

The Narragansett Electric Company
d/b/a National Grid
RIPUC Docket No. 4770
Information Technology Capital Investment Quarterly Report
Fourth Quarter Ended August 31, 2019
Attachment 6
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Narragansett Electric Company, Narragansett Gas Company and Narragansett Electric Company - Transmission d/b/a National Grid
Rate Year September 1, 2018 - August 31, 2019

Delivered Investments with Schedule Variance +/- 10%

Project Name	INVP #	Forecasted In-Service Date	Actual In Service Date	Variance in Schedule	Schedule Variation Commentary
Business Programs and Projects					
Gas Capacity Review Database	4468	2018 Sep 30	2019 Feb 12	32%	The project was put into service on February 12th, 2019. The project timeline increased due to an approved expansion in scope to include additional users in the Upstate New York region for the technology solution, and additional time needed to engage with our vendor partner on the additional scope and the need for additional contractual agreements based on the increased scope. The increased scope resulted in shift of the in-service date from September 2018, but the solution was implemented for all Gas Engineering and Customer Connections teams at National Grid, and included efficiency gains and automation for all Service Areas.
Cascade Electric Application Upgrade Project	3986	2018 Aug 31	2018 Nov 05	17%	The project was put into service on November 5th, 2018. The shift in forecast date by two months was the result of a dependency on the STORMS iScheduler project, which was delayed to the point that an executive decision was made to break the dependency to allow the Cascade Electric Upgrade to be deployed in advance of the STORMS upgrade. The deployment change required retesting to the legacy STORMS environment, as the original target application environment that had been tested was no longer applicable for the deployment window.
Ageing System Stabilization/Upgrades	4188	2018 Jun 15	2018 Sep 08	11%	This project consisted of 3 separate workstreams. The Schedule Variance was for the WS01 - AVLS – Vehicle Location System only, which had severe weather and a high number of storms that impacted the go-live date, along with a defective database server and modifications to the application configuration and testing.
CXT MyAccount - Two way Outage SMS Communications	4750G	2019 Apr 30	2019 Jul 11	29%	The project was delayed due to expanded scope added to the project which caused both schedule and cost overruns as well as issue with vendors completing work in a timely fashion.
Regulatory, Legal, and Compliance Mandates					
Enable Transactional Email in CRS	5180	2018 Sep 30	2019 Jan 28	44%	The schedule was delayed as a result of increased scope that resulted in 2 additional requirements; 1. Change in delivery method for eBill to new customers; 2. Delivery of Welcome Email. Additionally, several third party vendors had work delayed due to other NG projects, contention with NG IT Change Freeze, and other issues. The NG work stoppage along with IT third party vendor issues delayed activities around the middleware integration.
CXT-My Account Service and Billing Functions F&A	4750B	2018 Dec 31	2018 Oct 12	-15%	User Acceptance Test (UAT) for Positive ID and Office Meter Off were combined, creating regression test and overall delivery efficiencies. After UAT sign off the changes were deployed to production in Oct 2018.
Robotics / Process Automation Implementation	4941	2018 Aug 31	2018 Sep 25	10%	This project was impacted by: 1. delays in building out the secondary location of National Grid's strategic cloud node to host Robotic Process Automation's Disaster Recovery solution for virtual desktops and 2. delays with implementation of required network changes by ecosystem partner.
EPA Portfolio Manager Integration Phase 2	5099	2019 Feb 28	2019 Jun 14	37%	Project Schedule Overrun : Impact due to Govt Shutdown in Dec 2018-Feb 2019 as test / prod sites of EPM were not available for development work to progress. Additional time delays due to CIS environment issues pushing go live from Feb (Sanction) to June (Actual).
Technology/Infrastructure Foundation and Reliability					
North Andover Storm Site	5354	2019 Mar 31	2019 Jul 22	38%	This project included additional fiber cables be installed at the North Andover critical storm site to provide diversity at the site in case primary circuits go down, then these will be used as back up. During the original installation – it was discovered that the conduit area (which the cable had to run thru) was crushed and therefore needed to be fixed before we could proceed to run the cable into the communications room in the building causing delays to the project timeline.
Data Security	4710	2019 Mar 31	2019 Aug 16	37%	Due to resource constraints, the design phase was delayed resulting in delays to subsequent phases of the project resulting in the implementation delay.
IAM Privilege Access Management (PAM) Phase 1	5214US	2018 Jun 01	2018 Dec 12	68%	Due to the need to demonstrate two consecutive quarters of successful SOX controls, the introduction of PAM Phase 1 was delayed to avoid changing processes midstream.

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Delivered Investments with Cost Variance +/- 10%

Project Name	INVP #	Inception to 3/31/18	FY19-20 Project Spend	Forecasted Full Project Spend	Actual Capex	Variance	Capital Spend Variance Explanation
<u>Business Programs and Projects</u>							
Gas Capacity Review Database	4468	0.01	0.96	0.97	1.44	49.1%	The project was put into service on February 12th, 2019. The project CapEx increased due to an approved expansion in scope to include additional users in the Upstate New York region for the technology solution, and additional time needed to engage with our vendor partner on the additional scope and the need for additional contractual agreements based on the increased scope. The increased scope resulted in shift of the in-service date from September 2018, but the solution was implemented for all Gas Engineering and Customer Connections teams at National Grid, and included efficiency gains and automation for all Service Areas.
Ageing System Stabilization/Upgrades	4188	1.38	-	1.38	1.63	18.6%	The project overspend is due to an extension to the planned test period and additional server configuration that was required.
dobleARMS	3982	0.00	0.64	0.64	0.33	-48.2%	The IT project CapEx was lower than forecast due to an approved reduction in scope for the IT project effort, limiting the work to the server and application installation, security and functional testing, and network integration. A parallel project led by the business (Substation O&M) addressed the installation of the networking equipment in the electrical substation for the pilot effort.
New Electric Connections	4411C	-	2.39	2.39	1.99	-16.8%	The project underspend is the result of optimizing technical resources, unused professional services for content mapping and unused risk.
EMM Phase II	4714	-	1.78	1.78	1.44	-19.4%	The project underspend is due to a reduction in equipment costs.
Data Visualization Evolution	4768	-	2.70	2.70	2.21	-18.1%	Since this project was completed in January 2019, ahead of the planned April 2019 completion date, project labor costs were less than planned.
EPA Portfolio Manager Integration Phase 2	5099	-	0.55	0.55	0.45	-18.0%	The project overspend is the result of extending the project schedule. This project was delayed as a result of the Govt Shutdown in Dec 2018-Feb 2019 as test / prod sites of EPM were not available for development work to progress. Additional time delays due to CIS environment issues pushing go live from Feb (Sanction) to June (Actual) /Project costs cover total efforts from Sept 2018 thru' extended PIS period till end of Oct 2019.
AVLS - Old 3G Modem Replacement	5226	-	3.97	3.97	2.64	-33.4%	Cost savings came from redeploy of 4G modems that were recovered from the field, project team took on provision of devices and setup of server to save on cost from vendors, and training modules were substituted with documents that proved to be sufficient.
<u>Regulatory, Legal, and Compliance Mandates</u>							
CXT-My Account Service and Billing Functions F&A	4750B	0.16	0.10	0.26	0.49	87.2%	Delays in finalizing project scope necessitated the need for additional cost, based on detailed analysis changes for Budget bill, Account Overview, POS ID and Office Meter Off self-serve transactions.
Robotics / Process Automation Implementation	4941	0.71	0.24	0.95	1.06	11.7%	The project overspend is the result of additional System Integrator scope required to complete the project.
Gateway Upgrades (vStig Scaling Upgrades)	4975USG	0.01	2.17	2.18	0.45	-79.2%	The project underspend is a result of reduced project scope. The first reduction was to upgrade Cisco Anyconnect rather than replace it. The 2nd reduction was to remove the data loss protection (DLP) component. This resulted in less spend than planned.
Perimeter enhancements	4975USA	-	0.16	0.16	0.26	68.3%	Project overspend is due to identification and implementation of proxy rule changes that were more extensive and time consuming than originally planned as well as rule cleanup and port closing beyond original scope.
Contract Management Solution for CCDI	4771A	0.16	2.88	3.04	1.80	-40.8%	Project underspend is the result of the project scope related to SAP integrations being reduced. In addition, all Verizon firewall changes have been accepted as a part of our business as usual contract and not charged as a cost of the project. Lastly, the Commercial Management team negotiated cost savings with Oracle, including the inclusion of training materials from Oracle resulting in further savings.
Add Effective Date to CSS-Customer System (NACHA)	5132	0.14	0.33	0.47	0.27	-43.6%	The Project underspend reflects a reduction in overall effort due to a reduction of scope - the business stakeholders reduced the number of financial institutions whose payments were included in the original estimates.
@Risk Software for CCDI	4771D	0.05	0.05	0.09	0.06	-41.7%	Project underspend is the result of software license costs being less than forecasted.
CXT MyAccount - Two way Outage SMS Communications	4750G	-	0.66	0.66	0.75	13.5%	The project overspend is due to expanded scope added to the project which caused both schedule and cost overruns as well as issue with vendors completing work in a timely fashion.
<u>Technology/Infrastructure Foundation and Reliability</u>							
Apps Interface Remediation	4706	-	0.90	0.90	0.77	-14.6%	Project underspend is the result of the project team taking advantage of the opportunity to Go-Live earlier, therefore, requiring less resources from our eco-partner with a time and material (T&M) contract with National Grid, and also requiring less National Grid in-house resources.
North Andover Storm Site	5354	-	0.13	0.13	0.04	-66.4%	The project underspend is due to lower construction costs to repairing crushed conduit.
Data Security	4710	-	0.50	0.50	-	-100.0%	The scope of work for this investment was reduced. Therefore, the investment was separated into two phases. The first, worked under this INVP did not require any capital costs. The second phase will be worked under a separate INVP.
IAM Privilege Access Management (PAM) Phase I	5214US	0.55	0.04	0.59	0.80	34.9%	The project overspend is due to additional admin/professional services fees to ensure Sox testing was completed.