

NIA Project Registration and PEA Document

Date of Submission

Jul 2026

Project Reference Number

NIA_SPEN_0136

Project Registration

Project Title

Stormforce

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Project Licensee(s)

SP Energy Networks Distribution

Project Start

July 2026

Project Duration

1 year and 4 months

Nominated Project Contact(s)

Parham Momeni

Project Budget

£1,220,000.00

Summary

Stormforce is a Salesforce-based platform being evaluated to digitise SPEN's storm response, replacing manual processes with real-time, end-to-end coordination across vendors and internal teams. A structured proof of value will quantify impacts on outage duration, cost, and process consistency, while assessing platform fit, required enhancements, and scalability. Findings will inform a business case covering benefits, costs, and implementation options, and demonstrate alignment with RIIO-ED2 priorities on digital transformation, resilience, cost efficiency, and customer outcomes. The objective is to confirm whether Stormforce can provide a scalable digital capability that materially strengthens SPEN's emergency response.

Third Party Collaborators

IBM

Nominated Contact Email Address(es)

innovate@spenergynetworks.co.uk

Problem Being Solved

SPEN's storm response operations suffer from three key deficiencies that undermine the effectiveness during critical weather events. Manual processes dominate the workflows, operational inefficiencies drain resources, and significant visibility gaps hamper coordination among teams and vendors. These fundamental issues directly translate to longer customer outages and substantially higher operational costs, compromising both the service quality and financial performance. As SPEN execute the RIIO-ED2 strategy focused on digital transformation and customer excellence, implementing the Stormforce digital solution represents a strategic opportunity to transform the emergency response capabilities, delivering tangible benefits to customers and shareholders alike.

Method(s)

To address SPEN's storm response challenges, the recommendation is to implement the Stormforce digital platform, a proven Salesforce-based solution specifically designed for utility emergency management. The solution addresses SPEN's key deficiencies by automating manual processes, streamlining operational workflows, and providing complete visibility through real-time dashboards and reporting. By digitising the entire storm response lifecycle, from vendor onboarding and resource planning to field operations and financial settlement, Stormforce can deliver faster response times for customers and reduce operational costs.

The implementation approach begins with a focused Proof of Value phase to demonstrate capabilities, quantify benefits, and develop a value-driven roadmap for full deployment. This phased methodology ensures the solution aligns with SPEN's specific operational needs while accelerating time-to-value.

Stormforce directly supports SPEN's RIIO-ED2 commitment to digital transformation and operational excellence, representing a strategic investment that will enhance customer satisfaction, reduce costs, and strengthen emergency response capabilities for years to come.

Scope

- Timeline: 18 weeks for Proof of Value phase, with full implementation spanning 3 - 12 months
- Organisational Impact: Affects 100+ internal staff across operations, field services, vendor management, and finance, plus numerous external vendors and mutual assistance partners
- Geographic Scope: Deployment across SPEN's entire service territory, supporting all storm response activities in both SP Distribution and SP Manweb license areas
- Technical Scale: Enterprise-level Salesforce implementation with multiple integrations to existing systems, mobile capabilities, and vendor-facing portals
- Change Management: Significant business process transformation requiring comprehensive training and adoption program
- Strategic Importance: Core enabling technology for RIIO-ED2 digital transformation objectives with direct impact on customer satisfaction metrics and operational efficiency targets

Objective(s)

The objectives of the Stormforce Project are as follows:

- Assess the potential of the Salesforce-based digital platform (Stormforce) to address key deficiencies in SPEN's current storm response operations, including manual processing, operational inefficiency, and limited situational visibility.
- Determine whether digitising the storm response lifecycle, from vendor onboarding and resource planning through to field operations and financial reconciliation, can improve the speed and effectiveness of SPEN's response during severe weather events.
- Evaluate the ability of the Stormforce solution to provide real-time operational insight and improved coordination across internal teams and external vendors.
- Quantify operational and customer benefits through a structured Proof of Value exercise, including potential reductions in outage duration, cost efficiencies, and improvements in process consistency.
- Identify the degree of alignment between the pre-existing Stormforce accelerator and SPEN's operational requirements, and to understand what modifications may be required for full implementation.
- Generate evidence to inform a business case for wider rollout, including detailed benefit assessment, cost estimates, and implementation considerations.
- Support RIIOED2 objectives relating to digital transformation, enhanced storm resilience, cost efficiency, and improved customer service outcomes.
- Establish whether the Stormforce platform could serve as a scalable digital capability that strengthens SPEN's long-term emergency response performance.

Consumer Vulnerability Impact Assessment

Storm events can disproportionately impact consumers in vulnerable circumstances, including those who are medically dependent on electricity, have mobility or communication barriers, live in remote areas, or face financial hardship. The Stormforce Project is expected to have a positive impact on these consumers by improving SPEN's ability to identify, prioritise and support vulnerable customers during emergency events.

The Project does not introduce any new risks for vulnerable consumers, as it will be delivered within a test environment with no operational impact on live services. Instead, it is expected to support future improvements in the following ways:

1. Faster identification of vulnerable consumers during storms

By digitising storm response processes and improving visibility of customer and network data, the solution will enable faster recognition of Priority Services Register (PSR) customers in affected areas, helping direct resources more effectively during events.

2. More efficient resource allocation to areas with high vulnerability impact

Stormforce provides improved situational awareness and operational coordination. In a future implementation, this may help SPEN direct field crews and welfare resources to locations with higher concentrations of vulnerable customers sooner.

3. Better communication and tracking during outages

Enhanced workflow automation and data capture will support more accurate information flows between control rooms, field teams, and customer support staff. This could lead to improved communication with vulnerable customers during prolonged outages.

4. Reduced outage durations through operational efficiency

Evidence from the Proof of Value may demonstrate that streamlined processes and improved visibility can shorten storm-related outages. Reduced outage duration is known to disproportionately benefit consumers in vulnerable circumstances.

5. Strengthening of future resilience planning

Insights generated from the Project may help SPEN refine its storm response strategies, ensuring that vulnerable customers are more systematically considered in operational decisions.

6. No adverse impact or exclusion

The Project does not involve physical works, changes to tariffs, or direct engagement requiring consumers to opt in or share additional personal data. Therefore, it poses no additional risk or exclusion for vulnerable customers.

Overall, the Stormforce Project is expected to support SPEN's RII012 commitments to improve outcomes for vulnerable consumers by enabling a more resilient, efficient, and data-driven response during severe weather events. Further benefits will be evaluated and quantified through the Proof of Value.

Success Criteria

The Project will be considered successful if it delivers clear, evidence-based findings that demonstrate whether the Stormforce digital storm response solution is suitable for SPEN's operational needs and has the potential to improve storm event performance. Success will be evaluated against the following criteria:

- Completion of the Proof of Value activities as defined in the Project Plan
- All discovery activities completed and documented.
- Value Lab Environment deployed

Project Partners and External Funding

Project Partners

This Project is being delivered in collaboration with IBM United Kingdom Limited, who will act as the primary delivery partner for the Proof of Value activities. IBM will provide access to its pre-existing 'Stormforce Accelerator', technical expertise in Salesforce configuration, deployment of the Value Lab Environment, and specialist support for demonstrations, testing and evaluation. SP Energy Networks (the Funding Licensee) will provide operational insight, access to subject matter experts, and overall governance of the Project.

No other external partners are formally engaged in the delivery of this Project.

External Funding

This Project is being funded solely through the Network Innovation Allowance (NIA).

No additional or matched external funding is being provided by IBM, third party organisations, or any external funding bodies.

The Project does not receive contributions from commercial revenue, customer charging, or any other external financial sources. All Project costs presented in this submission reflect the full cost to the Funding Licensee under the NIA mechanism.

Potential for New Learning

The Project has strong potential to generate new learning for SP Energy Networks and the wider GB electricity distribution sector. Storm events continue to present increasing operational challenges, and there is limited industry evidence on the effectiveness of fully digitised, end-to-end storm response management platforms within a DNO context. This Project will enable SPEN to explore the operational, technical and organisational implications of adopting such a solution through a structured Proof of Value exercise.

The Project is expected to produce new learning in the following areas:

1. Applicability of a digital storm response accelerator to a GB DNO environment

The Project will provide insight into how a pre-existing global asset (IBM Stormforce Accelerator) aligns with SPEN's operational processes and whether such an approach can be transferred effectively into UK electricity distribution operations.

2. Impact of workflow automation on storm response speed and efficiency

The Project will assess whether automating manual tasks (e.g., resource allocation, vendor coordination, financial reconciliation) can reduce operational delays and free up staff capacity during severe weather events.

3. Benefits and limitations of real-time operational visibility during major incidents

Testing within the Value Lab Environment will generate evidence on the value of improved situational awareness, including whether real-time dashboards and digital tracking improve response coordination, decision-making and prioritisation of resources.

4. Organisational and readiness considerations for adopting a digital storm response capability

The Project will identify the enablers, barriers, and organisational changes required for successful implementation, including training needs, data availability, integration requirements and change management considerations.

5. Potential customer and vulnerability benefits linked to reduced outage duration

The Project will explore whether the model has potential to improve outcomes for customers in vulnerable circumstances by enabling faster identification and prioritisation during storms.

6. Evidence base to support future deployment decisions

The learning will help SPEN—and potentially other GB network operators—understand the costs, benefits, operational impacts and feasibility of implementing a digital storm response platform at scale.

The outputs will be documented through the Project's Proof of Value report, business case inputs, and follow-up dissemination activities. These findings will contribute to the sector's understanding of how digital platforms can support improved resilience and customer service during extreme weather events.

Scale of Project

The scale of this Project is appropriate and proportionate to the level of learning required to assess the applicability and value of a fully digitised storm response solution within SP Energy Networks. The investment covers discovery activities, deployment of a fully configured Value Lab Environment, hands-on operational testing, and detailed evaluation of benefits and implementation considerations. This level of scope is necessary to generate robust and transferable learning in line with NIA objectives.

A smaller-scale project, for example, one limited to demonstrations, partial configuration, or desktop analysis, would not provide sufficient insight into the operational realities of adopting such a solution. Key learning areas, such as workflow automation performance, data integration behaviours, operator usability, real-time visibility benefits, and the accuracy of resource allocation improvements, can only be meaningfully assessed within a working test environment that replicates end-to-end storm response processes.

The scale of investment is proportionate to the potential benefits. Severe weather events represent some of the highest-impact operational challenges faced by GB distribution networks, contributing to customer outages, vulnerability risks and significant emergency response costs. Even modest improvements in response speed, operational coordination, or reduction in manual effort during storms could deliver substantial long-term benefits for customers, particularly those in vulnerable circumstances. The learning generated from this Project has the potential to inform a wider implementation across SPEN and could be scalable across the GB DNO community.

By deploying the full Stormforce accelerator in a controlled Value Lab Environment, the Project creates the necessary conditions to assess benefits in a realistic and measurable manner. Reducing the scope would limit the ability to test important features, such as end-to-end workflow automation, vendor coordination, resource allocation modelling, and storm financial reconciliation, thereby undermining the potential learning outcome.

In summary, the chosen scale of the Project is justified as it is the minimum level required to generate actionable, evidence-based learning on the suitability and effectiveness of a digital storm response platform. Anything smaller would risk providing incomplete insights, reducing the value of the Project to SPEN and the wider industry.

Technology Readiness at Start

TRL4 Bench Scale Research

Technology Readiness at End

TRL6 Large Scale

Geographical Area

Across the UK SPEN licence area.

Revenue Allowed for the RIIO Settlement

0

Indicative Total NIA Project Expenditure

£1,220,000

Project Eligibility Assessment Part 1

Requirement 1

Facilitate the energy system transition and/or benefit consumers in vulnerable situations

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

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

- By improving network resilience amid more frequent severe weather through enhanced visibility, automated workflows, and coordinated vendor management.
- Faster, more coordinated restoration reduces the duration and impact of storm-related outages (improved CI/CML), supporting a more stable system as the energy transition progresses.

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

- Real-time communication and improved prioritisation help ensure PSR customers receive timely support during emergency events.
- Reduced outage duration (better CI/CML) delivers faster restoration for customers, including those in vulnerable situations, mitigating the risks and impacts they face during storms.

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

n/a

Please provide a calculation and/or description of the expected benefits of the solution

The project has substantial potential to deliver net consumer benefits through improved resource deployment efficiency and more effective use of operational staff during emergency events.

Phase 1 will quantify these benefits for SPEN, ensuring robust evidence before widespread deployment. These improvements ultimately reduce costs and directly improve customer experience during high impact weather events.

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

Replicability estimate: High across GB DNOs and IDNOs under the shared RII-ED2 framework, addressing common storm-response needs.

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

An outline of costs for rolling out across the UK will be quantified in Phase 1.

Requirement 3 / 1

Involve Research, Development or Demonstration

Projects 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

Involve Research, Development or Demonstration - Please select all that apply

- ☐ 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 proposal includes a structured programme of discovery, experimentation, and proof of value development to test how an existing Asset for Emergency response capability deployed in a US based Energy Company, can be adapted for a UK DNO context.

This requires research into SPEN's current processes, system interactions, and emergency workflows; development of a value lab environment; and demonstration of the StormForce module(s) within SPEN's digital ecosystem. The project will test new functionality, new integration patterns, and new digital operating models before any BAU decision is made.

The project will generate a set of reusable assets that other GB Network Licensees can adopt to accelerate and de-risk emergency response digitisation.

- Discovery artefacts: storm response process maps, system interaction inventories, and gap analyses to benchmark and redesign local workflows.
- Technical and data patterns: validated integration approaches and reusable data models.
- Implementation toolkit: proof of value metrics and calculators.

n/a

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. Networks must explicitly mention similar projects that they have considered and how these differ.

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

While some UK utilities are exploring digital enhancements to outage management, no UK DNO currently operates a fully integrated digital emergency preparedness hub equivalent to StormForce.

SPEN has no existing platform that provides real-time resource coordination, vendor integration, and automated storm workflows. The project builds on internationally proven concepts but adapts them to unique UK circumstances, regulatory structures, and systems.

A review of current UK NIA and SIF project portfolios shows no project duplicating this specific scope or approach, confirming that this work does not replicate existing funded innovation and instead fills a clear industry gap.

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

SPEN currently relies on manual, people-driven emergency response workflows, with limited real-time coordination across teams and vendors. Implementing a digitally orchestrated storm management hub on the Salesforce platform is a clear departure from BAU and represents a new approach within UK DNO operations.

Adapting a solution proven in the US to the UK regulatory, technical, and operational landscape requires innovation in process design, data integration, and emergency workflow automation. This project therefore meets Ofgem's definition of innovation by introducing new capabilities not currently deployed in UK distribution networks.

Relevant Foreground IPR

N/A

Data Access Details

The SP Energy Networks Data Access policy can be found [here](#).

Please identify why the Network Licensees will not fund the project as a part of its business and usual activities

The project is not BAU-funded because it is a novel, unproven method in the GB DNO context and requires research, experimentation, and a controlled proof of value before any operational deployment.

High uncertainty: The US-derived capability has not been validated against GB technical, operational, and regulatory conditions; benefits, costs, and integration effort are not yet evidenced to BAU standards.

R&D nature and risk: Work includes a value lab, prototyping, and new integration/operating model trials across OMS/ADMS, GIS, WFM, CRM, and finance—activities that carry delivery risk and are not appropriate for live BAU environments or budgets.

Sector learning: Outputs (playbooks, integration patterns, PoV toolkit) are designed for GB-wide reuse; innovation funding fairly shares risk/cost and supports mandated dissemination. If successful, quantified evidence will underpin a BAU business case for rollout.

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

The Project requires NIA support because:

It is early stage, high uncertainty R&D: a US-derived capability must be adapted and proven in a GB DNO context via discovery, prototyping, a value lab, and integration trials. These activities carry delivery/benefit risk and are not appropriate for BAU funding or live operations.

Benefits extend beyond a single licensee: the outputs (integration patterns, operating model playbooks, PoV toolkit) are designed for GB-wide reuse. NIA provides a fair cost-sharing mechanism and mandates dissemination, aligning costs with sector-level benefits.

NIA enables a proportionate, timeboxed proof of value: it avoids premature capital commitment or customer bill exposure, accelerates learning, and provides the robust evidence needed to justify (or reject) subsequent BAU rollout under RII ED2 priorities on digitalisation, resilience, cost efficiency, and customer outcomes.

This project has been approved by a senior member of staff

☒ Yes