Consultation

National Grid Electricity Transmission (NGET) Non-operational IT Capex Re-opener Consultation

Publication date:	01 September 2021	**Contact:**	Electricity Transmission Operations Team
		Team:	Networks
Response deadline:	01 October 2021	**Tel:**	020 7901 7414
		Email:	RIIO2@ofgem.gov.uk

We are consulting on NGET's proposed Non-operational Information Technology (IT) Capex Re-opener Application for additional Artificial Intelligence (AI) Capabilities. We would like views from people with an interest in electricity and gas transmission, distribution networks, and from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at **Ofgem.gov.uk/consultations**. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Contents

1. Introduction

What are we consulting on?

1.1.   We are consulting on adjusting the NGET Non-operational Information Technology (IT) Capex[1] outputs and allowances under the RIIO-2 Non-operational IT Capex Re-opener ("the Re-opener").

1.2.   As part of its Special Condition 3.7 ("Non-operational IT Capex Re-opener")[2], NGET submitted a Re-opener application to request approval of its "additional AI capabilities" project. NGET has provided a project justification through cost reports and supporting documentation.

1.3.   Since its submission in April 2021, NGET has also provided additional information through a combination of meetings and Supplementary Question (SQ) responses. Throughout this document, all monetary figures are in 2018/19 prices except where otherwise stated.

Consultation Approach

1.4.   We are issuing this consultation in response to NGET's Re-opener application. The consultation sets out our assessment of that application and the adjustments we are proposing to make to NGET licence, including the addition of Price Control Deliverable (PCD) outputs and adjustments to allowances. Currently NGET's licence condition for Non-operational IT capex Re-opener applications does not have a PCD component and does not allow for the addition of PCD outputs by way of direction. Therefore, we intend to implement our proposals from this consultation by way of a statutory licence modification process, which will allow us to adjust allowances and add PCD outputs at the same time. We expect to bring forward this statutory consultation later this year, subject to the outcome of the consultation.

---

[1] Expenditure on new and replacement IT assets, including Hardware & Infrastructure and Application Software Development.
[2] https://www.ofgem.gov.uk/publications/decision-proposed-modifications-riio-2-transmission-gas-distribution-and-electricity-system-operator-licence-conditions

1.5.   We reviewed the Re-opener application against the application criteria contained within the Non-operational IT Capex Annex in the RIIO-2 Re-opener Guidance and Application Requirements Document ("the Guidance").[3]

1.6.   We considered the NGET's proposals and their justifications for the funding requested in accordance with our principal objective and statutory duties. In line with the Guidance, our assessment of NGET's proposals covers the three following areas:

- the needs case;

- the options assessment and the justification for the proposed project; and

- the efficient costs for the proposed projects.

Context and related publications

1.7.   The scope of this consultation is limited to NGET's Non-operational IT Capex Re-opener for additional Artificial Intelligence (AI) capabilities. This document is intended to be read alongside:

- the RIIO-2 Final Determinations Core Document[4],

- the RIIO-2 Draft Determinations – Core Document[5],

- NGET's Licence Special conditions, and

- RIIO-2 Re-opener Guidance and Application Requirements Document.

Consultation stages

---

[3] https://www.ofgem.gov.uk/publications/re-opener-guidance-and-application-requirements-document-0
[4] https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determinations_-_core_document_revised.pdf
[5] https://www.ofgem.gov.uk/system/files/docs/2020/07/draft_determinations_-_core_document_redacted.pdf

1.8.   This consultation will open on 01 September 2021 and close on 01 October 2021. We will review and publish the non-confidential responses after the consultation closes. We will endeavour to publish our decision by the end of October 2021.

How to respond

1.9.   We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document's front page.

1.10.   We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

1.11.   We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

Your response, data and confidentiality

1.12.   You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

1.13.   If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

1.14.   If the information you give in your response contains personal data under the General Data Protection Regulation 2016/379 (GDPR) and domestic legislation on data protection, the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.

1.15.   If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

1.16.   We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

1.   Do you have any comments about the overall process of this consultation?
2.   Do you have any comments about its tone and content?
3.   Was it easy to read and understand? Or could it have been better written?
4.   Were its conclusions balanced?
5.   Did it make reasoned recommendations for improvement?
6.   Any further comments?

Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. Ofgem.gov.uk/consultations.

Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

Upcoming	▶	Open	▶	Closed (awaiting decision)	▶	Closed (with decision)

2. Assessment against Re-opener Requirements

2.1.   This Chapter sets out Ofgem's assessment of NGET's application against both general requirements that apply to all Re-opener applications and specific requirements for the Non-operational IT Capex Re-opener application (see Table 1 below).

Table 1: Re-opener application requirements

Document	Requirement	Assessment
Special Condition 3.7	To explain how the adjustment requested would improve its Non-operational IT Capex.	Y
	To explain the basis of the calculations for the adjustment requested to allowances.	Y
	To give details of anticipated business benefits derived from any risk reduction as a result of the proposed activities.	Y
	To provide such detailed supporting evidence as is reasonable in the circumstances, which must include: • delivery plans; • a prioritisation programme; • market and industry cost comparison; and • anticipated business benefits derived as a result of the proposed activities	Y
Special Condition 9.4	To prepare applications for Re-openers in accordance with the Re-opener Guidance and Application Requirements Document.	Y
RIIO-2 Re-opener Guidance and Application Requirements Document	Assurance requirements: • To provide applications that are accurate, unambiguous, complete and concise • To provide written confirmation from a suitable senior person of the same • To provide a point of contact for each application.	Y

	To publish applications within 5 working days of submitting it to Ofgem with only necessary redactions; unless this would pose a risk to national security.	Y
	To provide clear answers on: • Why an adjustment is justified • What that adjustment should be	Y
	To set out the requirements to ensure senior leadership assurance of the application.	Y
Appendix 2: Non-operational IT (IT) Capex Reopener Application Guidance	To provide information relating to the Needs Case of the adjustment requested, including: • Alignment with overall business strategy and commitments • Demonstration of needs case	Y
	To provide information relating to the Options Selection of the adjustment requested, including: • Consideration of project options and methodology • Preferred option details	Y
	To provide Cost information relating to the adjustment requested, including: • Consideration of options • Breakdown of costs of preferred option • Justification and efficiency of costs	Y

2.2.   In formulating its Re-opener submission, NGET has tried to match the requirements of Special Condition 3.7 and these are covered in the following sections. In summary, NGET has engaged with Ofgem in order to explain the additional Non-operational IT Capex allowance that would be required for the introduction of new AI capabilities. Detailed costed plans have set out the adjustment, which are commensurate with historical industry costs. NGET has worked with Ofgem to elaborate the anticipated business benefits and identify a prioritised implementation approach.

2.3.   Ofgem has deemed that the submission from NGET has met all of the requirements set out in both the applicable Special Licence conditions and the detailed Re-opener application criteria set out in the RIIO-2 Re-opener Guidance as listed in the Table above. In the following Chapters we set out the assessment in more detail and our conclusion based on the evidence submitted by NGET.

3. Needs case for the proposed projects

> **Consultation Question 1:** Do you agree with our view of the validity of the needs case for the NGET Non-operational IT Capex Re-opener application for additional AI Capabilities?

3.1.   In this Chapter we detail our assessment of the needs case for the projects proposed in the Non-operational IT Capex Re-opener application.

3.2.   The Guidance states that as part of the Re-opener application licensees must demonstrate alignment between their Non-operational IT Capex plans and their overall business strategy and commitments.[6] We considered the information provided by NGET in its Re-opener application, as well as evidence gathered through SQs, to assess whether NGET has satisfactorily demonstrated the needs case for the proposed projects.

Alignment with overall business strategy and commitments

3.3.   This NGET AI Re-opener application comprises several linked NGET projects to provide additional AI capability. NGET's strategy is to invest in machine learning and AI technologies to ensure more effective and adaptive planning of its maintenance and capital plans, enabling more dynamic decisions and preparing the electricity system to run on purely zero-carbon electricity by 2025.

3.4.   We consider the proposals in this Re-opener application to be aligned with the overall business strategy and commitments. It supports the Ofgem guidance on System Operator: Transmission Owner (SO:TO)[7] Optimisation output delivery incentive (ODI) which encourages the Electricity Transmission Owners (ETOs) to proactively identify and provide solutions to the Electricity System Operator (ESO) to help reduce constraint costs.

---

[6] Appendix 2, para 1.1 – 1.4
[7] https://www.ofgem.gov.uk/publications/soto-optimisation-governance-document-0

Demonstration of needs case

3.5.   The Re-opener application for the AI project proposal consists of 3 distinct elements: outage sequencing; outage cost forecasting; and scenario modelling. We consider the needs case for each of these 3 distinct components separately below.

Outage Sequencing

3.6.   NGET has recently conducted a successful proof-of-concept that automatically generates the national year ahead outage plan whilst considering both system and resource constraints simultaneously. This project component proposed within the Re-opener application will develop that proof-of-concept into a full digital product that can be used in the core of NGET's annual outage planning process. By applying machine learning these modelled constraints will be further refined to create higher quality reliable intervention plans which respect constraints.

3.7.   Currently the development of the annual year-ahead outage plan is a highly manual, labour intensive task where system and resource availability are considered individually, with plans iterating between those two constraints at a regional level until both are satisfied before the process is repeated at a national level. As a result, the process requires significant resource and interactions that present opportunities or risks to the plan that are not always identified early in the process. This process restricts some of NGET's visibility to risk management as a business, which this project component will alleviate.

Outage Cost Forecasting

3.8.   The development and enhancement of a bespoke Constraint Analysis Tool (CAT) will enable NGET to work collaboratively with the Electricity System Operator (ESO)[8] to maximise the potential benefits from the RIIO-T2 Constraint Incentive[9] as visibility increases of potential system constraints and their costs. The CAT enables multiple case studies to be run per day c.40-50 (compared to 2-3 per day manually) thus significantly increasing the

---

[8] The ESO plays a central role in our energy system. It performs several important functions from the real time operation of the system, through to market development, managing connections and advising on network investment.
[9] https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/final_determination_nget_annex_revised.pdf

potential to collaboratively formulate strategies with ESO to minimise constraint costs resulting in lower system operating costs for the end consumer.

Scenario Modelling

3.9.   Building on the NGET optimisation engine, delivered within RIIO-1, this investment will model deliverability confidence and suggest alternate work or sequencing through ingesting data relating to all work, the drivers, delivery decisions and historic outcomes of previous work programming and planning cycles. The capability will learn from churn and actions to optimise future plans and automate planning activities resulting in more effective and efficient network investment plans.

3.10.   Elements of these capabilities were submitted as part of the RIIO-2 Business Plan. However, due to immaturities in the requirements and their limited ability to accurately forecast the required resource, NGET amended their submission to request allowances to be assessed through a Re-opener application.

Our initial view of needs case

Outage Sequencer

3.11.   We consider that NGET has demonstrated the needs case for the Outage Sequencer, and in addition will result in time savings in the manual outage placement process (~6 weeks of savings for 5-6 FTEs), there is also a potential saving of ~3 weeks for 7-8 FTEs in operational timescales, and a reduction in time by 60% when considering a rapid outage. It will also provide the opportunity to deliver constraint cost reductions which are incentivised under the new SO:TO Output Delivery Incentive (ODI) through NGET having a greater understanding of future system behaviour and network enhancement requirement. Effective optimising of the outages will reduce the outage requirement and allow the planning of more outages in parallel. NGET predicts that the same work can be delivered with up to 500 fewer outages resulting in a more efficient and secure operation of the network.

Outage Cost Forecasting

3.12.   We consider that NGET has demonstrated the needs case for the Outage Cost Forecasting in that it will result in NGET and ESO being able to collaborate following the separation of their businesses; give greater visibility and explanation to Customers seeking

an opportunity to connect to the transmission system and better predict the outcome of the connection works delivered.

Scenario Modelling

3.13. We did not initially consider that NGET had demonstrated the needs case for the scale of project they were proposing. We thought there were some potential benefits for NGET, but that these had not been elaborated well in its Re-opener application. We therefore decided to explore the needs case further for Scenario Modelling through bi-lateral discussions. During these bi-laterals it became apparent that Scenario Modelling is currently done manually and is constrained to limited geographic areas and therefore some scale of automation could provide a consumer benefit through more effective and efficient investment scenario planning on a broader geographical scale with less manual resource requirement. Therefore, we now agree that the revised proposal has demonstrated the needs case and can improve the value proposition for consumers.

4. Assessment of options and justification for the proposed projects

Consultation Question 2: Do you agree with our technical assessment of the range of solutions to meet the needs case?

Consultation Question 3: Do you agree with our minded-to view of the solution proposed by NGET?

4.1.   In this Chapter we detail our assessment of the options considered by NGET and its justification for the chosen projects.

4.2.   As set out in the Guidance,[10] as part of the Re-opener application NGET was required to demonstrate consideration of project options and methodologies for its Non-Operational IT Capex projects and to provide justification for its preferred option.

Consideration of project options and methodology

Outage Sequencer

4.3.   To address the needs case for the Outage Sequencer discussed in the previous Chapter, NGET has recently conducted a successful proof-of-concept that automatically generates the national year ahead outage plan whilst considering both system and resource constraints simultaneously. It only takes a few minutes to run and also identifies dependencies and alternative timings for each outage. Upgrading the proof-of-concept into a full digital product that can be used in the core of annual outage planning process would allow NGET to:

- Optimise the plan across the whole network not just regions, maximising efficiency of delivery;

---

[10] Appendix 2, para 1.5 – 1.11

- Improve deliverability of initial plan by automatically avoiding undesirable interactions, reducing expensive changes that arise due to things that could have been foreseen; and
- Generate plans in very short timescales, which allows scenario testing and better assessments of plan resilience – which will enable a more transparent trade-off between plan efficiency and plan resilience with stakeholders. This will also allow NGET to meet System Operator - Transmission Owner Code (STC) obligations.

4.4.   Our view is that building on the successful proof of concept is a sound approach and that the work done in developing this will have addressed the various options (and associated pitfalls) for arriving with a viable product; we therefore support the approach.

Outage Cost Forecasting

4.5.   NGET has considered the current Constraint Analysis Processes, within which Power System Engineers (PSE) undertake transmission system analysis in compliance with the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS). The analysis enables:

- NGET to identify opportunities for Customers to connect to the system;
- NGET to undertake asset renewals / maintenance / repairs / future network changes; and
- ESO to economically & efficiently operate the network.

4.6.   To date, NGET & ESO share "frozen" outage plans annually following extensive analysis using historic network costs. Subsequently, the frozen plan is iterated as the network & operating conditions change from those initially planned for.

4.7.   By looking at the bottlenecks and manual elements within the current Constraint Analysis Process, NGET has considered ways in which the existing process could be improved rather than replaced. This allows a more controlled, lower risk, deployment of new technologies times, whilst also allowing ESO co-operative involvement in the process.

4.8.   Our view is that NGET has considered an appropriate range of options, demonstrating through process performance criteria that utilising machine learning and AI could be applied to elements of the process and streamline the outage plan and build a process cognisant of defined economic events.

Scenario Modelling

4.9.   Initially NGET's proposal was to integrate data from approximately 30 existing (and emerging) systems, covering diverse data sets with some elements of replication and varying degrees of granularity, followed by two rounds of enhancements to implement additional requirements that had emerged during the initial implementation so that a more coherent and insightful data set could be fed into future planned systems.

4.10.   Our view was that the various development and delivery options for the Scenario Modelling work had not been presented with a clear consumer economic benefit to be realised. We challenged the project approach and methodology through both the SQ process and bi-lateral. As a result of this engagement, NGET revised its options and proposed to reduce the number of systems being integrated and the subsequent enhancement work to be affected. We believe this is a more appropriate option to be exercised and allows NGET to demonstrate the viability of the proposed modelling while mitigating consumer risk.

4.11.   In summary, NGET has a variety of approaches to progress the proposed AI-based scenario modelling. Whilst building upon previous prototypes or improving the level of automation within existing manual processes can be regarded as relatively low risk investment, we were concerned around the benefit achievable in this application by attempting to integrate a large number of disparate systems. NGET engaged with these concerns and identified mechanisms by which a richer proof of concept could be developed, reducing cost/risk whilst allowing more measurable benefits to be collected and understood. We believe this to be an appropriate approach to developing investment options and helps mitigate risk to the consumer of any stranded IT assets.

5. Cost assessment of the proposed projects

Consultation Question 4: Do you agree with our cost assessment of the NGET Non-operational IT Capex Re-opener Application for additional AI Capabilities?

5.1.   This Chapter sets out our assessment of the submitted costs of the Non-operational IT Capex Re-opener application. The results represent our current view of an economic and efficient solution.

5.2.   As set out in the Guidance[11], NGET was required to provide a breakdown of the allowance requested in the Re-opener application, and to demonstrate that these costs are justified and efficient.

Breakdown and justification of costs

Outage Sequencer

5.3.   NGET has provided a time based, costed, resource breakdown of the project along with cost breakdown of software licencing, Run-the-Business[12] (RTB) and hardware costs. In addition, NGET has considered the extent of interfaces required and costed each one individually.

5.4.   Day-rates used are commensurate with market rates for these types of roles and are within the bounds of the rate cards used across the industry for RIIO-2. Day-rates are also consistent with NGET submissions for RIIO-2.

---

[11] Appendix 2, para 1.12 – 1.20
[12] Run-the-Business costs are the incremental ongoing operational costs arising from an NGET IT investment

5.5.   The approach proposes two iterations of enhancements; these are sensibly timed in relation to the main task, allowing time for reflection and learning from the initial application rollout.

5.6.   We have assessed the breakdown of costs and accept the costs proposed for Outage Sequencer as being appropriate and economic through our benchmarking analysis.

Outage Cost Forecaster

5.7.   The Outage Cost forecaster is supported by a rough order of magnitude quote by an external supplier. There is a discrepancy of £11k (20/21 prices) in the cost build up against this quote which Ofgem proposes to disallow, since the increase in cost has not been justified through an explicit risk element.

5.8.   Day-rates used are commensurate with market rates for these types of roles and are within the bounds of the rate cards used across the industry for RIIO-2. Day-rates are also consistent with NGET submissions for RIIO-2.

5.9.   The approach proposes two iterations of enhancements, with the first iteration commencing immediately after the Scenario Modeller applications has gone live. Given the potential for early life support issues to still be prevalent requiring resolution with the original developers and for the application to still be bedding into Business as Usual activities, we do not support this timing and propose a reduction to allow for a single delayed enhancement activity.

5.10.   We have assessed the breakdown of costs and accept the majority costs proposed for Outage Sequencer. We propose a reduction for one of the enhancement rounds.

Scenario Modeller

5.11.   NGET has provided a time based, costed, resource breakdown of the project along with cost breakdown of licence, RTB and hardware costs. In addition, NGET has considered the extent of interfaces required and costed each one individually. The cost of the project is principally driven by the number of interfaces and following discussion through the bi-lateral process it was identified that some of these have very similar information types, though to different levels of granularity.

5.12. It is expected that once NGET has successfully implemented the solution they will have a stronger understanding of the consumer benefits realised, and that the benefit of revised granularity of data can be used to justify additional interfaces to existing systems. In addition, it is expected that the project should not bear the cost of integration of future systems and going forward integration costs from future systems should form part of the costs of those future projects. We therefore propose a reduction to reflect a reduction in the number of interfaces being funded at this stage.

5.13. Day-rates used are commensurate with market rates for these types of roles and are within the bounds of the rate cards used and accepted across the industry for RIIO-2. Day-rates are also consistent with NGET submissions for RIIO-2.

5.14. The approach proposes two iterations of enhancements, with the first commencing during the initial development period. Due to the vagueness of the benefits to be realised, we do not support these enhancement rounds and proposed a cost reduction. We would therefore expect a future Re-opener in January 2023 to address potential enhancements which would build on the evidence accumulated in the implementation.

Level of detail of cost information

5.15. NGET provided a detailed breakdown of roles-based costs, effort and day-rates, along with third party build of estimated costs (see Tables 2, 3 and 4 below).

Table 2: Outage Sequencer Expenditure and budget allocation

Outage Sequencer Expenditure	Budget
Partner - Offshore	18%
Partner - UK	6%
National Grid	3%
EXTERNAL	21%
Refinements	6%
Licenses and RTB	40%
Risk	8%

Table 3: Outage Cost Forecaster Expenditure and budget allocation

Outage Cost Forecaster Expenditure	Budget

Partner - Offshore	27%
Partner - UK	9%
National Grid	4%
EXTERNAL	1%
Refinements	9%
Licenses and RTB	42%
Risk	8%

Table 4: Scenario Modeller Expenditure and budget allocation

Scenario Modeller Expenditure	Budget
Partner - Offshore	37%
Partner - UK	12%
National Grid	5%
EXTERNAL	2%
Refinements	13%
Licenses and RTB	21%
Risk	9%

5.16. A number of risks have been captured and costed that apply across the three additional AI capability projects, there has been no attempt to identify specific risks to each individual project.

5.17. Within the risks there is an allowance to address potential scope creep and implementation of additional requirements. Given the relatively short duration of each project and the availability of funding for further enhancements this risk is not accepted, and we propose a funding reduction.

5.18. Within the risks there is also a provision related to the use of cloud-based storage of data. However, the risk provision of 5% has been factored on the staff costs of the enhancement phase, which is not an appropriate metric as the risk is for additional costs arising from potential uplift in data retention costs and has therefore been disallowed.

5.19. Apart from the issues related to risk; removal of refinement rounds and the minor external cost discrepancy we agree that the level of cost breakdown and information is proportionate to the stages of the respective projects.

Summary

5.20. The Table below details NGET's requested funding, our proposed reductions, and our proposed allowances against each of the components. Specifics of the work packages have been redacted for commercial sensitivity.

Table 5: NGET's requested funding and Ofgem's proposed allowances

Project Workstream	NGET Request (£m)	Ofgem Proposed Adjustments (£m)	Ofgem Proposed Allowances (£m)
Outage Sequencer	1.665	0.028	1.637
Outage Cost Forecaster	1.203	0.069	1.134
Scenario Modeller	5.612	3.138	2.474
Total	**8.48**	**3.235**	**5.245**
Proposed adjustment Breakdown			
Outage Sequencer - Risk- Scope	*0.128*	*0.021*	*0.107*
Outage Sequencer - Risk – Storage	*0.007*	*0.007*	*0*
Outage Cost Forecaster - External costs discrepancy	*0.247*	*0.011*	*0.236*
Outage Cost Forecaster - 2nd refinement round	*0.07*	*0.035*	*0.035*
Outage Cost Forecaster - Risks -scope	*0.091*	*0.019*	*0.072*
Outage Cost Forecaster - Risk – storage	*0.004*	*0.004*	*0*
Scenario Modeller - Refinement rounds 1 & 2	*0.751*	*0.751*	*0*
Scenario Modeller - Reduction in # of interfaces	*4.343*	*2.184*	*2.159*
Scenario Modeller - Risk – Scope	*0.474*	*0.159*	*0.315*
Scenario Modeller - Risk - storage	*0.044*	*0.044*	*0*

6. Consultation proposal summary

6.1.   We are proposing to add PCDs as a result of this Re-opener application given the specific nature of the investment and the ability to measure the quantifiable outputs of the Scenario Modelling element of the project. In addition, given the materiality of the Re-opener application it is important to ensure that the investment outcomes are achieved to ensure consumer value is protected. PCDs were not attached to the IT investments approved at Final Determination given the challenges of measuring and presenting quantifiable evidence of the applicable success criteria, without it being confounded by other deliverables. Subsequently the licence condition for Non-operational IT capex Re-opener applications did not have a PCD component and neither did it include within the consultation provisions direction-making powers for the ability to add PCD outputs.

6.2.   We therefore propose to use the statutory licence modification process to give effect to our proposals in this consultation so that we can amend allowances and add PCD outputs for Re-opener applications at the same time. We expect to bring forward this statutory consultation later this year.

6.3.   Table 6 below outlines our proposed allowances in relation to NGET's Re-opener requests. All values are in 18/19 prices.

Table 6: NGET's proposed allowances

Regulatory Year	21/22	22/23	23/24	24/25	25/26	All years
18/19 prices (£m)	2.009	1.634	0.534	0.534	0.534	5.245

6.4.   Table 7 below outlines the proposed PCDs in relation to NGET's Re-opener request, using the discreet cost elements submitted with the project plan for each of these outputs to set the monetary value of each PCD.

Table 7: NGET's Non-operational IT (IT) Capex PCD Table

Output	Delivery date	Measure	Basis of Payment Calculation	Allowance (£m) 18/19 prices
Creation of scenarios with a functional user interface to allow efficient view of outputs and sensitivities	31/3/23	Production of a single national scenario. With AI Application / learning algorithms started from at least 3 operational sources providing information	Incremental cost of hardware being deployed early	0.060
Creation of scenarios with a functional user interface to allow efficient view of outputs and sensitivities	30/9/23	At least 1 national scenario generated. With AI Application / learning algorithms started from at least 90% of systems	Element of risk pot across all AI work	0.15
Creation of scenarios with a functional user interface to allow efficient view of outputs and sensitivities	31/1/24	At least 2 national scenarios generated. At least 10 regional scenarios generated. With AI Application / learning algorithms started	Element of risk pot across all AI work	0.15
Single View of the Plan (SVOP) decommissioned	30/12/26	SVOP decommissioned	Anticipated RTB savings from SVOP decommissioning	0.4
The Scenario Modelling tool can be used to support NOA 2023/24	31/3/24	Use tool and capability to support recommendation and delivery risks for NOA post-development	Element of risk pot across all AI work	0.15
Total				**0.91**

7. Next Steps

7.1.   We welcome your responses to this consultation, both generally, and in particular on the specific questions set out in Chapters 3, 4 and 5. Please send your response to: RIIO2@ofgem.gov.uk. The deadline for response is 01 October 2021.

7.2.   We will conclude our assessment of NGET's Non-operational IT Capex Re-opener after receipt of the consultation responses and endeavour to publish our decision by the end of October 2021.

Appendices

Index

Appendix 1 – Consultation questions

Question 1: Do you agree with our view of the validity of the needs case for the NGET Non-operational IT Capex Re-opener application for additional AI Capabilities?

Question 2: Do you agree with our technical assessment of the range of solutions to meet the needs case?

Question 3: Do you agree with our minded-to view of the solution proposed by NGET?

Question 4: Do you agree with our cost assessment of the NGET Non-operational IT Capex Re-opener Application for additional AI Capabilities?

Appendix 2 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

3. With whom we will be sharing your personal data

(Include here all organisations outside Ofgem who will be given all or some of the data. There is no need to include organisations that will only receive anonymised data. If different organisations see different set of data then make this clear. Be a specific as possible.)

4. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for (be as clear as possible but allow room for changes to programmes or policy. It is acceptable to give a relative time e.g. 'six months after the project is closed')

5. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

6. Your personal data will not be sent overseas (Note that this cannot be claimed if using Survey Monkey for the consultation as their servers are in the US. In that case use "the Data you provide directly will be stored by Survey Monkey on their servers in the United States. We have taken all necessary precautions to ensure that your rights in term of data protection will not be compromised by this".

7. Your personal data will not be used for any automated decision making.

8. Your personal data will be stored in a secure government IT system. (If using a third party system such as Survey Monkey to gather the data, you will need to state clearly at which point the data will be moved from there to our internal systems.)

9. More information For more information on how Ofgem processes your data, click on the link to our "Ofgem privacy promise".