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 Project Reference Number Apr 2013 2007_03 **Project Registration Project Title** Self Tuning Petersen **Project Reference Number Project Licensee(s)** 2007 03 Scottish and Southern Electricity Networks Distribution **Project Start Project Duration** July 2008 1 year and 9 months Nominated Project Contact(s) **Project Budget** SSEN Future Networks Team £64,356.00 **Summary** Introduction of new technology solution using self tuning arc suppression coils as an alternative to traditional resistance earthing methodology. Nominated Contact Email Address(es) fnp.pmo@sse.com **Problem Being Solved** Method(s) Scope Objective(s)

Understanding of design installation and maintenance requirements of self tuning arc suppression technology along with improved fault

Success Criteria

location measurement.

n/a

Project Partners and External Funding

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

n/a

Potential for New Learning

n/a

Scale of Project

n/a

Geographical Area

Revenue Allowed for the RIIO Settlement

Indicative Total NIA Project Expenditure

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)

n/a

Please provide a calculation of the expected benefits the Solution

n/a

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

n/a

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

n/a

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):

| 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 justif 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 |
|---|
| \Box 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 |
| \square 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 n/a |
| Or, please describe what specific challenge identified in the Network Licensee's innovation strategy that is being addressed by the project (RIIO-1 only) |
| ☐ Has the Potential to Develop Learning That Can be Applied by all Relevant Network Licensees |
| Is the default IPR position being applied? ☐ Yes |
| Please demonstrate how the learning from the project can be successfully disseminated to Network Licensees and other interested parties. |
| Please describe how many potential constraints or costs caused, or resulting from the imposed IPR arrangements.< |
| Please justify why the proposed IPR arrangements provide value for money for customers. |
| 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. |
| 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 |

n/a

Data Access Details

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