

Decision

Decision on the 2023 Network Innovation Competition Successful Delivery Reward (SDR) applications

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In May 2023 we¹ received three applications for a Successful Delivery Reward from three network companies who have completed their NIC projects.

This document sets out our assessment of the project's Successful Delivery Reward applications and the resulting level of award.

¹ The terms 'we', 'us', 'our' refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.

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Associated documents

New Suite of Transmission Structures: SSEN003 NeSTS Project Direction by Scottish Hydro Electric Transmission plc (SHE Transmission):

[Network Innovation Competition - NeSTS | Ofgem](#)

Phoenix Project Direction by SP Energy Networks (SPEN):

[Network Innovation Competition - Project Direction for Phoenix | Ofgem](#)

Future Billing Methodology (Cadent):

[Network Innovation Competition - Project Direction \(amended\) for Future Billing Methodology | Ofgem](#)

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Executive summary

Innovation is important to ensure that network companies support the transition to a smarter, more flexible, sustainable low-carbon energy system and reduce costs to consumers by finding new ways of operating and developing their networks. Accordingly, our framework for regulating network companies contains mechanisms to stimulate innovation.

Within the Revenue=Incentives+Innovation+Outputs (RIIO-1) price control framework, Network Licensees had access to the Network Innovation Competition (NIC) and Network Innovation Allowance (NIA).

While the RIIO-1 price control framework ended on 31 March 2021, a number of the RIIO-1 NIC projects remain in flight, and Ofgem will therefore continue to make decisions on these RIIO-1 projects during the course of the RIIO-2 price control framework.

The Successful Delivery Reward (SDR) is a financial reward that Network Licensees can apply for on completion of NIC projects that are delivered efficiently. The SDR is designed to reward projects that are well managed and completed at least to the standard expected given the information provided in the Full Submission. The Successful Delivery Reward Criteria (SDRC) against which the projects are judged are set out in the Project Directions.²

As per the NIC Governance Document³, Network Licensees made a compulsory contribution of 10% of the total project funding approved at the start of the project. This is the maximum value of the SDR that can be awarded for each project. Licensees can apply to receive the 10% contribution once the project is complete and they must demonstrate how they have met project-specific SDR Criteria.

There is an annual window for completed NIC projects to apply for their SDR. As required by the NIC Governance Document, both submissions were made by 01 May 2022. We used the applications submitted, along with other evidence received in the

² The project directions for the two projects are linked in the associated documents paragraph above.

³ [Version 3.0 of the Network Innovation Competition governance documents | Ofgem](#)

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course of the project, to assess whether the project had been well managed and met the SDRC set out in the Project Direction.

Having considered the applications, we have decided to award the projects the following:

- a) Project NeSTS - Awarded £750,062.13 representing 100% of the potential reward. Remaining unspent funds on the project will be returned to consumers.
- b) Project Pheonix - Awarded £1,764,375.59 representing 100% of the potential reward.
- c) Project Future Billing Methodology (FBM) - Awarded £5,380,080.12 representing 100% of the potential reward.

Our decision on the reward for the projects is presented in Table 1 below.

Table 1: Decision on the Successful Delivery Reward

Project	Funding Mechanism	Licensee	Licensee compulsory contribution (£)	Total SDR award (£)
NeSTS	Electricity NIC	SHE Transmission	750,062.13	750,062.13
Pheonix	Electricity NIC	SP Energy Networks	1,764,375.59	1,764,375.59
FBM	Gas NIC	Cadent	538,080.12	538,080.12

1. Introduction

Context

- 1.1 Network companies need to innovate to address the challenges they face and facilitate the transition to a low carbon economy. The NIC was designed to encourage Network Licensees to innovate and run network-related trials of technologies that will facilitate the transition to a low carbon economy and deliver wider environmental benefits to consumers. The funding provided to Network Licensees through the NIC Funding are paid for by consumers.
- 1.2 In accordance with the NIC Governance Document⁴, before licensees were awarded funding for NIC projects. Projects were assessed through an Initial Screening Process (ISP) before they are eligible to be developed into Full submissions. The Full Submissions were reviewed by Ofgem and an independent Expert Panel. The Expert Panel upon assessment made recommendations to Ofgem on which projects should be awarded funding and Ofgem based on the recommendations from Expert Panel use its judgment to decide which project should be awarded funding.
- 1.3 All NIC projects awarded funding in or before Relevant Year 2016/2017 are eligible to apply to Ofgem for the SDR once the project has been completed.
- 1.4 There is an annual window for completed NIC projects to apply for their SDR. The Network Licensee can submit their SDR application at any assessment window once the Project has concluded, and the Close Down Report has been published. The last window will occur one year after the final NIC Project has concluded.
- 1.5 The Network Licensee must provide sufficient evidence to allow Ofgem to evaluate the application. The Network Licensee may be permitted to resubmit its application in light of any clarification asked by Ofgem. Any resubmission or additional evidence submission may affect the timing of our decision. Ofgem may also use any other information it has gathered throughout the duration of the Project to inform its evaluation. If Ofgem considers that there is insufficient

⁴ All capitalised terms not otherwise defined in this document have the meaning given to them in the NIC Governance Document.

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evidence to evaluate the application, then the request for a Successful Delivery Reward will be rejected and the Network Licensee will be notified.

- 1.6 The maximum level of the Successful Delivery Reward is set out in the Project Direction and cannot exceed the level of the Network Licensee's Compulsory Contribution. The Authority will determine the level of the Successful Delivery Reward that may be awarded to the Network Licensee. This may be all, part or none of the amount requested.
- 1.7 In 2023, three NIC projects applied for the SDR. The total amount of funding applied for was £3,052,517.84.

Our decision making process

- 1.1 The process for assessing the SDR applications is set out in the NIC Governance Documents⁵. Network Licensees are required by their respective NIC Licence Conditions to comply with the NIC Governance Documents as if it formed part of the licence.
- 1.2 Paragraph 8.63 – 8.65 and Appendix 3 of the NIC Governance Document sets out our assessment process and the three elements of our assessment are summarised here:
- whether the project specific SDRC, contained in its Project Direction, had been met to a quality that we expected and delivered on time – weighted at 50% of the potential reward.
 - the final project cost to understand if the SDRC were met cost-effectively – weighted at 25% of the potential reward.
 - the management of the project, in particular how risk and uncertainty were controlled and how significant changes to the project were managed – weighted at 25% of the potential reward.
- 1.3 We place greater weighting on the first element because it is directly related to evaluating how the SDRC were met. The remaining weighting is split evenly between cost effectiveness and project management.⁶

⁵ [Network Innovation Competition Governance Documents v.3](#), paras 8.63 – 8.65.

⁶ See previous decisions for consistency of weighting [Decision on the 2021 Network Innovation Competition Successful Delivery Reward \(SDR\) applications \(ofgem.gov.uk\)](#)

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- 1.4 We assess projects on a case-by-case basis, using:
- evidence submitted in the applications.
 - responses from the companies to our supplementary questions (if any).
 - evidence gathered by us during the life of the project.
- 1.5 We adopt a standard assessment process to ensure the projects are treated consistently and fairly.
- 1.6 Our assessment of each project considers the types of evidence for quality set out in Paragraph 11 of Appendix 3 of the NIC Governance Document.
- 1.7 Some projects undergo changes in their scope, methodology and expected outputs, which can be expected due to the nature of innovation projects. To incorporate these changes into the Project Directions, the licensees have to submit change requests to us for approval.
- 1.8 When we assess whether to approve these change requests, we consider whether there has been a material change in circumstances and whether the changes are in consumers' interest. We are not at that time evaluating the licensee's management of the change request, and our approval of the request does not influence our decision on the level of the award under the SDR.
- 1.9 We reduce the amount of the reward where we believe the licensee had not made full use of the available risk management tools.
- 1.10 As per the NIC Governance Document, part of our assessment of the SDR is to consider whether the project was delivered cost effectively. We note in relation to the submissions assessed in this decision, that where Network Licensees have demonstrated that they have applied new and innovative approaches to underspend against the budget they have received the reward for cost effectiveness. We have not rewarded these Network licensees for underspending budgets where they have not demonstrated underspending, as the underspend may simply reflect an inaccurate, and possibly overstated, initial budget.
- 1.11 The remainder of this decision document outlines our assessment of this year's SDR application.

2. New Suite of Transmission Structures: SSEN003 NeSTS

Project summary

Scottish Hydro Electric Transmission plc (SHE Transmission) was awarded funding by Ofgem in 2015 to develop innovative designs for overhead line (OHL) structures based on new technologies and techniques.

The new suite of transmission structures will be deployed on the transmission network and is driven by stakeholder engagement to improve:

- OHL environmental performance by lowering visual and construction impacts, and
- lower OHL whole life asset costs via reduced land, construction, maintenance, and outage requirements.

Did the Project meet its SDRC?

- 2.1 The Project Direction set out eight SDR criteria. We consider that the evidence submitted by SHE Transmission in its SDR stage gate, recommendations and close down report for the project demonstrates that all eight SDRC set out in Ofgem's Project Direction were delivered to a high quality and in a timely manner. We therefore consider that the project has met its SDRC.

Were the SDRC cost-effectively delivered?

- 2.2 SHE Transmission delivered the project at a cost of £7,403,870 which is £96,751.32 (1.3%) under the budget set out in the Project Direction.
- 2.3 There are variances within budget categories. Only the Contractors budget category was within the 5% variance⁷ against the projected amount. Labour costs were £1,003,990 (39%) under budget which SHE Transmission attributes to efficient use of team resources.

⁷ Paragraph 13 of Appendix 3 in the Governance Document requires that to demonstrate the cost effectiveness for the SDRCs, the actual project expenditure should be presented against each line in the project budget and any variances in excess of 5% should be explained.

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- 2.4 Equipment costs were £389,360 (50.58%) over budget, IT costs were £617,310 (201.43%) over budget, and Travel and Expenses were £53,630 (13.06%) over budget. SHE Transmission attributes these costs variances to the unforeseen impacts of the COVID-19 pandemic, changes to the project's deployment site, and delays imposed by modified connection applications. This resulted in the project requiring more prototyping, testing, and modelling than originally planned.
- 2.5 Despite these variances, SHE Transmission delivered the project slightly under budget by 1.3% which is within the 5% materiality threshold set out in the project direction, and we are satisfied with SHE Transmission's justification for the cost variances. Overall, we consider the project to have been cost effective.

How well was the SHE Transmission project managed?

- 2.6 We consider that the project was managed well, with the risk register maintained and updated as the project progressed and that the project was delivered in a timely manner. SHE Transmission submitted project progress reports on time and notified Ofgem of any delays.

Our decision

- 2.7 SHE Transmission delivered the NeSTS project by meeting all SDRCs and managed project risks appropriately.
- 2.8 We have decided to award SHE Transmission the full SDR of £750,062.13.
- 2.9 Based on our assessment of evidence submitted on timeliness and quality, management, and cost effectiveness of the project, we are satisfied that the NeSTS project deserves the full SDR amount of £750,062.13

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Table 2: NeSTS Project Award

SDR criterion	Available (£)	Awarded (£)
SDRC Delivery	375,031.07 (50%)	375,031.07 (50%)
Cost effectiveness	187,515.53 (25%)	187,515.53 (25%)
Project management	187,515.53 (25%)	187,515.53 (25%)
Total	750,062.13	750,062.13

*The award is broken down as follows: 50% of the total award is calculated under the project specific SDRC delivery; 25% weighting is awarded for cost effectiveness; and a further 25% is awarded for project management.

3. Project Phoenix

Project summary

SP Energy Networks (SPEN) was awarded funding by Ofgem in 2016 to develop an innovative design hybrid control system by using a Synchronous Condenser (SC) coordinated with a static compensator (STATCOM) forming a Hybrid Synchronous Compensator (H-SC). Project Phoenix aimed to:

- Increase network inertia to improve Grid Stability and oscillation damping capability
- Provide dynamic reactive power support to alleviate voltage problems, maintaining good power quality on the network
- Increase system SCL and system operability

Did the Project meet its SDRC?

- 3.1 We consider the evidence submitted by SPEN in its SDR application for the project, to an acceptable quality, with evidence provided against each of the project successful delivery reward criteria with explanation for where delays occurred. The delays experienced were largely due to the impacts of COVID-19, which limited social interaction during the project's activity execution. We therefore consider the project met its SDRC.

Were the SDRC cost-effectively delivered?

- 3.2 The project was delivered over budget by 3%. With overspend largely within the Equipment and Contractors category (circa £1m), and Contingency spend (circa £500k). The main reason for the increase was due to additional contractor costs and COVID related delays, including extending the availability of site facilities for staff. Other areas came under budget, including Labour (circa -£300k) and Travel and Expenses (circa -£150k).
- 3.3 SPEN delivered the project 3% over budget, or equivalent to £587,980. This is within the 5% materiality threshold set out in the project direction, and we are satisfied with SPEN's justification and evidence provided for cost variances, as these primarily were due to the impact of COVID. Overall, we consider the project to have been cost effective.

How well was the SPEN project managed?

- 3.4 SPEN was required to provide regular reports throughout the project. All reporting were submitted on time to an acceptable standard. The impact of COVID resulted in delays and cost variations to aspects of the project, but we consider that these were reasonably managed and well evidenced by SPEN.
- 3.5 A risk register was provided, which evidenced a risk-based approach was used in the development of the work packs and in the delivery of the field trials. This provided a level of assurance that community and project risk was a project priority.
- 3.6 We consider that the project was managed well.

Our decision

- 3.7 SPEN delivered the Phoenix project by meeting all SDRCs and managed project risks appropriately. The project was delivered slightly over budget, but it was within the 5% materiality threshold, and we consider the reasoning for the cost variance and overspend to be reasonable and justified as these were primarily due to the impact of COVID.
- 3.8 We have decided to award SPEN the full SDR of £1,764,375.59
- 3.9 Based on our assessment of evidence submitted on timeliness and quality, management, and cost effectiveness of the project, we are satisfied that the Phoenix project deserves the full SDR amount of £1,764,375.59

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Table 3: Phoenix Project Award

SDR criterion	Available (£)	Awarded (£)
SDRC Delivery	882,187.79 (50%)	882,187.79 (50%)
Cost effectiveness	441,093.90 (25%)	441,093.90 (25%)
Project management	441,093.90 (25%)	441,093.90 (25%)
Total	1,764,375.59	1,764,375.59

*The award is broken down as follows: 50% of the total award is calculated under the project specific SDRC delivery; 25% weighting is awarded for cost effectiveness and a further 25% is awarded for project management. The table above represents how the project measured against each criteria.

4. Future Billing Methodology

Project summary

Cadent was awarded funding by Ofgem to implement its Future Billing Methodology Project through the NIC in 2016. The project sought to explore a “proof-of-concept” framework for a more specific way of attributing the energy content of gas or calorific value (CV) to maintain fair billing for consumers in a diverse-CV transition to a low carbon heat future.

The project aimed to conduct a series of field trials that focused on how the CVs within a Local Distribution Zone (LDZ) could be managed to create new charging areas to:

- Show that network modelling could be used to predict CV at a local level.
- Explore what level of hydrogen blending could be achieved under the current billing frameworks.

Did the Project meet its SDRC?

4.1 The Project Direction set out six SDR criteria. We consider that the evidence submitted by Cadent in its SDR stage gate, recommendations and close down report for the project demonstrates that all six SDRC set out in OFGEM’s Project Direction were delivered to a high quality and with no delays to deadlines. We therefore consider the project met its SDRC. There was a permitted delay of two years to the completion of the project driven by covid-19. A material change was requested and communicated to Ofgem in good time.⁸ Ofgem considered that the timeline extension would have been difficult or impossible for Cadent to foresee at the outset of the Project and would not significantly reduce or affect the value that network customers would derive from this Project.

Were the SDRC cost-effectively delivered?

4.2 Cadent delivered the project at a cost of £5,344,544, which is £36,257 (0.7%) under the budget set out in the Project Direction.

⁸ [FBM Decision on Change Request \(ofgem.gov.uk\)](https://www.ofgem.gov.uk/consult/condocs/fbm/fbm-decision-on-change-request)

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- 4.3 There are variances within budget categories but the main cost items; labour, contractors, equipment and decommissioning all landed well within the 5% variance.
- 4.4 IT costs are £18,467 (29%) under budget. These costs are lower than forecast mainly due to competitive re-procurement of these services from third-party suppliers.
- 4.5 Travel and expenses costs are £20,442 (71.7%) under budget. These costs are lower than projected, mainly due to the increase in remote working following the Covid-19 pandemic.
- 4.6 It is noted that decommissioning work is still in progress and the £208,320 cost for decommissioning includes an accrual of £147k for Operations costs.
- 4.7 Despite these variances, Cadent delivered the project slightly under budget by 0.7% which is within the 5% materiality threshold set out in the project direction, and we are satisfied with Cadent's justification for the cost variances. Overall, we consider the project to have been cost effective.

How well was the Future Billing Methodology project managed?

- 4.8 Cadent was required to provide reports at every key milestone throughout the project. All milestone reporting were submitted on time to an acceptable standard, with no substantial changes introduced in the project.
- 4.9 As a result of the pandemic Cadent was forced to push back the project completion from December 2019 to December 2022. The material change process was managed properly and without detriment to the overall project aims.
- 4.10 In consultation with stakeholders, Cadent identified the need for two new project options; Option A 'Work Within Existing Frameworks' and Option C 'Online CV Modelling'. These two options were subsequently selected for immediate implementation and further development, respectively. This demonstrated the value of consultation and active management of the project to achieve best outcomes.
- 4.11 A risk register was provided, and a risk-based approach used in the development of the work packs and in the delivery of the field trials. This provided a level of assurance that community and project risk was a project priority.

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4.12 We consider that the project was managed well.

Our decision

4.13 Cadent delivered the project by meeting all SDRCs and managed project risks appropriately. The FBM Project applied and further developed cost benefit analysis to evaluate each of the future billing options on a consistent basis, to provide a meaningful quantitative basis for presenting its findings and proposals to the gas industry. The project was also delivered slightly under budget.

4.14 We have decided to award the project 100% of the full SDR available: £538,080.12.

4.15 Based on our assessment of evidence submitted on timeliness and quality, management, and cost effectiveness of the project, we are satisfied that the FBM project deserves the full SDR amount of £530,080.12.

Table 3: Future Billing Methodology Project Award

SDR criterion	Available (£)	Awarded (£)
SDRC Delivery	269,040.06 (50%)	269,040.06 (50%)
Cost effectiveness	134,520.03 (25%)	134,520.03 (25%)
Project management	134,520.03 (25%)	134,520.03 (25%)
Total	538,080.12	538,080.12

*The award is broken down as follows: 50% of the total award is calculated under the project specific SDRC delivery; 25% weighting is awarded for cost effectiveness and a further 25% is awarded for project management. The table above represents how the project measured against each criteria.