



Making a positive difference  
for energy consumers

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Date: 28 September 2018

Dear Company Secretary,

**Project Direction ref: WPD EMID / EFFS / 28 September 2018**

Western Power Distribution (East Midlands) Plc (WPD EM) submitted the Electricity Flexibility and Forecasting System project (the Project) in August 2017 to be considered for funding through the Electricity Network Innovation Competition (NIC). In our decision<sup>1</sup>, we selected the Project<sup>2</sup> for funding. This funding was conditional upon WPD EM engaging with the licensees implementing the Transition and Fusion projects, removing areas of unnecessary duplication and coordinating their activities to ensure the best outcome for consumers.

WPD EM (and the licensees implementing the Transition and Fusion projects) submitted a document to us on 6 July 2018<sup>3</sup> to demonstrate compliance with the requirements of the Project Direction, which we had issued on 16 January 2018.<sup>4</sup> A non-confidential version of the documents we considered are available on our website.

We requested further information which we received on 23 August 2018. That further information allowed us to satisfy ourselves on two areas. Firstly, ensuring that there was no unnecessary duplication between the Project and the Transition and Fusion projects. Secondly, to understand the actions undertaken by WPD EM to ensure that learning derived from the Project would be complementary to the learning derived from the Transition and Fusion projects.

Based on this information we are now satisfied that the Project meets the conditions for funding that were set and can therefore proceed. We note that:

- you have committed to involving the licensees implementing the Fusion and Transition projects in developing the requirements of the forecasting module; and
- the EFFS project will be focussing on the forecasting elements required by a Distribution System Operator (DSO) in Open Networks Future World B but will also be adaptable to other worlds.

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<sup>1</sup> <https://www.ofgem.gov.uk/publications-and-updates/network-innovation-competition-2017-funding-decisions>

<sup>2</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>3</sup>Published alongside this document

<sup>4</sup> <https://www.ofgem.gov.uk/publications-and-updates/network-innovation-competition-project-direction-electricity-flexibility-and-forecasting-system>

This Project Direction contains the terms to be complied with by WPD EM as a condition of the Project receiving funding through the Electricity NIC. It must comply with these terms, which can be found in the Schedule to this amended Project Direction.

### **Project direction**

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

- set out the Project-specific conditions that the Network Licensee (which for this project is WPD EM) 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. Where appropriate, the Project Direction may therefore include extracts from the Full Submission or refer to specific sections of the Full Submission;
- 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; and
- set out the mechanism for the Network Licensee receiving the Approved Amount as set out in section 4 of the Funding Direction.

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

### **Decision**

Provided WPD EM 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 & Cross Sector Policy, Systems & Networks**  
**For and on behalf of the Authority**

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<sup>5</sup> <https://www.ofgem.gov.uk/publications-and-updates/version-30-network-innovation-competition-governance-documents>

<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: WPD EM / EFFS / ~~16 January~~ 28 September 2018.

### 2. PREAMBLE

This Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to Western Power Distribution (East Midlands) plc (the "Funding Licensee") pursuant to the Electricity NIC Governance Document issued in accordance with 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 the 'Electricity Flexibility and Forecasting System' (EFFS) project (the "Project") as a condition of it being funded under the NIC and the Funding Return Mechanisms.<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. CONDITIONS PRECEDENT

#### Condition 1

##### Table 1. Project Partners

The Funding Licensee will not access any funds from the Project Bank Account until it has signed contracts with the Project Partners named in Table 1.

~~Taking into account Condition 2 of this Project Direction we recognise that the Project Partners may change, as a result, the Funding Licensee's Project Partners for the Project shall be the parties listed below or such other parties as are approved by the Authority.~~

AMT-Sybex National Grid Electricity Transmission Plc (in its role as the Great Britain System Operator)
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#### ~~Condition 2~~

~~(i) In addition, the Funding Licensee will not access any NIC funding until we have provided our consent by way of an update to this Project Direction to reflect the revisions made to the project budget, programme and Project Deliverables as a result of this condition. We will only provide consent where we are satisfied that, within six months of issuing this Project Direction, the Funding Licensee demonstrates it has made reasonable endeavours to coordinate with the Funding Licensees of the TRANSITION and FUSION Projects, so it can provide the following to an appropriate standard (such standard to be determined by the Authority):~~

~~a. An updated project budget (this may include the cost of complying with this condition) which is sufficiently justified and, where appropriate,~~

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

~~includes reduced costs from those identified during the Full Submission process as a result of identifying and removing areas of unnecessary duplication between TRANSITION, FUSION and EFFS.~~

- ~~b. Trial definitions and requirements for all three projects in order to ensure delivery of complementary learnings.~~
  - ~~c. Definition of requirements for the three projects relating to the use of complementary market models for accessing flexibility.~~
  - ~~d. Stage gates that will allow the continued validity of the proposed trials to be tested in terms of delivering beneficial learning for network customers against the wider industry, policy and regulatory landscape, and aligning the phasing of the projects such that all three (TRANSITION, FUSION and EFFS) have successfully concluded the Design Stage in a complementary manner; none of the projects will commence the deployment stage without prior approval of the Authority.~~
  - ~~e. A coordinated dissemination plan so that all interested stakeholders are informed of the outputs of each of the Projects and of the outputs of all of the other projects and learning in a coordinated fashion.~~
  - ~~f. An explanation of the cooperation activities for the three projects. This will identify how all of the projects will interact with each other to deliver a complementary and coordinated set of learning outcomes to maximise benefits to consumers, how peer review of outputs will work, who will be attending project meetings, and how the various work packages will align with and complement each other, without unnecessarily duplicating, the Open Networks activities, including taking account of wider stakeholder views.~~
  - ~~g. Updated set of Project Deliverables to replace those set out in Part 10 (Project Deliverables) below. These should be based on the reviews described above; and~~
  - ~~h. The endorsement of the Open Networks Steering Group (or equivalent) for the actions taken and the proposed next steps.~~
- ~~(ii) To demonstrate compliance with this Condition, the Funding Licensee must submit a report to us demonstrating how it has addressed each of the points in paragraph (i) and each of its sub-bullets above within six months of the date of this Project Direction~~
- ~~(iii) Following receipt of the Funding Licensee's submission under paragraph (ii) above, we will make a decision on whether to provide written consent for the Project to proceed and indicating whether the Funding Licensee can access NIC funding by way of an update to this Project Direction.~~
- ~~(iv) Subject to any requests for additional evidence under paragraph (v) below, if we do not provide written consent within six weeks of receiving the Funding Licensee's submission under paragraph (iii) above, the Authority will be deemed to have given permission to the Funding Licensee to proceed with the Project in accordance with the revised project budget, programme and Project Deliverables as identified in its submission to satisfy condition (ii). If we have requested additional evidence under paragraph (v) below, no consent shall be deemed to have been given within 6 weeks of the Funding Licensee's~~

~~submission and the Funding Licensee will need to request actual consent from the Authority.~~

- ~~(v) If during the six week period described in paragraph (iv) above, we consider that the Funding Licensee has not provided sufficient evidence in accordance with paragraph (i) above, we may request additional information from the Funding Licensee, allowing two weeks for the submission of additional information. We may extend the time within which we will update this Project Direction by an additional six weeks.~~

~~The dates for the project deliverables and project completion included in this version of the Project Direction will be replaced once the new co-ordinated plan has been produced.~~

#### **4. COMPLIANCE**

The Funding Licensee must comply with Part E of Charge Restriction Condition 5A of the Licence and with the Electricity NIC Governance Document (as may be modified from time to time in accordance with Part E of Charge Restriction Condition 5A and as modified and/or augmented in respect of the Project by this Project Direction) 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 revenue received (whether by the Funding Licensee or by another Licensee) under the NIC and Funding Return Mechanisms that the Authority determines not to have been spent in accordance with the provisions of the Electricity NIC Governance Document or with those 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 accordance with the approved Project Budget contained within the Project Direction, and any unspent funds on the completion of the Project.

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

The Approved Amount is **£2,942,704.38**

#### **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 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 and the documents submitted to us on 6 July 2018 and 13 August 2018 pursuant to the Electricity NIC Governance Document and with the terms of this Project Direction. These include (but are not limited to) the requirements that the Funding Licensee:

- (i) undertake the Project in accordance with the description set out in Section 2 (Project Description) of the Full Submission as amended by the document submitted to us on 6 July 2018;
- (ii) provide a Network Licensee Compulsory Contribution of ~~£330,199.46~~ £314,187
- (iii) provide an Additional Network Licensee Contribution of £197,023
- (iv) complete the Project on or before the Project completion date of 31 July 2021 ~~31 August 2020~~; and
- (v) disseminate the learning from the Project at least to the level described in Section 5 (Knowledge Dissemination).

## **8. REPORTING**

Ofgem may issue guidance (as amended 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 the 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**

Reference	Project Deliverable	Deadline	Evidence	NIC funding request (100%)
1	Mobilisation Exit Report	<del>05/02/18</del> <u>17/12/18</u>	<p>A mobilisation exit report will be produced, including evidence of:</p> <ul style="list-style-type: none"> <li>• Academic partner tender accepted</li> <li>• Collaboration agreements signed</li> <li>• Detailed plan with breakdown by project work stream and milestones</li> <li>• Project staff mobilised</li> <li>• Workplaces set up</li> <li>• Governance structure in place</li> <li>• Project Mandate/Charter Agreed</li> <li>• Project Initiation Document signed off</li> <li>• Co-ordination plan developed with any other successful DSO related NIC bid to minimise overlap.</li> </ul>	10%
2	Output from the forecasting and conflict avoidance	<del>19/07/18</del> <u>08/04/19</u>	<p>Publication of report showing forecasting and conflict avoidance options evaluated and selected options.</p> <p>Presentations at conferences and workshops to disseminate output.</p> <p>Conflict avoidance plan.</p>	6%

Reference	Project Deliverable	Deadline	Evidence	NIC funding request (100%)
3	Development of requirements specification for DSO functionality	<del>03/12/2018</del> <u>15/04/19</u>	<p>Production of requirements specification document outlining for DSO functionality, common protocols and approach to supporting these functionalities.</p> <p>Electricity Networks Association (ENA) and stakeholder collaboration strategy document (delivered a fixed period of time following publishing of ENA workshop output).</p> <p>Letters of support from key stakeholders (e.g. ENA Working Group) outlining agreement with specification document.</p>	9%
4	Development of EFFS Design Specification document	<del>21/03/19</del> <u>15/07/19</u>	<p>Production of set of Design models and documents outlining specific EFFS functionality and approach to delivering this functionality.</p> <p>Report detailing review of functional specification document at key stages.</p>	15%
5	Implementation and System Delivery	<del>26/11/19</del> <u>20/07/20</u>	Build and delivery of the completed EFFS system, including technical design package release, deployment and configuration and system handover.	3%
6	Completion of on-site system testing	<del>05/03/20</del> <u>02/11/20</u>	<p>Test report demonstrating completion of on-site testing to required standards; includes integration, user acceptance, operational and performance testing.</p> <p>Supply of additional supporting documentation evidencing this claim, to include test plans, scripts, exit reports and screenshots.</p> <p>Report detailing completed user training.</p>	22%



Reference	Project Deliverable	Deadline	Evidence	NIC funding request (100%)
7	Trials design and preparation	<del>14/02/20</del> <u>30/11/20</u>	<p>Strategy document outlining trials approach and methodology, detailing approach to plant, system operations, supplier / aggregator and tandem operations trials.</p> <p>Co-operation plan showing how duplication with other DSO NIC projects has been avoided and, if possible, how testing between projects will be carried out.</p>	31%
8	Trials – execution and knowledge capture	<del>02/07/20</del> <u>01/06/21</u>	<p>Completion report demonstrating outcomes of trial phases alongside test scripts, exit reports etc.</p> <p>Letter of support from external stakeholders and partners confirming completion of project trial phase and acceptance of results.</p>	2%
9	Gateway reviews	<del>04/09/18</del> <del>24/10/19</del> <del>03/07/20</del> <u>26/03/19</u> <u>20/05/20</u> <u>07/06/21</u>	Delivery of gateway report at the end of Workstream 1, Workstream 2 and Workstream 3, detailing progress against the project benefits and costs.	2%
<b>Common Project Deliverable</b>				
N/A	Comply with knowledge transfer requirements of the NIC Governance Document.	<del>31 August 2020</del> <u>End of Project</u>	<ol style="list-style-type: none"> <li>1. Annual Project Progress Reports that comply with the requirements of the Governance Document.</li> <li>2. Completed Close Down Report which complies with the requirements of the Governance Document.</li> <li>3. Evidence of attendance and participation in the Annual Conference as described in the Governance Document.</li> </ol>	N/A

## **12. USE OF LOGO**

The Funding Licensee and 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.

## **13. 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.

## **14. 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 Part E of Charge Restriction Condition 5A.

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.

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

**ANNEX 1: PROJECT BUDGET**

<b>Cost Category</b>	<b>Cost (£)</b>
<b>Labour</b>	
	397,418.00
	<u>397,410.33</u>
<b>Equipment</b>	
	68,000.00
	58,000.00
<b>Contractors</b>	
	2,371,139.40
	<u>2,371,163.40</u>
<b>IT</b>	
	288,803.00
<b>IPR Costs</b>	
	0
<b>Travel &amp; Expenses</b>	
	39,741.80
<b>Payments to users</b>	
	0
<b>Contingency</b>	
	<del>101,859.70</del>
	<u>101,817.98</u>
<b>Decommissioning</b>	
	0
<b>Other</b>	
	81,960.00
<b>Total</b>	<del><b>3,348,921.90</b></del>
	<b><u>3,338,895.75</u></b>