Energy Networks Innovation Process

Annual Project Progress Report Document

The voice of the networks

Date of Submission: 26/07/2023

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Notes on Completion: Please refer to the NIA Governance Document to assist in the completion of this form. Please use the default font (Calibri font size 10) in your submission. Please ensure all content is contained within the boundaries of the text areas.

Project Title (*This cannot be changed once registered*) Near Real-time Data Access (NeRDA)	Project Reference NIA_SSEN_0050
Funding Licensee(s) Southern Electric Power Distribution Scottish Hydro Electric Power Distribution	Project Start Date November 2020
Project Duration 3 years and 5 months	Year 2023
Nominated Project Contact(s) Tim Sammon, Innovation Programme Delivery Manager at SSEN FNP.PMO@sse.com	

1. Scope

The project scope is limited to the works needed to make near real-time data available. This real-time data will be trialled in select local areas including Oxfordshire and the LEO project. The scope of the project has been extended so that in addition to real time data, NeRDA will make available Long Term Development Strategy (LTDS) data, network connectivity data and data from SSEN's load model. The project will provide data via APIs, and improved dashboards giving the user a rich source of connectivity and schematic data of the SSEN networks to help them unlock the value of real-time data.

The geographical scope of the project will also be extended to include areas receiving LV monitoring through separate programmes such as the Green Recovery funding. This will extend the scope of the stakeholder engagement allowing for greater and more diverse feedback that will help to increase the applicability of the project findings across GB. This will add minimal extra cost to the project.

2. Objective(s)

The project will make near real-time data for the Oxfordshire area available to stakeholders and will assess its usefulness to them.

This will be enabled through the implementation of a technology solution for near real-time DNO data within the SEPD licence area to enable its collation and presentation through an Application Protocol Interface (API).

The project will assess the usability of the data through this API with stakeholder groups such as local community energy action initiatives Local Energy Oxford (LEO) and Flexr Beta User Group (BUG).

3. Success Criteria

The NIA project will be deemed successful if the deployed solution enables the sharing of near real-time data, and if we are able to gather appropriate feedback on its usefulness from the stakeholders identified.

4. Performance compared to the original project aims, objectives and success criteria

Details of how the Project is investigating/solving the issue described in the NIA Project Registration Pro-forma. Details of how the Project is performing/performed relative to its aims, objectives and success criteria.

The NeRDA project has been successful in delivering near real-time data to stakeholders in the Oxfordshire area. Stakeholders can access data both via Application Protocol Interface (API) and through a custom-built web portal. High Voltage data is streaming real-time every 3 minutes and Low Voltage data every 10 minutes. Where no real-time data is available due to monitoring devices not being fitted, the project is providing data from the SSEN load model. The NeRDA portal and API is being met with positive feedback from stakeholders, SIA partners are using the APIs to stream data into their forecasting tool for the Transition project and have provided useful feedback in shaping the remainder of the project.

5. Required modifications to the planned approach during the course of the project

The Network Licensee should state any changes to its planned methodology and describe why the planned approach proved to be inappropriate. Please confirm if no changes are required.

There have been no modifications to the panned approach.

6. Lessons learnt for future projects

Recommendations on how the learning from the Project could be exploited further. This may include recommendations on what form of trialling will be required to move the Method to the next TRL. The Network Licensee should also state if the Project discovered significant problems with the trialled Methods. The Network

Licensee should comment on the likelihood that the Method will be deployed on a large scale in future. The Network Licensee should discuss the effectiveness of any Research, Development or Demonstration undertaken.

A full list of lessons learned will be made available in the close down report and associated reports. The learning from this stage in the project has focused on the difficulties of integrating single sign on for the NeRDA APIs with existing SSEN systems. This meant that the delivery of the NeRDA project was reliant on other BAU projects beyond the control of the project team. For future projects the learning would be to ensure earlier sight of interlinked projects and ensure that their deliverables are tracked by the NIA project team.

7. The outcomes of the project

When available, comprehensive details of the Project's outcomes are to be reported. Where quantitative data is available to describe these outcomes it should be included in the report. Wherever possible, the performance improvement attributable to the Project should be described. If the TRL of the Method has changed as a result of the Project this should be reported. The Network Licensee should highlight any opportunities for future Projects to develop learning further.

A full list of project outcomes will be made available in the close down report and associated reports. The project has been successful in making available real-time data to stakeholders and is now at the stage of evaluating how stakeholders use that data. There are opportunities for the project to understand what other data sets need to be made available in order to assist stakeholders in unlocking the value of real-time network data.

8. Data Access & Quality Details

A description of how any network or consumption data (anonymised where necessary) gathered in the course of the Project can be requested by interested parties. This requirement may be met by including a link to the publicly available data sharing policy.

For information how to request data gathered in the course of this project, see Network Innovation Competition (NIC) and Network Innovation Allowance (NIA) Data Sharing Procedure at https://ssen-innovation.co.uk/innovation-strategy/.

9. Foreground IPR

A description of any foreground IPR that have been developed by the project and how this will be owned.

N/A