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

Mar 2022

Project Reference Number

NIA_UKPN0079

Project Registration

Project Title

Collaborative Local Energy Optimisation (CLEO)

Project Reference Number

NIA_UKPN0079

Project Licensee(s)

UK Power Networks

Project Start

March 2022

Project Duration

2 years and 7 months

Nominated Project Contact(s)

James Daniel

Project Budget

£3,026,436.00

Summary

We will provide core planning datasets via an on-line, self-service energy planning tool to support the planning process for our local authorities, helping them make the best choices for their communities. This local area energy planning self-service tool will allow local authorities to layer local input such as decarbonisation strategies and action plans, local market trends, social inclusion policies, transport plans and so forth upon our network infrastructure data to develop options for their communities.

Nominated Contact Email Address(es)

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Problem Being Solved

Around 100 of the 127 Local Authorities (LAs) in the UK Power Networks region have declared a climate emergency (over 300 across the UK have done the same). More than half (66 of the 100) of these have an accelerated target to achieve Net Zero by 2030. Ofgem has set the expectation that local plans should be used to inform network planning and justify capital investment. Each LA has different needs, understanding their needs and what plans would best suit the customers and communities in that area is a complex, time consuming and resource intensive process.

Many LAs lack the expertise and experience to be able to identify, assess or consider the energy and technology impact on their development plans and vice versa. An effective Local Area Energy Plan (LAEP) requires integration of various data sources and balancing of various dependencies and constraints to achieve Net Zero goals. Not only do LAs lack the resources and expertise to build LAEPs to meet evolving industry standards, but they also face difficulties in assessing the impact that the energy plans have on social equality and the capacity to engage effectively with other local, regional, and national energy system stakeholders.

UK Power Networks is building a team that will engage with all 127 regional local planning authorities on their climate plans each year of RIIO-ED2, offering a three-tiered support service utilising a framework to assess, develop action plans and deliver investments where a prescribed level of certainty is achieved in period. This team and the LAs they serve will require the tools and data to perform

this activity and collaborate effectively.

Method(s)

The Net Zero Navigator project will develop a digital tool that allows LAs and their energy planners to layer local input such as decarbonisation strategies and action plans, local market trends, social inclusion policies and transport plans upon our network infrastructure data to develop optimum LAEP options for their communities and accelerate their local energy planning. It will provide the foundational features and functions that will support UK Power Networks' evolving three-tiered support service and will allow our growing LAEP team to assess LAEPs, track progress, develop action plans and deliver investments where a prescribed level of certainty is achieved.

It will achieve these outcomes by allowing LAs and other energy system stakeholders to rapidly evaluate different approaches to the deployment of Low Carbon Technologies (LCT), by digitally and geo-spatially modelling the relative impacts and determine the approach that would best suit that LA, their communities and potential investors. By streamlining the process and the speed by which they can evaluate different options and scenarios they can learn about the energy system by testing options digitally. In addition, a social impact assessment capability will be included allowing LAEP options to be sensitivity tested against their impact on social considerations such as poverty and vulnerable customers. The outputs from the tool will facilitate efficient and effective development of an LAEP which, in turn, will increase confidence in plans and better inform network operators' load related expenditure.

Development of the tool will be achieved through deep and ongoing engagement with LAs, their energy planners and other energy system stakeholders. To ensure high engagement of stakeholders throughout the process an agile and incremental software development approach will be used. This will ensure that LAs and other energy system stakeholders can regularly test the solution being developed to ensure it is fit for purpose. After requirements are gathered and prioritised in the Discovery phase (Phase 1), a minimum viable product (MVP) will be developed in the Alpha phase (Phase 2) after which the remaining essential components of the solution will be delivered in the Beta phase (Phase 3). A modular and flexible design will be adopted to ensure the tool can be further improved and developed as the LAEP service evolves and the team grows throughout the RIIO-ED2 period.

Measurement and Data Quality Statement

The scope of this project is to provide UK Power Networks' Distribution System Operator (DSO) with a solution that will enhance its ability to support LAs in the process of energy planning. The project will deliver clear benefits to customers, provide support to employees, and enhance our ability to validate and update our distributed energy forecasts with confidence assessed LAEPs.

The technology partner, Advanced Infrastructure Technologies Limited (AITL), have provided a baseline version of their software product LAEP+, and through collaborative software development, extended it further with improved functionality and approximately 60 datasets. The instance of LAEP+ has been branded as Your Local Net Zero Hub (www.yourlocalnetzerohub.co.uk) and made available to all LAs to use under a Beta Programme. The Beta is running in parallel with continued development and release of the software and datasets based on the feedback and usage insights from users.

Data gathered during the project follows a robust triage process to ensure that it is assessed for regulatory, privacy, and commercial sensitivity. Appropriate mitigations are defined where appropriate. Governance also ensures it is kept securely and deleted within a suitable timeframe in accordance with data protection requirements. In compliance with GDPR requirements anonymised and aggregated data only will be included in the software or in project reports for wider distribution.

In addition to the development of the tool, a dedicated team in the DSO has been created to support LAs through the development of their LAEPs. They have developed and implemented a new three-tiered framework that is used to coordinate the development of each LA's LAEP. This framework is summarised below:

- Tier 1 – Initial Screening: Starting with an annual assessment of the local area energy or climate change action, we will work with LAs to gain further understanding of their plans and identify areas of collaboration.
- Tier 2 – 1:1 Engagement: When we have sufficient information obtained for Tier 1, the climate change action plans can proceed to Tier 2. Tier 2 is a more detailed one-to-one engagement where we will 'deep-dive' into LAs' action plans, first to understand their impact on our network (materiality assessment) and secondly, to ascertain if they would be included within our investment plan (confidence assessment).

- Tier 3 – Major Scheme Cost Benefit Analysis: For LAs that have proposed projects requiring major strategic investments, such as a new Primary Substation, we will work with the LAs to remove any barriers to infrastructure investments. This may entail engineering assessments or more detailed analyses.

Update July 2024

The Your Local Net Zero Hub has been delivered with iterative releases of functionality and datasets through a beta program with local authorities since July 2023. The project is in the "Transition to Live" phase that is preparing the launch from beta to a live version that is fully operational with appropriate support and maintenance processes defined and tested with AITL. We have identified additional costs around the ongoing maintenance and refresh of fundamental datasets within the solution. These costs were not originally budgeted for and are required for the software to be of use to LAs. The project is extending the budget by £249,436 to cover these costs, and by two months to support an extension of the "Transition to Live" phase.

Scope

Phase 1 – Discovery

- Engagement with LAs, their energy planners, other energy system stakeholders and software vendors to understand and prioritise requirements, draft a product roadmap, access market capabilities and different delivery approaches
- Form a user group of LAs, their energy planners, and other energy system stakeholders to work in close collaboration with UK Power Networks and the chosen software vendor to deliver a fit for purpose solution
- Identify and prioritise the data sets required to support the development of an LAEP and understand how they can be sourced
- Request for proposal issued, software vendor selected, and contract drafted and agreed with vendor to deliver the digital tool
- Establish working practices for agile software delivery with the user group and vendor to ensure the benefits of agile working are realised.

Phase 2 – Alpha

- Implement and test an MVP that will include a reduced subset of the full solution requirements and data sets that will enable us to assess LA plans and readiness against our three-tier framework.
- Ongoing engagement and LAs, their energy planners, and other energy system stakeholders to ensure that what we deliver is usable and meets their needs

Phase 3 – Beta

- Validate the software vendors ability to deliver a solution and adjust the ways of working necessary for the remainder of the development
- Apply any necessary adaptations to the requirements, software development team and product roadmap based on further engagement and feedback
- Working LAEP tool developed that includes the workflow, visualisation, geospatial and data ingestion capabilities necessary for option-engineering and confidence framework assessment in three key domains: heat, transport and distributed generation
- Full testing and implementation of the solution and handover of the tool and product roadmap to the LAEP Team function

The benefits for this project are explained in section 3.2.2, further benefits analysis will be conducted during the project.

In Phase 1 – Discovery, it was identified to develop and implement a working prototype to further validate the insights and requirements gathered during this stage of work. This was necessary to explore some of the concepts and ideas identified by users that engaged in the Design Thinking research before being able to narrow down on final designs. Additionally, the user research during Discovery was expanded to conduct more workshops and collaborative sessions with Energy Practitioners and Energy Groups to ensure that designs and insights were further validated, and information disseminated. These included a series of User Group sessions and a Design Thinking workshop (Breakfast Briefing). All this work increased the overall budget from the original £2,520, 000 to £2,767,000, an increase of £247,000.

Objective(s)

The objectives of the Net Zero Navigator project are to:

1. Deliver a digital tool that:
   a. Allows LAs and their energy planners to layer local input such as decarbonisation strategies and action plans, local market trends, social inclusion policies, transport plans upon our network infrastructure data to develop optimum LAEP options for their communities

b. Enables LAs to learn the energy system and inform their LAEP through experimenting and trialling different options digitally using an intuitive, graphical interface that enables LA to self-serve as their knowledge increases

c. Supports our evolving three-tiered support service and allows our LAEP team to assess LAEPs, track progress, develop action plans and deliver investments where a prescribed level of certainty is achieved

2. Develop, publish and maintain a prioritised product roadmap for the digital tool that goes beyond the scope of this project and is informed through engagement with LAs, their energy planners and other energy system stakeholders and allows all stakeholders to feedback and comment
3. Identify and prioritise the core planning datasets required by LAs, their energy planners and other energy system stakeholders and make this available within the tool as well as outside of the tool for those who wish to adopt their own toolset
4. Capture all learning and insights from delivery of the tool and through engagement with LAs, their energy planners and other energy system stakeholders and make these available using the most appropriate format and channels available
5. Fully integrate the tool with our evolving BaU processes and procedures and ensure that our LAEP team is fully versed in its use before it is made more widely available
6. Produce and publish a draft proposal for wider GB adoption that includes endorsement from LAs, a handbook for deployment, a pricing framework and methodology, and recommendations for next steps

Consumer Vulnerability Impact Assessment (RIIO-2 Projects Only)

Your Local Net Zero Hub will assist vulnerable customers by empowering LAs with functionality and data to support an independent social sensitivity assessment for each decarbonisation plan or LAEP. An LAEP can be assessed in terms of its social and vulnerable customer impact, allowing decision makers to be made aware of these early and enabling solutions to be tried that avoid negative consequences.

Your Local Net Zero Hub supports LA planners to create decarbonisation plans that take account of the potential impact of plans on:

1. Network headroom
2. Capex costs
3. Carbon emissions
4. Fuel poverty
5. Deprivation
6. Vulnerability
7. Other decarbonisation targets such as megawatts of renewable generation

This is supported by a range of datasets and functionality which embed sociodemographic data and carbon data in user workflows – alongside the more commonly assessed technoeconomic factors. This includes datasets such as Fuel Poverty as Lower-Level Super Output Area (LSOA), published by the Department for Energy Security and Net Zero, Income Estimates published by the Office for National Statistics and other indicators such as the English Indices of Multiple Deprivation.

In addition, the potential for, and cost of, retrofit interventions have been assessed and visualised at the building level to support analysis of cost-to-the-consumer. This includes the potential for insulation, heat pumps and photovoltaics as well as the estimated material and labour cost of installation.

These datasets are embedded into user workflows that enable LAs to create robust decarbonisation plans.

Success Criteria

The following criteria will be used to determine whether the project has been successful:

1. UK Power Networks has used the tool to establish and record the capabilities of a LA and the maturity of an LAEP produced by at least one LA and enable them to progress through our three-tiered framework.
2. At least LA has used the tool to layer local input data upon our network infrastructure data to develop optimum LAEP options that have served as inputs into their LAEP
3. It has been demonstrated that the tool can serve regional and local authorities in our network areas regardless of their capabilities and the level of LAEP maturity
4. The tool has demonstrated the ability to perform a sensitivity analysis of the impact of different LAEP options on vulnerable and socially disadvantaged customers
5. The product roadmap has been endorsed by LAs, their energy planners and other energy system stakeholders and feedback

has been received from stakeholders not directly involved in the project
6. Any new core planning datasets have been identified and made publicly available and where this has not been possible a plan for publishing the remaining datasets has been put in place
7. The LAEP tool has been integrated into BAU operations and adopted by our LAEP team
8. The proposal for wider GB adoption has been presented to the appropriate forum(s) at the ENA

Project Partners and External Funding

Ten Local Authorities, City Councils, County Councils, London Boroughs, and Local Enterprise Partnerships have confirmed an interest in co-designing the tool and are expected to participate in the project and contribute staff time. In addition to the expertise and experience offered by each of the project partners described below, all project partners will be asked to provide public relations support as and when necessary and further funding contributions will be explored.

We have identified and engaged with two key strategic project partners to ensure alignment with the broad national and regional developments regarding LAEP and the best practices associated therein. These partners will ensure we gain full exposure to the necessary energy system stakeholders. The proposed project partners are:

Energy System Catapult

The Energy System Catapult (ESC) will play a crucial role in the ensuring that the requirements for the tool development are aligned with their LAEP methodology and definition which is endorsed by Ofgem and the continued work on the tool remains relevant for extension across the whole of the UK. We will also seek to ensure we remain aligned with the Energy Revolution Integration Service (ERIS) programme which will deliver tools for the delivery of projects resulting from LAEP.

Community Energy South

Community Energy South (CES) will play a central role in ensuring that the stakeholders the project engages with during the development of the tool are representative and comprehensive. It will facilitate engagement with the participants needed to effectively and legitimately develop a plan for local communities and that assessment of the plans developed considers the interests of all consumers.

Two more project partners will be engaged during the Discovery phase of the project to inform the iterative tool design, development and testing.

LAEP Advisors

We will seek the support of practitioners who have experience producing LAEPs on behalf of LAs to work with us and our LA stakeholders during the specification, design and delivery of tool. This will allow us to benefit from their experience of what has worked previously and what hasn't as well as inform how we best facilitate collaboration between LAs, their energy planners and other energy system stakeholders.

That Product Studio (TPS)

TPS are design thinking and digital product development experts. They will leverage their experience from working with LAs on energy issues and with games studios on interactive simulation games such as Sim City. Their experience will ensure we embed design thinking practices early on and we are able to effectively identify and prioritise requirements at the beginning of the project ensuring we minimise costly rework later on.

The fifth project partner will be engaged at the end of the Discovery phase following a formal request for proposal (RFP):

Strategic Tool Vendor

We will seek a software design and development partner to deliver the tool. Before publishing our request for proposal we will initially test the market and assess available solutions and delivery approaches via a request for information. Findings from this exercise, coupled with the outcomes from our stakeholder engagement, will inform the final requirements for the RFP. It is envisaged that the tool will be developed using an iterative build-measure learn-approach ensuring we can deliver value and gather feedback from users as early as possible.

We will also continue our engagement with gas delivery networks throughout the project to encourage their involvement and ensure that the relevant gas related datasets are provided via the tool and whole systems options are presented to LAs, their energy planners and other energy system stakeholders. At this stage, no additional external funding to this project has been secured.

Potential for New Learning

There are several opportunities for new learning. We expect to learn about:

1. The benefits and challenges involved in closely involving LAs, their energy planners and other energy system stakeholders in the software design and development process, and learn about their preferences and behaviours to better gain their participation in future projects
2. The features, functions, data sets, and outputs needed for a digital tool that will assist a LA and their energy planners in developing a LAEP:
   a. Of these features, functions, data sets, and outputs, which are the highest priority and have the widest applicability to the largest number of LAs – allowing us to build a product roadmap for the tool

   b. We will continuously validate whether these are indeed the most important features once the tool goes into use and will adjust our roadmap accordingly
3. The tools and solutions that are currently available to LAs and their energy planners for supporting LAEP development and the features and functions that these stakeholders' value
4. Any common preferences across LAs, their energy planners and other energy system stakeholders in terms of what makes a good LAEP and determine how the ESC methodology and LAEP definition can be applied to meet the needs of stakeholders
5. How confidence in LAEPs can be robustly assessed by DNOs/DSOs and which LAEP outputs will support and inform load related network investment decisions
6. How internal DNO/DSO processes need to change to accommodate a more efficient and effective way of supporting LAEP development and local energy systems
7. The support that community energy groups and similar stakeholders can provide to LAs and their energy planners in the development of LAEPs and whether access to the tool would be useful to them.

Multiple dissemination approaches will be taken using the most appropriate channel selected for the purpose. For example, once drafted, the product roadmap will be published and maintained online and stakeholders will be invited to feedback and comment. Insights gained will be frequently published online and via social media throughout the project and opportunities to disseminate via events and print media will continuously be sought.

Scale of Project

The scale of this project has been designed precisely to develop a LAEP Tool that is fit for use by LAs, their energy planners, other energy system stakeholders and UK Power Networks. The tool will be developed using an iterative build, measure learn approach which ensures that the design, development and delivery of the tool is tailored specifically to the needs of stakeholders who need to produce an LAEP. As the business case and benefits for the project are based on efficiency enhancements against the current state where LAs contract consultants to develop a LAEP, this is currently considered the smallest scale of project that can be implemented. As the requirements evolve the scale of the project will be continuously assessed as engagement with LAs and their energy planners progresses.

Technology Readiness at Start

TRL5 Pilot Scale

Technology Readiness at End

TRL8 Active Commissioning

Geographical Area

The project has been developed with the following distribution licence areas in mind:

1. Eastern Power Networks plc (EPN);
2. London Power Networks plc (LPN); and
3. South Eastern Power Networks plc (SPN).

The project will seek to work with a representative group of LAs and other energy system stakeholders to ensure coverage across each of these areas and will also consider the different maturity levels of LAs and their experience developing an LAEP.

The longer-term intention is for the work done in these areas to enable the tool and associated learnings to be disseminated in consideration for wider application to GB.

Revenue Allowed for the RIIO Settlement

No revenue has been allowed in the RIIO-ED1 settlement.

Indicative Total NIA Project Expenditure

The expenditure during RIIO ED1 was £1,634,416.60. The expenditure during RIIO ED2 is estimated to be £1,140,059 The estimated contingency estimated during RIIO ED2 is estimated to be £251,960.4. Total: £3,026,436

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:

Your Local Net Zero Hub facilitates the energy system transition by empowering LAs in collaboration with Community Energy Groups, Energy Practitioners, Net Zero Hubs, and UK Power Networks to create decarbonisation plans for their areas.

UK Power Networks' DSO Net Zero team works with LAs to facilitate the creation of their decarbonisation plans through a unique three-tiered framework. The team uses the functionality and data in Your Local Net Zero Hub to navigate the framework.

The objective being that all LAs have decarbonisation plans assessed for:

Materiality – a high-level study of how the climate change actions plan may affect our network; and

Confidence – if the plan materially affects our network, this will determine how regulatory approval will be secured for the related investment where needed using 'uncertainty mechanisms'.

Note: The RIIO-ED2 price control framework has a number of uncertainty mechanisms which will let expenditure adjust to changing network demand.

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

Your Local Net Zero Hub will benefit consumers in vulnerable situations by providing the means for LAs to design decarbonisation plans and assess their impact on those consumers.

LAs' energy planners can design heat decarbonisation plans using the existing datasets that best suit consumers in vulnerable situations in their area. Planners have the flexibility to assess the impact against fuel poverty and building rating. Equally, they can design transport and mobility solutions to cater for all consumers irrespective of personal circumstances.

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)

Please see answer on the following question.

Please provide a calculation of the expected benefits the Solution

Wider societal benefits have been assessed for this project. The principal recipients of the benefits based on our current assessment will be LAs who will make significant cost savings in the development of their LAEP using a structured process enabled by a digital tool.

We plan to deploy a working version of the LAEP tool from the start of the RIIO-ED2 period and have therefore assessed the expected financial benefits to LAs from the use of the tool during the RIIO-ED2 period.

Our calculation of benefits to LAs is based on figures from the Energy System Catapult (ESC), which performed assessments across multiple LAs in 2018 to understand the structured and unstructured costs for developing an LAEP. In this assessment the case of the Bury LAEP was seen as the most reflective of costs in general and were £570k for an unstructured process. The ESC estimated that the costs for a structured process would range from £100k-£250k. Therefore, taking the worst-case scenario of £250k we calculated that the savings per LA are at least £570k – £250k = £320k (Base cost – Method cost = Benefits).

As these figures are from 2018, adjustments need to be made for the social discount rate as well as applying an optimism bias. Both above adjustments are in line with the DNO industry wide, agreed Social Value Framework.

The annual benefits from 2024 are inflated over the five years from 2018 to 2024; therefore the benefit proxy of £320k in the first year is adjusted as follows: £320k x (1+3.5%)^5 = £380k

An optimism bias is then applied which deflates the benefits as follows: £380k x (1-10%) = £342k per LA

These principles of social discount and optimism bias are then applied for the whole of RIIO-ED2; assuming that eight LAs per year will use a structured process via the digital tool across the five years of RIIO-ED2.

Total benefits for RIIO-ED2 = £342k x 8 x 5 = **£13,682,000**

Or alternatively subtracting total base from the total method costs and subsequently applying a discount rate of 3.5% (Base cost – Method cost = Benefits * Discount Rate Per Year):

£24,371,000-£10,689,000 = £13,682,000 (**£12,787,551** Present Value)

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

The Method is applicable across the whole of GB. The LAEP tool that is produced because of the Method will be designed such that is that it can be adopted by any network operator although it is likely that the tool will need to be adapted to enable it to operate with other network operator data, different assessment frameworks, operational approaches and cultural differences.

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

Given the tool will be built by project, there will inevitably be savings to other network operators. However, it is not possible to usefully estimate the cost of rolling out the Method across GB without first engaging with the network operator who would be responsible for the implementation as the extent of adaptation described in 3.2.3 will determine the cost. A pricing framework and methodology for wider GB rollout forms part of the project scope and objectives which will include a proposed software licensing and support model for wider adoption.

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

The learning that is generated through the project will be embedded in the LAEP tool that is developed. By building on and adapting the tool to their own licence areas, other network operators can benefit from the project learnings. By publishing the product roadmap, other network operators are given an opportunity to feedback when their own requirements and priorities deviate from the plan. Other network operators will also benefit from the insights that will be frequently published throughout the project online and via events and print media.

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 as above has been answered.

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.

Through desk-based research and engagement we have found no evidence of current or prior projects that allow local authorities to layer local input such as decarbonisation strategies and action plans, local market trends, social inclusion policies, transport plans etc. upon our network infrastructure data to develop optimum options for their communities.

Rather, we have found evidence of projects that have specifically called out the challenges of addressing the varying needs of LA and have highlighted this as a gap. For example, SSEN's RESOP project report stated any "…methodology should be able to undertake analysis without relying heavily on Local Authority inputs (given the huge difference in quality, availability and consistency across local authorities)". However, we believe that LA inputs are critical to effective local area energy planning and with the tool developed by this project coupled with the three-tiered support offered by our LAEP team we can tackle these challenges to level up the gaps between local authorities in our area and reduce costs all round.

We also acknowledge that there are a number of tools and models available to local authorities to support with their local area energy planning but issues with these range from usability to accessibility and suitability. These issues have been fully documented by the ESC in their 'The future of Local Area Energy Planning' report published in Q4 2021 and will be used to inform the design and development of the tool delivered by this project.

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

Not applicable.

Additional Governance And Document Upload

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

It is clear from our customers and stakeholders that they need additional services to meet their needs. UK Power Networks believe that network operator support for LAs in the form of engagement and expertise and provision of digital tools and data sets is essential to achieve meaningful LAEPs and ensure plans are representative of their community's wants and needs; and therefore, present a legitimate democratic mandate for network and social investment.

This project is innovative as it seeks to engage with LAs, their energy planners and other energy system stakeholders to understand and directly tackle the challenge of the diversity of needs and capabilities at a regional, local and community level to enabling efficient and effective local authority energy planning through provision of digital technologies and data sets. The primary focus of this project is to meet the needs of LAs and addressing any capability gaps. We believe the project will deliver the first LAEP self-service tool that will allow local authorities to layer local input such as decarbonization strategies and action plans, local market trends, social inclusion policies, transport plans and so forth upon our network infrastructure data to develop options for their communities.

From a network operator perspective, we expect that the project, and the tool delivered, will improve our confidence levels when using LAEPs to inform our network planning and investment strategies. It will also provide valuable insights on the variances between LAs across UK Power Networks' three licence areas that will allow these differences to be factored into our forecasts including our Distributed Future Energy Scenarios (DFES).

Relevant Foreground IPR

The Relevant Foreground IPR generated by the project will be the digital LAEP tool. This will require the use of existing UK Power Networks Background IPR and that of the partners listed. Given the LAEP tool will be developed by a vendor selected in a competitive RFP process and agile software development methodologies and approaches employed, we are unable to specify the Background IPR at this time. However, the default IPR position will be applied.

Data Access Details

One of the objectives of the project is identify and consolidate the core planning datasets required to support the planning process for our LAs, their energy planners and other energy system stakeholders. As a starting point we will utilise the data that is available on the UK Power Networks Open Data Portal but additional local and regional specific data may be required based on the needs or circumstances of LAs in different areas. The data requirements will be assessed during the Discovery phase of the project and through ongoing stakeholder engagement. Data will be made available to those engaged in the development of the LAEP unless it constitutes personal or personally identifiable data. Whilst all data will be presumed open, the viability of sharing the data beyond the users of the tool, will be assessed based on the nature of the data and where it is sourced from. Wherever viable, it will be made available on our Open Data Portal by default. We will follow our Innovation Data Sharing Policy for all data sets.

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

In section 3.2 of the NIA Governance document, the DNOs are encouraged to pursue different types of methods and solutions to meet challenges affecting customers and network operators. By harnessing digital technologies and varied datasets, this project seeks to provide a solution that delivers benefits to both parties through educating LA stakeholders on the energy system, better informed network investment, and reduced costs that are typically incurred on resources required for local area energy planning.

The level of early engagement required to establish and prioritise the diverse range of requirements for a digital tool with LAs, their energy planners and other energy system stakeholders would not form part of business as usual activities. Due to the TRL levels and the unproven benefits across UK Power Networks' licence areas NIA project funding is required to progress the innovative nature of the project and the inherent risk that it carries for its implementation.

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

As digital technologies have not been previously used for these LAEP applications there are both commercial and technical risks, and the project could only be undertaken with the support of NIA. In addition, we believe project will deliver the first LAEP self-service tool that will allow local authorities to layer local input such as decarbonisation strategies and action plans, local market trends, social inclusion policies, transport plans and so forth upon our network infrastructure data to develop options for their communities. As noted in the NIA Guidance, certain projects are speculative in nature and yield unproven commercial returns.

This project has been approved by a senior member of staff

☑ Yes