

6/14/2017

FY18 - Investment Request Summaries - IRSs - US Network Programme



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: US Network Programme



**nationalgrid**
**Investment Request Summary - IS US**
**FISCAL YEAR 2018**

**INV ID:** 4496    **Project Name:** *US Network Programme*

**Program:** *Service Strategy Roadmap*

**Sponsor:** *John Gilbert*    **Title:** *Global Head IS Service Delivery, Global IS*

**Relationship Manager:** *Graham Pool*    **Title:** *IS Relationship Manager, Global IS*

**Prog Delivery Manager:** *Tom Cunningham*    **Title:** *Head of Programme Delivery, Global IS*

**Paper Author:** *Nicola Pennington / Steve Trezza*    **Title:** *Business Consultant - Corporate IS / Service Strategy*

**IS Roadmap Category:** IS Assurance    **Business Area:** *Corporate IS*    **Portfolio:** *IS for IS*

**In-Flight Project?**    **Invest Classification:** High    **Category:** Policy Driven    **Primary Policy Driver:** Environment    **Region:** *Global*

**Growth Playbook Project?**     **Shaping Our Future Project?**     **Energy Efficiency Project?**

**Project Description:** *The context for the project with background information*  
 The US Network Programme consists of the following projects:

- TBD Network Data Center Cleanup
- 4278 Network Improvement Utilization Monitoring with NG Portal
- TBD Network Management Portal
- TBD Network Refresh
- TBD Network Technology Refresh / Invest to Reduce
- TBD Network Transformation Completion - CEMS, ....
- TBD Network Transformation Leftovers

**Project Rationale:** *Highlight business challenge, capability or process the project addresses*  
 A stable Network environment is essential for the smooth running of the National Grid businesses.  
 To help support foundational programs that will enable or support the Utility of the Future.  
 Supports National Grid in fulfilling its reporting and data retention regulatory obligations.

**Project Scope:** *Explain what is in scope and what is not in scope for the project*  
 This scope covers all the identified functionality for the core service to be upgraded or improved.

**Project Dependencies:** *Identify any core program or project dependencies, please include INVP numbers if known*  
 Project dependencies will be developed as the individual projects start up.

**Basic Project Assumptions:**  
 The projects within these programme will be prioritized and could take multiple years to complete.

**Indicative Project Costs by Fiscal Year**

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		3.025	2.075	1.575	0.000	0.000	0.000	0.000	0.000	6.675
OpEx		0.190	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.280
Impact on RTB		0.345	0.655	0.655	0.655	0.655	0.655	0.655	0.655	4.930

**Indicative Project Costs by Delivery Phase**

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(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.500	6.175		6.675
OpEx	0.050	0.050	0.170	0.010	0.280

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

These Network Improvements will better help employees to use applications with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

**Additional benefits are:**

- Transformation implemented a new Verizon network and migrated the majority of sites onto this new network. A number of sites were not migrated at the time because they were expected to be closed or significantly reduced in size.
- Provision of a fit for purpose network - Legacy network infrastructure no longer meets the functional requirements of business users.
- Provision of a fully supported reliable network - Removes reliance on aged infrastructure that doesn't meet specifications and is no longer supported - ensuring that the network continues to be reliable and fit for purpose.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.280	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	6.675	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	68.689 %	-22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 2.26</b>				<b>Cost Score: -6.59</b>			
<b>Overall Priority Score: -4.325</b>							

**Investment Risk and Complexity**

Project Risk Score:	46	Risk Score Description: Impact score - 6 failure of active directory would affect all users and all business processes Likelihood score 7 - due to out of support hardware
Project Complexity Score:	14	Project Complexity Score Description:

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**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Now that customers are demanding new services, without these Network Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

**IS Projects: 4496 - US Network Programme**

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

**Business Initiative Dependencies**

**IS Projects: 4496 - US Network Programme**

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)     Enterprise Mobility  
 Comprehensive Integration Services (CIS)     Reporting and Analytics  
 Hybrid Cloud     Networks  
 Next Gen Workplace

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up April, 2017	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live March, 2019	Project Completion	Project Closure
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**Business Resource Estimates: # of Full Time Equivalents**

Start-up 0	Requirements & Deign 0	Develop & Implement 0	Business Resources UAT 0	Go Live Readiness 0	Post Go Live Support 0
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**Resourcing Strategy:**

This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.

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<b>Attached Supporting Documents</b>			
<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	





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nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4498	Project Name: <b>US VSTIG Programme</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS / Service Strategy</i>								
IS Roadmap Category:	IS Assurance	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>Global</b>			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
The US VSTIG Programme consists of the following projects:										
<ul style="list-style-type: none"> <li>TBD US DMZ Risk Avoidance</li> <li>4274 VSTIG Hardware Refresh</li> <li>TBD VSTIG Infrastructure Refresh</li> <li>TBD VSTIG Inter-Regional Load Balance</li> <li>TBD VSTIG Log Logic Refresh</li> <li>TBD VSTIG Upgrade Future Phases</li> </ul>										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
The projects within this programme are to upgrade the network infrastructure and bandwidth of the Internet gateway (VSTIG – Verizon Telecommunications Secure Internet Gateway). This will mitigate the existing risk associated with the amount of bandwidth already in use today and provide room for growth for new services and future projects which have a requirement to use additional bandwidth which cannot be provided due to current network hardware limitations and bandwidth utilization in the existing VSTIG.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
This scope covers all the identified functionality for the core service to be upgraded or improved.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
Project dependencies will be developed as the individual projects start up.										
<b>Basic Project Assumptions:</b>										
This multi-year investment addresses IS health and capability challenges while enabling National Grid's strategic business objectives.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		2.700	1.700	0.700	0.000	0.000	0.000	0.000	0.000	5.100
OpEx		0.130	0.070	0.000	0.000	0.000	0.000	0.000	0.000	0.200
Impact on RTB		0.240	0.120	0.120	0.120	0.120	0.120	0.120	0.120	1.080
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D			D & I			Closure	Total	

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CapEx		0.300	4.800		5.100
OpEx	0.030	0.050	0.110	0.010	0.200

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

These VSTIG Improvements will better help employees to use applications with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

Increased bandwidth and resilience - Delivery of software defined Wide Area Network technology will allow IS to deliver high bandwidth business class service through low cost commodity broadband internet services. In combination with cloud based security tools, this technology will support high speed Internet web browsing and use of high bandwidth cloud services even from the smallest locations. The tangible benefits that the user will experience is faster PC start up times, fast file transfers, more responsive applications, and access to bandwidth intensive Internet and cloud based services like, YouTube, WebEx, and Office 365.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.200	-24.4%	-0.732
CapEx Annual Savings		5.1%	0	CapEx Cost	5.100	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	32.941	% -22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	EI Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 2.26</b>				<b>Cost Score: -4.91</b>			
<b>Overall Priority Score: -2.649</b>							

**Investment Risk and Complexity**

Project Risk Score:	46	Risk Score Description: Impact score - 6 failure of active directory would affect all users and all business processes Likelihood score 7 - due to out of support hardware
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

Now that customers are demanding new services, without these Network Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs.

This program is an enabler for projects that require additional bandwidth. Mitigates risk of poor performance of internet connections as network reaches full capacity. Mitigates risk of internet service failure as a result of VSTIG Data Center failure.

<p><b>IS Project Dependencies</b> if you don't see a project in the drop-down please contact the Planning &amp; Performance team.</p>		<p><b>Benefiting Operating Companies:</b> Check all that apply</p>															
<p><b>IS Projects: 4498 - US VSTIG Programme</b></p> <p>1. Has a dependency on IS Project;</p> <p>2. Has a dependency on IS Project;</p> <p>3. Has a dependency on IS Project;</p> <p>4. Has a dependency on IS Project;</p> <p>5. Has a dependency on IS Project;</p> <p>6. Has a dependency on IS Project;</p>		<p><input type="checkbox"/> Select All Companies    <input type="checkbox"/> Clear All Companies</p> <p><input type="checkbox"/> Select All Gas    <input type="checkbox"/> Select All Electric    <input type="checkbox"/> Select All Gen</p> <p><input checked="" type="checkbox"/> National Grid USA Parent</p> <p><input checked="" type="checkbox"/> KeySpan Energy Development Corporation</p> <p><input checked="" type="checkbox"/> KeySpan Services Inc.</p> <p><input checked="" type="checkbox"/> KeySpan Energy Corp</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery New York</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island</p> <p><input checked="" type="checkbox"/> KeySpan Generation LLC (PSA)</p> <p><input checked="" type="checkbox"/> KeySpan Glenwood Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> Nantucket Electric Company</p> <p><input checked="" type="checkbox"/> Boston Gas Company</p> <p><input checked="" type="checkbox"/> Colonial Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Power Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Hydro - Trans Corp</p> <p><input checked="" type="checkbox"/> New England Electric Trans Corp</p> <p><input checked="" type="checkbox"/> NG LNG LP Regulated Entity</p>															
<p><b>Business Initiative Dependencies</b></p> <p><b>IS Projects: 4498 - US VSTIG Programme</b></p> <p>1. Has a dependency on Biz Initiative,</p> <p>2. Has a dependency on Biz Initiative,</p> <p>3. Has a dependency on Biz Initiative,</p> <p>4. Has a dependency on Biz Initiative,</p>																	
<p><b>Project Relationships</b></p> <p><input type="checkbox"/> Minor Works    Project Relationship:</p> <p>Related Projects:</p>																	
<p><b>Enabling IS Capabilities</b> check all that apply</p> <p><input type="checkbox"/> Enterprise Content Management (ECM)    <input type="checkbox"/> Enterprise Mobility</p> <p><input type="checkbox"/> Comprehensive Integration Services (CIS)    <input type="checkbox"/> Reporting and Analytics</p> <p><input type="checkbox"/> Hybrid Cloud    <input type="checkbox"/> Networks</p> <p><input type="checkbox"/> Next Gen Workplace</p>																	
<p><b>Key Milestone Dates:</b> Select the 1st, 15th or last day of the month</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Begin Start-up</td> <td style="text-align: center;">Begin Requirements &amp; Deign</td> <td style="text-align: center;">Begin Development &amp; Implementation</td> <td style="text-align: center;">Begin User Acceptance Testing</td> <td style="text-align: center;">Go Live</td> <td style="text-align: center;">Project Completion</td> <td style="text-align: center;">Project Closure</td> </tr> <tr> <td style="text-align: center;">April, 2017</td> <td></td> <td></td> <td></td> <td style="text-align: center;">March, 2018</td> <td></td> <td></td> </tr> </table>				Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure	April, 2017				March, 2018		
Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure											
April, 2017				March, 2018													
<p><b>Business Resource Estimates: # of Full Time Equivalents</b></p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Start-up</td> <td style="text-align: center;">Requirements &amp; Deign</td> <td style="text-align: center;">Develop &amp; Implement</td> <td style="text-align: center;">Business Resources UAT</td> <td style="text-align: center;">Go Live Readiness</td> <td style="text-align: center;">Post Go Live Support</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </table>				Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support	0	0	0	0	0	0		
Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support												
0	0	0	0	0	0												
<p><b>Resourcing Strategy:</b>                  This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.</p>																	
<p><b>Attached Supporting Documents</b></p>																	

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<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



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INV ID:	4499	Project Name: <b>US Wireless Programme</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS / Service Strategy</i>								
IS Roadmap Category:	IS Assurance	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>Global</b>			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
The US Wireless Programme consists of the following projects:										
<ul style="list-style-type: none"> <li>• NG-M Implementation</li> <li>• Wireless Bridge Replacements</li> <li>• Wireless LAN Expansion</li> <li>• Wireless LAN Management Tools</li> <li>• Wireless Network Expansion</li> </ul>										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
This program will expand the current coverage and capacity of the Wireless Local Area Network (WLAN) at various National Grid sites that have been identified as a priority. In addition, this implementation will strengthen the resilience of the WLAN by providing additional corporate and guest network Data Center infrastructure.										
National Grid Yards have become dependent on the use of WLANs for communications to their vehicles, and many of these WLAN access points are no longer supported and at risk of failure.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
This scope covers all the identified functionality for the core service to be upgraded or improved.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
Project dependencies will be developed as the individual projects start up.										
<b>Basic Project Assumptions:</b>										
This multi-year investment addresses IS health and capability challenges while enabling National Grid's strategic business objectives.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		1.950	1.500	1.500	0.000	0.000	0.000	0.000	0.000	4.950
OpEx		0.270	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.320
Impact on RTB		0.036	0.155	0.155	0.155	0.155	0.155	0.155	0.155	1.121
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D			D & I			Closure		Total
CapEx		0.300			4.650					4.950

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OpEx	0.030	0.060	0.220	0.010	0.320				
<b>Project Benefits - Type I only</b>									
(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

These Wireless Improvements will better help employees to use applications with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

Delivery of pervasive Wireless Networks with the capacity to support a multitude of devices will be key to supporting a flexible and mobile field worker or customer agent. Everyday more wireless only devices are coming to market that can allow National Grid to deliver services in a more effective and efficient manner (e. g. iPads, specialized tablets, sensors, equipment controllers). The implementation of secure wireless networks that support this environment will be critical to improved efficiencies the business will be challenged to achieve.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.320	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	4.950	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	21.919	% -22.5%	-2.025
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>2.06</b>			<b>Cost Score:</b>	<b>-6.38</b>
				<b>Overall Priority Score:</b>	<b>-4.319</b>		

**Investment Risk and Complexity**

Project Risk Score:	46	Risk Score Description: Impact score - 6 failure of active director y would affect all users and all business processes Likelihood score 7 - due to out of support hardware
Project Complexity Score:::	14	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

Now that customers are demanding new services, without these Wireless Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs.

### IS Project Dependencies if you don't see a project in the drop-down please contact the Planning & Performance team.

**IS Projects: 4499 - US Wireless Programme**

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

### Business Initiative Dependencies

**IS Projects: 4499 - US Wireless Programme**

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

### Project Relationships

Minor Works Project Relationship:

Related Projects:

### Benefiting Operating Companies: Check all that apply

Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

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### Enabling IS Capabilities check all that apply

<input type="checkbox"/> Enterprise Content Management (ECM)	<input type="checkbox"/> Enterprise Mobility
<input type="checkbox"/> Comprehensive Integration Services (CIS)	<input type="checkbox"/> Reporting and Analytics
<input type="checkbox"/> Hybrid Cloud	<input type="checkbox"/> Networks
<input type="checkbox"/> Next Gen Workplace	

### Key Milestone Dates: Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up	<i>Begin</i> Requirements & Deign	<i>Begin</i> Development & Implementation	<i>Begin</i> User Acceptance Testing	<i>Go Live</i>	<i>Project Completion</i>	<i>Project Closure</i>
April, 2017				March, 2018		

### Business Resource Estimates: # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

**Resourcing Strategy:**  
 This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.


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### Attached Supporting Documents

6/14/2017

FY18 - Investment Request Summaries - IRSs - US Wireless Programme

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	





6/14/2017

FY18 - Investment Request Summaries - IRSS - Monitoring and Alerting



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSS:  
 Monitoring and Alerting



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4493	Project Name: <b>Monitoring and Alerting</b>								
Program:	Service Strategy Roadmap									
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS								
Relationship Manager:	Graham pool	Title: IS Relationship Manager, Global IS								
Prog Delivery Manager:	Tom Cunningham	Title: Head of Programme Delivery, Global IS								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS / Service Strategy								
IS Roadmap Category:	IS Assurance	Business Area: Corporate IS			Portfolio: IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: Global			
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
Build a centralized (NG owned) APM platform to collect, present and store data from on end user experience:										
Step-change reduction in incident MTTR (Mean Time To Recover):										
<ul style="list-style-type: none"> <li>•Earlier detection of performance issues</li> <li>•Fewer false alarms (P1/P2) by having empirical evidence of scale of problem (#users impacted, impact of slowdowns)</li> <li>•Faster identification of fault domain (server/citrix/network etc.)</li> <li>•Faster diagnosis of faults</li> <li>•Strong opportunity to improve IS reputation:</li> <li>•Real-time dashboards shared with customer will build transparency show good performance, and true scale of slowdowns/outages</li> <li>•Ability to trace individual user performance history will allow validation of anecdotes</li> </ul>										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
<ol style="list-style-type: none"> <li>1. Service availability data presented to customers is known to be of poor quality: Based on incident data and anecdotes</li> <li>2. Triage of incidents is slow and inaccurate due to a lack of End User Experience visibility</li> <li>3. Incidents are slow to diagnose (MTTR) due to inability to reliably identify fault domain and allocate tickets accordingly</li> </ol>										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
In: Select, procure software and infrastructure, integrate, train. Limited to 1 or 2 pilot IS services.										
Out: Ongoing licensing/support (RTB), expansion across other IS services										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
May require servers, storage and internet bandwidth										
Eco-partners willing to accept tight integration of expertise into their delivery model										
<b>Basic Project Assumptions:</b>										
Pilot services have sources of workload data that can be tapped.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.450	1.000	1.000	0.000	0.000	0.000	0.000	0.000	2.450
OpEx		0.150	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.200
Impact on RTB		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.600
<b>Indicative Project Costs by Delivery Phase</b>										

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FY18 - Investment Request Summaries - IRSS - Monitoring and Alerting

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.100	2.350		2.450
OpEx	0.010	0.035	0.150	0.005	0.200

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

Employees will be able to use an application with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.200	-24.4%	-0.732
CapEx Annual Savings		5.1%	0	CapEx Cost	2.450	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	21.429	% -22.5%	-2.025
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Low	-6.6%	-0.066
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Low	10.9%	0.109				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>1.79</b>			<b>Cost Score:</b>	<b>-4.09</b>
				<b>Overall Priority Score:</b>	<b>-2.301</b>		

**Investment Risk and Complexity**

Project Risk Score:	42	Risk Score Description: Impact score - 5 failure of active director y would affect all users and all business processes Likelihood score 7 - due to out of support hardware
Project Complexity Score:::	14	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

Now that customers are demanding new services, without this investment in our underlying technology infrastructure, we cannot deliver these new strategic programs.

6/14/2017

FY18 - Investment Request Summaries - IRSs - Monitoring and Alerting

### IS Project Dependencies if you don't see a project in the drop-down please contact the Planning & Performance team.

**IS Projects: 4493 - Monitoring and Alerting**

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

### Business Initiative Dependencies

**IS Projects: 4493 - Monitoring and Alerting**

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

### Project Relationships

Minor Works Project Relationship:

Related Projects:

### Benefiting Operating Companies: Check all that apply

Select All Companies  Clear All Companies

Select All Gas  Select All Electric  Select All Gen

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp - Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

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### Enabling IS Capabilities check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace

- Enterprise Mobility
- Reporting and Analytics
- Networks

### Key Milestone Dates: Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up	<i>Begin</i> Requirements & Deign	<i>Begin</i> Development & Implementation	<i>Begin</i> User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2017				November, 2017		

### Business Resource Estimates: # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:


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### Attached Supporting Documents

6/14/2017

FY18 - Investment Request Summaries - IRSs - Monitoring and Alerting

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



6/14/2017

FY18 - Investment Request Summaries - IRSs - RSA Re-platform



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSs: RSA Re-platform



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4270	Project Name: <b>RSA Re-platform</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS / Service Strategy</i>								
IS Roadmap Category:	IS Assurance	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>US</b>			
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
The existing Managed One Time Password service (MOTP) (RSA Tokens) has been sunsetted by Verizon and NG is one of the last customers on the service. Verizon would like NG to move off the service and will not charge any termination fees of National Grid were to move off the services. National Grid has two primary options to utilize to move to another platform. One option is to move to UIS, Verizon's cloud based managed password system that utilizes hard tokens (not RSA tokens) and can also provide passwords through a smartphone app, txt messaging, and IVR. The other option is to use an RSA service that not only provides one time passwords via RSA token or a smartphone app, but also includes a risk based authentication engine that can increase or decrease the password requirements based on your location, device, and access required. Both options provide the benefit of having a smartphone app which can significantly reduce the overhead of physical token distribution.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
RSA token distribution and support is expensive and slow. Verizon's sunsetting of the MOTP converging with an upcoming renewal of the majority of our RSA tokens has created an opportunity for NG to move to a more modern and flexible platform that allows us to eliminate the hard token in favor of other alternatives as well as implement additional capabilities in this area.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
All US clients that use remote access to perform work at offsite locations.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
There are no dependencies required before this project can start.										
<b>Basic Project Assumptions:</b>										
There is 80% likelihood of these applications requiring a mobile remote access service that is not currently available on the existing platform.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.280
OpEx		0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020
Impact on RTB		0.050	0.150	0.150	0.150	0.150	0.150	0.150	0.150	1.100
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D			D & I		Closure		Total	
CapEx		0.050			0.230				0.280	

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FY18 - Investment Request Summaries - IRSs - RSA Re-platform

OpEx	0.010	0.005	0.000	0.005	0.020				
<b>Project Benefits - Type I only</b>									
(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Increase business and enterprise service performance and availability.
- Better way to support for Jurisdictional and business function initiatives.

Other benefits are:

- Use of smartphone app to replace physical hard token
- Minimize hard token distribution costs
- Use other alternatives immediately if token is lost or stolen

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.020	-24.4%	-244
CapEx Annual Savings		5.1%	0	CapEx Cost	0.280	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	375.000 %	-22.5%	-2.025
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 2.16</b>				<b>Cost Score: -2.83</b>			
<b>Overall Priority Score: -0.671</b>							

**Investment Risk and Complexity**

Project Risk Score:	42	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 7. If not deployed in the next 12 months, National Grid will need to purchased/renew approximately 12,500 RSA (\$200k/year) tokens that will ultimately be replaced with a smartphone app. Also we will need to retain our existing token disribution staff (\$150k/year), Tokens will start expiring in 2016. 5 years after initial Verizon contract initiation.
Project Complexity Score::	16	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

Tokens will start expiring in 2016, 5 years after initial Verizon contract initiation.

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FY18 - Investment Request Summaries - IRSs - RSA Re-platform

<b>IS Project Dependencies</b> if you don't see a project in the drop-down please contact the Planning & Performance team.		<b>Benefiting Operating Companies:</b> Check all that apply				
<b>IS Projects: 4270 - RSA Re-platform</b>  1. Has a dependency on IS Project; 2. Has a dependency on IS Project; 3. Has a dependency on IS Project; 4. Has a dependency on IS Project; 5. Has a dependency on IS Project; 6. Has a dependency on IS Project;		<input type="checkbox"/> Select All Companies <input type="checkbox"/> Clear All Companies <input type="checkbox"/> Select All Gas <input type="checkbox"/> Select All Electric <input type="checkbox"/> Select All Gen  <input checked="" type="checkbox"/> National Grid USA Parent <input checked="" type="checkbox"/> KeySpan Energy Development Corporation  <input checked="" type="checkbox"/> KeySpan Services Inc. <input checked="" type="checkbox"/> KeySpan Energy Corp <input checked="" type="checkbox"/> KeySpan Energy Delivery New York <input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island <input checked="" type="checkbox"/> KeySpan Generation LLC (PSA) <input checked="" type="checkbox"/> KeySpan Glenwood Energy Center <input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center <input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC <input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution <input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas <input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission <input checked="" type="checkbox"/> Massachusetts Electric Company <input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission <input checked="" type="checkbox"/> Nantucket Electric Company <input checked="" type="checkbox"/> Boston Gas Company <input checked="" type="checkbox"/> Colonial Gas Company <input checked="" type="checkbox"/> Narragansett Gas Company <input checked="" type="checkbox"/> Narragansett Electric Company <input checked="" type="checkbox"/> Narragansett Electric Company - Transmission <input checked="" type="checkbox"/> New England Power Company - Transmission <input checked="" type="checkbox"/> New England Hydro - Trans Corp <input checked="" type="checkbox"/> New England Electric Trans Corp <input checked="" type="checkbox"/> NG LNG LP Regulated Entity				
<b>Business Initiative Dependencies</b>  <b>IS Projects: 4270 - RSA Re-platform</b> 1. Has a dependency on Biz Initiative, 2. Has a dependency on Biz Initiative, 3. Has a dependency on Biz Initiative, 4. Has a dependency on Biz Initiative,						
<b>Project Relationships</b>  <input type="checkbox"/> Minor Works    Project Relationship:  Related Projects:						
<b>Enabling IS Capabilities</b> check all that apply						
<input type="checkbox"/> Enterprise Content Management (ECM) <input type="checkbox"/> Enterprise Mobility <input type="checkbox"/> Comprehensive Integration Services (CIS) <input type="checkbox"/> Reporting and Analytics <input type="checkbox"/> Hybrid Cloud <input type="checkbox"/> Networks <input type="checkbox"/> Next Gen Workplace						
<b>Key Milestone Dates:</b> Select the 1st, 15th or last day of the month						
Begin Start-up April, 2017	Begin Requirements & Deign 	Begin Development & Implementation 	Begin User Acceptance Testing 	Go Live September, 2018	Project Completion 	Project Closure 
<b>Business Resource Estimates: # of Full Time Equivalents</b>						
Start-up 0	Requirements & Deign 0	Develop & Implement 0	Business Resources UAT 0	Go Live Readiness 0	Post Go Live Support 0	
<b>Resourcing Strategy:</b> This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.						
<b>Attached Supporting Documents</b>						

6/14/2017

FY18 - Investment Request Summaries - IRSs - RSA Re-platform

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	





6/14/2017

FY18 - Investment Request Summaries - IRSs - Azure Core Service Enablement (Cloud - Broker...



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: Azure Core Service Enablement (Cloud - Broker / Hybrid Enablement)



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	3899	Project Name: <b>Azure Core Service Enablement (Cloud - Broker / Hybrid Enablement)</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS / Service Strategy</i>								
IS Roadmap Category:	Computing	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>Global</b>			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
We currently use cloud hosting services provided by CSC as part of the contract. There are some pain points in this on cost and time to provision a service. This work is to improve cloud hosting available by adding new contracts with alternative suppliers. There is the potential to reduce the costs of hosting costs and improve provisioning time though cloud hosting by adding in new contracts with Microsoft Azure.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
The provisioning of Strategic Cloud provider(s) will reduce the number of cloud-hosting environment that will need integration, reducing the overall network, security and service management costs										
<ul style="list-style-type: none"> <li>- The resulting solution will reduce time to market, cost and complexity for Enterprise Services such as the Strategic Analytics Platform, Mobile Application Development Environment, etc.</li> <li>- Reduce the the time to market for business solutions requiring IaaS and PaaS-based services</li> </ul>										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
Any Wintel infrastructure (servers, storage, MS-SQL databases and applications) are candidates for hosting in the public cloud environment, while adhering to Digital Risk and Security policies. The future may include AIX infrastructure, Oracle databases and Private cloud hosting.										
Out of scope is and CNI infrastructure and Software as a Service (SaaS).										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
This project requires the use of Verizons Secure Cloud Interconnect (SCI).										
<b>Basic Project Assumptions:</b>										
We will use our current network/internet as the main connectivity to the cloud – No planned network analysis/upgrades										
It is assumed that this project will identify and set up contracts/basic services - other projects will use the services when hosted environments are required. Therefore there is no RTB impact, and no capex impact - as nothing is deployed.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
OpEx		0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure			Total	
CapEx		0.050		0.200					0.250	
OpEx	0.010	0.050		0.685		0.005			0.750	

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FY18 - Investment Request Summaries - IRs - Azure Core Service Enablement (Cloud - Broker...

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.  
 Improves productivity and reduces costs.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.750	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	0.250	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Medium	3.8%	0.114	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	High	10.9%	0.981				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 2.46</b>				<b>Cost Score: -2.76</b>			
<b>Overall Priority Score: -0.302</b>							

**Investment Risk and Complexity**

Project Risk Score:	39	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 5
Project Complexity Score::	24	Project Complexity Score Description:

Key Risks Description: Provide detail on project risks & mitigation strategy:

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

IS Projects: 3899 - Azure Core Service Enablement (Cloud - Broker / Hybrid Enablement)

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All

6/14/2017

FY18 - Investment Request Summaries - IRs - Azure Core Service Enablement (Cloud - Broker...

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 3899 - Azure Core Service Enablement (Cloud - Broker / Hybrid Enablement)

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

- Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up	<i>Begin</i> Requirements & Deign	<i>Begin</i> Development & Implementation	<i>Begin</i> User Acceptance Testing	<i>Go Live</i>	<i>Project Completion</i>	<i>Project Closure</i>
April, 2017				March, 2018		

**Business Resource Estimates:** # of Full Time Equivalents

<i>Start-up</i>	<i>Requirements &amp; Deign</i>	<i>Develop &amp; Implement</i>	<i>Business Resources UAT</i>	<i>Go Live Readiness</i>	<i>Post Go Live Support</i>
0	0	0	0	0	0

**Resourcing Strategy:**  
 This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	

6/14/2017

FY18 - Investment Request Summaries - IRSs - Azure Core Service Enablement (Cloud - Broker...

<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



6/14/2017

FY18 - Investment Request Summaries - IRSs - US Office 2010 upgrade



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSs: US Office 2010 upgrade



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4265	Project Name: <b>US Office 2010 upgrade</b>								
Program:	US IS									
Sponsor:	John Gilbert	Title: Global Head of IS Service Delivery								
Relationship Manager:	Bill Kearns	Title: IS relationship manager - Corporate functions								
Prog Delivery Manager:	Dave McCune	Title: Corporate IS PDM								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS / Service Strategy								
IS Roadmap Category:	IS Assurance	Business Area: <b>Corporate IS</b>			Portfolio: <b>US IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>US</b>			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
The current productivity tool is Office 2010 which has entered extended support from Microsoft and is now "n-2" versions old. Upgrade of the software will bring improved features, improved security, and support for real time collaboration of documents as well as better cloud integration.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
To help support foundational programs that will enable or support the Utility of the Future.										
Supports National Grid in fulfilling its reporting and data retention regulatory obligations.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
Any users of the Microsoft Office suite of tools (i.e. Excel, Word, Powerpoint, etc.)										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
There are no dependencies required before this project can start.										
<b>Basic Project Assumptions:</b>										
This project would provide the funding for the Office 365 subscription upgrade and deployment										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.800
OpEx		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Impact on RTB		1.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.600
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure		Total		
CapEx		0.100		0.700				0.800		
OpEx	0.000	0.000		0.000		0.000		0.000		

6/14/2017

FY18 - Investment Request Summaries - IRSs - US Office 2010 upgrade

Project Benefits - Type I only									
(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Support Jurisdictional and business function initiatives
- Enables a better Customer Experience

Employees will be able to use an application with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score		
OpEx Annual Savings			10.3%	0	OpEx Cost	0.000	-24.4%	0	
CapEx Annual Savings			5.1%	0	CapEx Cost	0.800	-11.2%	0	
Revenue Generation (annual)			6.2%	0	RTB Efficiency	1,400.000	%	-22.5%	-2.025
Financial Control	Low		6.2%	0.062	Union/Labor Relations	Low		-9.8%	0
Soft Financial Benefits	Low		3.8%	0.038	Dependencies	Medium		-10.6%	-0.318
Regulatory Impact	does not apply		11.2%	0	Elapse Time Duration	Medium		-6.6%	-0.198
Process & Personal Safety	Low		19.4%	0.194	Change Management Effort	High		-14.9%	-1.341
Reliability	Medium		10.9%	0.327					
Customer & Community Responsiveness	Medium		5.3%	0.159					
Employee Satisfaction	Medium		4.6%	0.138					
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39		8.9%	0.267					
Jurisdictional Engagement	High		8.2%	1					
<b>Benefit Score: 1.92</b>				<b>Cost Score: -4.32</b>					
<b>Overall Priority Score: -2.393</b>									

**Investment Risk and Complexity**

Project Risk Score:	36	Risk Score Description: Risk Impact = 4 and Risk Likelihood = 6
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

Now that customers are demanding new services, without this investment in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: **4265 - US Office 2010 upgrade**

1. Has a dependency on IS Project;

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen

6/14/2017

FY18 - Investment Request Summaries - IRSs - US Office 2010 upgrade

- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4265 - US Office 2010 upgrade

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
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- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
August, 2017				March, 2018	March, 2018	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:  
 This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head of IS Service Delivery	

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FY18 - Investment Request Summaries - IRSs - US Office 2010 upgrade

<i>Business Relationship Manager</i>	<i>Bill Kearns</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Dave McCune</i>	<i>IS Program Delivery Manager</i>	





6/14/2017

FY18 - Investment Request Summaries - IRSs - US Citrix Rationalisation



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSs: US  
 Citrix Rationalisation



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018																																																
INV ID:	4279	Project Name: <b>US Citrix Rationalisation</b>																																																				
Program:	US IS																																																					
Sponsor:	John Gilbert	Title: Global Head of IS Service Delivery																																																				
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<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?																																																				
<p><b>Project Description:</b> The context for the project with background information                      F&amp;A study to make recommendations for upgrade/rationalisation of US Citrix infrastructure</p> <p><b>Project Rationale:</b> Highlight business challenge, capability or process the project addresses                      Citrix is a product that National Grid uses to virtualize a number of key business applications such as ArcGis, Casade, Small World GIS, and Maximo. Citrix is also a key method of remote access for National Grid users, Eco system partners and other outside contractors via our Secure gateway solutions. A good portion of our current Citrix environment is running on unsupported Operating systems (Windows 2000 and 2003) and unsupported Citrix versions ( Metaframe XP 1.0 and Presentation 4.0). This not only introduces instability but exposes National Grid to vulnerabilities. The current unstable environment can cause major incidents and failures due to unsupported hardware and software. Our most current version is Xenapp 6.0 running on Windows 2008 r2 was out of support as of August 2016.</p> <p>There is a proposal to resolve these issues through rationalisation of current estate (14 farms) and upgrade of remaining servers. There is a high level proposal from CSC suggesting a payback within 12 months.</p> <p>A more detailed F&amp;A piece of work is required to review this proposal and make recommendations for way forward.</p> <p><b>Project Scope:</b> Explain what is in scope and what is not in scope for the project                      The Scope of the F&amp;A is to review the US citrix estate and propose recommended work to rationalise and upgrade all of the estate to be within support.</p> <p><b>Project Dependencies:</b> Identify any core program or project dependencies, please include INVP numbers if known                      There are no dependencies required for this project to start.</p> <p><b>Basic Project Assumptions:</b>                      Core of the F&amp;A study is a piece of work by CSC costed at \$40k</p> <p>An NG PM will be required to manage</p> <ul style="list-style-type: none"> <li>• progress and costs</li> <li>• to coordinate NG review and approval of CSC recommendations</li> <li>• To manage development of sanction paper for recommended solution.</li> </ul>																																																						
<p><b>Indicative Project Costs by Fiscal Year</b></p> <table border="1"> <thead> <tr> <th>(\$M)</th> <th>Prior Years</th> <th>FY 2018</th> <th>FY 2019</th> <th>FY 2020</th> <th>FY 2021</th> <th>FY 2022</th> <th>FY 2023</th> <th>FY 2024</th> <th>FY 2025</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>CapEx</td> <td></td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>OpEx</td> <td></td> <td>0.080</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.080</td> </tr> <tr> <td>Impact on RTB</td> <td></td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> </tbody> </table>											(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total	CapEx		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	OpEx		0.080	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.080	Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total																																												
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FY18 - Investment Request Summaries - IRSs - US Citrix Rationalisation

**Indicative Project Costs by Delivery Phase**

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx					0.000
OpEx	0.005	0.070		0.005	0.080

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

This project will provide a recommended way forward for the US Citrix environment.

It is expected that the benefits of rationalising and upgrading Citrix will be as follows

- Increase business and enterprise service performance and availability
- Better way to support for Jurisdictional and business function initiatives.
- Better remote support
- Improved user experience

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.080	-24.4%	-244
CapEx Annual Savings		5.1%	0	CapEx Cost	0.000	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	Low	19.4%	0.194	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 1.73</b>				<b>Cost Score: -1.31</b>			
<b>Overall Priority Score: 0.42</b>							

**Investment Risk and Complexity**

Project Risk Score:	37	Risk Score Description: Risk Impact = 4 and Risk Likelihood = 7
Project Complexity Score::	14	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**


This project will be resourced using IS resources and sourcing partners.

<p><b>IS Project Dependencies</b> if you don't see a project in the drop-down please contact the Planning &amp; Performance team.</p>		<p><b>Benefiting Operating Companies:</b> Check all that apply</p>															
<p><b>IS Projects: 4279 - US Citrix Rationalisation</b></p> <p>1. Has a dependency on IS Project;</p> <p>2. Has a dependency on IS Project;</p> <p>3. Has a dependency on IS Project;</p> <p>4. Has a dependency on IS Project;</p> <p>5. Has a dependency on IS Project;</p> <p>6. Has a dependency on IS Project;</p>		<p><input type="checkbox"/> Select All Companies    <input type="checkbox"/> Clear All Companies</p> <p><input type="checkbox"/> Select All Gas    <input type="checkbox"/> Select All Electric    <input type="checkbox"/> Select All Gen</p> <p><input checked="" type="checkbox"/> National Grid USA Parent</p> <p><input checked="" type="checkbox"/> KeySpan Energy Development Corporation</p> <p><input checked="" type="checkbox"/> KeySpan Services Inc.</p> <p><input checked="" type="checkbox"/> KeySpan Energy Corp</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery New York</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island</p> <p><input checked="" type="checkbox"/> KeySpan Generation LLC (PSA)</p> <p><input checked="" type="checkbox"/> KeySpan Glenwood Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> Nantucket Electric Company</p> <p><input checked="" type="checkbox"/> Boston Gas Company</p> <p><input checked="" type="checkbox"/> Colonial Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Power Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Hydro - Trans Corp</p> <p><input checked="" type="checkbox"/> New England Electric Trans Corp</p> <p><input checked="" type="checkbox"/> NG LNG LP Regulated Entity</p>															
<p><b>Business Initiative Dependencies</b></p> <p><b>IS Projects: 4279 - US Citrix Rationalisation</b></p> <p>1. Has a dependency on Biz Initiative,</p> <p>2. Has a dependency on Biz Initiative,</p> <p>3. Has a dependency on Biz Initiative,</p> <p>4. Has a dependency on Biz Initiative,</p>																	
<p><b>Project Relationships</b></p> <p><input type="checkbox"/> Minor Works    Project Relationship:</p> <p>Related Projects:</p>																	
<p><b>Enabling IS Capabilities</b> check all that apply</p> <p><input type="checkbox"/> Enterprise Content Management (ECM)    <input type="checkbox"/> Enterprise Mobility</p> <p><input type="checkbox"/> Comprehensive Integration Services (CIS)    <input type="checkbox"/> Reporting and Analytics</p> <p><input type="checkbox"/> Hybrid Cloud    <input type="checkbox"/> Networks</p> <p><input type="checkbox"/> Next Gen Workplace</p>																	
<p><b>Key Milestone Dates:</b> Select the 1st, 15th or last day of the month</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Begin Start-up</td> <td style="text-align: center;">Begin Requirements &amp; Deign</td> <td style="text-align: center;">Begin Development &amp; Implementation</td> <td style="text-align: center;">Begin User Acceptance Testing</td> <td style="text-align: center;">Go Live</td> <td style="text-align: center;">Project Completion</td> <td style="text-align: center;">Project Closure</td> </tr> <tr> <td style="text-align: center;">June, 2017</td> <td></td> <td></td> <td></td> <td style="text-align: center;">September, 2017</td> <td style="text-align: center;">October, 2017</td> <td></td> </tr> </table>				Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure	June, 2017				September, 2017	October, 2017	
Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure											
June, 2017				September, 2017	October, 2017												
<p><b>Business Resource Estimates: # of Full Time Equivalents</b></p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Start-up</td> <td style="text-align: center;">Requirements &amp; Deign</td> <td style="text-align: center;">Develop &amp; Implement</td> <td style="text-align: center;">Business Resources UAT</td> <td style="text-align: center;">Go Live Readiness</td> <td style="text-align: center;">Post Go Live Support</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </table>				Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support	0	0	0	0	0	0		
Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support												
0	0	0	0	0	0												
<p><b>Resourcing Strategy:</b>                  This work will be primarily resourced by CSC</p>																	
<p><b>Attached Supporting Documents</b></p>																	

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FY18 - Investment Request Summaries - IRSs - US Citrix Rationalisation

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head of IS Service Delivery</i>	
<i>Business Relationship Manager</i>	<i>Bill Kearns</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Dave McCune</i>	<i>IS Program Delivery Manager</i>	



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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 1



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSs:  
 Business Innovation Projects 1



nationalgrid		Investment Request Summary - IS US		FISCAL YEAR 2018	
INV ID:	4707	Project Name: <b>Business Innovation Projects 1</b>			
Program:					
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS			
Relationship Manager:	Graham Pool	Title: IS Relationship Manager, Global IS			
Prog Delivery Manager:	Tom Cunningham	Title: Head of Programme Delivery, Global IS			
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS			
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio: Global F, SS & C	
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?			
<p><b>Project Description: The context for the project with background information</b>                      The Business Innovation project provides a funding base and governance structure that allows the Information Services (IS) organization to improve the IS experience for our employees and customers who will experience improved reliability, use ability, speed and efficiency across all functions. The program will also reduce the risk of system failure which have customer, brand and cost implications. The program includes the following:</p> <ul style="list-style-type: none"> <li>• Big Data Analytics – Setup Data Lake and company wide analytics capability</li> <li>• Data Cleansing for reporting and Data Standards compliance – Enable BMS Standards</li> <li>• Data Visualization and Online interactive dashboards for quick decision making</li> <li>• Process and workflow automation with robotics</li> <li>• CRM and SaaS capability for future Customer experience program</li> <li>• CIS system upgrade Pilots</li> <li>• Rate engine Upgrades</li> <li>• Call Center capability enhancements for chat, automated agents, multichannel problem solving capability</li> <li>• Consumer document management and process simplification</li> <li>• Engineering Systems upgrades</li> <li>• Network and connectivity upgrades for Field Force, yards and trucks</li> <li>• Mobile device capability enhancements with mobile access for applications</li> <li>• Increased collaboration with Office 365, Box and One Drive – Work anyplace, anytime, anydevice</li> <li>• Video collaboration for office workers, Field force and flexible workers/ contractors</li> </ul>					
<p><b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>                      Move towards a sustained, multi-year investment program to address IS health and capability challenges while enabling National Grid's strategic business objectives.</p>					
<p><b>Project Scope: Explain what is in scope and what is not in scope for the project</b></p>					
<p><b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>                      Several other strategic initiatives are dependent on the work described within this document, in order to progress and succeed including:</p> <ul style="list-style-type: none"> <li>• Advanced Analytics</li> <li>• Finance Controls</li> <li>• Gas Enablement</li> <li>• Customer Experience Transformation</li> </ul>					
<p><b>Basic Project Assumptions:</b></p>					
<p><b>Indicative Project Costs by Fiscal Year</b></p>					

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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 1

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		3.369	3.973	0.000	0.000	0.000	0.000	0.000	0.000	7.342
OpEx		0.100	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.200
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Indicative Project Costs by Delivery Phase**

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		1.000	6.342		7.342
OpEx	0.010	0.040	0.140	0.010	0.200

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Increase business and enterprise service performance and availability
- Support Jurisdictional and business function initiatives
- Enable Customer Experience Transformation

Increased bandwidth and resilience - Delivery of software defined Wide Area Network technology will allow IS to deliver high bandwidth business class service through low cost commodity broadband internet services. In combination with cloud based security tools, this technology will support high speed Internet web browsing and use of high bandwidth cloud services even from the smallest locations. The tangible benefits that the user will experience is faster PC start up times, fast file transfers, more responsive applications, and access to bandwidth intensive Internet and cloud based services like, YouTube, WebEx, and Office 365.

Access anywhere from any device - Delivery of pervasive Wireless Networks with the capacity to support a multitude of devices will be key to supporting a flexible and mobile field worker or customer agent. Everyday more wireless only devices are coming to market that can allow National Grid to deliver services in a more effective and efficient manner (e. g. iPads, specialized tablets, sensors, equipment controllers). The implementation of secure wireless networks that support this environment will be critical to improved efficiencies the business will be challenged to achieve.

Unified Communications - As we move to a more mobile world with people working away from the traditional office, it will be critical to have communications systems in place that ensure clear, consistent, and more personal communications between all parties. This will be achieved through use of a consistent set of easy to use communication tools that provide voice, video, and text communications between parties both within and outside the company. In addition, these tools will take advantage of the capabilities of the new device being used to relay real-time information in the form of pictures, videos, and telemeetry to staff and systems that can process the information and provide informed feedback to the remote staff.

Virtual Desktop - If we don't augment the current service the Business cannot grow, as planned, new development needs due to physical constraints of the existing offering. In addition, the current architecture is not a sustainable service, presents a single point of failure and high risk from internal attacks. The business should expect longer development times when existing resources begin to fail or current development tools need refresh.

Cloud - The business may lose competitive advantages as they will be limited to existing infrastructure options which lack current-state capabilities, are costly and take a long time to provision relative to hyper scale offerings. While not solely a financial advantage at first, there will be economies at scale. Developer productivity will be constrained in the current environment; agile project approaches will simply not work. IS will be silently encouraging shadow IT start ups via lack of an internal offering and current speed to deliver, which has compliance and other risks.

Applications - Employees and customers will be able to use applications with more functionality in a more intuitive manner through multiple devices. The Jurisdictions and business functions will be able utilize more reliable and resilient applications and leverage their full capability Application upgrades will enable CET to provide customers with more options to interact with the Company.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.200	-24.4%	-732
CapEx Annual Savings		5.1%	0	CapEx Cost	7.342	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	does not apply	6.2%	0	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Medium	10.9%	0.327				

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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 1

Customer & Community Responsiveness	Low	5.3%	0.053	
Employee Satisfaction	Low	4.6%	0.046	
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801	
Jurisdictional Engagement	High	8.2%	1	
<b>Benefit Score:</b>			<b>1.97</b>	<b>Cost Score: -2.69</b>
<b>Overall Priority Score: -0.722</b>				

**Investment Risk and Complexity**

Project Risk Score:	41	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 6
Project Complexity Score:::	16	Project Complexity Score Description:

Key Risks Description: Provide detail on project risks & mitigation strategy:

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4707 - Business Innovation Projects 1

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4707 - Business Innovation Projects 1

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- |   |  |
|---|--|
| <input type="checkbox"/> Enterprise Content Management (ECM)      | <input type="checkbox"/> Enterprise Mobility     |
| <input type="checkbox"/> Comprehensive Integration Services (CIS) | <input type="checkbox"/> Reporting and Analytics |
| <input type="checkbox"/> Hybrid Cloud                             | <input type="checkbox"/> Networks                |

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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 1

Next Gen Workplace

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up April, 2017	<i>Begin</i> Requirements & Deign 0	<i>Begin</i> Development & Implementation 0	<i>Begin</i> User Acceptance Testing 0	<i>Go Live</i> 0	<i>Project Completion</i> March, 2019	<i>Project Closure</i> 0
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**Business Resource Estimates: # of Full Time Equivalents**

Start-up 0	Requirements & Deign 0	Develop & Implement 0	Business Resources UAT 0	Go Live Readiness 0	Post Go Live Support 0
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Resourcing Strategy:


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**Attached Supporting Documents**

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**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	
Business Relationship Manager	Graham Pool	IS Business Relationship Manager	
IS Program Delivery Manager	Tom Cunningham	IS Program Delivery Manager	





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FY18 - Investment Request Summaries - IRSs - Data Security



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: Data Security



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4710	Project Name: <b>Data Security</b>								
Program:	Service Strategy Roadmap									
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS								
Relationship Manager:	Graham Pool	Title: IS Relationship Manager, Global IS								
Prog Delivery Manager:	Tom Cunningham	Title: Head of Programme Delivery, Global IS								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS								
IS Roadmap Category:	IS Assurance	Business Area: Corporate IS			Portfolio: IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: US			
<input type="checkbox"/> Growth Playbook Project?	<input checked="" type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
This Data Security project is based around a move to protect data through information rights management and advanced cyber protection both for our end points but also our cloud services. The thinking is it would be delivered using Microsoft Secure Productive Enterprise Plan E5. Another SAAS based subscription product.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
This projects will provide new services and future projects to build a foundation that will enable or support the Utility of the Future. As customers demand new services, such as smart metering and distributed generation, an investment in our underlying technology infrastructure is needed in order to deliver these strategic programs.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
As we move to any device working in the cloud our focus will change from end points and applications to data and the need to protect the data regardless of where it resides. Here are the related projects:										
<ul style="list-style-type: none"> <li>Data Security / Information Rights Management (SPE)</li> <li>Advanced Threat Analytics (SPE)</li> <li>Cloud App Security (SPE)</li> <li>Windows Advanced Threat Protection (SPE)</li> <li>Advance Compliance Services (SPE)</li> </ul>										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
Project dependencies will be developed as the individual projects start up.										
<b>Basic Project Assumptions:</b>										
This multi-year investment addresses IS health and capability challenges while enabling National Grid's strategic business objectives.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		1.575	1.575	1.575	0.000	0.000	0.000	0.000	0.000	4.725
OpEx		2.250	2.250	2.250	0.000	0.000	0.000	0.000	0.000	6.750
Impact on RTB		0.000	0.144	0.144	0.144	0.144	0.144	0.144	0.144	1.008
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure			Total	
CapEx		0.575		4.150					4.725	
OpEx	0.030	0.050		6.650		0.020			6.750	

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FY18 - Investment Request Summaries - IRSs - Data Security

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	6.750	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	4.725	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	21.333	% -22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>1.73</b>			<b>Cost Score:</b>	<b>-6.08</b>
				<b>Overall Priority Score:</b>	<b>-4.349</b>		

**Investment Risk and Complexity**

Project Risk Score:	39	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 5
Project Complexity Score:	16	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Without these Security improvements we will lose the ability to help employees use applications with more functionality in a more intuitive manner. The Jurisdiction and business functions will not be able to utilize a more reliable and resilient applications that could have helped provide customers with more options when interacting with the Company.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: **4710 - Data Security**

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All

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FY18 - Investment Request Summaries - IRSs - Data Security

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4710 - Data Security

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

- Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
January, 2018				March, 2020		

**Business Resource Estimates: # of Full Time Equivalents**

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	

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FY18 - Investment Request Summaries - IRSs - Data Security

<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



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FY18 - Investment Request Summaries - IRs - Orchestration and Self Service



Planning & Performance Management > FY18 - Investment Request Summaries - IRs:  
 Orchestration and Self Service



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4726	Project Name: <b>Orchestration and Self Service</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS</i>								
IS Roadmap Category:	IS Assurance	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>US</b>			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
The provisioning of Strategic Cloud provider(s) will reduce the number of cloud-hosting environment that will need integration, reducing the overall network, security and service management costs.										
The resulting solution will reduce time to market, cost and complexity for Enterprise Services such as the Strategic Analytics Platform, Mobile Application Development Environment, etc.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
The resulting solution will reduce time to market, cost and complexity for Enterprise Services such as the Strategic Analytics Platform, Mobile Application Development Environment, etc.										
It will also reduce the the time to market for business solutions requiring IaaS and PaaS-based services										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
This project will create the strategy that will build the processes used by these cloud services, along with the ability to self-provision resources.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
A cloud environment is needs to be in place prior to starting this project.										
<b>Basic Project Assumptions:</b>										
We will use our current network/internet as the main connectivity to the cloud – No planned network analysis/upgrades.										
It is assumed that this project will identify and set up contracts/basic services - other projects will use the services when hosted environments are required. Therefore there is no RTB impact, and no capex impact - as nothing is deployed.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
OpEx		0.500	0.750	0.750	0.000	0.000	0.000	0.000	0.000	2.000
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D			D & I		Closure		Total	
CapEx		0.050			0.700				0.750	
OpEx										

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FY18 - Investment Request Summaries - IRSs - Orchestration and Self Service

	0.010	0.050	1.935	0.005	2.000				
<b>Project Benefits - Type I only</b>									
<i>(\$M)</i>	<i>FY 2018</i>	<i>FY 2019</i>	<i>FY 2020</i>	<i>FY 2021</i>	<i>FY 2022</i>	<i>FY 2023</i>	<i>FY 2024</i>	<i>FY 2025</i>	<i>Total</i>
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The business may lose competitive advantages as they will be limited to existing infrastructure options which lack current-state capabilities, are costly and take a long time to provision relative to hyper scale offerings. While not solely a financial advantage at first, there will be economies at scale. Developer productivity will be constrained in the current environment; agile project approaches will simply not work. IS will be silently encouraging shadow IT start ups via lack of an internal offering and current speed to deliver, which has compliance and other risks.

**Investment Prioritization**

<b>Benefits</b>	<i>Impact</i>	<i>Weight</i>	<i>Score</i>	<b>Cost</b>	<i>Impact</i>	<i>Weight</i>	<i>Score</i>
OpEx Annual Savings		10.3%	0	OpEx Cost	2.000	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	0.750	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	Low	11.2%	0.112	Elapse Time Duration	Low	-6.6%	-0.066
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>1.64</b>			<b>Cost Score:</b>	<b>-2.95</b>
				<b>Overall Priority Score:</b>	<b>-1.308</b>		

**Investment Risk and Complexity**

Project Risk Score:	39	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 5
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Now that customers are demanding new services, without this investment in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

IS Projects:

6/14/2017

FY18 - Investment Request Summaries - IRSs - Orchestration and Self Service

**4726 - Orchestration and Self Service**

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

**Business Initiative Dependencies**

**IS Projects: 4726 - Orchestration and Self Service**

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works      Project Relationship:

Related Projects:

Select All Companies     Clear All Companies

Select All Gas             Select All Electric     Select All Gen

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

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**Enabling IS Capabilities** check all that apply

<input type="checkbox"/> Enterprise Content Management (ECM)	<input type="checkbox"/> Enterprise Mobility
<input type="checkbox"/> Comprehensive Integration Services (CIS)	<input type="checkbox"/> Reporting and Analytics
<input checked="" type="checkbox"/> Hybrid Cloud	<input type="checkbox"/> Networks
<input type="checkbox"/> Next Gen Workplace	

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i>	<i>Begin</i>	<i>Begin</i>	<i>Begin</i>			
Start-up	Requirements & Deign	Development & Implementation	User Acceptance Testing	Go Live	Project Completion	Project Closure
January, 2018				March, 2019		

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

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**Attached Supporting Documents**


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**Recommendation Sign-off**

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FY18 - Investment Request Summaries - IRSS - Orchestration and Self Service

<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	





6/14/2017

FY18 - Investment Request Summaries - IRSs - Virtual Desktop - DaaS



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSs:  
 Virtual Desktop - DaaS



nationalgrid		Investment Request Summary - IS US		FISCAL YEAR 2018	
INV ID:	4727	Project Name:	Virtual Desktop - DaaS		
Program:	Service Strategy Roadmap				
Sponsor:	John Gilbert	Title:	Global Head IS Service Delivery, Global IS		
Relationship Manager:	Bill Kearns	Title:	IS Relationship Manager, Global IS		
Prog Delivery Manager:	Dave McCune	Title:	Programme Delivery, Global IS		
Paper Author:	Nicola Pennington / Steve Trezza	Title:	Business Consultant - Corporate IS		
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio:	IS for IS
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?	Region: US		
<p><b>Project Description:</b> The context for the project with background information                      To deploy a Virtual Desktop (DaaS) solution to 20% of the US user estate.</p> <p><b>Project Rationale:</b> Highlight business challenge, capability or process the project addresses                      National Grid has implemented a Virtual Desktop environment (VMware Horizon Air) to replace Legacy Stop gap solutions for IBM offshore applications support users.                      This solution is built on a cloud platform and provides true scalability and predictable costs - and is able to be leveraged for other use cases where appropriate.                      Virtual Desktop allows a user's desktop environment (icons, wallpaper, windows, folders, toolbars, widgets, etc.) to be stored remotely on a server, rather than on a local PC or other client computing device. Therefore can replace the traditional model of providing a device to each user.                      Deploying virtual desktop in place of using local nationalgrid provided laptops/desktops will provide the following benefits over the current solution</p> <ul style="list-style-type: none"> <li>• PC availability is a challenge due to PC Hardware problems</li> <li>• PC allocation and installing applications reduced productivity and increases support cost</li> <li>• Operating system upgrades, applying security patch for every PC is time consuming</li> <li>• Constraints on space i.e. in data centre as is not scalable and devices occupy space within the data centre</li> <li>• Specific users with unique application requirements and application installations will consume additional time for deployment and installations</li> <li>• Moving operating systems and applications inside the data center can create network issues and performance problems</li> <li>• Enterprise should scale-up network bandwidth or deploy WAN Optimization devices to combat latency and performance issues to end users</li> </ul> <p><b>Project Scope:</b> Explain what is in scope and what is not in scope for the project                      The scope of this project is to deploy virtual desktop (VMware) to 20% of the US estate.                      Activities will include:</p> <ul style="list-style-type: none"> <li>• A pilot for Thin Client across appropriate use cases (to include US Contact Centers)</li> <li>• Deployment to US Contact Centers</li> <li>• Deployment to other use cases, as identified during the pilot</li> </ul> <p>Excludes: SCI connections</p> <p><b>Project Dependencies:</b> Identify any core program or project dependencies, please include INVP numbers if known                      There are no dependencies for this project to start R&amp;D phase however INVP 3901 Virtual desktop has to be completed before implementation can start</p> <p><b>Basic Project Assumptions:</b></p> <ul style="list-style-type: none"> <li>- All activities will not be within CSC contract and will require NG input.</li> <li>- RTB will be confirmed during sanction paper/TCO log completion</li> <li>- The estate size is approximately 30,000 devices</li> <li>- 20% of the estate is between 5,000 and 6,000 devices</li> <li>- Start up will decide sanction approach</li> </ul>					

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FY18 - Investment Request Summaries - IRSs - Virtual Desktop - DaaS

### Indicative Project Costs by Fiscal Year

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.550
OpEx		0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100
Impact on RTB		0.250	0.350	0.500	0.000	0.000	0.000	0.000	0.000	1.100

### Indicative Project Costs by Delivery Phase

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.020	0.530		0.550
OpEx	0.015	0.000	0.075	0.010	0.100

### Project Benefits - Type I only

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

#### Key Business Benefits:

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

#### Daas will provide:

- A reduction in cost of new physical PCs. (Current new PC cost is \$448; Thin Client Device cost is \$142)
- A reduction in cost of hardware maintenance as the end point device is a Dumb Terminal, Thin Client Device.
- The ability to offload end point cost or extend the lifecycle of existing PCs.
- Scalability to add more users as needed.

### Investment Prioritization

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.100	-24.4%	-732
CapEx Annual Savings		5.1%	0	CapEx Cost	0.550	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	636.364	% -22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	Low	11.2%	0.112	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Low	10.9%	0.109				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 1.52</b>				<b>Cost Score: -3.86</b>			
<b>Overall Priority Score: -2.339</b>							

### Investment Risk and Complexity

Project Risk Score: Risk Score Description:

6/14/2017

FY18 - Investment Request Summaries - IRSs - Virtual Desktop - DaaS

	39	Impact score - 5, Likelihood score - 5														
Project Complexity Score::	14	Project Complexity Score Description:														
Key Risks Description: Provide detail on project risks & mitigation strategy:																
<p><b>IS Project Dependencies</b> if you don't see a project in the drop-down please contact the Planning &amp; Performance team.</p> <p><b>Benefiting Operating Companies:</b> Check all that apply</p>																
<p><b>IS Projects: 4727 - Virtual Desktop - DaaS</b></p> <p>1. Has a dependency on IS Project;</p> <p>2. Has a dependency on IS Project;</p> <p>3. Has a dependency on IS Project;</p> <p>4. Has a dependency on IS Project;</p> <p>5. Has a dependency on IS Project;</p> <p>6. Has a dependency on IS Project;</p>		<p><input type="checkbox"/> Select All Companies <input type="checkbox"/> Clear All Companies</p> <p><input type="checkbox"/> Select All Gas <input type="checkbox"/> Select All Electric <input type="checkbox"/> Select All Gen</p> <p><input checked="" type="checkbox"/> National Grid USA Parent</p> <p><input checked="" type="checkbox"/> KeySpan Energy Development Corporation</p> <p><input checked="" type="checkbox"/> KeySpan Services Inc.</p> <p><input checked="" type="checkbox"/> KeySpan Energy Corp</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery New York</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island</p> <p><input checked="" type="checkbox"/> KeySpan Generation LLC (PSA)</p> <p><input checked="" type="checkbox"/> KeySpan Glenwood Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> Nantucket Electric Company</p> <p><input checked="" type="checkbox"/> Boston Gas Company</p> <p><input checked="" type="checkbox"/> Colonial Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Power Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Hydro - Trans Corp</p> <p><input checked="" type="checkbox"/> New England Electric Trans Corp</p> <p><input checked="" type="checkbox"/> NG LNG LP Regulated Entity</p>														
<p><b>Business Initiative Dependencies</b></p> <p><b>IS Projects: 4727 - Virtual Desktop - DaaS</b></p> <p>1. Has a dependency on Biz Initiative,</p> <p>2. Has a dependency on Biz Initiative,</p> <p>3. Has a dependency on Biz Initiative,</p> <p>4. Has a dependency on Biz Initiative,</p>																
<p><b>Project Relationships</b></p> <p><input type="checkbox"/> Minor Works Project Relationship:</p> <p>Related Projects:</p>																
<p><b>Enabling IS Capabilities</b> check all that apply</p> <p><input type="checkbox"/> Enterprise Content Management (ECM) <input type="checkbox"/> Enterprise Mobility</p> <p><input type="checkbox"/> Comprehensive Integration Services (CIS) <input type="checkbox"/> Reporting and Analytics</p> <p><input type="checkbox"/> Hybrid Cloud <input type="checkbox"/> Networks</p> <p><input type="checkbox"/> Next Gen Workplace</p>																
<p><b>Key Milestone Dates:</b> Select the 1st, 15th or last day of the month</p> <table border="0"> <tr> <td style="text-align: center;">Begin Start-up</td> <td style="text-align: center;">Begin Requirements &amp; Deign</td> <td style="text-align: center;">Begin Development &amp; Implementation</td> <td style="text-align: center;">Begin User Acceptance Testing</td> <td style="text-align: center;">Go Live</td> <td style="text-align: center;">Project Completion</td> <td style="text-align: center;">Project Closure</td> </tr> <tr> <td style="text-align: center;">June, 2017</td> <td></td> <td></td> <td></td> <td style="text-align: center;">March, 2018</td> <td></td> <td></td> </tr> </table>			Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure	June, 2017				March, 2018		
Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure										
June, 2017				March, 2018												
<p><b>Business Resource Estimates:</b> # of Full Time Equivalents</p> <table border="0"> <tr> <td style="text-align: center;">Start-up</td> <td style="text-align: center;">Requirements &amp; Deign</td> <td style="text-align: center;">Develop &amp; Implement</td> <td style="text-align: center;">Business Resources UAT</td> <td style="text-align: center;">Go Live Readiness</td> <td style="text-align: center;">Post Go Live Support</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </table>			Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support	0	0	0	0	0	0		
Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support											
0	0	0	0	0	0											

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FY18 - Investment Request Summaries - IRSs - Virtual Desktop - DaaS

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Bill Kearns</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Dave McCune</i>	<i>IS Program Delivery Manager</i>	



6/14/2017

FY18 - Investment Request Summaries - IRSs - SCI connections



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: SCI connections



nationalgrid		Investment Request Summary - IS US		FISCAL YEAR 2018	
<b>INV ID:</b>	4495	<b>Project Name:</b>	SCI connections		
<b>Program:</b>	Service Strategy Roadmap				
<b>Sponsor:</b>	John Gilbert	<b>Title:</b>	Global Head IS Service Delivery, Global IS		
<b>Relationship Manager:</b>	Bill Kearns	<b>Title:</b>	IS Relationship Manager, Global IS		
<b>Prog Delivery Manager:</b>	Dave McCune	<b>Title:</b>	Programme Delivery, Global IS		
<b>Paper Author:</b>	Nicola Pennington / Steve Trezza	<b>Title:</b>	Business Consultant - Corporate IS / Service Strategy		
<b>IS Roadmap Category:</b>	IS Assurance	<b>Business Area:</b>	Corporate IS	<b>Portfolio:</b>	IS for IS
<input type="checkbox"/> <b>In-Flight Project?</b>	<b>Invest Classification:</b> Medium	<b>Category:</b>	Policy Driven	<b>Primary Policy Driver:</b>	Reliability
<input type="checkbox"/> <b>Growth Playbook Project?</b>	<input type="checkbox"/> <b>Shaping Our Future Project?</b>	<input type="checkbox"/> <b>Energy Efficiency Project?</b>	<b>Region:</b> Global		
<b>Project Description: The context for the project with background information</b>					
Implementation of infrastructure to enable saas services to take advantage of the verizon SCI connections service, which will provide connectivity to cloud service providers at a lower price point than dedicated MPLS lines.					
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>					
Software as a service applications that will have a high volume of traffic currently have to install their own dedicated network links to support the services. Which come at a cost to install and fixed price to support. Verizon now offer a service to provide dedicated links to services, without the need to install our own infrastructure. This new service has the advantage that they are charged on the basis of volume of data. Meaning that we only pay for the bigger volumes when we use it. For some applications (particularly those which have variable volumes of data this will reduce costs). In order to use this new service we need to ensure that we maintain our required security services on SCI as we would with any dedicated network link. To that end, SCI can utilize most of the existing services in the VSTIG, but may require some additional infrastructure and/or configuration to use the service. This project is to identify and implement any infrastructure and establish configurations to support the deployment of future SCI services. In addition implement service wrap.					
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>					
The project will set up a new service to enable applications to use the Verizon SCI Connections service. In addition will test the service set up by supporting 1 US project through the process. Deliverables include:					
<ul style="list-style-type: none"> <li>The project will purchase and implement any required infrastructure</li> <li>Implementation of required network configuration and traffic routing to support the use of the SCI service.</li> <li>Complete Service Design, Definition and implementation of required Service Wrap. (note it is expected that the SCI connections service will fit under the standard set of VSTIG services as it is a commercial construct of a 3rd party MPLS circuit. For service support NG has some additional obligations under SCI, so the requirements and demarcations of the support model need to be defined.</li> <li>Provision of support to 2 projects to set up service (1 project in each region) - to ensure processes operate correctly.</li> </ul>					
In addition					
DR&S review of the service					
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>					
none					
<b>Basic Project Assumptions:</b>					
The scope of the project does not include the moving of any current saas services onto the new SCI connections. However in order to test the service the project will identify and support 2 projects as they access and set up the service. It is expected in the most part projects will be connect applications as part of a sanctioned project. Where existing services can save money by switching then projects will be brought forward to make the switch.					
This will be run as a regional US only project - however there is a mirror project in the UK - the two projects will work together to ensure that any synergies and economies of scale are realised.					
<b>Indicative Project Costs by Fiscal Year</b>					

6/14/2017

FY18 - Investment Request Summaries - IRSs - SCI connections

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100
OpEx		0.400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.400
Impact on RTB		0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.800

**Indicative Project Costs by Delivery Phase**

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.000	0.000		0.000
OpEx	0.010	0.035	0.070	0.005	0.120

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

Benefits are to enable cost saving opportunities through providing cheaper dedicated network links priced by data volume rather than size of a link.

Remove pressure on VSTIG services from services that create a high volume of data flow across the internet through providing access to dedicated link at reduced cost and quicker set up times.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost			
				Impact	Weight	Score	
OpEx Annual Savings		10.3%	0	OpEx Cost	0.400	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	0.100	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	700.000	% -22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
			<b>Benefit Score: 2.07</b>				<b>Cost Score: -4.79</b>
				<b>Overall Priority Score: -2.721</b>			

**Investment Risk and Complexity**

Project Risk Score:		Risk Score Description:
Project Complexity Score:	14	Project Complexity Score Description:

6/14/2017

FY18 - Investment Request Summaries - IRSs - SCI connections

*Key Risks Description: Provide detail on project risks & mitigation strategy:*

If the SCI service was not deployed, the alternative options of Internet VPN or dedicated MPLS network would need to be deployed. A dedicated MPLS network is most similar in functionality but carries a higher cost and longer lead time to implement.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

**IS Projects: 4495 - SCI connections**

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Business Initiative Dependencies**

**IS Projects: 4495 - SCI connections**

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works

Project Relationship:

Related Projects:

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)     Enterprise Mobility  
 Comprehensive Integration Services (CIS)     Reporting and Analytics  
 Hybrid Cloud     Networks  
 Next Gen Workplace

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i>	<i>Begin</i>	<i>Begin</i>	<i>Begin</i>	<i>Go Live</i>	<i>Project Completion</i>	<i>Project Closure</i>
Start-up	Requirements & Deign	Development & Implementation	User Acceptance Testing			
April, 2017				September, 2017		


**Business Resource Estimates: # of Full Time Equivalents**

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

6/14/2017

FY18 - Investment Request Summaries - IRSs - SCI connections

<b>Attached Supporting Documents</b>			
<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Bill Kearns</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Dave McCune</i>	<i>IS Program Delivery Manager</i>	
			



6/14/2017

FY18 - Investment Request Summaries - IRs - US SAP: Dynamic Storage Tiering



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRs: US  
 SAP: Dynamic Storage Tiering



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4560	Project Name: <b>US SAP: Dynamic Storage Tiering</b>								
Program:										
Sponsor:	Doneen Hobbs and Anuraag Bhargava				Title: VP US Shared Services and SVP US CIO					
Relationship Manager:	Joel Semel				Title: Relationship Manager					
Prog Delivery Manager:	Samir Parikh				Title: Director Portfolio SAP Enterprise					
Paper Author:	Ella Weisbord				Title: Business Consultant					
IS Roadmap Category:	Enterprise SAP			Business Area: <b>US F,SS&amp;C</b>		Portfolio: <b>Other</b>				
<input type="checkbox"/> In-Flight Project?	Invest Classification:	Category: Policy Driven		Primary Policy Driver: Reliability		Region: <b>US</b>				
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?		<input type="checkbox"/> Energy Efficiency Project?							
<p><b>Project Description:</b> The context for the project with background information                      This policy driven project will implement dynamic storage tiering for HANA.</p> <p>The HANA reporting environment is currently constrained, due to infrastructure and licensing agreements, to 2 TB of in-memory storage. This investment is to implement dynamic tiering, which would allow HANA to scale so that it can handle the increasingly growing data volumes from ECC, Powerplan and other source systems. This project will provide options for storing data based on access, frequency of use and cost.</p> <p><b>Project Rationale:</b> Highlight business challenge, capability or process the project addresses                      Support the growth and exploit usage of HANA for real time data access and analytics</p> <p><b>Project Scope:</b> Explain what is in scope and what is not in scope for the project</p> <ul style="list-style-type: none"> <li>• Consideration for combining with Performance Drumbeat and Hosting Strategy</li> <li>• Implement dynamic tiering.</li> <li>• Identify and Move low usage and high volume tables to tiered storage.</li> <li>• Establish a procedure to move to tiered storage and in memory as needed.</li> </ul> <p><b>Project Dependencies:</b> Identify any core program or project dependencies, please include INVP numbers if known                      INVP3924 - US SAP Hosting Strategy</p> <p><b>Basic Project Assumptions:</b></p>										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		1.355								1.355
OpEx		0.464								0.464
Impact on RTB		0.177	0.236	0.236	0.236	0.236				1.121
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up		R & D		D & I		Closure		Total	
CapEx			0.446		0.909				1.355	
OpEx	0.182		0.191				.091		0.464	

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FY18 - Investment Request Summaries - IRs - US SAP: Dynamic Storage Tiering

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

- Optimizing the storage use
- Increase usage of HANA platform for Business Analytics and Reporting
- Performance improvement
- Allowing non-SAP data storage in HANA for cross-functional reporting

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.464	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	1.355	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	121.919	% -22.5%	-2.025
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	High	3.8%	0.342	Dependencies	does not apply	-10.6%	0
Regulatory Impact	Medium	11.2%	0.336	Elapse Time Duration	Low	-6.6%	-0.066
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	does not apply	-14.9%	0
Reliability	High	10.9%	0.981				
Customer & Community Responsiveness	does not apply	5.3%	0				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 2.71</b>				<b>Cost Score: -5.30</b>			
<b>Overall Priority Score: -2.585</b>							

**Investment Risk and Complexity**

Project Risk Score:	38	Risk Score Description: Based on Financial Impact (5) and Likelihood of failure (5)
Project Complexity Score:	19	Project Complexity Score Description: Please see complexity matrix attached

Key Risks Description: Provide detail on project risks & mitigation strategy:  
 Maturity of dynamic storage software

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: **4560 - US SAP: Dynamic Storage Tiering**  
 1. Has a Parallel dependency on IS Project; 3924 - Host Transition

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen

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FY18 - Investment Request Summaries - IRSs - US SAP: Dynamic Storage Tiering

- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4560 - US SAP: Dynamic Storage Tiering

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
Standalone Project

Related Projects:

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up	<i>Begin</i> Requirements & Deign	<i>Begin</i> Development & Implementation	<i>Begin</i> User Acceptance Testing	<i>Go Live</i> July, 2017	<i>Project Completion</i>	<i>Project Closure</i>
January, 2017						

**Business Resource Estimates:** # of Full Time Equivalents

<i>Start-up</i>	<i>Requirements &amp; Deign</i>	<i>Develop &amp; Implement</i>	<i>Business Resources UAT</i>	<i>Go Live Readiness</i>	<i>Post Go Live Support</i>
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

[INVP4560\\_Complexity\\_Matrix.xlsx](#)

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	Doneen Hobbs and Anuraag Bhargava	VP US Shared Services and SVP US CIO	

6/14/2017

FY18 - Investment Request Summaries - IRSs - US SAP: Dynamic Storage Tiering

<i>Business Relationship Manager</i>	<i>Joel Semel</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Samir Parikh</i>	<i>IS Program Delivery Manager</i>	





**US Sanction Paper**

<b>Title:</b>	US Office 365 ICE Replacement	<b>Sanction Paper #:</b>	USSC-17-154
<b>Project #:</b>	INVP 4491	<b>Sanction Type:</b>	Sanction
<b>Operating Company:</b>	National Grid USA Svc. Co.	<b>Date of Request:</b>	April 12, 2017
<b>Author:</b>	Paul Cudby	<b>Sponsor:</b>	John Gilbert, Global Head IS Service Delivery
<b>Utility Service:</b>	IS	<b>Project Manager:</b>	Zakariyya Ahmedabadi

**1 Executive Summary**

**1.1 Sanctioning Summary**

This paper requests sanction of INVP 4491 in the amount \$4.291M with a tolerance of +/- 10% for the purposes of Full implementation

*This sanction amount is \$4.291M broken down into:*

- \$3.316M Capex
- \$0.974M Opex
- \$0.000M Removal

**1.2 Project Summary**

This investment is required to replace the current Instant Messaging, Collaboration, and Email (ICE) services with a set of similar, or enhanced, services provided by Office 365. Office 365 will provide a more effective collaboration and email service (Microsoft Office 365) to meet the business demand for additional capabilities (eg: collaboration with external parties) and provide any enabling infrastructure technology necessary before the ICE service contract expires.

**1.3 Summary of Projects**

Project Number	Project Type (Elec only)	Project Title	Estimate Amount (\$M)
INVP 4491	Project Type	Office 365 US	4.291
<b>Total</b>			<b>4.291</b>

**1.4 Associated Projects**

N/A

**1.5 Prior Sanctioning History**

N/A



**US Sanction Paper**

**1.6 Next Planned Sanction Review**

Date (Month/Year)	Purpose of Sanction Review
Jun 2018	Project closure

**1.7 Category**

Category	Reference to Mandate, Policy, NPV, or Other
<input type="radio"/> Mandatory	The IS Leadership Team have signed off and approved the Global Strategy to implement Office 365 as the preferred solution to replace the current Instant Messaging, Collaboration and Email services
<input checked="" type="radio"/> Policy- Driven	
<input type="radio"/> Justified NPV	
<input type="radio"/> Other	

**1.8 Asset Management Risk Score**

Asset Management Risk Score: 34

**Primary Risk Score Driver:** (Policy Driven Projects Only)

- Reliability       Environment       Health & Safety       Not Policy Driven

**1.9 Complexity Level**

- High Complexity       Medium Complexity       Low Complexity       N/A

Complexity Score: 25

**1.10 Process Hazard Assessment**

A Process Hazard Assessment (PHA) is required for this project:

- Yes       No



**US Sanction Paper**

**1.11 Business Plan**

Business Plan Name & Period	Project included in approved Business Plan?	Over / Under Business Plan	Project Cost relative to approved Business Plan (\$)
IS Investment Plan FY2018-22	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Over <input type="radio"/> Under <input checked="" type="radio"/> NA	\$0.000M

**1.12 If cost is not aligned with approved Business Plan how will this be funded?**

N/A

**1.13 Current Planning Horizon**

\$M	Prior Yrs	Current Planning Horizon						Total
		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6 +	
CapEx	0.000	3.316	0.000	0.000	0.000	0.000	0.000	3.316
OpEx	0.000	0.974	0.000	0.000	0.000	0.000	0.000	0.974
Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CIAC/Reimbursement	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.000	4.291	0.000	0.000	0.000	0.000	0.000	4.291

**1.14 Key Milestones**

Milestone	Target Date: (Month/Year)
Start Up	Jan 2017
Begin Requirements and Design	Apr 2017
Full Sanction	Apr 2017
Begin Development and Implementation	Aug 2017
Move to Production / Last Go Live	Mar 2018
Project Complete	Apr 2018
Project Closure Sanction	Jun 2018





**US Sanction Paper**

**1.15 Resources, Operations and Procurement**

Resource Sourcing			
Engineering & Design Resources to be provided	<input checked="" type="checkbox"/> Internal	<input checked="" type="checkbox"/> Contractor	
Construction/Implementation Resources to be provided	<input checked="" type="checkbox"/> Internal	<input checked="" type="checkbox"/> Contractor	
Resource Delivery			
Availability of internal resources to deliver project:	<input type="radio"/> Red	<input type="radio"/> Amber	<input checked="" type="radio"/> Green
Availability of external resources to deliver project:	<input type="radio"/> Red	<input type="radio"/> Amber	<input checked="" type="radio"/> Green
Operational Impact			
Outage impact on network system:	<input type="radio"/> Red	<input type="radio"/> Amber	<input checked="" type="radio"/> Green
Procurement Impact			
Procurement impact on network system:	<input type="radio"/> Red	<input type="radio"/> Amber	<input checked="" type="radio"/> Green

**1.16 Key Issues (include mitigation of Red or Amber Resources)**

1	Network Infrastructure - VStig upgrade needs to deliver required bandwidth capacity including the upgrade of existing Proxy servers
2	Microsoft Enterprise License Agreement need to be renewed in time to prevent delays to delivery timelines
3	Transformation of users from XP to Windows 7

**1.17 Climate Change**

Contribution to National Grid's 2050 80% emissions reduction target:	<input checked="" type="radio"/> Neutral	<input type="radio"/> Positive	<input type="radio"/> Negative
Impact on adaptability of network for future climate change:	<input checked="" type="radio"/> Neutral	<input type="radio"/> Positive	<input type="radio"/> Negative

**1.18 List References**

N/A





**US Sanction Paper**

**2 Decisions**

The US Sanctioning Committee (USSC) at a meeting held on April 12, 2017:

- (a) APPROVED this paper and the investment of \$4.291M and a tolerance of +/-10%.
- (b) NOTED the RTB reduction of \$0.857M (per annum) for 5 years.
- (c) NOTED that Zakarry Ahmedabadi has the approved financial delegation.

Signature.....Date.....

**Christopher Kelly**  
**Senior Vice President, Electric Process & Engineering**  
**US Sanctioning Committee Co – Chair Person**



**US Sanction Paper**

**3 Sanction Paper Detail**

<b>Title:</b>	US Office 365 ICE Replacement	<b>Sanction Paper #:</b>	USSC-17-154
<b>Project #:</b>	INVP 4491	<b>Sanction Type:</b>	Sanction
<b>Operating Company:</b>	National Grid USA Svc. Co.	<b>Date of Request:</b>	April 12, 2017
<b>Author:</b>	Paul Cudby	<b>Sponsor:</b>	John Gilbert, Global Head IS Service Delivery
<b>Utility Service:</b>	IS	<b>Project Manager:</b>	Zakariyya Ahmedabadi

**3.1 Background**

The way we work internally and interact with our external customers and partners is changing and is driving new requirements for improved collaboration, mobility and user experience.

The current ICE platform cannot support the business demand due to limitations in the current functionality and the inability of the current service to be upgraded. A few of the issues are:

- High risk threats to the service from capacity pressure. On average, an additional 1.5TB to 2TBs of data are being added each month, resulting in us nearing our storage capacity and needing to implement new storage to cope with demand.
- These uplifts in storage as required result in additional effort risk and cost
- The EMC (N.B. this is the branded name of the storage) hardware storage supporting the current service is at end of operational life support from the manufacturer (Dell)
- ICE cannot integrate with Cloud services in an efficient manner. For example, Integrations with Salesforce, EFSS (Enterprise File Sync and Share), success factors, etc.

The existing ICE contract expired in October 2016. It has been extended for another 26 months with an early exit clause. The contract could be extended further if required, but the existing service does not deliver to the business the required capabilities listed below.

- Reliability of the service
- Demand for improved collaboration (including external collaboration)
- Greater mobile device capability
- Enhanced storage capability
- Promoting the "Anytime, Anywhere" working model

The current plan is to gradually move away from ICE by the end of December 2017.

## **US Sanction Paper**

### **3.2 Drivers**

The business drivers for this investment are:

- To ensure the ongoing reliable delivery of the service, as there are issues with the existing service in place
- To meet business demand for improved collaboration (including external collaboration requirements), mobile device capability and "Anytime, Anywhere" working model.

Whilst it is not the main reason for delivering this project, it should be noted that the successful completion and implementation will also deliver a reduction in RTB.

### **3.3 Project Description**

This project will include two key areas of work :

1. Refresh the requirements / gap analysis against Office 365
2. Implementation of Office 365 and migrate users off ICE

This investment will deliver:

- Establish platform and foundation services, for example, ADFS (Active directory Federation Service) and co-existence with ICE
- Implementation of Office 365 capabilities including Exchange, SharePoint Online and Skype for Business (to replace MS Lync on an Instant Messaging basis) and other identified services.
- Migration of all US users and services

## **In Scope**

### Office 2010 assessment

- Office 2010 upgrade assessment in scope – Implementation of the upgrade is dependent on the outcome of the assessment

### Collaboration and social

- Migrate UK SharePoint 2010 sites to SharePoint Online
- Provide ability for external collaboration with Partners and Suppliers
- Provide ability to access SharePoint sites on mobile devices
- Improved user experience using latest versions of office online

### Email and Calendar

- Migrate US Mailboxes and Calendar
- Assessment of pst and archive files during detailed design phase and plan for migration
- Improve/enhance Webmail experience (Exchange Online)
- Increased mail box sizes

## ***US Sanction Paper***

- Provide ability to access emails on Mobile devices. (Windows Phones, iOS, and other Android devices )

### External Instant Messaging

- Migrate As-Is features of Lync
- Provide ability to use new web version of Skype for Business instead of the current Lync thick client

### Cloud storage

Ability to use One Drive– Private cloud storage that can be accessed from any where

### Training and Adoption

Adoption requires much more than communication and training. A business change management approach will be run to ensure:

#### Awareness

- of the need for change
- of the nature of the change

#### Desire

- To support the change
- To Participate and engage

#### Knowledge

- On how to change
- On how to implement new skills and behaviours

#### Ability

- To implement the change
- To demonstrate performance

#### Reinforcement

- To sustain the change
- To build a culture and competence around change to business processes and use of office 365 capabilities

### Operational Support and Monitoring

Delivery of a full support model of the Office 365 services and provide administrative controls, Monitoring and Reporting

### Security and Mobile Data Management

Delivery of the capabilities in line with the National Grid DR&S security principles and industry best practice

N.B. The migration scope can be found in the [Appendices](#) section



## **US Sanction Paper**

### **3.4 Benefits Summary**

The project is expected to deliver the following benefits:

#### Saving in RTB:

- The successful completion and delivery of this project will result in a reduction in RTB

#### Reliable service provided:

- Enhanced storage capability – Office 365 uses cloud based storage, giving ability to share large files securely, benefitting email and SharePoint services
- Network File Share – E3 licence option gives potential to unlimited storage, increasing collaboration
- Archiving solution – Global information records management (GIRM) has requirements to archive the information as per data protection act and regulations. Office 365 E3 licences provide user friendly and common solution for archiving

#### New service will provide new capabilities:

- Mobility – Office 365 is designed to support mobility whether by smartphone, tablet or PC
- External collaboration – Office 365 is designed to support external collaboration across all services. This could be supporting instant messaging with our stakeholders, making data in SharePoint available to Joint Venture partners, or collaborating with partners
- Social collaboration – The social collaboration features of Office 365 ensure employees feel more involved leading to improvements in employee engagement
- Agile Task Management – Office 365 has an inbuilt Planner service which eliminates the need to purchase an Agile task Management solution (e.g. Trello)
- Power BI (Business Intelligence) – Opportunity for future savings by exploiting Power BI as a potential strategic reporting tool
- Future Desktop Office Upgrades – E3 licences come with Pro Plus, helping mitigate future upgrade costs of Office 2010
- Potential for future capabilities – Office 365 has many additional features which can be implemented to add further value as required

### **3.5 Business and Customer Issues**

None identified at this stage



## **US Sanction Paper**

### **3.6 Alternatives**

**Alternative 1: Do Nothing** - Practically, there is no do nothing option, the current contract is due to expire at the end of 2018. The current service does not deliver required capabilities, and the infrastructure is set to fail due to capacity issues. DR&S need new functionality on the anti-virus defences entailing a move away from current technology. Rejected

**Alternative 2: Replace ICE with Office 365 (All E1 licences)** - This option does not align with all business needs and will at some point in near future require to upgrade to E3 licences. Despite the E1 licences being initially cheaper than E3 licences, E1 licence option would entail buying off the shelf solutions for Data Loss Prevention (DLP), Archiving, E-Discovery, etc. Future projects to upgrade Office would also be costlier with E1 option. Rejected

**Alternative 3: Replace ICE with Cloud other than Office 365** - Comparable solutions from competitors are not a significant differentiator. However, user adoption and training, migration and magnitude of the change including co-existence will likely be more costly and complex, due to moving to a new technology stack. It will be time consuming and NG will incur high costs both due to maintenance of current aged infrastructure and due to lengthy prospective implementation. Rejected

### **3.7 Safety, Environmental and Project Planning Issues**

None at this stage



**US Sanction Paper**

**3.8 Execution Risk Appraisal**

Number	Detailed Description of Risk / Opportunity	Probability	Impact		Score		Strategy	Pre-Trigger Mitigation Plan	Residual Risk	Post Trigger Mitigation Plan
			Cost	Schedule	Cost	Schedule				
1	There is a risk of technical or cost limitations based on the discovery phase output of the following services: <ul style="list-style-type: none"> <li>Office 2010 upgrade to Office 2016/Pro-plus</li> <li>All other public shared drives</li> <li>Personal folders (if applicable) to Onedrive</li> <li>Legacy Sharepoint migration (2007/03)</li> <li>Access/Connectivity of any part of the business that is run from offshore</li> </ul>	3	4	4	12	12	Mitigate	Risk margin allowance included within this sanction based on high level assumptions prior to output of discovery phase. Upon discovery assessment output proposal to be presented to Project Board. If cost or schedule impact of including these initiatives are considerable then a follow on phase to the project or re-sanction to cover funding will need to be considered.		
2	There is a risk that D&I phase might be more complex and/or there is a change in requirements causing project schedule slippage	3	2	2	6	6	Mitigate	Risk Margin to cover any additional engagement		
3	Active Directory Infrastructure project changes – risk of rework and impact to end users	3	3	2	9	6	Mitigate	Close working between Active Directory and Office 365 projects to ensure a robust business change plan		
4	There is a potential risk that additional bandwidth is required as more Office 365 features/services are introduced	3	2	3	6	9	Mitigate	Network performance reports and validation of network design Staging and phasing the networking upgrade approach during discovery phase. Office 365 project will also be working closely with VStig upgrade plans/project.		
5	A risk that external dependencies could impact on overall migration timescales.	3	1	2	6	6	Accept	The full migration will have dependencies on various external projects and business critical periods/change freeze – e.g. bandwidth increase, BAU patching of clients, year/month end. These will be identified in at the start of the R&D phase and work with the business/projects to identify completion dates and incorporate into plan		
6	Business Maturity for handling the change.	3	1	1	6	6	Accept	Business Change and adoption management workshops will be run across the business		

**3.9 Permitting**

N/A

**3.10 Investment Recovery**

**3.10.1 Investment Recovery and Regulatory Implications**

Recovery will occur at the time of the next rate case for any operating company receiving allocations of these costs.

**3.10.2 Customer Impact**

N/A

**3.10.3 CIAC / Reimbursement**

N/A



**US Sanction Paper**

**3.11 Financial Impact to National Grid**

**3.11.1 Cost Summary Table**

Project Number	Project Title	Project Estimate Level (%)	Spend (\$M)	Prior Yrs	Current Planning Horizon						Total	
					Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6 +		
INVP 4491	Office 365 US	Est Lvl (e.g. +/- 10%)	CapEx	0.000	3.316	0.000	0.000	0.000	0.000	0.000	0.000	3.316
			OpEx	0.000	0.974	0.000	0.000	0.000	0.000	0.000	0.000	0.974
			Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
			Total	0.000	4.291	0.000	0.000	0.000	0.000	0.000	0.000	4.291
Total Project Sanction			CapEx	0.000	3.316	0.000	0.000	0.000	0.000	0.000	3.316	
			OpEx	0.000	0.974	0.000	0.000	0.000	0.000	0.000	0.974	
			Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
			Total	0.000	4.291	0.000	0.000	0.000	0.000	0.000	4.291	

**3.11.2 Project Budget Summary Table**

**Project Costs per Business Plan**

\$M	Prior Yrs (Actual)	Current Planning Horizon						Total
		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6 +	
CapEx	0.000	3.316	0.000	0.000	0.000	0.000	0.000	3.316
OpEx	0.000	0.974	0.000	0.000	0.000	0.000	0.000	0.974
Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Cost in Bus. Plan	0.000	4.291	0.000	0.000	0.000	0.000	0.000	4.291

**Variance (Business Plan-Project Estimate)**

\$M	Prior Yrs (Actual)	Current Planning Horizon						Total
		Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Yr. 6 +	
CapEx	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OpEx	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Cost in Bus. Plan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**3.11.3 Cost Assumptions**

- This estimate was developed in 2017 using the standard IS estimating methodology; the accuracy level of estimate is identified in table 3.11.1
- Office 365 implementation will complete before ICE contract expiry in Dec 2018. There will be cost implications if that doesn't happen. Cost implications are unknown at the moment.
- Commercial approach is that the suppliers and partners are engaged on fixed cost basis

**3.11.4 Net Present Value / Cost Benefit Analysis**

**3.11.4.1 NPV Summary Table**

N/A





**US Sanction Paper**

**3.11.4.2 NPV Assumptions and Calculations**

**3.11.5 Additional Impacts**

N/A

**3.12 Statements of Support**

**3.12.1 Supporters**

The supporters listed have aligned their part of the business to support the project.

Role	Individual's Name
Business Executive Sponsor	John Gilbert
Head of PDM	Tom Cunningham
Relationship Manager	Graham Pool
Program Delivery Manager	Lee Denny
IS Finance Management	Chip Benson
IS Regulatory	Dan DeMauro
DR&S	Elaine Wilson
Service Delivery	Brian Detota
Enterprise Architecture	Joe Clinchot

**3.12.2 Reviewers**

The reviewers have provided feedback on the content/language of the paper.

Function	Individual	Area
Regulatory	Zschokke, Peter	All
Jurisdictional Delegate(s)	Harbaugh, Mark	Electric - NY
	Anand, Sonny	Electric - NE
	Hill, Terron	FERC
	Brown, Laurie	Gas - NY
	Currie, John	Gas - NE
Procurement	Curran, Art	All



**US Sanction Paper**

**4 Appendices**

**4.1 Sanction Request Breakdown by Project**

N/A

**4.2 Other Appendices**

**4.2.1 Project Cost Breakdown**

Project Cost Breakdown			
Cost Category	sub-category	\$ (millions)	Name of Firm(s) providing
Personnel	NG Resources	1.489	
	SDC Time & Materials	-	
	SDC Fixed-Price	-	
	All other personnel	-	
	<b>TOTAL Personnel Costs</b>	<b>1.489</b>	
Hardware	Purchase	-	
	Lease	-	
Software		0.129	
Risk Margin		0.488	
Other		2.186	
<b>TOTAL Costs</b>		<b>4.291</b>	

**4.2.2 Benefitting Operating Companies**

This project will benefit all the companies listed below.

Operating Company Name	Business Area	State
Niagara Mohawk Power Corp.- Electric Distr.	Electric Distribution	NY
Massachusetts Electric Company	Electric Distribution	MA
KeySpan Energy Delivery New York	Gas Distribution	NY
KeySpan Energy Delivery Long Island	Gas Distribution	NY
Boston Gas Company	Gas Distribution	MA
Narragansett Electric Company	Electric Distribution	RI
Niagara Mohawk Power Corp. - Transmission	Transmission	NY
Niagara Mohawk Power Corp. - Gas	Gas Distribution	NY
New England Power Company – Transmission	Transmission	MA, NH, RI, VT
KeySpan Generation LLC (PSA)	Generation	NY
Narragansett Gas Company	Gas Distribution	RI
Colonial Gas Company	Gas Distribution	MA



**US Sanction Paper**

<b>Operating Company Name</b>	<b>Business Area</b>	<b>State</b>
Narragansett Electric Company – Transmission	Transmission	RI
National Grid USA Parent	Parent	
Nantucket Electric Company	Electric Distribution	MA
NE Hydro - Trans Electric Co.	Inter Connector	MA, NH
New England Hydro Finance Company Inc.	Inter Connector	MA, NH
KeySpan Energy Development Corporation	Non-Regulated	NY
KeySpan Port Jefferson Energy Center	Generation	NY
New England Hydro - Trans Corp.	Inter Connector	MA, NH
KeySpan Services Inc.	Service Company	
KeySpan Glenwood Energy Center	Generation	NY
Massachusetts Electric Company – Transmission	Transmission	MA
NG LNG LP Regulated Entity	Gas Distribution	MA, NY, RI
Transgas Inc	Non-Regulated	NY
Keyspan Energy Trading Services	Other	NY
KeySpan Energy Corp.	Service Company	
New England Electric Trans Corp	Inter Connector	MA



**US Sanction Paper**

**4.2.3 IS Ongoing Operational Costs**

Summary Analysis of RTB Costs							
All figures in \$ millions	Yr. 1 17/18	Yr. 2 18/19	Yr. 3 19/20	Yr. 4 20/21	Yr. 5 21/22	Yr. 6+	Total
<b>Forecast of RTB Impact</b>							
RTB if Status Quo Continues	3.892	3.892	3.892	3.892	3.892	3.989	23.447
RTB if Project is Implemented	5.451	2.595	2.376	2.376	2.376	2.435	17.609
<b>Net change in RTB</b>	<b>1.559</b>	<b>(1.297)</b>	<b>(1.516)</b>	<b>(1.516)</b>	<b>(1.516)</b>	<b>(1.553)</b>	<b>(5.838)</b>
<b>RTB Variance Analysis (if Project is Implemented)</b>							
Net Δ RTB funded by Plan(s)	-	-	-	-	-	-	-
Variance to Plan	1.559	(1.297)	(1.516)	(1.516)	(1.516)	(1.553)	(5.838)
<b>Total RTB Costs - by Cost Type (if Project is Implemented)</b>							
App.Sup. - SDC 1	0.240	-	-	-	-	-	0.240
App.Sup. - SDC 2	-	-	-	-	-	-	-
App.Sup. - other	-	-	-	-	-	-	-
SW maintenance	3.121	0.117	-	-	-	-	3.238
SaaS	-	-	-	-	-	-	-
HW support	-	-	-	-	-	-	-
Other: IS	2.089	2.478	2.376	2.376	2.376	2.435	14.131
<b>All IS-related RTB (sub-Total)</b>	<b>5.451</b>	<b>2.595</b>	<b>2.376</b>	<b>2.376</b>	<b>2.376</b>	<b>2.435</b>	<b>17.609</b>
<b>Business Support (sub-Total)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total RTB Costs</b>	<b>5.451</b>	<b>2.595</b>	<b>2.376</b>	<b>2.376</b>	<b>2.376</b>	<b>2.435</b>	<b>17.609</b>

Note: U.S. Policy dictates that RTB Variance = forecasted Net Δ RTB - Net Δ RTB funded by Investment Plan

**4.3 NPV Summary**

N/A

**4.4 Customer Outreach Plan**

N/A

**4.5 Migration scope for US**

Following is the migration scope for US. Further assessment would be done to determine the metrics of in scope services.

Category	Service	Scope	Action
ICE Platform	Email	Personal folders	Migrate
		Shared mailboxes	Migrate
		US Mailboxes	- Archive non-active Employee mailboxes



**US Sanction Paper**

			- Migrate active user mailboxes
		PST Archives	Assessment and recommendation on how to migrate user PST archives
		Legal Holds	Migrate legal holds and implement legal hold solution
		SMTP Relays	Continued operation of existing SMTP relays
	SharePoint 2010	Site collections	- Retain Information architecture - Migrate of all site collections
	Lync	All NG Users	- Migrate to 'Skype For business' - Continued hybrid operations
Legacy SharePoint	CNI Sites	Custom applications <sup>1</sup>	Migrate (Assumption) or redevelopment of all applications
	SP Sites	CNI Site collections <sup>2</sup>	Migrate
Custom App SharePoint 2013	Custom SharePoint solution		Potentially Migrate (if kept on premise) or Redevelopment

**1** Full analysis not provided – assume an analysis and redevelopment of each application either to SharePoint on Premise (hybrid) or redevelopment using the new app model

**2** CNI Data may potentially remain on premise due to our security policies

Assess and propose delivery/migration strategy of the following services:

- Office 2010 upgrade to Office 2016/Pro-plus
- All other public shared drives
- Personal folders (if applicable) to Onedrive
- Legacy Sharepoint migration (2007/03)
- Any part of the business that is run from offshore

Implementation of Office 365 will be phased as follows:

1. Core Online – enabling online services (i.e Sharepoint Online) expected to be delivered early on to pilot users
2. Core Hybrid - timescales to be determined as per business readiness plans
3. Deployment Phase - timescales to be determined as per business readiness plans

Each phase will bring in more capabilities of Office 365 while offloading users from ICE.



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FY18 - Investment Request Summaries - IRSs - Data Visualisation Expansion



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: Data Visualisation Expansion



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4606	Project Name: <b>Data Visualisation Expansion</b>								
Program:	<b>Growth Playbook Roadmap</b>									
Sponsor:	Rory Abbazio	Title: IT director								
Relationship Manager:	Graham Pool	Title: Corporate IS relationship manager								
Prog Delivery Manager:	Tom Cunningham	Title: Head of program delivery (Corporate IS)								
Paper Author:	Nicola Pennington / Steve Trezza	Title: IS Business Consultant (Global IS)								
IS Roadmap Category:	Integration Services	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>US</b>			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
Expanding use of tableau across more use cases across business area. Identifying requirements for reporting, configuring and building reports.										
Supports National Grid in fulfilling its reporting and data retention regulatory obligations.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
Improving efficiencies to reduce operational costs is a constant challenge. Providing Data, Visualisations and analytics can provide invaluable insights for both operational and strategic decision making in how we use our resources. Creating the ability to discover hidden savings potential by visualising consumption data of many different resources.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
Platform/Interface – enables the capability to visualize behaviors and investigate anomalies in real time. Provides representation of data flows across the business network (real-time and historically), internally and externally, between all machines and users. Visually represents events leading up to and during an anomaly and contextually expose factors that are out of the ordinary.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
There are no dependencies required for this project to start.										
<b>Basic Project Assumptions:</b>										
Project RTB to be analysed										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		1.000	1.800	0.000	0.000	0.000	0.000	0.000	0.000	2.800
OpEx		0.100	0.150	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Impact on RTB		0.400	0.640	0.640	0.640	0.640	0.640	0.640	0.640	4.880
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure			Total	
CapEx		1.000		1.800					2.800	
OpEx	0.050	0.030		0.150		0.02			0.250	

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FY18 - Investment Request Summaries - IRSs - Data Visualisation Expansion

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this project on the Customer are based on a number of areas:

- Improves reliability and productivity
- Support Jurisdictional and business function initiatives
- Enables a better Customer Experience

Employees will be able to use an application with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

The project will provide productivity benefits and potential operational savings for the business areas that the tools are deployed to in two ways:

- through the removal of the manual effort currently deployed to create reports required
- through improved access to data and improved reporting capabilities

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score	
OpEx Annual Savings		10.3%	0	OpEx Cost	0.250	-24.4%	-732	
CapEx Annual Savings		5.1%	0	CapEx Cost	2.800	-11.2%	-1	
Revenue Generation (annual)		6.2%	0	RTB Efficiency	160.000 %	-22.5%	-2.025	
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0	
Soft Financial Benefits	High	3.8%	0.342	Dependencies	does not apply	-10.6%	0	
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	does not apply	-6.6%	0	
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	does not apply	-14.9%	0	
Reliability	does not apply	10.9%	0					
Customer & Community Responsiveness	does not apply	5.3%	0					
Employee Satisfaction	High	4.6%	0.414					
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267					
Jurisdictional Engagement	does not apply	8.2%	0					
			<b>Benefit Score: 1.09</b>				<b>Cost Score: -3.77</b>	
				<b>Overall Priority Score: -2.68</b>				

**Investment Risk and Complexity**

Project Risk Score:	39	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 5
Project Complexity Score::	16	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

Now that customers are demanding new services, without this investment in our underlying technology infrastructure, we cannot deliver these new strategic programs.

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FY18 - Investment Request Summaries - IRSs - Data Visualisation Expansion

<b>IS Project Dependencies</b> <small>if you don't see a project in the drop-down please contact the Planning &amp; Performance team.</small>		<b>Benefiting Operating Companies:</b> <small>Check all that apply</small>				
<b>IS Projects: 4606 - Data Visualisation Expansion</b> 1. Has a Downstream dependency on IS Project; 4464 Data Visualisation 2. Has a dependency on IS Project; 3. Has a dependency on IS Project; 4. Has a dependency on IS Project; 5. Has a dependency on IS Project; 6. Has a dependency on IS Project;		<input type="checkbox"/> Select All Companies <input type="checkbox"/> Clear All Companies <input type="checkbox"/> Select All Gas <input type="checkbox"/> Select All Electric <input type="checkbox"/> Select All Gen <input checked="" type="checkbox"/> National Grid USA Parent <input checked="" type="checkbox"/> KeySpan Energy Development Corporation <input checked="" type="checkbox"/> KeySpan Services Inc. <input checked="" type="checkbox"/> KeySpan Energy Corp <input checked="" type="checkbox"/> KeySpan Energy Delivery New York <input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island <input checked="" type="checkbox"/> KeySpan Generation LLC (PSA) <input checked="" type="checkbox"/> KeySpan Glenwood Energy Center <input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center <input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC <input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution <input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas <input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission <input checked="" type="checkbox"/> Massachusetts Electric Company <input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission <input checked="" type="checkbox"/> Nantucket Electric Company <input checked="" type="checkbox"/> Boston Gas Company <input checked="" type="checkbox"/> Colonial Gas Company <input checked="" type="checkbox"/> Narragansett Gas Company <input checked="" type="checkbox"/> Narragansett Electric Company <input checked="" type="checkbox"/> Narragansett Electric Company - Transmission <input checked="" type="checkbox"/> New England Power Company - Transmission <input checked="" type="checkbox"/> New England Hydro - Trans Corp <input checked="" type="checkbox"/> New England Electric Trans Corp <input checked="" type="checkbox"/> NG LNG LP Regulated Entity				
<b>Business Initiative Dependencies</b> <b>IS Projects: 4606 - Data Visualisation Expansion</b> 1. Has a dependency on Biz Initiative, 2. Has a dependency on Biz Initiative, 3. Has a dependency on Biz Initiative, 4. Has a dependency on Biz Initiative,						
<b>Project Relationships</b> <input type="checkbox"/> Minor Works    Project Relationship: Related Projects:						
<b>Enabling IS Capabilities</b> <small>check all that apply</small>						
<input type="checkbox"/> Enterprise Content Management (ECM) <input type="checkbox"/> Enterprise Mobility <input type="checkbox"/> Comprehensive Integration Services (CIS) <input checked="" type="checkbox"/> Reporting and Analytics <input type="checkbox"/> Hybrid Cloud <input type="checkbox"/> Networks <input type="checkbox"/> Next Gen Workplace						
<b>Key Milestone Dates:</b> <small>Select the 1st, 15th or last day of the month</small>						
Begin Start-up March, 2017	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion March, 2018	Project Closure
<b>Business Resource Estimates: # of Full Time Equivalents</b>						
Start-up 0	Requirements & Deign 0	Develop & Implement 0	Business Resources UAT 0	Go Live Readiness 0	Post Go Live Support 0	
Resourcing Strategy:						
<b>Attached Supporting Documents</b>						



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FY18 - Investment Request Summaries - IRSs - Data Visualisation Expansion

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>Rory Abbazio</i>	<i>IT director</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



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FY18 - Investment Request Summaries - IRSs - US SAP: Business Warehouse (BW) Consolidation...



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: US SAP: Business Warehouse (BW) Consolidation to HANA Enterprise Cloud (HEC).



**nationalgrid**
**Investment Request Summary - IS US**
**FISCAL YEAR 2018**

**INV ID:** 4562    **Project Name:** *US SAP: Business Warehouse (BW) Consolidation to HANA Enterprise Cloud (HEC).*

**Program:**

<b>Sponsor:</b> Doneen Hobbs	<b>Title:</b> VP US Shared Services
<b>Relationship Manager:</b> Joel Semel	<b>Title:</b> Relationship Manager
<b>Prog Delivery Manager:</b> Samir Parikh	<b>Title:</b> Director, Portfolio SAP Enterprise
<b>Paper Author:</b> Ella Weisbord	<b>Title:</b> Business Consultant

**IS Roadmap Category:** Enterprise SAP    **Business Area:** US F,SS&C    **Portfolio:** Other

**In-Flight Project?**    **Invest Classification:** Medium    **Category:** Policy Driven    **Primary Policy Driver:** Reliability    **Region:** US

**Growth Playbook Project?**     **Shaping Our Future Project?**     **Energy Efficiency Project?**

**Project Description:** *The context for the project with background information*  
 This investment is to provide funding to consolidate National Grid Business Intelligence (BI) / Business Warehouse (BW) to HANA Enterprise Cloud (HEC).

**Project Rationale:** *Highlight business challenge, capability or process the project addresses*  
 This project support Strategy Alignment by delivering

- Reporting Platform Consolidation
- Maintenance Cost Reduction
- Reporting Infrastructure Enhancement

**Project Scope:** *Explain what is in scope and what is not in scope for the project*

- Migrate the T-Systems SAP BW 7.31 SP10 to HEC SAP HANA SP11/BW 7.4
  - Success Enterprise
  - Front Office (FO) - Native HANA
  - Non Utility Billing (NUB)- BW
  - Payroll - Native HANA
  - Employee Actions and Employee Master Data - Native HANA/BW
  - Supply Chain Management (SCM) - Native HANA
  - Maximo - Native HANA
  - Storms - Native HANA
- Decommission BW / Oracle
- Consolidate reporting onto one instance

**Project Dependencies:** *Identify any core program or project dependencies, please include INVP numbers if known*

**Basic Project Assumptions:**

**Indicative Project Costs by Fiscal Year**

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		2.366								2.366
OpEx		0.810								0.810
Impact on RTB		0.011	0.043	0.043	0.043	0.043				0.183

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FY18 - Investment Request Summaries - IRSs - US SAP: Business Warehouse (BW) Consolidation...

### Indicative Project Costs by Delivery Phase

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.778	1.588		2.366
OpEx	0.318	0.333		.159	0.810

### Project Benefits - Type I only

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

#### Key Business Benefits:

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy. Consolidate the reporting solutions onto a single platform to reduce BAU costs including infrastructure hosting and application support costs. Simplify the reporting solution for the business users. Increase cross functional reporting capabilities.

### Investment Prioritization

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.810	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	2.366	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	12.722	% -22.5%	-6.75
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	Medium	11.2%	0.336	Elapse Time Duration	Low	-6.6%	-0.066
Process & Personal Safety	Low	19.4%	0.194	Change Management Effort	Low	-14.9%	-0.149
Reliability	High	10.9%	0.981				
Customer & Community Responsiveness	does not apply	5.3%	0				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	Low=1 to 15	8.9%	0.089				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>2.51</b>			<b>Cost Score:</b>	<b>-4.41</b>
				<b>Overall Priority Score:</b>	<b>-1.898</b>		

### Investment Risk and Complexity

Project Risk Score:	36	Risk Score Description: Based on financial impact (4) and likelihood (6)
Project Complexity Score::	17	Project Complexity Score Description: Please see attached complexity matrix


Key Risks Description: Provide detail on project risks & mitigation strategy:

<p><b>IS Project Dependencies</b> if you don't see a project in the drop-down please contact the Planning &amp; Performance team.</p>		<p><b>Benefiting Operating Companies:</b> Check all that apply</p>															
<p><b>IS Projects:</b> 4562 - US SAP: Business Warehouse (BW) Consolidation to HANA Enterprise Cloud (HEC).</p> <p>1. Has a dependency on IS Project;</p> <p>2. Has a dependency on IS Project;</p> <p>3. Has a dependency on IS Project;</p> <p>4. Has a dependency on IS Project;</p> <p>5. Has a dependency on IS Project;</p> <p>6. Has a dependency on IS Project;</p>		<p><input type="checkbox"/> Select All Companies <input type="checkbox"/> Clear All Companies</p> <p><input type="checkbox"/> Select All Gas <input type="checkbox"/> Select All Electric <input type="checkbox"/> Select All Gen</p> <p><input checked="" type="checkbox"/> National Grid USA Parent</p> <p><input checked="" type="checkbox"/> KeySpan Energy Development Corporation</p> <p><input checked="" type="checkbox"/> KeySpan Services Inc.</p> <p><input checked="" type="checkbox"/> KeySpan Energy Corp</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery New York</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island</p> <p><input checked="" type="checkbox"/> KeySpan Generation LLC (PSA)</p> <p><input checked="" type="checkbox"/> KeySpan Glenwood Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> Nantucket Electric Company</p> <p><input checked="" type="checkbox"/> Boston Gas Company</p> <p><input checked="" type="checkbox"/> Colonial Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Power Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Hydro - Trans Corp</p> <p><input checked="" type="checkbox"/> New England Electric Trans Corp</p> <p><input checked="" type="checkbox"/> NG LNG LP Regulated Entity</p>															
<p><b>Business Initiative Dependencies</b></p> <p><b>IS Projects:</b> 4562 - US SAP: Business Warehouse (BW) Consolidation to HANA Enterprise Cloud (HEC).</p> <p>1. Has a dependency on Biz Initiative,</p> <p>2. Has a dependency on Biz Initiative,</p> <p>3. Has a dependency on Biz Initiative,</p> <p>4. Has a dependency on Biz Initiative,</p>																	
<p><b>Project Relationships</b></p> <p><input type="checkbox"/> Minor Works <span style="margin-left: 20px;">Project Relationship:</span></p> <p>Related Projects:</p>																	
<p><b>Enabling IS Capabilities</b> check all that apply</p> <p><input type="checkbox"/> Enterprise Content Management (ECM) <span style="margin-left: 200px;"><input type="checkbox"/> Enterprise Mobility</span></p> <p><input type="checkbox"/> Comprehensive Integration Services (CIS) <span style="margin-left: 200px;"><input type="checkbox"/> Reporting and Analytics</span></p> <p><input type="checkbox"/> Hybrid Cloud <span style="margin-left: 200px;"><input type="checkbox"/> Networks</span></p> <p><input type="checkbox"/> Next Gen Workplace</p>																	
<p><b>Key Milestone Dates:</b> Select the 1st, 15th or last day of the month</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Begin Start-up</th> <th style="text-align: center;">Begin Requirements &amp; Deign</th> <th style="text-align: center;">Begin Development &amp; Implementation</th> <th style="text-align: center;">Begin User Acceptance Testing</th> <th style="text-align: center;">Go Live</th> <th style="text-align: center;">Project Completion</th> <th style="text-align: center;">Project Closure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">April, 2017</td> <td></td> <td></td> <td></td> <td style="text-align: center;">March, 2018</td> <td></td> <td></td> </tr> </tbody> </table>				Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure	April, 2017				March, 2018		
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<p><b>Business Resource Estimates:</b> # of Full Time Equivalents</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Start-up</th> <th style="text-align: center;">Requirements &amp; Deign</th> <th style="text-align: center;">Develop &amp; Implement</th> <th style="text-align: center;">Business Resources UAT</th> <th style="text-align: center;">Go Live Readiness</th> <th style="text-align: center;">Post Go Live Support</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>				Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support	0	0	0	0	0	0		
Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support												
0	0	0	0	0	0												
<p>Resourcing Strategy:</p>																	
<p><b>Attached Supporting Documents</b></p> <p><a href="#">INVP4562_Complexity_Matrix.xlsx</a></p>																	

6/14/2017

FY18 - Investment Request Summaries - IRSs - US SAP: Business Warehouse (BW) Consolidation...

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>Doneen Hobbs</i>	<i>VP US Shared Services</i>	
<i>Business Relationship Manager</i>	<i>Joel Semel</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Samir Parikh</i>	<i>IS Program Delivery Manager</i>	



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FY18 - Investment Request Summaries - IRSs - MWORK and Netmotion Risk Avoidance



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSs:  
 MWORK and Netmotion Risk Avoidance



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4725	Project Name: <b>MWORK and Netmotion Risk Avoidance</b>								
Program:	Service Strategy Roadmap									
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS								
Relationship Manager:	Graham Pool	Title: IS Relationship Manager, Global IS								
Prog Delivery Manager:	Tom Cunningham	Title: Head of Programme Delivery, Global IS								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS								
IS Roadmap Category:	IS Assurance	Business Area: Corporate IS			Portfolio: IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: US			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
Netmotion will be the strategic direction for the MWork application. It is used when mobile field workers move in and out of wireless coverage areas and roam between networks, the product maintains and secures their data connections in order to maximize worker productivity. This project will implement a new solution for MWork that replaces the current Birdstep product with Netmotion.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
For MDSI users (Legacy Keyspan), they are currently on an old Netmotion network and a new Netmotion network. As new and replacement devices are deployed they are added to the new Netmotion network reducing the load on the old one. Once all of the old devices are replaced the old network will be de-commissioned. This will happen organically.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
This scope covers all the identified functionality for the core service to be upgraded or improved.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
This project is to move the Mwork device (Legacy National Grid ) from Birdstep to the New Netmotion network. It will require the separation of Mwork from Birdstep and additional Netmotion licenses and may even need a verizon capacity upgrade.										
<b>Basic Project Assumptions:</b>										
This investment addresses IS health and capability challenges while enabling National Grid's strategic business objectives.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500
OpEx		0.000	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.020
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure			Total	
CapEx		0.050		0.450					0.500	
OpEx	0.007	0.005		0.005		0.003			0.020	

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FY18 - Investment Request Summaries - IRSs - MWORK and Netmotion Risk Avoidance

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.020	-24.4%	-0.244
CapEx Annual Savings		5.1%	0	CapEx Cost	0.500	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	does not apply	11.2%	0	Elastice Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 1.53</b>				<b>Cost Score: -1.54</b>			
<b>Overall Priority Score: -0.012</b>							

**Investment Risk and Complexity**

Project Risk Score:	36	Risk Score Description: Reliability - 4, likelihood 6
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Now that customers are demanding new services, without these Network Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: **4725 - MWORK and Netmotion Risk Avoidance**

1. Has a dependency on IS Project;

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen

6/14/2017

FY18 - Investment Request Summaries - IRs - MWORK and Netmotion Risk Avoidance

- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Business Initiative Dependencies**

IS Projects: 4725 - MWORK and Netmotion Risk Avoidance

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2018					March, 2019	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	



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FY18 - Investment Request Summaries - IRSs - MWORK and Netmotion Risk Avoidance

<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



6/14/2017

FY18 - Investment Request Summaries - IRSs - Improving End User Experience- Cloud based...



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs:  
 Improving End User Experience- Cloud based DMZ Service Platform

I Like It  
 Tags & Notes

**nationalgrid** **Investment Request Summary - IS US** **FISCAL YEAR 2018**

INV ID: **4723** Project Name: **Improving End User Experience- Cloud based DMZ Service Platform**

Program: **Service Strategy Roadmap**

Sponsor: **John Gilbert** Title: **Global Head IS Service Delivery, Global IS**

Relationship Manager: **Graham Pool** Title: **IS Relationship Manager, Global IS**

Prog Delivery Manager: **Tom Cunningham** Title: **Head of Programme Delivery, Global IS**

Paper Author: **Nicola Pennington / Steve Trezza** Title: **Business Consultant - Corporate IS**

IS Roadmap Category: **IS Assurance** Business Area: **Corporate IS** Portfolio: **IS for IS**

In-Flight Project? Invest Classification: **Medium** Category: **Policy Driven** Primary Policy Driver: **Reliability** Region: **US**

Growth Playbook Project?  Shaping Our Future Project?  Energy Efficiency Project?

**Project Description: The context for the project with background information**

A DMZ or Demilitarized Zone is primarily used to separate the network into multiple segments to enhance security, where only defined traffic is allowed to navigate between these different segments. This is established by using a firewall and intrusion detection and intrusion prevention systems. This project will establish a cloud based service platform where the DMZ will move from a physical to virtual environment. This will reduce the cost of the overall network configuration and maintenance.

**Project Rationale: Highlight business challenge, capability or process the project addresses**

New technologies will emerge across the network creating new opportunities and threats. Innovation at the customer interface will meet rising demand for customer choice.

**Project Scope: Explain what is in scope and what is not in scope for the project**

This scope covers all the identified functionality for the core service to be upgraded or improved.

**Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known**

There are no dependencies for this project to start.

**Basic Project Assumptions:**

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

**Indicative Project Costs by Fiscal Year**

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.300
OpEx		0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.010
Impact on RTB		0.000	0.025	0.050	0.050	0.050	0.050	0.050	0.050	0.325

**Indicative Project Costs by Delivery Phase**

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.100	0.200		0.300
OpEx	0.007	0.000	0.000	0.003	0.010

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FY18 - Investment Request Summaries - IRSs - Improving End User Experience- Cloud based...

### Project Benefits - Type I only

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

Here are benefits of this project:

- We will be able to successfully deliver new business development opportunities
- For the best interest of customers by the new opportunities, bound together by a clear purpose, vision and values.
- We adapt to the changing environment positively and play a leading role in shaping the future

### Investment Prioritization

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.010	-24.4%	-244
CapEx Annual Savings		5.1%	0	CapEx Cost	0.300	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	116.667	% -22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Low	10.9%	0.109				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 1.31</b>				<b>Cost Score: -2.93</b>			
<b>Overall Priority Score: -1.619</b>							

### Investment Risk and Complexity

Project Risk Score:	36	Risk Score Description: Reliability - 4, likelihood 6
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Now that customers are demanding new services, without these Wireless Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4723 - Improving End User Experience- Cloud based DMZ Service Platform

**Benefiting Operating Companies:** Check all that apply

Select All Companies  Clear All Companies

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FY18 - Investment Request Summaries - IRSs - Improving End User Experience- Cloud based...

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4723 - Improving End User Experience- Cloud based DMZ Service Platform

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

- Select All Gas  Select All Electric  Select All Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2018					December, 2018	

**Business Resource Estimates: # of Full Time Equivalents**

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	

6/14/2017

FY18 - Investment Request Summaries - IRSs - Improving End User Experience- Cloud based...

<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



6/14/2017

FY18 - Investment Request Summaries - IRSs - Mobile Broadband PoC



Planning & Performance Management ▶ FY18 - Investment Request Summaries - IRSs:  
 Mobile Broadband PoC



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4745	Project Name: <b>Mobile Broadband PoC</b>								
Program:										
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS								
Relationship Manager:	Graham Pool	Title: IS Relationship Manager, Global IS								
Prog Delivery Manager:	Tom Cunningham	Title: Head of Programme Delivery, Global IS								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS / Service Strategy								
IS Roadmap Category:	Networks / Mobility	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Low	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>US</b>			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
The Mobile Broadband POC project is to trial the use of wireless broadband service from Verizon to provide WAN connectivity to a National Grid site.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
A stable Network environment is essential for the smooth running of the National Grid businesses.										
To help support foundational programs that will enable or support the Utility of the Future.										
Supports National Grid in fulfilling its reporting and data retention regulatory obligations.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
Review of alternate WAN connectivity options for small sites over the mobile network.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
Selection of appropriate small site to test.										
<b>Basic Project Assumptions:</b>										
Delivery of pervasive Wireless Networks with the capacity to support a multitude of devices will be key to supporting a flexible and mobile field worker or customer agent. Everyday more wireless only devices are coming to market that can allow National Grid to deliver services in a more effective and efficient manner (e. g. iPads, specialized tablets, sensors, equipment controllers). The implementation of this project supports an environment that will be critical to improved efficiencies the business will be challenged to achieve.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.100
OpEx		0.000	0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.015
Impact on RTB		0.000	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.050
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure		Total		
CapEx		0.100		0.000				0.100		
OpEx	0.010	0.000		0.000		0.005		0.015		

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FY18 - Investment Request Summaries - IRSs - Mobile Broadband PoC

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

In the future this service (benefits) could be used to:

1. Provide site WAN backup in case of primary circuit failure
2. Potentially provide higher access speed than traditional TDM circuits
3. Could be used to quickly implement a WAN service to a site that has facilities delays.
4. Used an alternative carrier option as part of an SD-WAN solution

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.015	-24.4%	-244
CapEx Annual Savings		5.1%	0	CapEx Cost	0.100	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	350.000 %	-22.5%	-2.025
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Low	-6.6%	-0.066
Process & Personal Safety	Low	19.4%	0.194	Change Management Effort	Low	-14.9%	-0.149
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 1.82</b>				<b>Cost Score: -2.70</b>			
<b>Overall Priority Score: -0.879</b>							

**Investment Risk and Complexity**

Project Risk Score:	36	Risk Score Description: Reliability - 4, likelihood 6
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

Now that customers are demanding new services, without these Network Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4745 - Mobile Broadband PoC

1. Has a dependency on IS Project;

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen

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FY18 - Investment Request Summaries - IRSs - Mobile Broadband PoC

- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4745 - Mobile Broadband PoC

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2018				July, 2018	August, 2018	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	



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FY18 - Investment Request Summaries - IRSs - Mobile Broadband PoC

<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	



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FY18 - Investment Request Summaries - IRSs - FY19 Edge Projects



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: FY19 Edge Projects



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4717	Project Name: <b>FY19 Edge Projects</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS</i>								
IS Roadmap Category:	IS Assurance	Business Area: <b>Corporate IS</b>			Portfolio: <b>IS for IS</b>					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: <b>US</b>			
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
As we use more cloud based services that dictate the pace of change we will need new capability to manage this impact on National Grid. This includes services to manage the change as well as reducing complexity in estate to reduce impact of changes.										
As we move to any device working in the cloud our focus will change from end points and applications to data and the need to protect the data regardless of where it resides.										
We will within the period still predominately provide end user devices to employees. Reacting to the merging of mobile and PC world's we will need to refresh and manage existing devices in new ways.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
This projects will provide new services and future projects to build a foundation that will enable or support the Utility of the Future. As customers demand new services, such as smart metering and distributed generation, an investment in our underlying technology infrastructure is needed in order to deliver these strategic programs.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
As we move to any device working in the cloud our focus will change from end points and applications to data and the need to protect the data regardless of where it resides.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
There are no dependencies for this project to start. Work is dependent the effort completed in FY18.										
<b>Basic Project Assumptions:</b>										
This multi-year investment addresses IS health and capability challenges while enabling National Grid's strategic business objectives.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	1.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000
OpEx		0.000	0.700	0.000	0.000	0.000	0.000	0.000	0.000	0.700
Impact on RTB		0.000	0.500	0.500	0.500	0.500	0.500	0.500	0.500	3.500
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure			Total	
CapEx		0.100		0.900					1.000	
OpEx										

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FY18 - Investment Request Summaries - IRSs - FY19 Edge Projects

	0.030	0.050	0.600	0.020	0.700				
<b>Project Benefits - Type I only</b>									
<i>(\$M)</i>	<i>FY 2018</i>	<i>FY 2019</i>	<i>FY 2020</i>	<i>FY 2021</i>	<i>FY 2022</i>	<i>FY 2023</i>	<i>FY 2024</i>	<i>FY 2025</i>	<i>Total</i>
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this project on the Customer are based on a number of areas:

- Improves reliability and productivity
- Support Jurisdictional and business function initiatives
- Enables a better Customer Experience

There is a risk of failure of unsupported platforms and the fact that many of these systems support key company operations. Thus, our ability to continue to provide safe and reliable service to our customers would be impacted if one of these systems were to fail.

**Investment Prioritization**

<b>Benefits</b>	<i>Impact</i>	<i>Weight</i>	<i>Score</i>	<b>Cost</b>	<i>Impact</i>	<i>Weight</i>	<i>Score</i>
OpEx Annual Savings		10.3%	0	OpEx Cost	0.700	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	1.000	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	350.000 %	-22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	Low	11.2%	0.112	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 2.38</b>				<b>Cost Score: -6.01</b>			
<b>Overall Priority Score: -3.639</b>							

**Investment Risk and Complexity**

Project Risk Score:	41	Risk Score Description: Reliability - 5, likelihood 6
Project Complexity Score::	21	Project Complexity Score Description:

**Key Risks Description: Provide detail on project risks & mitigation strategy:**

There is a risk of failure of these unsupported platforms, as the fact that many of these systems support key company operations. Thus, our ability to continue to provide safe and reliable service would be impacted if one of these systems were to fail.

Now that customers are demanding new services, without this investment of upgrading our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

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FY18 - Investment Request Summaries - IRSs - FY19 Edge Projects

**IS Projects: 4717 - FY19 Edge Projects**

1. Has a dependency on IS Project;
2. Has a dependency on IS Project;
3. Has a dependency on IS Project;
4. Has a dependency on IS Project;
5. Has a dependency on IS Project;
6. Has a dependency on IS Project;

**Business Initiative Dependencies**

**IS Projects: 4717 - FY19 Edge Projects**

1. Has a dependency on Biz Initiative,
2. Has a dependency on Biz Initiative,
3. Has a dependency on Biz Initiative,
4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- |   |  |
|---|--|
| <input type="checkbox"/> Enterprise Content Management (ECM)      | <input type="checkbox"/> Enterprise Mobility     |
| <input type="checkbox"/> Comprehensive Integration Services (CIS) | <input type="checkbox"/> Reporting and Analytics |
| <input type="checkbox"/> Hybrid Cloud                             | <input type="checkbox"/> Networks                |
| <input type="checkbox"/> Next Gen Workplace                       |  |

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up	<i>Begin</i> Requirements & Deign	<i>Begin</i> Development & Implementation	<i>Begin</i> User Acceptance Testing	<i>Go Live</i>	<i>Project Completion</i>	<i>Project Closure</i>
January, 2018					March, 2019	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:


**Attached Supporting Documents**

**Recommendation Sign-off**

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FY18 - Investment Request Summaries - IRSs - FY19 Edge Projects

<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	





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FY18 - Investment Request Summaries - IRSs - FY19 Network Projects

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

These Network Improvements will better help employees to use applications with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

**Investment Prioritization**

Benefits				Cost			
	Impact	Weight	Score		Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.050	-24.4%	-244
CapEx Annual Savings		5.1%	0	CapEx Cost	1.000	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	Low	11.2%	0.112	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	Low	19.4%	0.194	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 2.57</b>				<b>Cost Score: -1.83</b>			
<b>Overall Priority Score: 0.744</b>							

**Investment Risk and Complexity**

Project Risk Score:	41	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 6
Project Complexity Score:	16	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Now that customers are demanding new services, without these Network Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

IS Projects: 4718 - FY19 Network Projects

Select All Companies  Clear All Companies

1. Has a dependency on IS Project;

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FY18 - Investment Request Summaries - IRSs - FY19 Network Projects

2. Has a dependency on IS Project;

3. Has a dependency on IS Project;

4. Has a dependency on IS Project;

5. Has a dependency on IS Project;

6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: **4718 - FY19 Network Projects**

1. Has a dependency on Biz Initiative,

2. Has a dependency on Biz Initiative,

3. Has a dependency on Biz Initiative,

4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:

Related Projects:

Select All Gas  Select All Electric  Select All Gen

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

Enterprise Content Management (ECM)  Enterprise Mobility

Comprehensive Integration Services (CIS)  Reporting and Analytics

Hybrid Cloud  Networks

Next Gen Workplace

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i>	<i>Begin</i>	<i>Begin</i>	<i>Begin</i>			
Start-up	Requirements & Deign	Development & Implementation	User Acceptance Testing	Go Live	Project Completion	Project Closure

**Business Resource Estimates: # of Full Time Equivalents**

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	



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FY18 - Investment Request Summaries - IRSs - FY19 Network Projects

<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	





nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4711	Project Name: <b>Digital Asset Management (DAM)</b>								
Program:	Service Strategy Roadmap									
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS								
Relationship Manager:	Graham Pool	Title: IS Relationship Manager, Global IS								
Prog Delivery Manager:	Tom Cunningham	Title: Head of Programme Delivery, Global IS								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consitant - Corporate IS								
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio:	IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability	Region:	US			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
This project will implement a strategic Digital Asset Management (DAM) business process solution for organizing, storing and retrieving media in a cost effective manner.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
To continue the effort to Keeps National Grid in the supported releases window, stable support for the smooth running of the National Grid businesses.										
To help support foundational programs that will enable or support the Utility of the Future.										
Supports National Grid in fulfilling its reporting and data retention regulatory obligations.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
Media assets include photos, music, videos, logos, documents, spreadsheets and other multimedia content.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
DAM involves the creation of an archived infrastructure to preserve and manage digital assets and a search functionality that allows end users to easily identify, locate and retrieve an asset.										
<b>Basic Project Assumptions:</b>										
This investment addresses IS health and capability challenges while enabling National Grid's strategic business objectives.										
<b>Indicative Project Costs by Fiscal Year</b>										
(SM)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500
OpEx		0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.030
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Indicative Project Costs by Delivery Phase</b>										
(SM)	Start-up	R & D		D & I		Closure		Total		
CapEx		0.050		0.450				0.500		
OpEx	0.020	0.000		0.000		0.010		0.030		

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FY18 - Investment Request Summaries - IRSs - Digital Asset Management (DAM)

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

Benefits of a DAM solution are that it allows access to digital media anytime, fast implementation, easy integration, and is intuitive.

The Impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.030	-24.4%	-244
CapEx Annual Savings		5.1%	0	CapEx Cost	0.500	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	does not apply	6.2%	0	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	EIapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Low	10.9%	0.109				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
<b>Benefit Score: 1.21</b>				<b>Cost Score: -1.13</b>			

Overall Priority Score: 0.082000...

**Investment Risk and Complexity**

Project Risk Score:	36	Risk Score Description: Reliability - 4, Likelihood 6
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Without DAM we will lose the ability to help employees use applications with more functionality in a more intuitive manner. The Jurisdiction and business functions will not be able to utilize a more reliable and resilient applications that could have helped provide customers with more options when interacting with the Company.

**IS Project Dependencies**

If you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4711 - Digital Asset Management (DAM)

1. Has a dependency on IS Project;

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen

- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Business Initiative Dependencies**

IS Projects: 4711 - Digital Asset Management (DAM)

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works

Project Relationship:

Related Projects:

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Design	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
January, 2018					March, 2019	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Design	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	

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FY18 - Investment Request Summaries - IRSs - Digital Asset Management (DAM)

<i>Business Relationship Manager</i>	<b>Graham Pool</b>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<b>Tom Cunningham</b>	<i>IS Program Delivery Manager</i>	
			<b>nationalgrid</b>



nationalgrid		Investment Request Summary - IS US		FISCAL YEAR 2018	
INV ID:	4708	Project Name: <b>Business Innovation Projects 2</b>			
<b>Program:</b>					
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS			
Relationship Manager:	Graham Paol	Title: IS Relationship Manager, Global IS			
Prog Delivery Manager:	Tom Cunningham	Title: Head of Programme Delivery, Global IS			
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS			
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio: Global F, SS & C	
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability
				Region:	US
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?			
<b>Project Description: The context for the project with background information</b>					
<p>The Business innovation project provides a funding base and governance structure that allows the Information Services (IS) organization to improve the IS experience for our employees and customers who will experience improved reliability, use ability, speed and efficiency across all functions. The program will also reduce the risk of system failure which have customer, brand and cost implications. The program includes the following:</p> <ul style="list-style-type: none"> <li>• Big Data Analytics – Setup Data Lake and company wide analytics capability</li> <li>• Data Cleansing for reporting and Data Standards compliance – Enable BMS Standards</li> <li>• Data Visualization and Online Interactive dashboards for quick decision making</li> <li>• Process and workflow automation with robotics</li> <li>• CRM and SaaS capability for future Customer experience program</li> <li>• CIS system upgrade Pilots</li> <li>• Rate engine Upgrades</li> <li>• Call center capability enhancements for chat, automated agents, multichannel problem solving capability</li> <li>• Consumer document management and process simplification</li> <li>• Engineering Systems upgrades</li> <li>• Network and connectivity upgrades for Field Force, yards and trucks</li> <li>• Mobile device capability enhancements with mobile access for applications</li> <li>• Increased collaboration with Office 365, Box and One Drive – Work anyplace, anytime, anydevice</li> <li>• Video collaboration for office workers, Field force and flexible workers/ contractors</li> </ul>					
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>					
Move towards a sustained, multi-year investment program to address IS health and capability challenges while enabling National Grid's strategic business objectives					
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>					
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>					
Several other strategic initiatives are dependent on the work described within this document, in order to progress and succeed including:					
<ul style="list-style-type: none"> <li>• Advanced Analytics</li> <li>• Finance Controls</li> <li>• Gas Enablement</li> <li>• Customer Experience Transformation</li> </ul>					
<b>Basic Project Assumptions:</b>					

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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 2

**Indicative Project Costs by Fiscal Year**

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	3.369	3.973	4.491	0.000	0.000	0.000	0.000	11.833
OpEx		0.000	0.100	0.100	0.100	0.000	0.000	0.000	0.000	0.300
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Indicative Project Costs by Delivery Phase**

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		2.000	9.833		11.833
OpEx	0.020	0.040	0.230	0.010	0.300

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Increase business and enterprise service performance and availability
- Support Jurisdictional and business function Initiatives
- Enable Customer Experience Transformation

Increased bandwidth and resilience - Delivery of software defined Wide Area Network technology will allow IS to deliver high bandwidth business class service through low cost commodity broadband internet services. In combination with cloud based security tools, this technology will support high speed Internet web browsing and use of high bandwidth cloud services even from the smallest locations. The tangible benefits that the user will experience is faster PC start up times, fast file transfers, more responsive applications, and access to bandwidth intensive Internet and cloud based services like, YouTube, WebEx, and Office 365.

Access anywhere from any device – Delivery of pervasive Wireless Networks with the capacity to support a multitude of devices will be key to supporting a flexible and mobile field worker or customer agent. Everyday more wireless only devices are coming to market that can allow National Grid to deliver services in a more effective and efficient manner (e. g. iPads, specialized tablets, sensors, equipment controllers). The implementation of secure wireless networks that support this environment will be critical to improved efficiencies the business will be challenged to achieve.

Unified Communications – As we move to a more mobile world with people working away from the traditional office, it will be critical to have communications systems in place that ensure clear, consistent, and more personal communications between all parties. This will be achieved through use of a consistent set of easy to use communication tools that provide voice, video, and text communications between parties both within and outside the company. In addition, these tools will take advantage of the capabilities of the new device being used to relay real-time information in the form of pictures, videos, and telemetry to staff and systems that can process the information and provide informed feedback to the remote staff.

Virtual Desktop - If we don't augment the current service the Business cannot grow, as planned, new development needs due to physical constraints of the existing offering. In addition, the current architecture is not a sustainable service, presents a single point of failure and high risk from internal attacks. The business should expect longer development times when existing resources begin to fail or current development tools need refresh.

Cloud - The business may lose competitive advantages as they will be limited to existing infrastructure options which lack current-state capabilities, are costly and take a long time to provision relative to hyper scale offerings. While not solely a financial advantage at first, there will be economies at scale. Developer productivity will be constrained in the current environment; agile project approaches will simply not work. IS will be silently encouraging shadow IT start ups via lack of an internal offering and current speed to deliver, which has compliance and other risks.

Applications - Employees and customers will be able to use applications with more functionality in a more intuitive manner through multiple devices. The Jurisdictions and business functions will be able utilize more reliable and resilient applications and leverage their full capability Application upgrades will enable CET to provide customers with more options to interact with the Company

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.300	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	11.833	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	does not apply	6.2%	0	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447



Reliability	Medium	10.9%	0.327
Customer & Community Responsiveness	Low	5.3%	0.053
Employee Satisfaction	Low	4.6%	0.046
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801
Jurisdictional Engagement	High	8.2%	1
Benefit Score:			1.97
Cost Score:			-4.45
Overall Priority Score: -2.484			

**Investment Risk and Complexity**

Project Risk Score:	41	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 6
Project Complexity Score:	16	Project Complexity Score Description:
Key Risks Description: Provide detail on project risks & mitigation strategy:		

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

- IS Projects: 4708 - Business Innovation Projects 2
- Has a dependency on IS Project;
  - Has a dependency on IS Project;
  - Has a dependency on IS Project;
  - Has a dependency on IS Project;
  - Has a dependency on IS Project;
  - Has a dependency on IS Project;

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Business Initiative Dependencies**

- IS Projects: 4708 - Business Innovation Projects 2
- Has a dependency on Biz Initiative,
  - Has a dependency on Biz Initiative,
  - Has a dependency on Biz Initiative,
  - Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works    Project Relationship:  
 Related Projects:

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)     Enterprise Mobility



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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 2

- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Design	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2019					March, 2021	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Design	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	
Business Relationship Manager	Graham Pool	IS Business Relationship Manager	
IS Program Delivery Manager	Tom Cunningham	IS Program Delivery Manager	

**nationalgrid**



nationalgrid		Investment Request Summary - IS US		FISCAL YEAR 2018	
INV ID:	4728	Project Name: <b>Business Innovation Projects 3</b>			
<b>Program:</b>					
Sponsor:	John Gilbert	Title:	Global Head IS Service Delivery, Global IS		
Relationship Manager:	Graham Pool	Title:	IS Relationship Manager, Global IS		
Prog Delivery Manager:	Tom Cunningham	Title:	Head of Programme Delivery, Global IS		
Paper Author:	Nicola Pennington / Steve Trezza	Title:	Business Consultant - Corporate IS		
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio:	Global F, SS & C
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability
				Region:	US
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?			
<b>Project Description: The context for the project with background information</b>					
The Business Innovation project provides a funding base and governance structure that allows the Information Services (IS) organization to improve the IS experience for our employees and customers who will experience improved reliability, use ability, speed and efficiency across all functions. The program will also reduce the risk of system failure which have customer, brand and cost implications. The program includes the following:					
<ul style="list-style-type: none"> <li>• Big Data Analytics – Setup Data Lake and company wide analytics capability</li> <li>• Data Cleansing for reporting and Data Standards compliance – Enable BMS Standards</li> <li>• Data Visualization and Online interactive dashboards for quick decision making</li> <li>• Process and workflow automation with robotics</li> <li>• CRM and SaaS capability for future Customer experience program</li> <li>• CIS system upgrade Pilots</li> <li>• Rate engine Upgrades</li> <li>• Call center capability enhancements for chat, automated agents, multichannel problem solving capability</li> <li>• Consumer document management and process simplification</li> <li>• Engineering Systems upgrades</li> <li>• Network and connectivity upgrades for Field Force, yards and trucks</li> <li>• Mobile device capability enhancements with mobile access for applications</li> <li>• Increased collaboration with Office 365, Box and One Drive – Work anyplace, anytime, anydevice</li> <li>• Video collaboration for office workers, Field force and flexible workers/ contractors</li> </ul>					
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>					
Move towards a sustained, multi-year investment program to address IS health and capability challenges while enabling National Grid's strategic business objectives					
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>					
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<ul style="list-style-type: none"> <li>• Advanced Analytics</li> <li>• Finance Controls</li> <li>• Gas Enablement</li> <li>• Customer Experience Transformation</li> </ul>					
<b>Basic Project Assumptions:</b>					
<b>Indicative Project Costs by Fiscal Year</b>					

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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 3

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	3.369	3.973	4.491	0.000	0.000	0.000	0.000	11.833
OpEx		0.000	0.100	0.100	0.100	0.000	0.000	0.000	0.000	0.300
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Indicative Project Costs by Delivery Phase

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		2.000	9.833		11.833
OpEx	0.010	0.040	0.240	0.010	0.300

Project Benefits - Type I only

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

Key Business Benefits:

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

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- Enable Customer Experience Transformation

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Virtual Desktop - If we don't augment the current service the Business cannot grow, as planned, new development needs due to physical constraints of the existing offering. In addition, the current architecture is not a sustainable service, presents a single point of failure and high risk from internal attacks. The business should expect longer development times when existing resources begin to fail or current development tools need refresh.

Cloud - The business may lose competitive advantages as they will be limited to existing infrastructure options which lack current-state capabilities, are costly and take a long time to provision relative to hyper scale offerings. While not solely a financial advantage at first, there will be economies at scale. Developer productivity will be constrained in the current environment; agile project approaches will simply not work. IS will be silently encouraging shadow IT start ups via lack of an internal offering and current speed to deliver, which has compliance and other risks.

Applications - Employees and customers will be able to use applications with more functionality in a more intuitive manner through multiple devices. The Jurisdictions and business functions will be able to utilize more reliable and resilient applications and leverage their full capability. Application upgrades will enable CET to provide customers with more options to interact with the Company.

Investment Prioritization

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.300	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	11.833	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	does not apply	6.2%	0	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	EIapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				

Customer & Community Responsiveness	Low	5.3%	0.053
Employee Satisfaction	Low	4.6%	0.046
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801
Jurisdictional Engagement	High	8.2%	1
Benefit Score:			1.97
Cost Score:			-4.45
Overall Priority Score: -2.484			

**Investment Risk and Complexity**

Project Risk Score:	41	Risk Score Description: Risk Impact = 5 and Risk Likelihood = 6
Project Complexity Score:	16	Project Complexity Score Description:

Key Risks Description: Provide detail on project risks & mitigation strategy:

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4728 - Business Innovation Projects 3

- 1. Has a dependency on IS Project;
- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4728 - Business Innovation Projects 3

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
Related Projects:

**Benefiting Operating Companies:** Check all that apply

- Select All Companies  Clear All Companies  
 Select All Gas  Select All Electric  Select All Gen
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York
  - KeySpan Energy Delivery Long Island
  - KeySpan Generation LLC (PSA)
  - KeySpan Glenwood Energy Center
  - KeySpan Port Jefferson Energy Center
  - KeySpan Energy Trading Svc LLC
  - Niagara Mohawk Power Corp- Electric Distribution
  - Niagara Mohawk Power Corp - Gas
  - Niagara Mohawk Power Corp - Transmission
  - Massachusetts Electric Company
  - Massachusetts Electric Company - Transmission
  - Nantucket Electric Company
  - Boston Gas Company
  - Colonial Gas Company
  - Narragansett Gas Company
  - Narragansett Electric Company
  - Narragansett Electric Company - Transmission
  - New England Power Company - Transmission
  - New England Hydro - Trans Corp
  - New England Electric Trans Corp
  - NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Enterprise Mobility
- Comprehensive Integration Services (CIS)
- Reporting and Analytics

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FY18 - Investment Request Summaries - IRSs - Business Innovation Projects 3

- Hybrid Cloud
- Next Gen Workplace

- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2019					March, 2021	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	
Business Relationship Manager	Graham Pool	IS Business Relationship Manager	
IS Program Delivery Manager	Tom Cunningham	IS Program Delivery Manager	

**nationalgrid**



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4715	Project Name: <b>EUC, Network, and Data Center Strategy</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS</i>								
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio:	IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability		Region:	US		
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
A Piece of strategy work to assess the current state and plan against the demands and see if the strategies and plans support achievement of those business strategies. The timing of this is important given the timing of several key strategic supplier contracts.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
This strategic investment program will help to address IS health and capability challenges while enabling National Grid's strategic business objectives.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
This scope covers all the identified functionality for the core service to be upgraded or improved.										
<b>Project Dependencies: identify any core program or project dependencies, please include INVP numbers if known</b>										
Several other strategic initiatives are dependent on the work described within this document, in order to progress and succeed including:										
<ul style="list-style-type: none"> <li>•Advanced Analytics</li> <li>•Finance Controls</li> <li>•Gas Enablement</li> <li>•Customer Experience Transformation</li> </ul>										
<b>Basic Project Assumptions:</b>										
These strategies developed will better help employees to use applications with more functionality in a more intuitive manner.										
<b>Indicative Project Costs by Fiscal Year</b>										
(SM)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.771	0.772	0.000	0.000	0.000	0.000	0.000	0.000	1.543
OpEx		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Indicative Project Costs by Delivery Phase</b>										
(SM)	Start-up	R & D			D & I		Closure		Total	
CapEx		0.100			1.443				1.543	
OpEx	0.000	0.000			0.000		0.000		0.000	



6/2/2017

FY18 - Investment Request Summaries - IRSs - EUC, Network, and Data Center Strategy

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.000	-24.4%	0
CapEx Annual Savings		5.1%	0	CapEx Cost	1.543	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	Low	-10.6%	-0.106
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	Low	-6.6%	-0.066
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Low	-14.9%	-0.149
Reliability	Low	10.9%	0.109				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Low	4.6%	0.046				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>1.85</b>			<b>Cost Score:</b>	<b>-1.33</b>
				<b>Overall Priority Score:</b>	<b>0.524</b>		

**Investment Risk and Complexity**

Project Risk Score:	<b>41</b>	Risk Score Description: Reliability - 5, likelihood 6
Project Complexity Score:	<b>14</b>	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:

Now that customers are demanding new services, without these strategies in our underlying infrastructure, we cannot deliver new programs.

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4715 - EUC, Network, and Data Center Strategy

**Benefiting Operating Companies:** Check all that apply

- Select All Companies     Clear All Companies  
 Select All Gas     Select All Electric     Select All

- 1. Has a dependency on IS Project;
- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;

- Gen**
- National Grid USA Parent
  - KeySpan Energy Development Corporation
  - KeySpan Services Inc.
  - KeySpan Energy Corp
  - KeySpan Energy Delivery New York

- 6. Has a dependency on IS Project;

- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Business Initiative Dependencies**

IS Projects: 4715 - EUC, Network, and Data Center Strategy

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works *Project Relationship:*  
 Related Projects:

**Enabling IS Capabilities check all that apply**

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
May, 2017					March, 2019	

**Business Resource Estimates: # of Full Time Equivalents**

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	



6/2/2017

FY18 - Investment Request Summaries - IRSs - EUC, Network, and Data Center Strategy

<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	
			<b>nationalgrid</b>



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4716	Project Name: <b>FY19 Data Centre Projects</b>								
Program:	<b>Service Strategy Roadmap</b>									
Sponsor:	John Gilbert	Title: <i>Global Head IS Service Delivery, Global IS</i>								
Relationship Manager:	Graham Pool	Title: <i>IS Relationship Manager, Global IS</i>								
Prog Delivery Manager:	Tom Cunningham	Title: <i>Head of Programme Delivery, Global IS</i>								
Paper Author:	Nicola Pennington / Steve Trezza	Title: <i>Business Consultant - Corporate IS</i>								
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio:	IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability	Region:	US			
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
Replacement of legacy aging equipment which are in legacy Data Centers.										
Although these are in the legacy data centers - there are critical applications that are still in the legacy data centers running on these aged assets.										
In addition, the expectation is that there will be some services retained in these data centers using the aged infrastructure.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
There is a risk to continuing to run systems in the legacy data centres. A number of mission critical systems remain in the legacy data centers running in aged systems connected to aged network platforms. There is a likelihood that either the compute platform or network could fail and the hardware would not easily be restored. A compute platform failure would impact one system, but a network failure could impact multiple systems.										
Reliability - Old technology is vulnerable to more DRS threats - removing the old technology will mitigate this risk.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
This project will implement an agreed plan to decommission or retain equipment in Legacy Data centres.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
There are no dependencies for this project to start. Work is dependent the effort completed in FY18.										
<b>Basic Project Assumptions:</b>										
It is expected that all decommission activities will not be within CSC contract and will require funds. There will be some activities particularly around coordination of plans for "retained applications" which will require NG input and therefore a NG project manager.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	2.000	0.000	0.000	0.000	0.000	0.000	0.000	2.000
OpEx		0.000	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.800
Impact on RTB		0.000	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.700
<b>Indicative Project Costs by Delivery Phase</b>										
(\$M)	Start-up	R & D		D & I		Closure			Total	
CapEx		0.500		1.500					2.000	
OpEx										

6/2/2017

FY18 - Investment Request Summaries - IRSs - FY19 Data Centre Projects

	0.015	0.075	0.700	0.010	0.800				
<b>Project Benefits - Type I only</b>									
(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this project on the Customer are based on a number of areas:

- Improves reliability and productivity
- Support Jurisdictional and business function initiatives
- Enables a better Customer Experience

There is a risk of failure of unsupported platforms and the fact that many of these systems support key company operations. Thus, our ability to continue to provide safe and reliable service to our customers would be impacted if one of these systems were to fail.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.800	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	2.000	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	35 000 %	-22.5%	-2.025
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	does not apply	3.8%	0	Dependencies	does not apply	-10.6%	0
Regulatory Impact	does not apply	11.2%	0	Elapse Time Duration	does not apply	-6.6%	0
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	does not apply	-14.9%	0
Reliability	does not apply	10.9%	0				
Customer & Community Responsiveness	does not apply	5.3%	0				
Employee Satisfaction	does not apply	4.6%	0				
Mitigates a Corporate Risk / Risk of not Doing	does not apply	8.9%	0				
Jurisdictional Engagement	does not apply	8.2%	0				
		<b>Benefit Score:</b>	<b>0.00</b>			<b>Cost Score:</b>	<b>-5.23</b>
				<b>Overall Priority Score:</b>	<b>-5.229</b>		

**Investment Risk and Complexity**

Project Risk Score:	41	Risk Score Description: Reliability - 5, likelihood 6
Project Complexity Score:	21	Project Complexity Score Description:
Key Risks Description: Provide detail on project risks & mitigation strategy: There is a risk of failure of these unsupported platforms, as the fact that many of these systems support key company operations. Thus, our ability to continue to provide safe and reliable service would be impacted if one of these systems were to fail.		
Now that customers are demanding new services, without this investment of upgrading our underlying technology infrastructure, we cannot deliver these new strategic programs.		

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

<p><b>IS Projects: 4716 - FY19 Data Centre Projects</b></p> <p>1. Has a dependency on IS Project;</p> <p>2. Has a dependency on IS Project;</p> <p>3. Has a dependency on IS Project;</p> <p>4. Has a dependency on IS Project;</p> <p>5. Has a dependency on IS Project;</p> <p>6. Has a dependency on IS Project;</p> <p><b>Business Initiative Dependencies</b></p> <p><b>IS Projects: 4716 - FY19 Data Centre Projects</b></p> <p>1. Has a dependency on Biz Initiative,</p> <p>2. Has a dependency on Biz Initiative,</p> <p>3. Has a dependency on Biz Initiative,</p> <p>4. Has a dependency on Biz Initiative,</p> <p><b>Project Relationships</b></p> <p><input type="checkbox"/> Minor Works      Project Relationship:</p> <p>Related Projects:</p>	<p><input type="checkbox"/> Select All Companies    <input type="checkbox"/> Clear All Companies</p> <p><input type="checkbox"/> Select All Gas            <input type="checkbox"/> Select All Electric    <input type="checkbox"/> Select All Gen</p> <p><input checked="" type="checkbox"/> National Grid USA Parent</p> <p><input checked="" type="checkbox"/> KeySpan Energy Development Corporation</p> <p><input checked="" type="checkbox"/> KeySpan Services Inc.</p> <p><input checked="" type="checkbox"/> KeySpan Energy Corp</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery New York</p> <p><input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island</p> <p><input checked="" type="checkbox"/> KeySpan Generation LLC (PSA)</p> <p><input checked="" type="checkbox"/> KeySpan Glenwood Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center</p> <p><input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas</p> <p><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company</p> <p><input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> Nantucket Electric Company</p> <p><input checked="" type="checkbox"/> Boston Gas Company</p> <p><input checked="" type="checkbox"/> Colonial Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Gas Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company</p> <p><input checked="" type="checkbox"/> Narragansett Electric Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Power Company - Transmission</p> <p><input checked="" type="checkbox"/> New England Hydro - Trans Corp</p> <p><input checked="" type="checkbox"/> New England Electric Trans Corp</p> <p><input checked="" type="checkbox"/> NG LNG LP Regulated Entity</p>
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**Enabling IS Capabilities** check all that apply

<input type="checkbox"/> Enterprise Content Management (ECM)	<input type="checkbox"/> Enterprise Mobility
<input type="checkbox"/> Comprehensive Integration Services (CIS)	<input type="checkbox"/> Reporting and Analytics
<input type="checkbox"/> Hybrid Cloud	<input type="checkbox"/> Networks
<input type="checkbox"/> Next Gen Workplace	

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i>	<i>Begin</i>	<i>Begin</i>	<i>Begin</i>			
Start-up	Requirements & Deign	Development & Implementation	User Acceptance Testing	Go Live	Project Completion	Project Closure
January, 2018					March, 2020	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

6/2/2017

FY18 - Investment Request Summaries - IRSs - FY19 Data Centre Projects

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	
Business Relationship Manager	Graham Pool	IS Business Relationship Manager	
IS Program Delivery Manager	Tom Cunningham	IS Program Delivery Manager	

**nationalgrid**



Planning & Performance Management > FY18 - Investment Request Summaries - IRSs: 1327 Interfaces - 523 FTS, 340 RDX, 245 MQSI, 253 JCAPS, 44 PM4D, 7 VB

I Like It Tags & Notes

nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018																																															
INV ID:	4706	Project Name: 1327 Interfaces - 523 FTS, 340 RDX, 245 MQSI, 253 JCAPS, 44 PM4D, 7 VB																																																			
Program:																																																					
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS																																																			
Relationship Manager:	Graham Pool	Title: IS Relationship Manager, Global IS																																																			
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<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?																																																			
<p><b>Project Description:</b> The context for the project with background information</p> <p>The primary driver for this project is to mitigate the risks of continuing to be reliant on out of support infrastructure. These risks are :</p> <ul style="list-style-type: none"> <li>Increased Security risk as out of support Infrastructure will not receive security patches.</li> <li>In the event of failure National Grid IS will be unable to meet the agreed Service Level Agreements (SLAs) for many key applications once the middleware infrastructure goes out of support. The majority of these applications currently have Gold or Platinum SLA's.</li> <li>The FTS environment has a single point of failure/no redundancy.</li> <li>The new technology provides functional benefits which will provide productivity improvements enabling improvements in the efficiency of data and file transfer.</li> </ul> <p><b>Project Rationale:</b> Highlight business challenge, capability or process the project addresses</p> <p>The Strategy roadmap for middleware that supports file transfers is SAP PI and Oracle Fusion. Work is required to migrate interfaces from legacy services to strategic services and decommission the legacy services.</p> <p><b>Project Scope:</b> Explain what is in scope and what is not in scope for the project</p> <p>There are 1327 Interfaces included in the scope of this work - 523 FTS, 340 RDX, 245 MQSI, 253 JCAPS, 44 PM4D, 7 VB</p> <p><b>Project Dependencies:</b> Identify any core program or project dependencies, please include INVP numbers if known</p> <p>INVP 3492 - Comprehensive Integration Services</p> <p><b>Basic Project Assumptions:</b></p> <p>All migration work</p> <p>After discussion with finance it is assumed that the majority of this project is capex based on the assumption that the work is creating new interfaces as interfaces move to the new oracle fusion service, which significantly enhances current capability. It has been assumed that there will still be some opex required for requirements, and post implementation support.</p>																																																					
<p><b>Indicative Project Costs by Fiscal Year</b></p> <table border="1"> <thead> <tr> <th>(\$M)</th> <th>Prior Years</th> <th>FY 2018</th> <th>FY 2019</th> <th>FY 2020</th> <th>FY 2021</th> <th>FY 2022</th> <th>FY 2023</th> <th>FY 2024</th> <th>FY 2025</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>CapEx</td> <td></td> <td>2.600</td> <td>0.700</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>3.300</td> </tr> <tr> <td>OpEx</td> <td></td> <td>0.020</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.020</td> </tr> <tr> <td>Impact on RTB</td> <td></td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> </tbody> </table>										(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total	CapEx		2.600	0.700	0.000	0.000	0.000	0.000	0.000	0.000	3.300	OpEx		0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total																																											
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<p><b>Indicative Project Costs by Delivery Phase</b></p> <table border="1"> <thead> <tr> <th>(\$M)</th> <th>Start-up</th> <th>R &amp; D</th> <th>D &amp; I</th> <th>Closure</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										(\$M)	Start-up	R & D	D & I	Closure	Total																																						
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6/2/2017

FY18 - Investment Request Summaries - IRSs - 1327 Interfaces - 523 FTS, 340 RDX, 245 MQSI,...

CapEx		0.600		2.700					3.300
OpEx	0.010	0.000		0.000			0.010		0.020
<b>Project Benefits - Type I only</b>									
(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**  
Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.  
The Impacts of this project on the Customer are based on a number of areas:

- Improves reliability and productivity
- Support Jurisdictional and business function initiatives
- Enables a better Customer Experience

Employees will be able to use an application with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.020	-24.4%	-244
CapEx Annual Savings		5.1%	0	CapEx Cost	3.300	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	High	-10.6%	-0.954
Regulatory Impact	Low	11.2%	0.112	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	Low	19.4%	0.194	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>2.57</b>			<b>Cost Score:</b>	<b>-3.35</b>
				<b>Overall Priority Score:</b>	<b>-0.776</b>		

**Investment Risk and Complexity**

Project Risk Score:	46	Risk Score Description: Risk Impact = 6 and Risk Likelihood = 7
Project Complexity Score:	21	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:  
There is a risk of failure of these unsupported platforms, as the fact that many of these systems support key company operations. Thus, our ability to continue to provide safe and reliable service would be impacted if one of these systems were to fail.

Now that customers are demanding new services, without this investment of upgrading our underlying technology infrastructure, we cannot deliver these new strategic programs.



<p><b>IS Project Dependencies</b> <small>if you don't see a project in the drop-down please contact the Planning &amp; Performance team.</small></p> <p><b>IS Projects:</b> 4706 - 1327 Interfaces - 523 FTS, 340 RDX, 245 MQSI, 253 JCAPS, 44 PM4D, 7 VB</p> <ol style="list-style-type: none"> <li>1. Has a dependency on IS Project;</li> <li>2. Has a dependency on IS Project;</li> <li>3. Has a dependency on IS Project;</li> <li>4. Has a dependency on IS Project;</li> <li>5. Has a dependency on IS Project;</li> <li>6. Has a dependency on IS Project;</li> </ol> <p><b>Business Initiative Dependencies</b></p> <p><b>IS Projects:</b> 4706 - 1327 Interfaces - 523 FTS, 340 RDX, 245 MQSI, 253 JCAPS, 44 PM4D, 7 VB</p> <ol style="list-style-type: none"> <li>1. Has a dependency on Biz Initiative;</li> <li>2. Has a dependency on Biz Initiative;</li> <li>3. Has a dependency on Biz Initiative;</li> <li>4. Has a dependency on Biz Initiative;</li> </ol> <p><b>Project Relationships</b></p> <p><input type="checkbox"/> Minor Works <span style="margin-left: 20px;">Project Relationship:</span></p> <p>Related Projects:</p>	<p><b>Benefiting Operating Companies:</b> <small>Check all that apply</small></p> <p><input type="checkbox"/> Select All Companies <input type="checkbox"/> Clear All Companies</p> <p><input type="checkbox"/> Select All Gas <input type="checkbox"/> Select All Electric <input type="checkbox"/> Select All Gen</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> National Grid USA Parent</li> <li><input checked="" type="checkbox"/> KeySpan Energy Development Corporation</li> <li><input checked="" type="checkbox"/> KeySpan Services Inc.</li> <li><input checked="" type="checkbox"/> KeySpan Energy Corp</li> <li><input checked="" type="checkbox"/> KeySpan Energy Delivery New York</li> <li><input checked="" type="checkbox"/> KeySpan Energy Delivery Long Island</li> <li><input checked="" type="checkbox"/> KeySpan Generation LLC (PSA)</li> <li><input checked="" type="checkbox"/> KeySpan Glenwood Energy Center</li> <li><input checked="" type="checkbox"/> KeySpan Port Jefferson Energy Center</li> <li><input checked="" type="checkbox"/> KeySpan Energy Trading Svc LLC</li> <li><input checked="" type="checkbox"/> Niagara Mohawk Power Corp- Electric Distribution</li> <li><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Gas</li> <li><input checked="" type="checkbox"/> Niagara Mohawk Power Corp - Transmission</li> <li><input checked="" type="checkbox"/> Massachusetts Electric Company</li> <li><input checked="" type="checkbox"/> Massachusetts Electric Company - Transmission</li> <li><input checked="" type="checkbox"/> Nantucket Electric Company</li> <li><input checked="" type="checkbox"/> Boston Gas Company</li> <li><input checked="" type="checkbox"/> Colonial Gas Company</li> <li><input checked="" type="checkbox"/> Narragansett Gas Company</li> <li><input checked="" type="checkbox"/> Narragansett Electric Company</li> <li><input checked="" type="checkbox"/> Narragansett Electric Company - Transmission</li> <li><input checked="" type="checkbox"/> New England Power Company - Transmission</li> <li><input checked="" type="checkbox"/> New England Hydro - Trans Corp</li> <li><input checked="" type="checkbox"/> New England Electric Trans Corp</li> <li><input checked="" type="checkbox"/> NG LNG LP Regulated Entity</li> </ul>
--	---

**Enabling IS Capabilities** check all that apply

<input type="checkbox"/> Enterprise Content Management (ECM)	<input type="checkbox"/> Enterprise Mobility
<input checked="" type="checkbox"/> Comprehensive Integration Services (CIS)	<input type="checkbox"/> Reporting and Analytics
<input type="checkbox"/> Hybrid Cloud	<input type="checkbox"/> Networks
<input type="checkbox"/> Next Gen Workplace	

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up	<i>Begin</i> Requirements & Deign	<i>Begin</i> Development & Implementation	<i>Begin</i> User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2017					March, 2019	

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

**Resourcing Strategy:**

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**Attached Supporting Documents**

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6/2/2017

FY18 - Investment Request Summaries - IRSs - 1327 Interfaces - 523 FTS, 340 RDX, 245 MQSI,...

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head IS Service Delivery, Global IS</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	

**nationalgrid**



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4497	Project Name: US Video Conference Programme								
Program:	Service Strategy Roadmap									
Sponsor:	John Gilbert	Title: Global Head IS Service Delivery, Global IS								
Relationship Manager:	Bill Kearns	Title: IS Relationship Manager, Global IS								
Prog Delivery Manager:	Dave McCune	Title: Programme Delivery, Global IS								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS / Service Strategy								
IS Roadmap Category:	IS Assurance	Business Area: Corporate IS			Portfolio: IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability			Region: Global			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<p><b>Project Description:</b> The context for the project with background information                      This project will replace the current Verizon OVC (Open Video Conferencing) dedicated service with cloud based WebEx CMR (Collaboration meeting room) service</p> <p><b>Project Rationale:</b> Highlight business challenge, capability or process the project addresses                      Migrating onto the webex based CMR service will put audio and video onto a common integrated platform. Providing a more consistent and reliable experience for users. This will mean that people can join a video call from the endpoint and location that they find most appropriate - eg from a fixed VC unit in an office or from an iPad with webex app. Moving onto a cloud based platform will mean we will benefit from incremental improvements as the supplier makes improvements. Consolidating onto one platform will reduce costs.</p> <ul style="list-style-type: none"> <li>We currently spend \$1m globally on Video calls - every call on the bridge is \$150 per hour. Using webex will remove these charges.</li> </ul> <p><b>Project Scope:</b> Explain what is in scope and what is not in scope for the project</p> <ul style="list-style-type: none"> <li>Migration of VC units from OVC bridge to webex</li> <li>Includes Skype for Business client integration with webex</li> <li>Change program to drive user migration to the new platform</li> </ul> <p>Excluded - any roll out of webex or skype for business to individual users.</p> <p><b>Work required:</b>                      Infrastructure changes in call manager to enable call connectivity to allow all VC units to dial into webex                      Federation between call manager and skype for business.ederation between call manager and skype for business.                      Administration to add the feature to existing webex users.                      Alter current webex package to provide feature for new users. Alter current webex package to provide feature for new users.                      Review of how more specialist VC rooms will work - eg Collaboration rooms, and board rooms and then project to proceed appropriately                      Implementation of a change program within nationalgrid to facilitate the move from OVC bridge onto webex.</p> <p><b>Project Dependencies:</b> Identify any core program or project dependencies, please include INVP numbers if known                      Dependent on call manager upgrade project                      Dependent on DRS approving the existing collaboration edge VC gateway architecture. (ongoing progress)                      Dependent on IDS and forward proxies projects - due to increase of bandwidth requirement.</p> <p><b>Basic Project Assumptions:</b>                      - Costs are very high level ROM                      - Assuming as configuration and business change - will be opex                      - Assumes its a global project                      - RTB reduction costs are based on FY17 spend and will be revisited during development of the Investment Paper                      - Assumed the capability will be available in 3 months with communications to drive further adoption</p>										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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OpEx		0.200	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.210
Impact on RTB		-0.200	-0.500	0.370	0.370	0.370	0.370	0.370	0.370	1.520

**Indicative Project Costs by Delivery Phase**

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.200	1.450		1.650
OpEx	0.020	0.040	0.200	0.010	0.270

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this program on the Customer are based on a number of areas:

- Improves reliability and productivity
- Better support for Jurisdictional and business function initiatives
- Enables a better Customer Experience

These VC Improvements will better help employees to use applications with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

As we move to a more mobile world with people working away from the traditional office, it will be critical to have communications systems in place that ensure clear, consistent, and more personal communications between all parties. This will be achieved through use of a consistent set of easy to use communication tools that provide voice, video, and text communications between parties both within and outside the company. In addition, these tools will take advantage of the capabilities of the new device being used to relay real-time information in the form of pictures, videos, and telemetry to staff and systems that can process the information and provide informed feedback to the remote staff.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score	
OpEx Annual Savings		10.3%	0	OpEx Cost	0.210	24.4%	-732	
CapEx Annual Savings		5.1%	0	CapEx Cost	0.000	-11.2%	0	
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0	
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0	
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Low	-10.6%	-0.106	
Regulatory Impact	Low	11.2%	0.112	Elapse Time Duration	High	-6.6%	-0.594	
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447	
Reliability	Medium	10.9%	0.327					
Customer & Community Responsiveness	Medium	5.3%	0.159					
Employee Satisfaction	Medium	4.6%	0.138					
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801					
Jurisdictional Engagement	High	8.2%	1					
			<b>Benefit Score: 2.38</b>				<b>Cost Score: -1.88</b>	
				<b>Overall Priority Score: 0.496</b>				

**Investment Risk and Complexity**

Project Risk Score:	46	Risk Score Description: Business will not achieve benefits of improved meeting experience.
Project Complexity Score:	14	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:  
 Older VC equipment will not be compatible  
 Users will not adapt to new platform

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4497 - US Video Conference Programme

- 1. Has a dependency on IS Project;
- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4497 - US Video Conference Programme

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:  
 Related Projects:

**Benefiting Operating Companies:** Check all that apply

- Select All Companies  Clear All Companies
- Select All Gas  Select All Electric  Select All Gen
- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Enterprise Mobility
- Comprehensive Integration Services (CIS)
- Reporting and Analytics
- Hybrid Cloud
- Networks
- Next Gen Workplace

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
June, 2017				March, 2019		

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

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FY18 - Investment Request Summaries - IRSs - US Video Conference Programme

Now that customers are demanding new services, without these VC Improvements in our underlying technology infrastructure, we cannot deliver these new strategic programs. Communications/Business change will be required to delivery business change.

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	
Business Relationship Manager	Bill Kearns	IS Business Relationship Manager	
IS Program Delivery Manager	Dave McCune	IS Program Delivery Manager	

**nationalgrid**



nationalgrid		Investment Request Summary - IS US			FISCAL YEAR 2018					
INV ID:	4513	Project Name:		IS Tools						
Program:	Service Strategy Roadmap									
Sponsor:	John Gilbert	Title:		Global Head of IS Service Delivery						
Relationship Manager:	Graham Pool	Title:		IS Relationship Manager, Global IS						
Prog Delivery Manager:	Tom Cunningham	Title:		Head of Programme Delivery, Global IS						
Paper Author:	Nicola Pennington / Steve Trezza	Title:		Business Consultant - Corporate IS / Service Strategy						
IS Roadmap Category:	Integration Services	Business Area:	Corporate IS	Portfolio:	IS for IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category:	Policy Driven	Primary Policy Driver:	Reliability	Region:	Global			
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<p><b>Project Description:</b> The context for the project with background information                  IS utilises a number of tools to support IS process to improve quality and productivity. Improvements to process through Process excellence require improvements to these tools. Tools for supporting IS processes - includes extension of use of rational suite (Focal point, rtc etc) - excludes ITSM - this is assumed to be in Athena Project                  A Strategic review of tooling is to be conducted July - Sept 2016 - which is expected to out put a number of recommendation. This line item is a placeholder for this work.</p> <p><b>Project Rationale:</b> Highlight business challenge, capability or process the project addresses                  Provides productivity and efficiency improvements to IS process primarily for processes supporting IS project processes (from investment planning through to implementation).</p> <p><b>Project Scope:</b> Explain what is in scope and what is not in scope for the project                  The scope covers all the identified functionality for a core service of each toolset.</p> <p><b>Project Dependencies:</b> Identify any core program or project dependencies, please include INVP numbers if known                  INVP3900 - Active Directory Improvements - Active Directory Improvements - Including federation support with cloud services</p> <p><b>Basic Project Assumptions:</b>                  Assumed to be small iterative projects - and cloud hosted solutions. Some implementation of new service (which could be capilised) but some configuration (opex) - opex in later years assumed that further configuration required to support process excellence.</p>										
<b>Indicative Project Costs by Fiscal Year</b>										
(SM)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	0.200	0.200	0.000	0.000	0.000	0.000	0.000	0.400
OpEx		0.000	0.400	0.400	0.000	0.000	0.000	0.000	0.000	0.800
Impact on RTB		0.000	0.160	0.160	0.160	0.160	0.160	0.160	0.160	1.120
<b>Indicative Project Costs by Delivery Phase</b>										
(SM)	Start-up	R & D		D & I		Closure		Total		
CapEx		0.050		0.350				0.400		
OpEx	0.010	0.135		0.650		0.005		0.800		

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FY18 - Investment Request Summaries - IRSs - IS Tools

**Project Benefits - Type I only**

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of these tools for the Customer are based on a number of areas:

- Improves reliability and productivity
- Support Jurisdictional and business function initiatives
- Enables a better Customer Experience

Employees will be able to use an application with more functionality in a more intuitive manner. The Jurisdiction and business function will be able to utilize a more reliable and resilient application, that will help to provide customers with more options when interacting with the Company.

Additionally benefits enables improved productivity, efficiency and quality within IS projects. Enabling reduced IS costs for project delivery and higher quality. Supports standardization and automation of processes used to drive Enterprise Architecture Planning and Governance.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.800	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	0.400	-11.2%	0
Revenue Generation (annual)		6.2%	0	RTB Efficiency	280.000	% -22.5%	-2.025
Financial Control	does not apply	6.2%	0	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	does not apply	11.2%	0	EIapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Low	5.3%	0.053				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>1.56</b>			<b>Cost Score:</b>	<b>-5.30</b>
				<b>Overall Priority Score:</b>	<b>-3.735</b>		

**Investment Risk and Complexity**

Project Risk Score:	<b>31</b>	<b>Risk Score Description:</b> Risk Impact = 3 and Risk Likelihood = 7 Reliability 3 less than 100 employees affected up to week, likely in next year (7)
Project Complexity Score:	<b>11</b>	<b>Project Complexity Score Description:</b>

**Key Risks Description:** Provide detail on project risks & mitigation strategy:  
 Now that customers are demanding new services, without these investments in our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

IS Projects: 4513 - IS Tools

- 1. Has a dependency on IS Project;
- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

- Select All Companies
- Clear All Companies
- Select All Gas
- Select All Electric
- Select All Gen
- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Business Initiative Dependencies**

IS Projects: 4513 - IS Tools

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works *Project Relationship:*

*Related Projects:*

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Design	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2017				March, 2018		

**Business Resource Estimates:** # of Full Time Equivalents

Start-up	Requirements & Design	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

**Resourcing Strategy:**

This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.

**Attached Supporting Documents**

**Recommendation Sign-off**

Role	Name	Title	Date



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FY18 - Investment Request Summaries - IRSs - IS Tools

<i>Business Project Sponsor</i>	<i>John Gilbert</i>	<i>Global Head of IS Service Delivery</i>	
<i>Business Relationship Manager</i>	<i>Graham Pool</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Tom Cunningham</i>	<i>IS Program Delivery Manager</i>	

**nationalgrid**



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4564	Project Name: <b>US SAP: Enhancement Pack 9 Upgrade</b>								
<b>Program:</b>										
Sponsor:	Doneen Hobbs	Title: VP US Shared Services								
Relationship Manager:	Joel Semel	Title: Relationship Manager								
Prog Delivery Manager:	Samir Parikh	Title: Director, Portfolio SAP Enterprise								
Paper Author:	Ella Weisbord	Title: Business Consultant								
IS Roadmap Category:	Enterprise SAP	Business Area: US F,SS&C		Portfolio: Other						
<input type="checkbox"/> In-Flight Project?	Invest Classification: Medium	Category: Policy Driven		Primary Policy Driver: Reliability		Region: US				
<input type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
The SAP Enhancement pack upgrade is an investment to provide for the upgrade of the core SAP application every two years (biennially) excluding the upgrade work associated with the annual HR service pack which is accounted for under a separate mandatory annual investment. The project would apply the latest agreed SAP service packs for ECC, SRM, PI, Portal, BPC and SolMan to ensure that the SAP application stays within current vendor support and mitigates the risk of system failure by remaining current every two years on the SAP core application. The investment would only include the upgrade packs (non HR) which are supplied by the SAP and would exclude any discretionary enhancements as part of this upgrade or any upgrades associated with ancillary USFP systems (ex. PowerPlan, uPerform, OpenText, SABRIX). The investment would also not account for any upgrade work which may be required on the BI/BW SAP platform. This biennial patching/upgrade strategy is to ensure that National Grid applies the latest service packs every two year in order to ensure proper system operation and application maintenance support.										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
Periodic upgrades and solution updates to maintain currency and supportability										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
<b>Included in scope:</b>										
- Upgrade core SAP application . The project would apply the latest agreed SAP service packs for ECC, SRM, PI, Portal, BPC and SolMan to ensure that the SAP application stays within current vendor support and mitigates the risk of system failure by remaining current every two years on the SAP core application										
- Automated Testing and Automated Performance Testing (including LoadRunner licenses)										
<b>Excluded from scope:</b> upgrade work associated with annual HR Service pack										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
INVP4348 - US SAP Infrastructure Landscape										
In addition, the unknown impact from Enterprise Wide Program:										
- Shaping The Future (Supply Chain Transformation Program)										
- Gas Enablement										
- HR Simplification Program										
<b>Basic Project Assumptions:</b>										
RTB cost is based on assumption that additional functionality can be added and would require Application Maintenance support										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		3.493	5.328							8.821
OpEx		2.427	0.592							3.019
Impact on RTB				0.178	0.178	0.178				0.534
<b>Indicative Project Costs by Delivery Phase</b>										

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FY18 - Investment Request Summaries - IRSs - US SAP: Enhancement Pack 9 Upgrade

(SM)	Start-up	R & D	D & I	Closure	Total
CapEx		2,901	5,920		8,821
OpEx	1,184	1,243		.592	3,019

**Project Benefits - Type I only**

(SM)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy. More reliable procurement, vendor management, inventory management, general ledger, financial reporting, system monitoring, and interface integration, closing and business reporting processes. More stable and reliable core SAP solution, reduced OSS messages and associated OSS note patches, opportunity for the elimination of custom code included in upgrade pack and faster SAP vendor resolution times for production problems and situations.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	3,019	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	8,821	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	14.125 %	-22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	does not apply	-9.8%	0
Soft Financial Benefits	Medium	3.8%	0.114	Dependencies	does not apply	-10.6%	0
Regulatory Impact	Medium	11.2%	0.336	Elapse Time Duration	Medium	-6.6%	-0.198
Process & Personal Safety	Low	19.4%	0.194	Change Management Effort	does not apply	-14.9%	0
Reliability	High	10.9%	0.981				
Customer & Community Responsiveness	does not apply	5.3%	0				
Employee Satisfaction	High	4.6%	0.414				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>3.64</b>			<b>Cost Score:</b>	<b>-5.43</b>
		<b>Overall Priority Score:</b>					<b>-1.787</b>

**Investment Risk and Complexity**

Project Risk Score:	42	Risk Score Description: Based on Risk Scoring Guide: Financial Impact Score: 6 (\$10-40M) / Likelihood of Failure: 7 (Likelihood score (50% chance within 2 years))
Project Complexity Score:	26	Project Complexity Score Description: Project Cost: 6 (>=\$5), Project Duration 1, Project Delivery 6, Process Impact 6, External Impact 4, Dependencies 2, Innovation: 1

Key Risks Description: Provide detail on project risks & mitigation strategy:

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4564 - US SAP: Enhancement Pack 9 Upgrade

- 1. Has a Upstream dependency on IS Project, 4348 - US SAP Application Asset Health
- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4564 - US SAP: Enhancement Pack 9 Upgrade

- 1. Has a dependency on Biz Initiative,
- 2. Has a dependency on Biz Initiative,
- 3. Has a dependency on Biz Initiative,
- 4. Has a dependency on Biz Initiative,

**Project Relationships**

- Minor Works Project Relationship:
- Standalone Project

Related Projects:

**Benefiting Operating Companies:** Check all that apply

- Select All Companies  Clear All Companies
- Select All Gas  Select All Electric  Select All Gen
- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmision
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Deign	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
April, 2017				March, 2019		

**Business Resource Estimates: # of Full Time Equivalents**

Start-up	Requirements & Deign	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

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FY18 - Investment Request Summaries - IRSs - US SAP: Enhancement Pack 9 Upgrade

<b>Recommendation Sign-off</b>			
<i>Role</i>	<i>Name</i>	<i>Title</i>	<i>Date</i>
<i>Business Project Sponsor</i>	<i>Doneen Hobbs</i>	<i>VP US Shared Services</i>	
<i>Business Relationship Manager</i>	<i>Joel Semel</i>	<i>IS Business Relationship Manager</i>	
<i>IS Program Delivery Manager</i>	<i>Samir Parikh</i>	<i>IS Program Delivery Manager</i>	

**nationalgrid**



nationalgrid		Investment Request Summary - IS US				FISCAL YEAR 2018				
INV ID:	4261	Project Name: <b>US Service Desk Improvements</b>								
Program:	US IS									
Sponsor:	John Gilbert	Title: Global Head of IS Service Delivery								
Relationship Manager:	Bill Kearns	Title: IS relationship manager - Corporate functions								
Prog Delivery Manager:	Richard Pedley	Title: Corporate IS PDM								
Paper Author:	Nicola Pennington / Steve Trezza	Title: Business Consultant - Corporate IS / Service Strategy								
IS Roadmap Category:	IS Assurance	Business Area:	Corporate IS	Portfolio:	US IS					
<input type="checkbox"/> In-Flight Project?	Invest Classification: High	Category:	Policy Driven	Primary Policy Driver:	Reliability	Region:	US			
<input checked="" type="checkbox"/> Growth Playbook Project?	<input type="checkbox"/> Shaping Our Future Project?	<input type="checkbox"/> Energy Efficiency Project?								
<b>Project Description: The context for the project with background information</b>										
Ongoing improvements to SMI (Service Management Integration) processes - extension of channels available for contacting help desk and resolving issues.										
Annual platform upgrade to: - to support new functionality - supportable platform to N-1										
Drive down calls to the servicedesk										
Open up utilisation of other channels of engagement										
Decommission and consolidate other legacy SMI toolsets into service now transformational improvements in SMI processes and wider automation. Such as: - CMDB (service watch) automated discovery - Supplier operational management - Project and portfolio management										
Integrating of servicenow with other systems to provide seamless workflow. Such as: - Success Factors - SAP solution manager UK/US - To support new functionality										
<b>Project Rationale: Highlight business challenge, capability or process the project addresses</b>										
Fit for purpose, stable support processes are essential for the smooth running of the National Grid businesses.										
This investment will continue the work started and provide National Grid with fit for purpose, stable, Service Delivery processes supported by a strategic toolset.										
Improving the underlying toolset and bringing all Service Desk technology up to the same standard will improve the SMI processes further and enhance the business user experience.										
<b>Project Scope: Explain what is in scope and what is not in scope for the project</b>										
This scope covers all the identified functionality for a core service.										
<b>Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known</b>										
Cannot start until Service Now Release 2 completes.										
<b>Basic Project Assumptions:</b>										
Assumes that Service Now release 2 has been completed in FY17										
Project costs compiled using estimates provided by the suppliers, together with estimated National Grid resource costs based upon a project plan.										
The project costs will be split equally between the UK and the US since each region will benefit equally.										
<b>Indicative Project Costs by Fiscal Year</b>										
(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.400	1.500	1.500	0.000	0.000	0.000	0.000	0.000	3.400

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OpEx	0.600	0.020	0.020	0.000	0.000	0.000	0.000	0.000	0.640
Impact on RTB	0.100	0.150	0.150	0.150	0.150	0.150	0.150	0.150	1.150

Indicative Project Costs by Delivery Phase

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.900	2.500		3.400
OpEx	0.020	0.100	0.500	0.020	0.640

Project Benefits - Type I only

(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

Key Business Benefits:

Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

Stable IS support processes have a direct impact on the National grid business to run reliable and productive processes.

Improves reliability of support processes, improving management of IS related issues will reduce "down time" and therefore improve business productivity.

The need to provide a single consistent process and user experience.

Investment Prioritization

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	0.640	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	3.400	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	30.882 %	-22.5%	-2.025
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	does not apply	11.2%	0	EIapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	Low	19.4%	0.194	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	Medium=16 to 39	8.9%	0.267				
Jurisdictional Engagement	High	8.2%	1				
		<b>Benefit Score:</b>	<b>1.92</b>			<b>Cost Score:</b>	<b>-6.69</b>
				<b>Overall Priority Score:</b>	<b>-4.763</b>		

Investment Risk and Complexity

Project Risk Score:	<b>37</b>	Risk Score Description: Risk Impact = 4 and Risk Likelihood = 7
Project Complexity Score:	<b>14</b>	Project Complexity Score Description:

Key Risks Description: Provide detail on project risks & mitigation strategy:

Schedule delay due to dependency on Release 2 deployment or reliance on end user resources for key activities.

Increased solution complexity or additional testing for Service Desk Integrations and SRM Solution.

**IS Project Dependencies** If you don't see a project in the drop-down please contact the Planning & Performance team.

IS Projects: 4261 - US Service Desk Improvements

- 1. Has a dependency on IS Project;
- 2. Has a dependency on IS Project;
- 3. Has a dependency on IS Project;
- 4. Has a dependency on IS Project;
- 5. Has a dependency on IS Project;
- 6. Has a dependency on IS Project;

**Business Initiative Dependencies**

IS Projects: 4261 - US Service Desk Improvements

- 1. Has a dependency on Biz Initiative;
- 2. Has a dependency on Biz Initiative;
- 3. Has a dependency on Biz Initiative;
- 4. Has a dependency on Biz Initiative;

**Project Relationships**

Minor Works

Project Relationship:

Related Projects:

**Benefiting Operating Companies:** Check all that apply

- Select All Companies  Clear All Companies
- Select All Gas  Select All Electric  Select All Gen

- National Grid USA Parent
- KeySpan Energy Development Corporation
- KeySpan Services Inc.
- KeySpan Energy Corp
- KeySpan Energy Delivery New York
- KeySpan Energy Delivery Long Island
- KeySpan Generation LLC (PSA)
- KeySpan Glenwood Energy Center
- KeySpan Port Jefferson Energy Center
- KeySpan Energy Trading Svc LLC
- Niagara Mohawk Power Corp- Electric Distribution
- Niagara Mohawk Power Corp - Gas
- Niagara Mohawk Power Corp - Transmission
- Massachusetts Electric Company
- Massachusetts Electric Company - Transmission
- Nantucket Electric Company
- Boston Gas Company
- Colonial Gas Company
- Narragansett Gas Company
- Narragansett Electric Company
- Narragansett Electric Company - Transmission
- New England Power Company - Transmission
- New England Hydro - Trans Corp
- New England Electric Trans Corp
- NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

- Enterprise Content Management (ECM)
- Comprehensive Integration Services (CIS)
- Hybrid Cloud
- Next Gen Workplace
- Enterprise Mobility
- Reporting and Analytics
- Networks

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

<i>Begin</i> Start-up	<i>Begin</i> Requirements & Design	<i>Begin</i> Development & Implementation	<i>Begin</i> User Acceptance Testing	<i>Go Live</i>	<i>Project Completion</i>	<i>Project Closure</i>
July, 2017				March, 2020	March, 2020	

**Business Resource Estimates:** # of Full Time Equivalents

<i>Start-up</i>	<i>Requirements &amp; Design</i>	<i>Develop &amp; Implement</i>	<i>Business Resources UAT</i>	<i>Go Live Readiness</i>	<i>Post Go Live Support</i>
0	0	0	0	0	0

**Resourcing Strategy:**

This project will be resourced using Solution Delivery Centre (SDC) partners, Systems integrator and IS resources.

**Attached Supporting Documents**



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**Recommendation Sign-off**

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head of IS Service Delivery	
Business Relationship Manager	Bill Kearns	IS Business Relationship Manager	
IS Program Delivery Manager	Richard Pedley	IS Program Delivery Manager	

nationalgrid



**nationalgrid** Investment Request Summary - IS US FISCAL YEAR 2018

INV ID: 4720 Project Name: **FY20 Edge Projects**

Program: **Service Strategy Roadmap**

Sponsor: **John Gilbert** Title: **Global Head IS Service Delivery, Global IS**

Relationship Manager: **Graham Pool** Title: **IS Relationship Manager, Global IS**

Prog Delivery Manager: **Tom Cunningham** Title: **Head of Programme Delivery, Global IS**

Paper Author: **Nicola Pennington / Steve Trezza** Title: **Business Consultant - Corporate IS**

IS Roadmap Category: **IS Assurance** Business Area: **Corporate IS** Portfolio: **IS for IS**

In-Flight Project? Invest Classification: **Medium** Category: **Policy Driven** Primary Policy Driver: **Reliability** Region: **US**

Growth Playbook Project?  Shaping Our Future Project?  Energy Efficiency Project?

**Project Description: The context for the project with background information**  
 As we use more cloud based services that dictate the pace of change we will need new capability to manage this impact on National Grid. This includes services to manage the change as well as reducing complexity in estate to reduce impact of changes.

As we move to any device working in the cloud our focus will change from end points and applications to data and the need to protect the data regardless of where it resides. We will within the period still predominately provide end user devices to employees. Reacting to the merging of mobile and PC world's we will need to refresh and manage existing devices in new ways.

**Project Rationale: Highlight business challenge, capability or process the project addresses**  
 This projects will provide new services and future projects to build a foundation that will enable or support the Utility of the Future. As customers demand new services, such as smart metering and distributed generation, an investment in our underlying technology infrastructure is needed in order to deliver these strategic programs.

**Project Scope: Explain what is in scope and what is not in scope for the project**  
 As we move to any device working in the cloud our focus will change from end points and applications to data and the need to protect the data regardless of where it resides.

**Project Dependencies: Identify any core program or project dependencies, please include INVP numbers if known**  
 There are no dependencies for this project to start. Work is dependent the effort completed in FY19.

**Basic Project Assumptions:**  
 This multi-year investment addresses IS health and capability challenges while enabling National Grid's strategic business objectives.

**Indicative Project Costs by Fiscal Year**

(\$M)	Prior Years	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
CapEx		0.000	0.000	2.000	0.000	0.000	0.000	0.000	0.000	2.000
OpEx		0.000	0.000	1.270	0.000	0.000	0.000	0.000	0.000	1.270
Impact on RTB		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Indicative Project Costs by Delivery Phase**

(\$M)	Start-up	R & D	D & I	Closure	Total
CapEx		0.100	1.900		2.000
OpEx					

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	0.040	0.140	1.070	0.020	1.270				
<b>Project Benefits - Type I only</b>									
(\$M)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Total
Type I - CapEx									0.000
Type I - OpEx									0.000
Revenue Generation									0.000

**Key Business Benefits:**  
 Describe benefits, both financial and non-financial, and when those benefits will be delivered. Provide a clear & concise business case stating the investment drivers – why do we need to do something and why now? Explain any Regulatory considerations and how this initiative aligns with the US Business Strategy.

The impacts of this project on the Customer are based on a number of areas:

- Improves reliability and productivity
- Support Jurisdictional and business function initiatives
- Enables a better Customer Experience

There is a risk of failure of unsupported platforms and the fact that many of these systems support key company operations. Thus, our ability to continue to provide safe and reliable service to our customers would be impacted if one of these systems were to fail.

**Investment Prioritization**

Benefits	Impact	Weight	Score	Cost	Impact	Weight	Score
OpEx Annual Savings		10.3%	0	OpEx Cost	1.270	-24.4%	-2.196
CapEx Annual Savings		5.1%	0	CapEx Cost	2.000	-11.2%	-1
Revenue Generation (annual)		6.2%	0	RTB Efficiency	0.000	% -22.5%	0
Financial Control	Low	6.2%	0.062	Union/Labor Relations	Low	-9.8%	0
Soft Financial Benefits	Low	3.8%	0.038	Dependencies	Medium	-10.6%	-0.318
Regulatory Impact	Low	11.2%	0.112	Elapse Time Duration	High	-6.6%	-0.594
Process & Personal Safety	does not apply	19.4%	0	Change Management Effort	Medium	-14.9%	-0.447
Reliability	Medium	10.9%	0.327				
Customer & Community Responsiveness	Medium	5.3%	0.159				
Employee Satisfaction	Medium	4.6%	0.138				
Mitigates a Corporate Risk / Risk of not Doing	High= 40 or more	8.9%	0.801				
Jurisdictional Engagement	High	8.2%	1				
			<b>Benefit Score: 2.38</b>				<b>Cost Score: -4.66</b>
				<b>Overall Priority Score: -2.286</b>			

**Investment Risk and Complexity**

Project Risk Score:	41	Risk Score Description: Reliability - 5, Likelihood 6
Project Complexity Score:	21	Project Complexity Score Description:

**Key Risks Description:** Provide detail on project risks & mitigation strategy:  
 There is a risk of failure of these unsupported platforms, as the fact that many of these systems support key company operations. Thus, our ability to continue to provide safe and reliable service would be impacted if one of these systems were to fail.

Now that customers are demanding new services, without this investment of upgrading our underlying technology infrastructure, we cannot deliver these new strategic programs.

**IS Project Dependencies** if you don't see a project in the drop-down please contact the Planning & Performance team.

**Benefiting Operating Companies:** Check all that apply

**IS Projects: 4720 - FY20 Edge Projects**

1. Has a dependency on IS Project;

2. Has a dependency on IS Project;

3. Has a dependency on IS Project;

4. Has a dependency on IS Project;

5. Has a dependency on IS Project;

6. Has a dependency on IS Project;

**Business Initiative Dependencies**

**IS Projects: 4720 - FY20 Edge Projects**

1. Has a dependency on Biz Initiative,

2. Has a dependency on Biz Initiative,

3. Has a dependency on Biz Initiative,

4. Has a dependency on Biz Initiative,

**Project Relationships**

Minor Works Project Relationship:

Related Projects:

Select All Companies  Clear All Companies  
 Select All Gas  Select All Electric  Select All Gen

National Grid USA Parent  
 KeySpan Energy Development Corporation  
 KeySpan Services Inc.

KeySpan Energy Corp  
 KeySpan Energy Delivery New York  
 KeySpan Energy Delivery Long Island  
 KeySpan Generation LLC (PSA)  
 KeySpan Glenwood Energy Center  
 KeySpan Port Jefferson Energy Center  
 KeySpan Energy Trading Svc LLC  
 Niagara Mohawk Power Corp - Electric Distribution  
 Niagara Mohawk Power Corp - Gas  
 Niagara Mohawk Power Corp - Transmission  
 Massachusetts Electric Company  
 Massachusetts Electric Company - Transmission  
 Nantucket Electric Company  
 Boston Gas Company  
 Colonial Gas Company  
 Narragansett Gas Company  
 Narragansett Electric Company  
 Narragansett Electric Company - Transmission  
 New England Power Company - Transmission  
 New England Hydro - Trans Corp  
 New England Electric Trans Corp  
 NG LNG LP Regulated Entity

**Enabling IS Capabilities** check all that apply

Enterprise Content Management (ECM)  Enterprise Mobility  
 Comprehensive Integration Services (CIS)  Reporting and Analytics  
 Hybrid Cloud  Networks  
 Next Gen Workplace

**Key Milestone Dates:** Select the 1st, 15th or last day of the month

Begin Start-up	Begin Requirements & Design	Begin Development & Implementation	Begin User Acceptance Testing	Go Live	Project Completion	Project Closure
January, 2019					March, 2019	

**Business Resource Estimates: # of Full Time Equivalents**

Start-up	Requirements & Design	Develop & Implement	Business Resources UAT	Go Live Readiness	Post Go Live Support
0	0	0	0	0	0

Resourcing Strategy:

**Attached Supporting Documents**

**Recommendation Sign-off**

6/2/2017

FY18 - Investment Request Summaries - IRSs - FY20 Edge Projects

Role	Name	Title	Date
Business Project Sponsor	John Gilbert	Global Head IS Service Delivery, Global IS	
Business Relationship Manager	Graham Pool	IS Business Relationship Manager	
IS Program Delivery Manager	Tom Cunningham	IS Program Delivery Manager	

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