

Docket No. 4770
Twenty Ninth Set of Data Requests of the
Division of Public Utilities and Carriers to National Grid
February 28, 2018

Service Company Rents

- 29-1 Please refer to the Company's response to DIV 9-5, Attachment DIV 9-5-2, project FY18 - Investment Request Summaries – IRSs – Mandated IS Projects FY19-21, page 2 of 4, and please respond to the following:
- a. Explain and provide documentation detailing the investment prioritization process used by the Company.
 - i. Explain and define the complete list of benefits and costs analyzed.
 - ii. Explain and define the “Impact”, “Scale”, and “Score” for costs and benefits, including the scale used for each.
 - iii. Explain how the overall priority score is considered in selecting an investment, including the score scale used.
 - iv. Does the Company generate an investment prioritization score for every investment? If not, please explain what types of investments are given a prioritization score.
 - v. Explain the Company personnel who are involved in determining the prioritization score?

Response can be found on Bates page(s) 1-11.

- 29-2 Please refer to Niagara Mohawk Power Corporation, Cases 17-E-0238 & 17-G-0239, August 2017, Prepared Testimony of Staff Information Services Panel, p. 35, lines 10-22, which states: “Staff has made adjustments to remove a number of discrete projects from the Rate Year revenue requirement. The Staff AMI Panel will discuss adjustments related to AMI projects. The Staff Electric Infrastructure and Operations Panel will discuss adjustments related to the Distributed Generation Interconnection Online Application Portal, or DGIOAP (INVP #4704F), Load and DER Forecasting (INVP #4729), and the System Control and Data Acquisition, (D-SCADA) projects (INVP # 4704G). The Staff Consumer Services Panel will address the Customer Bill Redesign project (INVP #4704Q).”
- a. Do any of the projects detailed in this section of testimony (or similar projects) part of the Company's Filing in Rhode Island? If so, please provide the names, location, and costs associated with these projects in the Company's Filing.

Response can be found on Bates page(s) 12.

Labor Expenses

- 29-3. Please refer to the Direct Testimony of Rosario, Jr., Amaral III, and Constable, page 29, lines 3-5, and provide the analytical tool in Excel format with formulae intact and any

supporting workpapers that it used to “predict, prioritize, and mitigate workforce capacity and capability risks to its core business”.

Response can be found on Bates page(s) 13.

- 29-4. Please refer to Direct Testimony of Bhargava, DeMauro, and Ravipaty, page 17, lines 1-2, and explain how many of the 64 full-time equivalent employees were added to the Service Company in each of the following years: Rate Year, Data Year 1, and Data Year 2.

Response can be found on Bates page(s) 14.

- 29-5. Please refer to Direct Testimony of Melissa Little, page 29, lines 19-22, and provide a table in Excel format showing the revenue requirement impact of the 204 post-Test Year hires separated into labor and each type of benefit for Rate Year 1, Data Year 1, and Data Year 2.

Response can be found on Bates page(s) 15.

- 29-6. Please refer to Workpaper MAL-4 Labor Expenses, tab Incremental FTEs (pages 10-12), and provide an updated version of tab Incremental FTEs in Excel format that includes additional columns for Rate Year, Data Year 2020, and Data Year 2021 in dollars (\$) for each type of benefit (e.g. health insurance) for each Position, including positions that are retiring in each year.

Response can be found on Bates page(s) 16.

Division 29-1

Request:

Please refer to the Company's response to DIV 9-5, Attachment DIV 9-5-2, project FY18 - Investment Request Summaries – IRSs – Mandated IS Projects FY19-21, page 2 of 4, and please respond to the following:

- a. Explain and provide documentation detailing the investment prioritization process used by the Company.
 - i. Explain and define the complete list of benefits and costs analyzed.
 - ii. Explain and define the “Impact”, “Scale”, and “Score” for costs and benefits, including the scale used for each.
 - iii. Explain how the overall priority score is considered in selecting an investment, including the score scale used.
 - iv. Does the Company generate an investment prioritization score for every investment? If not, please explain what types of investments are given a prioritization score.
 - v. Explain the Company personnel who are involved in determining the prioritization score?

Response:

- a.
 - i. This is a blanket funding project for Fiscal Years 2019-2021, which will be utilized to address regulatory mandates, regulatory audits, or compliance reporting requirements that emerge during the course of the years. The benefits section in the Investment Summary Request (IRS) document, was scored based on previous experience in delivering mandated projects where compliance with the mandate is the primary driver; the cost section was scored based on the total value of the investment. Please note that the costs, included in the IRS, are based on the historical spend over the last three years to deliver mandated Information Services (IS) projects to all National Grid operating companies. Lastly, as the individual projects become known, an IS sanction paper, containing the cost and benefits, will be raised for each of the projects that draw funding from this funding source.
 - ii. Please see Attachment DIV 29-1 for the Project Valuation Framework, which is utilized to score each project. As noted in the Framework, each of the benefit impacts are scored as either low, medium, or high, which equates to a scale of 0 to +9; the cost impacts, which are meant to counteract the benefit score, are scored on a scale of 0 to -9. Each “impact” is multiplied by a “weight” that has been agreed to previously with the National Grid business functions to produce a “score”. The scores are

- totaled to produce a Benefit and Cost score and these two scores are then combined to produce the overall priority score.
- iii. The overall priority score is used to guide the initial discussions with the National Grid business functions and jurisdictional teams on which projects are included in the annual IS Investment Plan. As part of these discussions, the merits of each project are further reviewed before an agreement is reached on which projects are ultimately included in the Plan. The range of overall priority scores, considered as part of this year's IS Investment Plan, were 4.12 to -5.50.
 - iv. The overall priority score is included on the IRS documents, which are utilized to capture future demand. An IRS is required for all IS projects that will be considered for inclusion in a future Investment Plan. Please note that there are instances where a critical project may arise during the year and must be addressed immediately. These projects will proceed directly to sanction, and no IRS document will be produced.
 - v. The IS Business Relationship Management (BRM) team will generate the overall priority score and complete the IRS document. The BRM team consists of senior IS professionals, who are responsible for working closely the National Grid business functions and jurisdictions to understand their future requirements.

US Process & Technology Project Valuation Framework

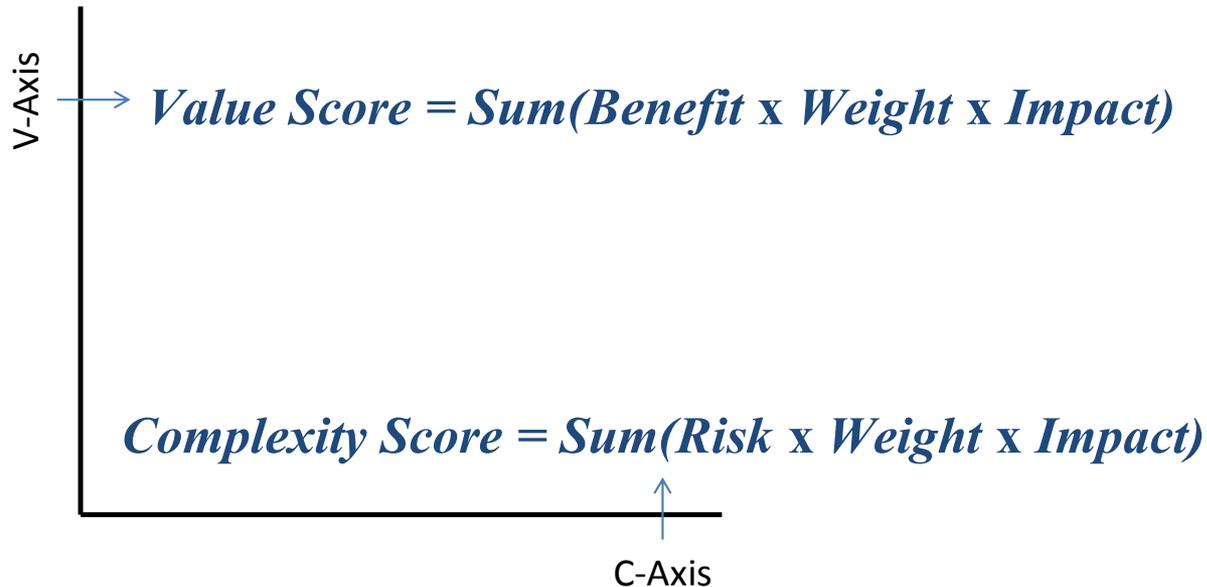


09/2017
Contact: Jen Cooper



A common approach, an equal playing field

Investments are assessed and evaluated on a common set of criteria that reflects the Company's values and ability to execute to select investment priorities.



Building the Framework

The calculation of value and complexity score is a factor of

- a) If the value or complexity criteria is in scope for the project (yes or no)
- b) What is the probability of realizing the value and/or degree of each complexity (low, medium or high based on a set of common definitions)
- c) Account for the importance, or “weight”, of the criteria to the company - which is determined by the US Executive Team through a pair-wise analysis

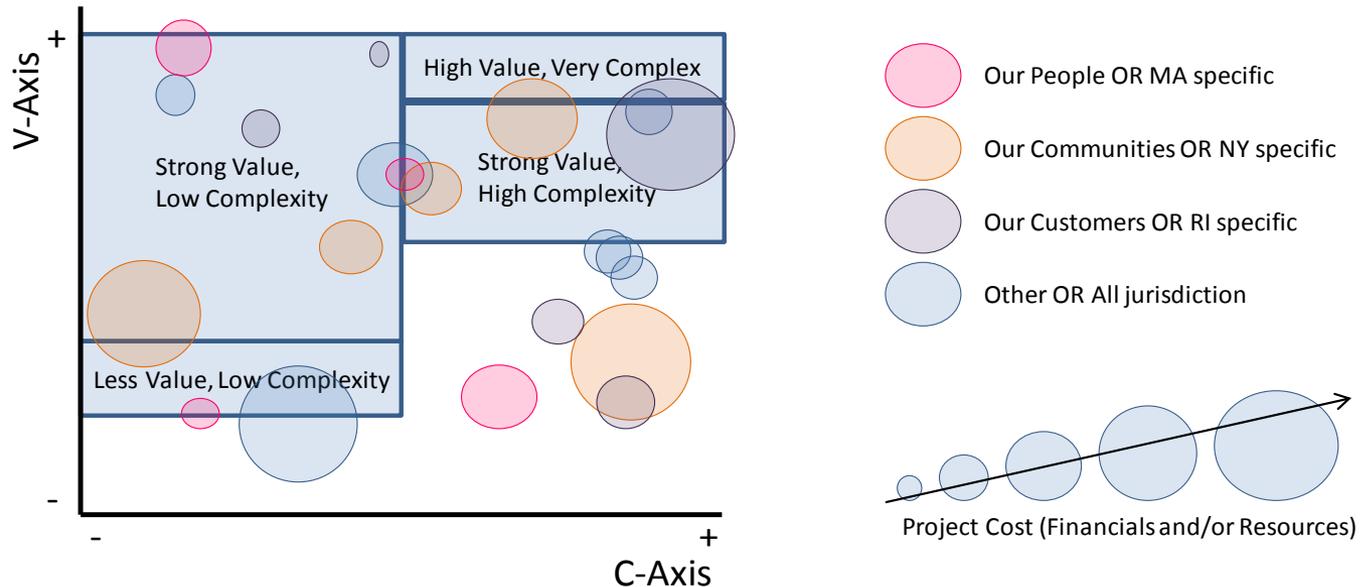
Measure	Y/ N	Weighting	Impact Score
Value Assessment Criteria	1/0	tbd%	L(1) – M(3) – H(9)
Complexity Assessment Criteria	1/0	tbd%	L(1) – M(3) – H(9)

$$\text{Value Score} = \text{Sum}(\text{Benefit} \times \text{Weight} \times \text{Impact})$$

$$\text{Complexity Score} = \text{Sum}(\text{Risk} \times \text{Weight} \times \text{Impact})$$

Building informed, balanced portfolios

Understanding value, complexity/risk and the size of the investment will allow the leadership team to build balanced investment portfolios. Projects could also be aligned to Priorities, Processes, or other categories to support decision making.



Illustrative

Assessment Criteria

	Strategic Value Factor		Complexity Factor
V1	OpEx Annual Savings	C1	Union / Labor Relations
V2	CapEx Annual Savings	C2	Project Duration (Elapsed Time)
V3	Annual Revenue Generation	C3	Business Change Management Impact
V4	Financial Controls	C4	Internal Dependencies/Interdependenci
V5	Soft Financial Benefits		
V6	Process & Personal Safety		
V7	Reliability		
V8	Customer & Community Responsiveness		
V9	Jurisdictional Engagement/Alignment		
V10	Employee Satisfaction		
V11	Regulatory Relations		
V12	Mitigates a Corporate Risk		
V13	RTB Efficiency (tbc)		

Criteria Impact Definitions

Assessment Lever	Short Description	Low (1)	Medium (3)	High (9)
Annual Revenue Generation	Absolute, measureable benefit; Quantifiable benefits directly related to the project being done. The absolute value may also relate to the prevention of current savings or revenues. The Project Sponsor is willing to adjust performance metrics, operating budget and/or head count	Less than \$250K	Between \$250-500K	Greater than \$500K
OpEx Annual Savings		Less than \$250K	Between \$250-500K	Greater than \$500K
CapEx Annual Savings		Less than \$750K	Between \$750K-2M	Greater than \$2M
Financial Controls		Makes an incremental financial control process improvement but does not resolve a known control issue	Mitigates a financial control weakness in the revenue process	Can be directly tied to the initiative and/or remediates a financial control deficiency
Soft Financial Benefits	Soft benefits may include process efficiencies, resource productivity, reduced cycle times, etc Benefits <u>can not</u> be calculated and/or the project sponsor is not willing to adjust performance and budget targets to reflect the expected benefit.	There is an intrinsic belief and agreement across impacted areas that there will be financial benefits of doing the project, but the benefits can not be calculated	Benefits can be estimated, and are less than \$2M	Benefits can be estimated, and are greater than \$2M

Criteria Impact Definitions

Assessment Level	Short Description	Low (1)	Medium (3)	High (9)
Regulatory / Legislative Impact		Creates some good faith goodwill with a regulatory or a state agency (eg., supports a regulatory initiative, community policy, etc); not related legislation mandate	Indirectly or tangentially satisfies or improves a response to a regulatory or legislative mandate, and/or creates significant goodwill with regulatory and state or federal agencies (eg., supports a regulatory initiative, community policy, etc)	Directly satisfies regulatory or legislative mandate (tied to a order reference #)
Process & Personal Safety		May indirectly reduce a safety risk or exposure to employees but no quantitative impact to safety performance measures.	May indirectly reduce a safety risk or exposure to employees that can indirectly be tied to safety performance measures	Directly reduces a safety risk or exposure that can be tied directly to in an impact to safety performance measures
Jurisdictional Engagement	Supports objectives to get to one common way of working	All within one Jurisdiction	More than one	Global or all US
Reliability	Improves the reliability of a gas, electric or technology system	Indirectly improves the reliability of all other (non-critical) Gas, Electric or IS systems	Directly improves the reliability of all other (non-critical) Gas, Electric or IS systems and/or indirectly improves the reliability of business critical, operational critical, E2E PEX critical or CNI system(s)	Directly improves the reliability of a business critical, operational critical, E2E PEX critical, CNI IS system, or Gas or Electric system

Criteria Impact Definitions

Benefits	Low (1)		Medium (3)		High (9)	
Customer & Community Responsiveness	Indirectly improves the NG relationship with customers and communities ; likely dependent on another project or effort to achieve the improvement; there is an inherent but not measureable expectation that the project will generally improve customer experience and/or community relations		Meaningfully improves our customer- and/or community-related KPI metrics; and/or Alleviates customer complaints and/or increases customer positive feedback as measured through our community relationship management		Directly helps us to achieve regulatory targets linked to penalties, such as CSAT (i.e., prevents penalty assessment) OR improves customer experience in a way that directly drives financial savings for the Company – must be measureable	
Employee Satisfaction	An inherent belief and subjective evidence that the project output will improve the level of employee satisfaction over current; and/or the project is inherently believed to avoid a decrease in ESAT (not doing the project would result in an ESAT decrease), but it can not be definitively proved or measured		Demonstrable and quantitative % improvement in ESAT (via project survey, annual employee survey or otherwise) across a single team/function/department; and/or the project will avoid a decrease in ESAT (not doing the project would result in an ESAT decrease) – the avoidance is demonstrable		Demonstrable and quantitative % improvement in ESAT (via project survey, annual employee survey or otherwise) across multiple teams/ functions/ departments	
Mitigates a Corporate Risk / Risk of not Doing	1-15 risk score	Improves an existing key risk control(s) already testing as appropriate and are deemed satisfactory.	16-39 risk score	Establishes suitable assurance activities or testing reveals that resolve required control improvements deemed non-fundamental	40-49 risk score	Replaces key controls that had not been established or were deemed to be ineffective.
RTB Efficiency (Avg Annual RTB/ Avg. Annual Depreciation)	Less than 10%		Between 10 – 14%		Greater than 14%	

Criteria Impact Definitions

Complexity	Low (1)	Medium (3)	High (9)
Union/Labor Relations	1 union affected (requires discussion and consent but does not require contract negotiations)	More than 1 union affected within the same jurisdiction (requires discussions and consent with labor leaders)	Multiple Unions across jurisdictions are affected, requiring discussions and consent; Labor negotiations are required for 1 or more unions
Internal Dependencies	Relationships with other projects, but a delay/cancel or change in those projects will not directly impede the success of this project and/or the success of the project depends on 1 or 2 other projects being managed within the same function/team	There are direct ties/dependencies to other projects within the same function but not the same team	There are direct ties to other projects that are outside of the control and management of the same function/team; dependencies cross technology , process, operations/business
Elapsed Time Duration	Project timeline from start to go-live is equal to or less than 6 months	Project timeline from start to go-live is greater than 6 months and equal to or less than a year (12 months)	Project timeline from start to go-live is greater than 12 months
Change Management Effort	There is some degree of change management effort to migrate behaviors and culture to make the project a success; however the degree of change is minimal and will require informal communications, coaching and support to a specific and contained audience		the degree of change and/or the volume of people affected by the change the project will deliver will require significant effort to manage the change (training courses, communications, support and transition models, transition/adjustment delays, etc); more than 10% of the project OpEx is to support change management activities

Division 29-2

Request:

Please refer to Niagara Mohawk Power Corporation, Cases 17-E-0238 & 17-G-0239, August 2017, Prepared Testimony of Staff Information Services Panel, p. 35, lines 10-22, which states: "Staff has made adjustments to remove a number of discrete projects from the Rate Year revenue requirement. The Staff AMI Panel will discuss adjustments related to AMI projects. The Staff Electric Infrastructure and Operations Panel will discuss adjustments related to the Distributed Generation Interconnection Online Application Portal, or DGIOAP (INVP #4704F), Load and DER Forecasting (INVP #4729), and the System Control and Data Acquisition, (D-SCADA) projects (INVP # 4704G). The Staff Consumer Services Panel will address the Customer Bill Redesign project (INVP #4704Q)."

- a. Do any of the projects detailed in this section of testimony (or similar projects) part of the Company's Filing in Rhode Island? If so, please provide the names, location, and costs associated with these projects in the Company's Filing.

Response:

Please see the joint Pre-Filed Direct Testimony of The Power Sector Transformation (PST) Panel for activities and related costs for the Advanced Metering Infrastructure (AMI) and System Control and Data Acquisition (D-SCADA). The AMI activities and costs, referred to as Advanced Metering Functionality (AMF), are included in Schedule PST-1, Chapter 4 – AMF (Bates Pages 68-99 of PST Book 1) and the D-SCADA activities and costs are included in Schedule PST-1, Chapter 3 – Modern Grid (Bates Pages 48-53 of PST Book 1).

Please see the Pre-Filed Joint Direct Testimony of Company Witnesses Anuraag Bhargava, Daniel J. DeMauro, and Mukund Ravipaty for the costs to the Customer Bill Redesign project (INVP 4704Q), which is located on Schedule ISP-1 (Bates Page 28 of Book 7).

The Distributed Generation Interconnection Online Application Portal project (INVP 4704F) and Load and DER Forecasting (INVP 4729) were Niagara Mohawk Power Corporation-specific projects, and there are no similar projects or costs included in this rate case proceeding.

Division 29-3

Request:

Please refer to the Direct Testimony of Rosario, Jr., Amaral III, and Constable, page 29, lines 3-5, and provide the analytical tool in Excel format with formulae intact and any supporting workpapers that it used to “predict, prioritize, and mitigate workforce capacity and capability risks to its core business”.

Response:

The Company is providing an *in camera* review for the Division of Public Utilities and Carriers (Division) Staff and representatives from the Division's consultant, Daymark Energy Advisors, of the analytical tool in Excel format with formulae intact, which is used to predict and prioritize workforce risks.

Division 29-4

Request:

Please refer to Direct Testimony of Bhargava, DeMauro, and Ravipaty, page 17, lines 1-2, and explain how many of the 64 full-time equivalent employees were added to the Service Company in each of the following years: Rate Year, Data Year 1, and Data Year 2.

Response:

All 64 full-time equivalent employees will be added to National Grid USA Service Company, Inc. before the start of the Rate Year and remain active throughout the Rate Year, Data Year 1 and Data Year 2. As of January 31, 2018, National Grid USA Service Company, Inc. has already filled 30 of the 64 positions.

Division 29-5

Request:

Please refer to Direct Testimony of Melissa Little, page 29, lines 19-22, and provide a table in Excel format showing the revenue requirement impact of the 204 post-Test Year hires separated into labor and each type of benefit for Rate Year 1, Data Year 1, and Data Year 2.

Response:

Please see Attachment DIV 29-5 for the requested table in Excel format showing the revenue requirement impact of the 204 post-Test Year hires separated by Narragansett Electric, Narragansett Gas, and National Grid USA Service Company, Inc. by labor and benefit type (Thrift, Group Life, Healthcare, and Payroll Tax) for the Rate Year (referred to as Rate Year 1 on the attachment), Data Year 1, and Data Year 2.

Page 1, Lines 1 through 15, Columns (a) through (d) reconcile to Workpaper MAL-4, Pages 10 through 13, which provide the base salaries of the incremental FTEs and vacancies included in the revenue requirement. Columns (e) through (i) reflect the appropriate O&M percentages, allocators, and labor inflators to provide the revenue requirement impact of the labor and associated benefits.

Division 29-6

Request:

Please refer to Workpaper MAL-4 Labor Expenses, tab Incremental FTEs (pages 10-12), and provide an updated version of tab Incremental FTEs in Excel format that includes additional columns for Rate Year, Data Year 2020, and Data Year 2021 in dollars (\$) for each type of benefit (e.g. health insurance) for each Position, including positions that are retiring in each year.

Response:

Please see Attachment DIV 29-6 for an updated version of tab Incremental FTE's (pages 10-12) of Workpaper MAL-4 Labor Expenses that includes additional columns for the Rate Year (referred to as Rate Year 1 on the attachment), Data Year 2020 (referred to as Data Year 1 on the attachment), and Data Year 2021 (referred to as Data Year 2) in dollars (\$) for the revenue requirement of labor and each type of benefit for each position, including positions that are retiring in each year.

The Incremental FTEs RY1 tab, Columns (a) through (e) reflects the rate year FTE counts and base salaries shown on Workpaper MAL-4, Columns (a) and (e). These amounts are summed on Line 191. Columns (f) through (j) reflect the appropriate O&M percentages, allocators, and labor inflators to provide the revenue requirement impact of the labor and associated benefits that are reflected in the Company's instant rate proposal. The attachment also includes the revenue requirement impact of rate year vacancies in a similar fashion to the Company's response to information request Division 29-5.

The Incremental FTEs Data Year 1 tab, Columns (a) through (f) reflects the data year 2020 FTE counts and base salaries shown on Workpaper MAL-4, Columns (b) and (f). These amounts are summed on Line 234. Columns (g) through (k) roll forward the revenue requirements of labor and associated benefits from the rate year incremental FTEs, and reflect the appropriate O&M percentages, allocators, and labor inflators to calculate the revenue requirement impact of the labor and associated benefits that are associated with the data year 1 incremental FTEs.

The Incremental FTEs Data Year 2 tab, Columns (a) through (g) reflects the data year 2021 FTE counts and base salaries shown on Workpaper MAL-4, Columns (c) and (g). These amounts are summed on Line 277. Columns (g) through (k) roll forward the revenue requirements of labor and associated benefits from the rate year and data year 1 incremental FTEs, and reflect the appropriate O&M percentages, allocators, and labor inflators to calculate the revenue requirement impact of the labor and associated benefits that are associated with the data year 2 incremental FTEs.