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

Nov 2014

Project Reference Number

NIA_NGGD0045

Project Registration

Project Title

Fence Feet Improvements

Project Reference Number

NIA_NGGD0045

Project Licensee(s)

Cadent

Project Start

December 2014

Project Duration

0 years and 9 months

Nominated Project Contact(s)

NGGD Project Manager – John Connor, BBUS - Andrew Edwards

Project Budget

£13,200.00

Summary

- Undertake site trials, sites to be identified both in North West/West Midlands and London/East of England
- Wind tunnel testing to be undertaken in line with requirements under NRSWA and in compliance with HAUC specifications.
- Assessments for lifting and handling, under health and safety compliance.
- Measured reduction in customer impact regarding encroachment into walkways and highways.
- Measured improvements to work areas inside fencing systems with less of structures.
- Site and stores storage. Measured reduction in logistics, ability to store and distribute in a smaller footprint.

Nominated Contact Email Address(es)

Innovation@cadentgas.com

Problem Being Solved

Current methods for supporting temporary high fencing originate from the civil and construction industry where works are typically expected to have minimal impact on members of the public. These Fence feet protrude into public walkways as well as restricting the work area. They are manufactured from either a compressed rubber material or concrete within a plastic retainer and tend to deteriorate quite quickly and are difficult to move around and stack both on-site and at depots.

Within the utilities sector there are more sites where members of the public are affected and available space on site is typically less which also exacerbates the handling issues.

This product potentially allows more of the footpath to remain open to general members of the public as well as increasing working area for operations as each unit is 150mm smaller than its current equivalent

Method(s)

It is proposed to purchase a small number of these Fence Feet and undertake controlled site trials and wind tunnel testing to assess their safety, practicality and cost benefits.

Scope

- Undertake site trials, sites to be identified both in North West/West Midlands and London/East of England
- Wind tunnel testing to be undertaken in line with requirements under NRSWA and in compliance with HAUC specifications.
- Assessments for lifting and handling, under health and safety compliance.
- Measured reduction in customer impact regarding encroachment into walkways and highways.
- Measured improvements to work areas inside fencing systems with less of structures.
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Objective(s)

- Reduce of structures for members of the public when high fencing systems are used in public walkways.
- Reduce operational injuries and increase ease of use.
- Provide a fencing foot system that has greater stability in high wind conditions.
- A system that has stability when stored or stacked for both transportation and site storage.
- Reduce costs and improvements to operational efficiencies.

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

n/a

Success Criteria

- Feedback from trial participants and stakeholders is positive.
  - Positive wind tunnel and compliance tests.
  - Consultation will take place with HA's, NGGD Policy team, internal and external stakeholder and customer groups and the field users.

Project Partners and External Funding

n/a

Potential for New Learning

n/a

Scale of Project

30 units to be deployed over GDSPs in WM / NW, London and East of England. 6 sites will be selected from ongoing works where high fencing systems are required and the trial will be conducted over an 8 week period.

Technology Readiness at Start

TRL7 Inactive Commissioning

Technology Readiness at End

TRL8 Active Commissioning

Geographical Area

West Midland, North West, London, East of England.

Revenue Allowed for the RIIO Settlement

Tier 1 mains replacement/risk removal under Efficient and Safe Work Delivery and Removal of Risk.

Total Repex in allowance = £3.2bn.

Allowances as per Ofgem RIIO-GD1 Final Proposals and all figures are in 2009/10 prices.

Indicative Total NIA Project Expenditure

£13200

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)

An annual saving of approximately £100k is possible along with expected positive impacts from reduce MOP injury, LTI injury and site space and storage reduction.

Please provide a calculation of the expected benefits the Solution

Proposed unit costs per unit are approximately 40% cheaper.

Based on estimated purchase volumes this could exceed £100k saving pa across NGGD GDSP contracts.

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

This process would be transferable across all network licensees.

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

Contractual and commercial processes will be developed when the technology has been fully tested and approved for use.

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

For all networks working in close proximity to members of the public learning will be based on providing wind testing and results that can be duplicated throughout the industry.

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

Not applicable.

☑ Has the Potential to Develop Learning That Can be Applied by all Relevant Network Licensees

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.

n/a

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

n/a

Additional Governance And Document Upload

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

n/a

Relevant Foreground IPR

n/a

Data Access Details

n/a

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

n/a

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

n/a

This project has been approved by a senior member of staff

☑ Yes