		- (202)
INVP 5487F Legacy Device Refresh	5487F	03/31/20	G020	923,007	2.73%	881	2,103	7.22%	2,326	5,553	(1,076)	1.97%	633	1,512	(293)
INVP 5580 Managed Workspace Services Transition & Tx	5580	04/01/20	G020	4,518,597	2.73%	4,312	10,294	7.22%	11,389	27,186	(5,269)	1.97%	3,101	7,402	(1,435)
INVP 5361 ABB SENDOUT Server Upgrade	5361	04/03/20	C210	266,222	7.37%	699	1,168	0.00%	-	-	-	0.00%	-	-	-
INVP 4570 US CNI Tech Services-Network Equipment Lifecycle Replacements	4570	05/12/20	G186	10,089,418	0.00%	-	-	12.69%	46,050	60,948	(14,616)	3.71%	13,475	17,834	(4,277)
INVP 4568 US CNI-EMS Lifecycle Hardware and Software	4568	05/12/20	T186	3,549,863	0.00%	_		6.66%	8,506	11,258	(2,700)	1.86%	2,376	3,144	(754)
INVP 4914 EMS Lifecycle hardware and Software Upgrade	4914	05/12/20	T186	17,031,157	0.00%	-	_	6.66%	40,810	54,013	(12,953)	1.86%	11,397	15,085	(3,617)
INVP 5636 Storage Capacity Purchase and Configure for Use	5636	05/29/20	G020	4,875,498	2.73%	4,843	4,760	7.22%	12,790	12,571	(3,464)	1.97%	3,482	3,423	(943)
INVP 4975USC Multi Factor Authentication US	4975USC	05/29/20	G020	2,216,369	2.73%	2,202	2,164	7.22%	5,814	5,715	(1,575)	1.97%	1,583	1,556	(429)
INVP 4491 ICE Replacement – O365 Implementation	4491	05/30/20	G020	12,785,665	2.73%	14,010	12,483	7.22%	36,999	32,968	(9,557)	1.97%	10,073	8,976	(2,602)
INVP 5461 Total Reward Statement	5461	06/01/20	G020	418,254	2.73%	415	408	7.22%	1,097	1,078	(297)	1.97%	299	294	(81)
INVP 3614B7 CNI Network Security US	3614B7	06/05/20	G020	1,556,098	2.73%	1,546	1,519	7.22%	4,082	4,012	(1,106)	1.97%	1,111	1,092	(301)
INVP 5367 Enable Dominion Pipeline Confirmations	5367	06/11/20	521G	272,041	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 5241 East Pulaski Energy Storage System IS Network	5241	06/12/20	5210	330,339	0.00%		_	0.00%		_	_	0.00%		_	
INVP 4408 DMS Replacement Delivery	4408	06/12/20	G149	4,102,960	2.77%	4,123	4,053	7.33%	10,925	10,739	(2,959)	1.98%	2,956	2,905	(801)
INVP 4750M ODS	4750M	06/18/20	C175	2,301,475	3.77%	3,184	2,066	6.95%	5,869	3,808	(1,322)	0.00%	-	-	-
INVP 5242 Buffalo Energy Storage System IS Network	5242	06/19/20	521E	294,583	0.00%	-	-,	0.00%	-	-	(-,522)	0.00%	-	-	-
INVP 5753 US SAP: Fiori Upgrade Phase 1	5753	06/22/20	G020	1,215,809	2.73%	1,220	791	7.22%	3,221	2,090	(725)	1.97%	877	569	(198)
INVP 4802 DocuSign	4802	06/29/20	G116	911,773	0.00%	-	-	0.00%	-	-		0.00%	-		-
INVP 5146 Smart Cities Schenectady	5146	06/30/20	521E	415,476	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Information Technology Capital Investment Quarterly Report
Rate Year 2 - Third Quarter Ended May 31, 2020
Attachment 1
Page 4 of 4

Narragansett Electric Company and Narrangansett Gas Company d/b/a National Grid IT Service Company Capital allocated to Operating Companies as Rent Expense Post HTY Through May 31, 2020

NVP 5317US Employee Digital Workplace US	5754 17US 5759 524G	06/30/20 06/30/20	G020				Depn	Allocation	E Rent-Return	E Rent - Depn	Less IFA Salary & Wage Allocator	T Allocation	T Rent- Return	T Rent - Depn	Less IFA Salary & Wage Allocator
INVP 5317US Employee Digital Workplace US	17US 5759 524G	06/30/20		5.542.277	2.73%	5,559	3,607	7.22%	14.681	9,527	(3,307)	1.97%	3,997	2,594	(900)
INVP 5759 UPS Infrastructure 5 INVP 5759 UPS Infrastructure 5 INVP 5774B Syracuse WiFi 57 INVP 5774B Syracuse WiFi 57 INVP 5778 Identity and Access Management Business Change Programme 5 INVP 5598A Case & Customer Complaint Management Solution (AppRat) 55 INVP 5523B Upstate NY PBX Replacement 55 INVP 5545 Learning Interfaces Integration with SAP SuccessFactors LearningLink 55 INVP 5487C Box & Huddle to SharePoint Online 54	759 524G		G020	1,558,047	2.73%	1,563	1,014	7.22%	4,127	2,678	(930)	1.97%	1,124	729	(253)
INVP 5524G Verizon US SD-WAN expansion 55 INVP 5774B Syracuse WiFi 57 INVP 5278 Identity and Access Management Business Change Programme 55 INVP 5598A Case & Customer Complaint Management Solution (AppRat) 55 INVP 5523B Upstate NY PBX Replacement 55 INVP 5545 Learning Interfaces Integration with SAP 59 SuccessFactors LearningLink 55 INVP 5487C Box & Huddle to SharePoint Online 54	524G		G020	311,283	2.73%	310	284	7.22%	818	749	(214)	1.97%	223	204	(58)
INVP 5774B Syracuse WiFi INVP 5278 Identity and Access Management Business Change Programme 5 INVP 5598A Case & Customer Complaint Management Solution (AppRat) INVP 552B Upstate NV PBX Replacement 55 INVP 5545 Learning Interfaces Integration with SAP Success Factors LearningLink INVP 5487C Box & Huddle to SharePoint Online 54		06/30/20		311,283	0.00%	- 310	284	0.00%	818	749	(214)	0.00%	223	204	(38)
INVP 5278 Identity and Access Management Business Change Programme 5 INVP 5598A Case & Customer Complaint Management Solution (AppRat) 55 INVP 5523B Upstate NY PBX Replacement 555 INVP 5545 Learning Interfaces Integration with SAP SuccessFactors LearningLink 5 INVP 5487C Box & Huddle to SharePoint Online 54	//4B	06/30/20	G020	0	0.00%			0.00%	-			0.00%	-		-
Change Programme         5           INVP 5598A Case & Customer Complaint Management         55           Solution (AppRat)         55           INVP 5523B Upstate NY PBX Replacement         55           INVP 5545 Learning Interfaces Integration with SAP SuccessFactors LearningLink         5           INVP 5487C Box & Huddle to SharePoint Online         54		06/30/20	G020	U	0.00%	-		0.00%	-	-	-	0.00%	-	-	-
INVP 5598A Case & Customer Complaint Management Solution (AppRat) 55 INVP 5523B Upstate NY PBX Replacement 55 INVP 5545 Learning Interfaces Integration with SAP SuccessFactors LearningLink 5 INVP 5487C Box & Huddle to SharePoint Online 54	278	06/30/20	G020	3,368,298	2.73%	3,379	2,192	7.22%	8,923	5,790	(2,010)	1.97%	2,429	1,576	(547)
INVP 5523B Upstate NY PBX Replacement         55           INVP 5545 Learning Interfaces Integration with SAP         5           SuccessFactors LearningLink         5           INVP 5487C Box & Huddle to SharePoint Online         54		,,		-,,				7.227	0,7 =0	-,,,,	(=,010)	21,777	_,,,	-,,	(2)
INVP 5545 Learning Interfaces Integration with SAP SuccessFactors LearningLink 5 INVP 5487C Box & Huddle to SharePoint Online 54	598A	07/01/20	C175	618,724	3.77%	856	555	6.95%	1,578	1,024	(355)	0.00%	-	-	-
SuccessFactors LearningLink 5 INVP 5487C Box & Huddle to SharePoint Online 54	523B	07/10/20	G020	790,630	2.73%	787	720	7.22%	2,078	1,903	(544)	1.97%	566	518	(148)
INVP 5487C Box & Huddle to SharePoint Online 54															
	545	07/13/20	G020	599,659	2.73%	601	390	7.22%	1,588	1,031	(358)	1.97%	432	281	(97)
	487C	07/17/20	G020	400,097	2.73%	405	130	7.22%	1,070	344	(193)	1.97%	291	94	(53)
INVP 5472US GRC Archer Risk and Migration US 54	72US	07/20/20	G020	2,823,566	2.73%	2,860	919	7.22%	7,552	2,427	(1,363)	1.97%	2,056	661	(371)
	523A	07/23/20	G020	589,771	2.73%	595	269	7.22%	1,571	710	(312)	1.97%	428	193	(85)
	750J	07/31/20	C175	15,434,567	3.77%	21,557	6,927	6.95%	39,740	12,770	(7,173)	0.00%	-	-	-
	878	07/31/20	G020	744,874	2.73%	754	242	7.22%	1,992	640	(360)	1.97%	542	174	(98)
	1998	08/01/20	G175	1,540,795	3.36%	1,919	617	8.63%	4,924	1,582	(889)	0.00%	-	-	-
	507	08/05/20	G020	371,959	2.73%	377	121	7.22%	995	320	(180)	1.97%	271	87	(49)
	723	08/07/20	5220	1,352,292	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	523G	08/16/20	G020	653,392	2.73%	668	-	7.22%	1,764	-	(241)	1.97%	480	-	(66)
INVP 5360 Lease Accounting Updates and Contract															
	360	08/28/20	G020	12,056,650	2.73%	12,328	-	7.22%	32,558	-	(4,447)	1.97%	8,864	-	(1,211)
	750K	09/08/20	C175	1,696,214	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	777	09/09/20	G020	502,343	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	489	09/30/20	G020	2,596,894	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	398	09/30/20	G160	2,073,181	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	1932	09/30/20	C175	6,022,073	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	522A	09/30/20	G020	1,131,420	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	524A	09/30/20	G020	1,351,557	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	578	09/30/20	G020	358,689	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	774A	09/30/20	G020	0	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	904	10/12/20	G004	542,806	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	486	10/30/20	G148	725,627	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 4769 Gas Storm Hardening Using Remote Service															
	769	11/05/20	G225	4,807,785	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
	487B	11/30/20	G020	181,122	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 3683USF Enterprise Centralized Patch Management															
US 368	83USF	12/31/20	G020	246,047	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	-
INVP 4987 SOE (Windows) Upgrade and Device Refresh US 4:	1987	12/31/20	G020	12,628,546	0.00%			0.00%		_	_	0.00%	_		_
	02USA	12/31/20	G020	3,593,702	0.00%			0.00%			-	0.00%	_		-
	D2USC	12/31/20	G020	4.103.992	0.00%	-		0.00%	-	-	-	0.00%			-
	487D	12/31/20	G020	4,103,992	0.00%	-		0.00%	-		-	0.00%	-		-
	521B	12/31/20	G020	177,619	0.00%	-		0.00%	-		-	0.00%	-		-
INVP 4483 US Control-Transmission Outage Application	J21B	12/31/20	G020	177,019	0.00%	-		0.00%			-	0.00%			
	1483	12/31/20	G185	359,002	0.00%	_		0.00%	_	_	_	0.00%			
INVP 5384 Supervisor Enablement iPad Advanced		12/31/20	0103	337,002	0.0070			0.0070				0.0070			
	384	12/31/20	G148	0	0.00%	_		0.00%	_	_	_	0.00%	_	_	_
	750N	01/05/21	C175	1,062,451	0.00%	-	-	0.00%	-	-	-	0.00%	-	-	
	1990	01/31/21	X148	6,013,349	0.00%	-		0.00%	-		-	0.00%	_		
	489A	01/31/21	G020	112.564	0.00%	-		0.00%	-		-	0.00%	-		-
	160	08/11/21	521E	739,980	0.00%			0.00%				0.00%	_		
IT Actuals	100	30/11/21	J21L	431,438,875	0.0070	486,478	1,139,661	0.0070	1,177,281	2,714,299	(531,590)	0.0070	242,868	562,886	(110,066)

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Information Technology Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Attachment 2 Page 1 of 2

Narragansett Electric Company, Narragansett Gas Company and Narragansett Electric Company - Transmission d/b/a National Grid Rate Year 2 Quarter 3
YTD Actuals vs FY21 IT Investment Plan Budget
Amounts in Millions of USD

#### Total Service Company Capital Spending

Project Name	INVP#	Forecasted In Service Date	Allocation Code	RI Total Percent	Project Inception to March 31, 2020 Spending	(A:1 2020		O Actual FYTD Va 2020 - May (April 2020 2020) 2020	- May	FY21 Annual Budget	FYTD Absolute Variance %	YTD Variance Driver	Commentary
Customer Experience Transformation - Web Self Service	4750Ј	8/31/2020	C175	10.7%	\$ 8.8	3 \$ 2	2.5 \$	3.0 \$	(0.6) \$	6.2	24%	Scope Increase	Several customer centric web capabilities have been delivered including modernized customer identity access management solution and CSS CSR admin tools benefiting customers and contact center agents, improved response outage communication, one-click E-bill and discount rate enrollment marketing campaign capabilities. Spending is higher than budget due to the high number of defects identified during testing cycles as well as increased resource costs.
Customer Contact Center / SDC Technology Upgrade Implement S	3932	8/31/2020	C175	10.7%	20.4	1	1.7	1.2	0.5	4.4	31%	Other	Phase one of the project that deployed core functionalities at the NG Contact Centers was completed in July 2019. Phase two of the project, which includes direct dialogue and natural language speech tuning, is in-progress. In addition, this phase will deliver scope to enable third-party vendors to manage call volumes on a new platform. Hardware has been installed successfully and tested to enable secure connections. Delays experienced in software delivery to the third-party agents has caused delivery schedule to shift from Q2-2020 to Q3-2020.
AMAG HW and SW Upgrade	5466	5/20/2021	G020	9.7%	1.7	′ (	0.6	0.8	(0.1)	3.9	23%	Accounting Changes - Reclass to/from Other INVP	The Year-To-Date (YTD) project overspend is due to an accounting error which will be adjusted in the next quarter. The YTD project spend is in-line with the budget.  The updated iTOA software product requires Web-enabled Infrastructure. The
US Control-Transmission Outage Application (iTOA) Upgrade to	4483	1/19/2021	G185	12.2%	0.3	. (	0.7	0.1	0.6	3.6	86%	Other	project team performed additional analysis of Hyper Convergent Infrastructure as a possible solution. This unplanned task delayed the project by 3-4 months as additional analysis took place. Reduced labor costs during this period resulted in the underspend.
Customer Connection Program	5125	3/31/2021	C175	10.7%	-	(	0.4		0.4	2.5	100%	Internal Resource Constraints	Delays due to resource availability resulted in the project start being delayed resulting the underspend.
Blackline: US Implementation	5380A	12/31/2021	G020	9.7%	-				0.0	2.1	n/a	N/A +/- 10%	This project will begin later in the fiscal year.
New Storms Respose Management System Implementaition	5274A	3/31/2022	G148	10.3%	-	-		-	0.0	1.8	n/a	N/A +/- 10%	This project will begin later in the fiscal year.
Bill Print and Bill Composition Implementation	5345B	10/1/2021	C175	10.7%	0.3		0.3	0.2	0.0	1.5	17%	Negotiated Contracts Discounts	Third party vendor contract execution delays have resulted in the project underspend.
EMS Lifecycle Hardware and Software Upgrade	4914	5/15/2020	T186	7.6%	15.8	3 1	1.5	1.1	0.4	1.5	26%	Delayed Contract Payments	Project underspend is the result of a delayed milestone payment that has been pushed into Q2 FY21.
Personalization	4750K	12/31/2020	C175	10.7%			0.3	0.5	(0.2)	1.2	83%	Other	This project will deliver a personalized energy experience to customers using energy analytics and "Next Best Action" recommendations. National Grid has contracted with Uplight to implement the project. Integrations are being built with National Grid systems to share customer energy usage data with Uplight for analytics and recommendations. Delivery challenges including resource turnover have resulted in increased spend. The first go live, planned for September 2020, will include both the Syracuse and Long Island contact centers
Other Business Programs and Projects					24.2		4.8	5.7	(0.9)	17.3	4.50/	_	
Total Business Programs and Projects					\$ 71.4	\$ 12	2.8 \$	12.6 \$	0.2 \$	46.0	1.5%	=	

The Narragansett Electric Company d/b/a National Grid RIPUC Docket No. 4770 Information Technology Capital Investment Quarterly Report Rate Year 2 - Third Quarter Ended May 31, 2020 Attachment 2 Page 2 of 2

Narragansett Electric Company, Narragansett Gas Company and Narragansett Electric Company - Transmission d/b/a National Grid Rate Year 2 Quarter 3 YTD Actuals vs FY21 IT Investment Plan Budget

Amounts in Millions of USD

#### Total Service Company Capital Spending

Project Name	INVP#	Forecasted In Service Date	Allocation Code	RI Total Percent	Proj Incept March 3 Spen	tion to 31, 2020		) - (Ap	YTD Actual oril 2020 - May 2020)	FYTD Variar (April 2020 - N 2020)		FY21 Annual Budget	FYTD Absolute Variance %	YTD Variance Driver	Commentary
Identity and Access Management	5870	6/30/2020	G020	9.7%	\$	- 5	s -	\$	-	\$	- \$	10.4	n/a	N/A +/- 10%	This project will begin later in the fiscal year.
Capitalized equipment installs/replacement **	3617	3/31/2021	G020	9.7%		26.8	1.	.2	0.3	\$	0.8	7.0	73%	Other	Delays due to COVID-19 and work from home order resulted in lower than planned project spend.
SOAR - Security Orchestration Automation and Response	3683USN	9/20/2021	G020	9.7%		0.9	0.	0.8	1.1	(	(0.3)	4.7	33%	Other	A hardware purchase resulted in spend hitting the project in April and May, rather than being spread throughout the project lifecycle.  Delays to the rollout of privileged Access Workstations in CNI due to the risk
Malware Defense - System Hardening	5702USC	12/31/2020	G020	9.7%		2.2	0.	0.8	0.4		0.4	3.6	55%	Other	of interpersonal contact and transmission of COVID-19 resulted in lower than planned project spend.
Annual HR & Payroll Mandatory Service Pack Upgrade (HRSP) FY21	5609	12/31/2020	G020	9.7%		-	-		-		0.0	1.4	n/a	N/A +/- 10%	This project will begin later in the fiscal year.
MyHub Compliance & Enhancements	5158	11/1/2021	G020	9.7%		-	-		-		0.0	1.3	n/a	N/A +/- 10%	This project will begin later in the fiscal year.
DMS Replacement - Delivery	4408	6/30/2020	G149	9.8%		12.5	0.	0.8	0.6		0.2	1.3	26%	Billing Delays	The project underspend is due to Cloud Hosting and other project costs which have not been billed yet.
Malware Defense - Endpoint Protection	5702USA	12/31/2020	G020	9.7%		2.3	0.	1.3	0.3	(	(0.0)	1.2	1%	N/A +/- 10%	Project spend is on target for FY21.  The original project was focused on Firewall management tool upgrade for SSN Network, delivering a new instance for Verizon to manage firewall rules
Network Security Improvements	3683USH	10/20/2021	G020	9.7%		-	0.	0.1	0.2	(	(0.1)	0.8	50%	Scope Increase	and update policy and governance. The scope has increased to onboard critical devices, high-risk internal and CNI firewalls and update rules for all these devices. The increased scope has resulted in higher than budgeted spend for FY21.
Data Protection	5820	3/31/2022	G020	9.7%		-	-		-			0.8	n/a		
Other Regulatory, Legal and Compliance Mandates  Total Regulatory, Legal and Compliance Mandates					\$	21.3 66.0		.2 \$	0.2 3.0		2.0 3.2 \$	31.9 <b>64.4</b>	51.2%		
Total Regulatory, Degai and Compliance standards					Ψ	00.0	, 0.	.2 9	5.0		J.2 4	04.4	31.270		
Substation Network Connectivity & Comms	5846	3/31/2021	G020	9.7%	\$	2.6	\$ 1.	.6 \$	0.1	s	1.5 \$	9.5	97%	COVID	Due to the pandemic situation, the expected work that would have been completed in April and May of 2020 for this project was pushed out to later in the year.
Infrastructure Remediation & Lifecycle Refresh	5873	3/31/2022	G020	9.7%		-	-		-		0.0	7.2	n/a	N/A +/- 10%	This project will begin later in the fiscal year.
SOE (Windows) Upgrade and Device Refresh	4987	12/31/2020	G020	9.7%		12.3	1.	.5	0.5		0.9	6.7	64%	COVID	The deployment strategy has been changed from in-person to "mail out" which will impact future project spend.
	5905	3/31/2021	C175	9.7%		2.3	1.	.1	2.6	(	(1.5)	6.7	131%	COVID	Project overspend is due to the impact from the pandemic which resulted in additional resources added to coordinate project activities as well as
Nucleus Project	5912	12/31/2020	G198	15.7%		2.2	1.	.4	2.5	(	(1.1)	6.3	82%	COVID	increased project complexity for system integration work. Project overspend is due to the impact from the pandemic which resulted in additional resources added to coordinate project activities as well as
On My Way (EBU Digital Solution)	5874	3/31/2023	G020	9.7%							0.0		,	N/A +/- 10%	increased project complexity for system integration work.
Infrastructure New Capability WAN Infrastructure Program	5874 5868	3/31/2023	G020 G020	9.7%		-	-		-		0.0	5.7 4.6	n/a n/a	N/A +/- 10% N/A +/- 10%	This project will begin later in the fiscal year.  This project will begin later in the fiscal year.
Ü	5838	12/31/2020	G020	9.7%		12.4	1.	.0	0.4		0.5	4.3	57%	COVID	Due to the pandemic situation, the expected work that would have been completed in April and May of 2020 for this project was pushed out to later in
Managed Networks	5867	3/31/2021	G020	9.7%							0.0	3.6	-/-	N/A . / 100/	the year.
Network Security Infrastructure Program	4990	3/31/2021 8/3/2020	G020 X148	9.7% 8.1%		3.0	1.	.2	0.7		0.0	3.6	n/a 46%	N/A +/- 10% Other	This project will begin later in the fiscal year.  Project underspend is due to increased complexity which has delayed the Develop and Implement phase and, therefore, timing of costs have been
Primavera Upgrade/Stabilization						16.6			<i>(6.1</i> )			15.			delayed.
Other Technology/Infrastructure Foundation and Reliability Total Technology/Infrastructure Foundation and Reliability					\$	46.6 81.5		.9 \$	(0.4) <b>6.4</b>		4.6 5.5 \$	15.1 72.5	46.3%		
					Ψ	OIL	, 11.	Ψ	3.4	-	φ	, 210	-1010 / 0		

(0.7)

22.0 \$

\$ 218.9 \$ 30.2 \$

(4.2)

8.2 \$ 178.7 27.0%

Programs with \*\* consist of several individual projects.

FY21 CAPITAL INVESTMENT TOTALS

Project Efficiencies

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Information Technology Capital Investment Quarterly Report
Rate Year 2 - Third Quarter Ended May 31, 2020
Attachment 3
Page 1 of 1

Narragansett Electric Company, Narragansett Gas Company and Narragansett Electric Company - Transmission d/b/a National Grid Projects not continuing in Rate Year 2 Quarter 3

Rate Year 2 Quarter 3 (March 1, 2020 - May 31, 2020)

Amounts in Millions of USD

					To	tal S	ervice Cor	npany	Spendi	ng	
Project Name	INVP#	Forecasted In	Allocation	<b>RI Total</b>	FYTD 21	F	YTD 21	FYT	<b>D</b> 21	FY 2	1
1 Toject Name	11441 π	Service Date	Code	Percent	Budget	A	Actual	Vari	ance	Budge	et
Business Programs and Projects											
F&A for CIS Request for Proposal	5271				\$ -	\$	0.0	\$	-	\$	-
<b>Total Business Programs and Projects</b>					0.0		0.0		0.0		0.0
Regulatory, Legal and Compliance Mandates											
None											
Regulatory, Legal and Compliance Mandates					0.0		0.0		0.0		0.0
Technology/Infrastructure Foundation and Reliability											
Total Technology/Infrastructure Foundation and Relia	bility				0.0		0.0		0.0		0.0
Projects not continuing in RY2 Q3 Total					\$ -	\$		\$		\$	-

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Information Technology Capital Investment Quarterly Report
Rate Year 2 - Third Quarter Ended May 31, 2020
Attachment 4
Page 1 of 1

Narragansett Electric Company, Narragansett Gas Company and Narragansett Electric Company - Transmission d/b/a National Grid New Capital Investment Demand not on FY21 Plan

Rate Year 2 Quarter 3 (March 1, 2020 - May 31, 2020)

Amounts in Millions of USD

•					TOTAL	SERVICE CO	OMPANY SPI	ENDING
Project Name	INVP#	Forecasted In Service Date	Allocation Code	RI Total Percent	FYTD 21 Budget	FYTD 21 Actual	FYTD 21 Variance	FY21 Budget
Business Programs and Projects								
US SAP: GRC Upgrade	5842A	12/31/2020			\$ -	\$ -	\$ -	\$ 2.3
Lockbox Payments and Credit Payments Implementation	5836	3/31/2021			-	-	-	0.7
Intelligent Substation Design	5877A	3/31/2022			-	-	-	0.6
Blackline: US Implementation	5380A	2/28/2021			-	-	-	2.1
Forecasting and Long Term Planning Solution (Metapraxis)	5380B	2/28/2021			-	-	-	2.9
SAP Platform Upgrade: OS and Databases	5843A	12/31/2020			-	-	-	1.0
Washington DC Video Conferencing Installation	5978	3/31/2021			-	-	-	0.1
Pension Administrator Replacement	5841A	12/31/2021			-	-	-	0.5
<b>Total Business Programs and Projects</b>					0.0	0.0	0.0	10.1
Regulatory, Legal and Compliance Mandates								
F&A and Implementation - Vision FM Replacement	3870	3/31/2021			-	-	-	2.8
Asset and Work Management System for LNG	4898	3/31/2022			-	-	-	2.0
ServiceNow Upgrade to version Orlando	5900A	3/31/2021			-	-	-	0.3
Control Room Event Recording	5889A	7/1/2021			-	-	-	0.6
Smart City Phase II	5987	3/31/2021			-	-	-	0.5
Annual HR & Payroll Mandatory Service Pack Upgrade (HRSP) FY21	5609	3/31/2021			-	-	-	3.8
Total Regulatory, Legal and Compliance Mandates					0.0	0.0	0.0	9.9
Technology/Infrastructure Foundation and Reliability								
Total Technology/Infrastructure Foundation and Reliability					0.0	0.0	0.0	19.8
FY21 NEW DEMAND CAPITAL INVESTMENT TOTALS					\$ 0.0	\$ 0.0	\$ 0.0	\$ 39.7

Narragansett Electric Company, Narragansett Gas Company and Narragansett Electric Company - Transmission d/b/a National Grid Fiscal Year 2021 (April 2020 - May 2020)

d/b/a National Grid RIPUC Docket No. 4770

The Narragansett Electric Company

**Budget Exception Reporting** *Amounts in Millions of USD* 

Information Technology Capital Investment Quarterly Report

Rate Year 2 - Third Quarter Ended May 31, 2020

Attachment 5

Page 1 of 1

#### **Impact of Budget Exceptions on FY21 Capital Plan Categories**

	Budget
Investment Category	Exception
	Amt \$M
Business Programs and Projects	(5.385)
Regulatory, Legal, and Compliance Manc	4.458
Technology/Infrastructure Foundation an	0.927
Total	_

#### Top 10 Projects in each Investment Plan Category Impacted by Budget Exceptions

Investment Category	INVP#	INVP# of Projects within Project Name a program	Budget Exception Amt \$M	% change to FY21 Budget	Driver for Budget Exception Request
Business Programs and Projects		Other Business Programs and Projects	-5.385 -5.385		Net Category Impact
Regulatory, Legal and Compliance Mandates  Technology/Infrastructure Foundation	5609	Annual HR & Payroll Mandatory Service Pack Upgrade (HRSP) FY21 Other Regulatory, Legal, and Compliance Mandates	3.200 1.258 4.458	74%	Increased scope  Net Category Impact
and Reliability	4990	Primavera Upgrade/Stabilization	0.927 0.927	30%	Increased scope caused the need for additional system integrations  Net Category Impact
Total			\$ -		