



Making a positive difference  
for energy consumers

Company Secretary  
South Eastern Power Networks Plc  
Newington House  
237 Southwark Bridge Road  
London  
SE1 6NP

Direct Dial: 0141 354 5416  
Email: Steven.McMahon@ofgem.gov.uk

Date: 9 December 2020

Dear Company Secretary,

**Project Direction ref: SPN/ Constellation / 9 December 2020**<sup>1</sup>

South Eastern Power Networks Plc (SPN) submitted the project Constellation (the Project) in July 2020 to be considered for funding through the Electricity Network Innovation Competition (NIC). In the 2020 NIC decision<sup>2</sup>, we selected the Project<sup>3</sup> for funding.

SPN must comply with the terms contained in this Project Direction as a condition of the Project receiving funding through the Electricity NIC. These terms can be found in the Schedule to this Project Direction.

**Project Direction**

Chapter 5 of the Electricity NIC Governance Document<sup>4</sup> states that a Project Direction will:

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<sup>1</sup> This Project Direction constitutes notice pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989

<sup>2</sup> <https://www.ofgem.gov.uk/publications-and-updates/network-innovation-competition-2020-funding-decision>

<sup>3</sup> Unless otherwise specified, defined terms in this Project Direction have the meaning given to them in Appendix 1 of the Electricity NIC Governance Document.

<sup>4</sup> <https://www.ofgem.gov.uk/publications-and-updates/version-30-network-innovation-competition-governance-documents>

- set out the Project-specific conditions that the Network Licensee is committing to in accepting funding;
- require the Network Licensee to undertake the Project in accordance with the commitments it has made in the Full Submission<sup>5</sup>;
- set out the Approved Amount for the Project, that will form part of the calculation contained in the Funding Direction issued by the Authority under Chapter 7 of the Governance Document;
- set out the Project budget that the Network Licensee must report against and how variances against the Project budget will be reported and approved/rejected; and
- set out the mechanism for the Network Licensee receiving the Approved Amount as set out in the Funding Direction.

These requirements are described for the Project in the Schedule to this Project Direction.

## **Decision**

Provided SPN complies with the Electricity NIC Governance Document and with the Schedule to this Project Direction, the Project is deemed to be an Eligible NIC Project.<sup>6</sup>

This Project Direction constitutes notice pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989.



**Steven McMahon**

**Deputy Director, Electricity Distribution and Cross Sector Policy**

**For and on behalf of the Authority**

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<sup>5</sup> Where appropriate, the Project Direction may therefore include extracts from the Full Submission or refer to specific sections of the Full Submission.

<sup>6</sup> Eligible NIC Project has the meaning given in definitions of the Electricity Distribution licence.

## Schedule to Project Direction

### 1. TITLE

Project Direction ref: SPN / Constellation / 9 December 2020

### 2. PREAMBLE

This Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to South Eastern Power Networks Plc (the "Funding Licensee") pursuant to the Electricity NIC Governance Document issued pursuant to Part E of Charge Restriction Condition 5A (The Network Innovation Competition) of the Electricity Distribution Licence (the "Licence"). It sets out the terms to be complied with in relation to Constellation (the "Project") as a condition of it being funded under the NIC and the Funding Return Mechanism.<sup>7</sup>

Unless otherwise specified, defined terms in this Project Direction have the meaning given to them in Appendix 1 of the Electricity NIC Governance Document.

References to specific sections of the Funding Licensee's Full Submission in this Project Direction are, for ease of reference, made by referring to the section number in the Funding Licensee's Full Submission pro-forma.

### 3. CONDITION PRECEDENT

In accepting funding for the Project, the Funding Licensee is subject to the following Project-specific conditions:

#### ***Condition 1***

The Funding Licensee will not access any funds from the Project Bank Account until contracts are signed with the Project Partners named in Table 1 for the purpose of completing the Project.

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<sup>7</sup> The Funding Return Mechanism is defined in Part C of Charge Restriction Condition 5A.

**Table 1. Project Partners**

ABB Limited
GE Intelligent Platforms Ltd
University of Strathclyde
Siemens plc
Vodafone Limited

#### **4. COMPLIANCE**

The Funding Licensee must comply with Charge Restriction Condition 5A, the Electricity NIC Governance Document (as may be modified from time to time in accordance with Part E of Charge Restriction Condition 5A) and with this Project Direction.

Any part of the Approved Amounts that the Authority determines not to have been spent in accordance with this Project Direction (or in accordance with the Electricity NIC Governance Document) is deemed to be Disallowed Expenditure.

Pursuant to Charge Restriction Condition 5A, Disallowed Expenditure is any revenue received (whether by the Funding Licensee or by another Licensee) from the System Operator under the NIC Funding Mechanism that the Authority determines has not been spent in accordance with the applicable provisions of the Electricity NIC Governance Document or the terms of the relevant Project Direction.

Pursuant to Chapter 8 of the Electricity NIC Governance Document, Disallowed Expenditure includes any funds that must be returned if the Project is halted without Ofgem's permission, any funds that have not been spent in line with the approved Project Budget contained within the Project Direction, any unspent funds on the completion of the Project and any Directly Attributable Costs that the Authority deems to have been misreported following a Project audit. In particular, it includes the proportion of funds associated with a Project Deliverable (as proposed by the Network Licensee), where the Network Licensee is deemed by Ofgem to be at fault for the non-delivery of that Project Deliverable.

#### **5. APPROVED AMOUNT FOR THE PROJECT**

The Approved Amount is **£14,384,070**

The Approved Amount will be recovered by the System Operator from GB customers and transferred to the Network Licensee in the Relevant Year following the issue of the Project Direction. The Relevant Year is a period of twelve months beginning on 1 April in any calendar year and ending on 31 March of the next calendar year. Transfer of revenue between the System Operator and one or more Network Licensees must be made monthly on an equal basis, for the entirety of the Relevant Year, on the day of the month agreed by the Network Licensee making the transfer. The Network Licensee is responsible for notifying the System Operator of the bank account details to which transfers must be made. If a Network Licensee is required to return funding to the System Operator, the reverse applies.

## **6. PROJECT BUDGET**

The Project Budget is set out in Annex 1 of this Project Direction.

The Funding Licensee will report on expenditure against each line under the category total in the Project Budget, and explain any projected variance against each line total in excess of 5% as part of its detailed report which will be provided, in accordance with Chapter 8 of the Electricity NIC Governance Document. Ofgem will use the reported expenditure and the explanation to assess whether the funding has been spent in accordance with the Electricity NIC Governance Document and with this Project Direction.

## **7. PROJECT IMPLEMENTATION**

The Funding Licensee must undertake the Project in accordance with the commitments it has made in the Full Submission approved by the Authority pursuant to the Electricity NIC Governance Document and with the terms of this Project Direction. These include (but are not limited to) the following:

- (i) undertake the Project in accordance with the description set out in Section 2 (Project Description) of the Full Submission;
- (ii) provide a Network Licensee Compulsory Contribution of £1,627,320;
- (iii) complete the Project on or before the Project completion date of 30 September 2025; and

(iv) disseminate the learning from the Project at least to the level described in Section 5 (Knowledge Dissemination) of the Full Submission.

## 8. REPORTING

Ofgem may issue guidance (and amend it from time to time) about the structure and content of the Project Progress Report required by Chapter 8 of the Electricity NIC Governance Document. The Funding Licensee must follow this guidance in preparing the reports.

As required by Chapter 8 of the Electricity NIC Governance Document, the Funding Licensee must inform the Authority promptly in writing of any material event or circumstance likely to affect its ability to deliver the Project as set out in its Full Submission.

## 9. INTELLECTUAL PROPERTY RIGHTS (“IPR”)

In Section 5 of its Full Submission (Knowledge Dissemination) the Funding Licensee has stated that the Project conforms to the default IPR arrangements set out in Chapter 9 of the Electricity NIC Governance Document. The Funding Licensee must therefore undertake the Project in accordance with the default IPR arrangements.

## 10. PROJECT DELIVERABLES

At the end of a Project, the Funding Licensee must commission a report from an independent third party that verifies whether the Project Deliverables set out in Table 2 below (which comply with Chapter 5 of the Electricity NIC Governance Document) have been achieved.

After it has received the report, the Funding Licensee must send it to the Authority. Where a Project Deliverable has not been achieved we will consider whether funding should be returned to customers using the Funding Return Mechanism. If the Network Licensee is deemed by Ofgem to be at fault for the non-delivery of the Project Deliverable, it is the proportion of funding assigned to it within Table 2 below, which may be returned to customers.

**Table 2. Project Deliverables**

Ref	Project Deliverable	Deadline	Evidence	NIC funding request (%)
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1	Details of the system design and architecture for protection and control on a substation with local intelligence	28/02/22	(Workstream 1 [WS1] and WS2) Report on the system design of Constellation and the associated architecture for communication, protection and control across Methods 1 and 2 as described in the Full Submission Pro Forma.	16%
2	Description of the trial design and site selection criteria process for Methods 1 and 2	31/08/22	(WS1 and WS2) Report containing: <ul style="list-style-type: none"> <li>1. A description of the trial site selection criteria process for each phase of the network trials; and</li> <li>2. Details of the trial requirements for the demonstration of each element of Constellation.</li> </ul>	14%
3	Initial learning from off-network PNDC trial, and learning from development and virtualisation of Methods 1 and 2	30/06/23	(WS1, WS2 and WS3) Report containing: <ul style="list-style-type: none"> <li>1. Details of the key learning from the design and development of Methods 1 and 2;</li> <li>2. Details of learnings from design of 5G slicing; and</li> <li>3. Testing preparation and early lessons from the off-network testing.</li> </ul>	33%
4	Review and insights following site installation and learning from mid trial passive network demonstration	30/11/23	(WS2 and WS3) Report containing: <ul style="list-style-type: none"> <li>1. Key lessons from site installation process at Distributed Energy Resource sites and primary/grid substations; and</li> <li>2. Early learning from the passive network demonstration.</li> </ul>	17%
5	Learning from the Open Innovation Competition (OIC)	31/07/24	(WS3) Report containing key learning on the OIC use case prioritisation, participant selection and incubation process.	4%
6	Learning from academic insights and the governance required to prepare for the future world of distributed network operation	28/02/25	(WS7) Report containing analysis by the academic partner on the opportunities, risks and barriers to full distributed and interoperable future network operation.	6%
7	Analysis and presentation of findings from the trials and plan for BaU deployment	30/09/25	(WS3) Report containing findings from the trials and appraisal of the business case including key learning and plan for BaU deployment.	10%
<b>Common Project Deliverable</b>				

N/A	Comply with knowledge transfer requirements of the Governance Document.	End of Project	<ol style="list-style-type: none"> <li>1. Annual Project Progress Reports which comply with the requirements of the Governance Document;</li> <li>2. Completed Close Down Report which complies with the requirements of the Governance Document; and</li> <li>3. Evidence of attendance and participation in the Annual Conference as described in the Governance Document.</li> </ol>	N/A
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## 11. USE OF LOGO

The Funding Licensee and the Project Partners, External Funders and Project Supporters<sup>8</sup> may use the NIC logo for purposes associated with the Project but not use the Ofgem logo in any circumstances.

## 12. AMENDMENT OR REVOCATION

As set out in Chapter 8 of the Electricity NIC Governance Document and this Project Direction, this Project Direction may be amended or revoked under the following circumstances:

- (i) if the Funding Licensee considers that there has been a material change in circumstance that requires a change to the Project Direction, and the Authority agrees; or
- (ii) to reflect amendments made to the Licence.

## 13. HALTING OF PROJECTS

This Project Direction is subject to the provisions contained in Chapter 8 of the Electricity NIC Governance Document relating to the halting of projects. By extension, this Project Direction is subject to any decision by the Authority to halt the Project to which this Project Direction relates and to any subsequent relevant Funding Direction issued by the Authority pursuant to Charge Restriction Condition 5A.

<sup>8</sup> As listed in Box 1.6 in Section 1 of the Full Submission pro-forma.



In the event of the Authority deciding to halt the Project to which this Project Direction relates, the Authority may issue a statement to the Funding Licensee clarifying the effect of that halting decision as regards the status and legal force of the conditions contained in this Project Direction.

**NOW THEREFORE:**

In accordance with the powers contained in the Electricity NIC Governance Document issued pursuant to Part E of Charge Restriction Condition 5A of the Licence the Authority hereby issues this Project Direction to the Funding Licensee in relation to the Project.

This constitutes notice of reasons for the Authority's decision pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989.

**ANNEX 1: PROJECT BUDGET**

<b>Cost Category</b>	<b>Cost (£k)</b>
<b>Labour</b>	
	1,929.99
<b>Equipment</b>	
	2,023.02
<b>Contractors</b>	
	4,384.30
<b>IT</b>	
	6,358.92
<b>IPR Costs</b>	
	-
<b>Travel &amp; Expenses</b>	
	134.46
<b>Payments to users</b>	
	-
<b>Contingency</b>	
	1,369.50
<b>Decommissioning</b>	
	-
<b>Other</b>	
	73.04
<b>Total</b>	<b>16,273.22</b>