

NIA Project Registration and PEA Document

Notes on Completion: Please refer to the appropriate NIA Governance Document to assist in the completion of this form. The full completed submission should not exceed 6 pages in total.

Project Registration

Project Title

Carbon Tracing

Project Reference

NIA_WPD_022

Project Licensee(s)

Western Power Distribution East Midlands, Western Power Distribution South Wales, Western Power Distribution South West, Western Power Distribution West Midlands

Project Start Date

Aug 2016

Project Duration

8 Months

Nominated Project Contact(s)

Steve Gough- sgough@westernpower.co.uk

Project Budget

£235,000

Problem(s)

Giving visibility of generation mix to customers.

Method(s)

There is currently no mechanism for telling a customer how the generation in their area is made. We feel that by providing a mechanism for them to find out that this will act as:

- 1 A catalyst for more information about generation
- 1 Apotential new avenue into the community and those customers with an interest of where the energy they use comes from.

In addition we also feel that this project could also help with the engagement and use of Demand Side Management- allowing customers to see the impact of using their LCTs and possibly shifting their load.

Scope

The project will follow a waterfall approach starting with the procurement of the technical support required to build the app and website. We have catered for some trials with customers before launching it in order to determine the level of interest and whether or not it works to a level that does indeed create /satisfy the interest of end customers.

We intend to trial this with a selection of customers across the WPD areas for validation. After that we will then roll this out across all of WPD's areas. In order to obtain access to interested customers we will be partnering with the Carbon Trust on this part of the project. They will be actively working with us and the customers to hold surgeries and trials with customers to ascertain interest and monitor it with us throughout the project.

Objective(s)

The project will address a perception that customers are increasingly interested in how their energy is made up. We continue to see the adoption of Solar and Wind generation and as such being able to tell a customer what the mix is like at any point in time is deemed valuable. Having created an app and website we will then test with local groups before a cross WPD implementation enabling customers to see their generation mix and allow for their own generation as well.

Once this is available to all, we will then measure interest across the WPD area.

Success Criteria

Success will be measured within the trials and then monitored once live.

We will also be monitoring how we can make the calculation more accurate over time.

Technology Readiness Level at Start

2

Technology Readiness Level at Completion

3

Project Partners and External Funding

Not applicable- suppliers will be procured to build the app and website.

Carbon Trust will be providing the “validation” aspects of the trials for us.

Potential for New Learning

Parties will learn the following:

- 1 The detailed design of the app and website
- 1 The calculation of the energy mix and any options that were considered
- 1 The results of the trials with customers
- 1 Specific customer feedback
- 1 How the calculation of generation mix can be achieved to a level that is credible with the data available
- 1 The level of interest in such visibility of data and
- 1 How best to present this information to end customers through end user trials.

Scale of Project

We will trial this with customers first and if possible across more than one geographic area. This is because we believe that we should test the premise of the project fully first to see what the level of interest is in this deliverable. Failure to do this could mean that we miss an important validation of the project. It is though our intention that this should be as a minimum across all WPD areas.

Geographical Area

We intend to trial in as many areas as possible but as mentioned above, we want this to be across all areas from the outset.

Revenue Allowed for in the RIIO Settlement

N/A

Indicative Total NIA Project Expenditure

£212,195

Project Eligibility Assessment

Specific Requirements 1

1a. A NIA Project must have the potential to have a Direct Impact on a Network Licensee's network or the operations of the System Operator and involve the Research, Development, or Demonstration of at least one of the following (please tick which applies):

- | | |
|---|-------------------------------------|
| A specific piece of new (i.e. unproven in GB, or where a Method has been trialled outside GB the Network Licensee must justify repeating it as part of a Project) equipment (including control and communications systems and software) | <input type="checkbox"/> |
| A specific novel arrangement or application of existing licensee equipment (including control and/or communications systems and/or software) | <input type="checkbox"/> |
| A specific novel operational practice directly related to the operation of the Network Licensees System | <input checked="" type="checkbox"/> |
| A specific novel commercial arrangement | <input type="checkbox"/> |

Specific Requirements 2

2a. Has the Potential to Develop Learning That Can be Applied by all Relevant Network Licensees

Please answer one of the following:

i) Please explain how the learning that will be generated could be used by relevant Network Licenses.

Parties will be able to take the learning and develop their own app/website for their geographical area. In addition they will be provided with the detailed design of the app and website.

Parties will also be able to see the specific customer feedback from trials.

ii) Please describe what specific challenge identified in the Network Licensee's innovation strategy that is being addressed by the Project.

2b. Is the default IPR position being applied?

- | | |
|-----|-------------------------------------|
| Yes | <input checked="" type="checkbox"/> |
| No | <input type="checkbox"/> |

If no, please answer i, ii, iii before continuing:

i) Demonstrate how the learning from the Project can be successfully disseminated to Network Licensees and other interested parties

ii) Describe any potential constraints or costs caused or resulting from, the imposed IPR arrangements

iii) Justify why the proposed IPR arrangements provide value for money for customers

2c. Has the Potential to Deliver Net Financial Benefits to Customers

i) Please provide an estimate of the saving if the Problem is solved.

There is no saving to customers by providing this solution. The benefit may come from customers being more aware of where

generation comes from and thereby informing them ahead of any behavioral adjustments they may then make.

ii) Please provide a calculation of the expected financial benefits of a Development or Demonstration Project (not required for Research Projects). (Base Cost – Method Cost, Against Agreed Baseline).

N/A

iii) Please provide an estimate of how replicable the Method is across GB in terms of the number of sites, the sort of site the Method could be applied to, or the percentage of the Network Licensees system where it could be rolled-out.

All network licensees could use this application if it is proven to be successful. Costs are relatively small as it is about the development of an app/website. Conceivably many customers across all geographies could use the Method to inform their energy usage or perhaps invest in LCTs on the back of the information provided.

iv) Please provide an outline of the costs of rolling out the Method across GB.

This could be rolled out across all GB and this project would mean that other DNO's would ostensibly be saved the costs of developing the underlying calculation.

2d. Does Not Lead to Unnecessary Duplication



i) Please demonstrate below that no unnecessary duplication will occur as a result of the Project.

This has not been trialed before and the specification will be made available as part of dissemination.

ii) If applicable, justify why you are undertaking a Project similar to those being carried out by any other Network Licensees.

N/A