

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.

## **NIA Project Registration and PEA Document**

### **Date of Submission**

Jul 2021

### **Project Reference Number**

ENWEN03

## **Project Registration**

### **Project Title**

QUEST

### **Project Reference Number**

ENWEN03

### **Project Licensee(s)**

Electricity North West

### **Project Start**

June 2021

### **Project Duration**

3 years and 11 months

### **Nominated Project Contact(s)**

InnovationTeam@enwl.co.uk

### **Project Budget**

£9,674,900.00

## **Summary**

Using a novel application of proven technology combined with innovative software, QUEST will build an overarching system which operates a holistic voltage control methodology. This will co-ordinate existing and future voltage management techniques, establishing efficient network operation, promoting low-cost connection and use of LCTs, to deliver significant customer benefits.

## **Preceding Projects**

ENWLT204 - Customer Load Active System Services (CLASS)

ENWNT205 - Smart Street (eta)

## **Third Party Collaborators**

Schneider Electric

Smarter Grid Solutions

Impact Research

Fundamentals

## **Nominated Contact Email Address(es)**

innovation@enwl.co.uk

## **Problem Being Solved**

See QUEST NIC Full Submission Pro-forma

Link to QUEST ISP on Ofgem's website: <https://www.ofgem.gov.uk/publications/electricity-nic-2020-initial-screening-submission-quest>

Link to QUEST FSP on Ofgem's website: <https://www.ofgem.gov.uk/publications/electricity-nic-submission-quest-electricity-north-west-limited>

### **Method(s)**

See QUEST NIC Full Submission Pro-forma

### **Scope**

See QUEST NIC Full Submission Pro-forma

### **Objective(s)**

See QUEST NIC Full Submission Pro-forma

### **Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)**

N/A

### **Success Criteria**

See QUEST NIC Full Submission Pro-forma

### **Project Partners and External Funding**

See QUEST NIC Full Submission Pro-forma

### **Potential for New Learning**

See QUEST NIC Full Submission Pro-forma

### **Scale of Project**

See QUEST NIC Full Submission Pro-forma

### **Technology Readiness at Start**

TRL6 Large Scale

### **Technology Readiness at End**

TRL8 Active Commissioning

### **Geographical Area**

See QUEST NIC Full Submission Pro-forma

### **Revenue Allowed for the RIIO Settlement**

See QUEST NIC Full Submission Pro-forma

### **Indicative Total NIA Project Expenditure**

See QUEST NIC Full Submission Pro-forma

## Project Eligibility Assessment Part 1

There are slightly differing requirements for RIIO-1 and RIIO-2 NIA projects. This is noted in each case, with the requirement numbers listed for both where they differ (shown as RIIO-2 / RIIO-1).

### Requirement 1

Facilitate the energy system transition and/or benefit consumers in vulnerable situations (Please complete sections 3.1.1 and 3.1.2 for RIIO-2 projects only)

Please answer **at least one** of the following:

#### How the Project has the potential to facilitate the energy system transition:

N/A

#### How the Project has potential to benefit consumer in vulnerable situations:

N/A

### Requirement 2 / 2b

Has the potential to deliver net benefits to consumers

Project must have the potential to deliver a Solution that delivers a net benefit to consumers of the Gas Transporter and/or Electricity Transmission or Electricity Distribution licensee, as the context requires. This could include delivering a Solution at a lower cost than the most efficient Method currently in use on the GB Gas Transportation System, the Gas Transporter's and/or Electricity Transmission or Electricity Distribution licensee's network, or wider benefits, such as social or environmental.

#### Please provide an estimate of the saving if the Problem is solved (RIIO-1 projects only)

See QUEST NIC Full Submission Pro-forma

#### Please provide a calculation of the expected benefits the Solution

See QUEST NIC Full Submission Pro-forma

#### Please provide an estimate of how replicable the Method is across GB

See QUEST NIC Full Submission Pro-forma

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

See QUEST NIC Full Submission Pro-forma

### Requirement 3 / 1

Involve Research, Development or Demonstration

A RIIO-1 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 system software).
- A specific novel arrangement or application of existing licensee equipment (including control and/or communications systems and/or software)
- A specific novel operational practice directly related to the operation of the Network Licensees system
- A specific novel commercial arrangement

RIIO-2 Projects

- A specific piece of new equipment (including monitoring, control and communications systems and software)
- A specific piece of new technology (including analysis and modelling systems or software), in relation to which the Method is

unproven

- A new methodology (including the identification of specific new procedures or techniques used to identify, select, process, and analyse information)
- A specific novel arrangement or application of existing gas transportation, electricity transmission or electricity distribution equipment, technology or methodology
- A specific novel operational practice directly related to the operation of the GB Gas Transportation System, electricity transmission or electricity distribution
- A specific novel commercial arrangement

## Specific Requirements 4 / 2a

### Please explain how the learning that will be generated could be used by the relevant Network Licensees

See QUEST NIC Full Submission Pro-forma

### Or, please describe what specific challenge identified in the Network Licensee's innovation strategy that is being addressed by the project (RIIO-1 only)

See QUEST NIC Full Submission Pro-forma

### Is the default IPR position being applied?

Yes

## Project Eligibility Assessment Part 2

### Not lead to unnecessary duplication

A Project must not lead to unnecessary duplication of any other Project, including but not limited to IFI, LCNF, NIA, NIC or SIF projects already registered, being carried out or completed.

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

See QUEST NIC Full Submission Pro-forma

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

See QUEST NIC Full Submission Pro-forma

## Additional Governance And Document Upload

### Please identify why the project is innovative and has not been tried before

See QUEST NIC Full Submission Pro-forma

### Relevant Foreground IPR

See QUEST NIC Full Submission Pro-forma

### Data Access Details

See QUEST NIC Full Submission Pro-forma

### Please identify why the Network Licensees will not fund the project as apart of it's business and usual activities

See QUEST NIC Full Submission Pro-forma

### Please identify why the project can only be undertaken with the support of the NIA, including reference to the specific risks(e.g. commercial, technical, operational or regulatory) associated with the project

See QUEST NIC Full Submission Pro-forma

**This project has been approved by a senior member of staff**

Yes