

UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN) Newington House 237 Southwark Bridge Road London SE1 6NP

> Direct Dial: 020 7901 7295 Email: <u>Marzia.Zafar@ofgem.gov.uk</u> Date: 25 September 2023

Dear UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN), <u>Strategic Innovation Fund – Approval of the Material Change request for</u> <u>SHIELD/ UK Power Networks Eastern Power Networks PLC (EPN)</u>

The Strategic Innovation Fund (SIF) supports network innovation that contributes to the achievement of Net Zero, while delivering net benefits to energy consumers. It facilitates collaboration with other public funders of innovation so that activities appropriately funded by network consumers are coordinated with activities funded by Government, and funding gaps are avoided. The SIF Governance Document sets out the governance and administration of the SIF.¹

On 25 September 2023, UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN), was awarded SIF Funding for SHIELD - Smart Heat and Intelligent Energy in Low-Income Districts (the Project).² The Project is developing a novel approach to using Low Carbon Technologies to heat homes. This allows for thransformation of the energy landscape and improve vulnerable lives. Further to this decision, on 25 September 2023 Ofgem³ issued a SIF Project Direction.⁴

On 19 February 2024, UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN) submitted a Material Change request for the Project to the Authority. The Material Change request was submitted due to:

¹ <u>https://www.ofgem.gov.uk/publications/updated-sif-governance-document</u>

² <u>https://www.ofgem.gov.uk/publications/strategic-innovation-fund-round-2-alpha-projects-approved-funding</u>

³ The terms the "Authority", "Ofgem", "we" and "us" are used interchangeably in this document. The Authority refers to the Gas and Electricity Markets Authority. Ofgem is the Office of the Gas and Electricity Markets Authority.

⁴ <u>https://www.ofgem.gov.uk/publications/strategic-innovation-fund-round-2-alpha-projects-approved-funding</u>



Reduction in scope and reduction in SIF requested funding to Work Package 6: Deploy pilots to remove activities relating to the installation of two Thermify HeatHub units. The units will still be installed but at the cost of the project.

The Material Change request proposed the following changes to the schedule of the SIF Project Direction issued on 25 September 2023:

- Reduce the total Project Costs for Project Partner POWER CIRCLE PROJECTS LTD from £195,394.00 to £161,894.00
- Reduce the total Project Contribution for Project Partner POWER CIRCLE PROJECTS LTD from £19,680.00 to £16,306.00
- Reduce the total SIF Requested Funding for Project Partner POWER CIRCLE PROJECTS LTD from £175,714.00 to £145,588.00
- Reduce the total Project Costs for Project Partner THERMIFY HOLDINGS LIMITED from £88,234.00 to £19,776.00
- Reduce the total Project Contribution for Project Partner THERMIFY HOLDINGS LIMITED from £8,823.00 to £1,978.00
- Reduce the total SIF Requested Funding for Project Partner THERMIFY HOLDINGS LIMITED from £79,411.00 to £17,798.00
- Reduce scope of Work Package 6: Deploy Pilots to remove the installation of two Thermify HeatHub units

Ofgem's review

As set out in chapter 1 of the SIF Governance Document, Ofgem is the decision-maker in the SIF. Furthermore, as set out in chapter 6, Ofgem will consider Material Changes in circumstances and requests to change SIF Project Directions on a case by case, and will engage with monitoring officers on Projects to support the assessment of Material Change requests.

Ofgem has reviewed this Material Change requested submitted by UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN) and has engaged with the monitoring officer on the Project. Ofgem has reviewed the reasoning for the Material Change submitted by the UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN)and considers it to satisfy the Eligibility Criteria in chapter 2 of the SIF Governance because:



- That the requested change to the Project Direction should be approved as the requested change does not violate any of the Eligibility Criteria outlined in Chapter 2 of the SIF Governance Document.
- That the requested change to the Project Direction should be approved as the requested change also does not violate the eligibility outlined in the Innovation Challenge Documentation.

As such, UKRI recommended approval of the Material Change request to Ofgem.

Decision

As a result of the reasons outlined above, Ofgem approves of this Material Change request.

In accordance with Section 17 of the Project Direction issued on 25 September 2023 and paragraph 6.22 of the SIF Governance Document, the amended SIF Project Direction for UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN), Indus is published in the Schedule 1 of this letter. The amended SIF Project Direction is effective as of the date of this letter and, unless stated otherwise, supersedes the SIF Project Direction issued on 25 September 2023. The letter constitutes notice pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989 and 38A (Reasons for decisions) of the Gas Act 1986.

If you would like to discuss any of the issues, you can contact Ofgem via <u>networks.innovation@ofgem.gov.uk</u>. Alternatively, you can contact UKRI via <u>SIF_Ofgem@innovateuk.ukri.org</u>.

Yours sincerely,

Marzia Zafar Deputy Director, Decentralisation & Digitalisation For and on behalf of the Authority



Schedule to SIF Project Direction

1. PROJECT DETAILS

SIF Project Direction reference: UKPNOL/SHIELD - Smart Heat and Intelligent Energy in Low-Income Districts/SIFSJET/Rd2_Alpha Application number: 10085976 Project title: SHIELD - Smart Heat and Intelligent Energy in Low-Income Districts Innovation Challenge/Project Phase: Supporting a just energy transition / Alpha Phase round 2 Project start date: 01 October 2023 Project end date: 31 March 2024 SIF Approved Amount for SIF Funding: £383,384.00 **2. PREAMBLE**

This SIF Project Direction is issued by the Gas and Electricity Markets Authority (the "Authority") to UK POWER NETWORKS: EASTERN POWER NETWORKS PLC (EPN) (the "Funding Party") pursuant to the SIF Governance Document issued pursuant to Special Condition 9.9 of the Electricity Distribution Licence. It sets out the conditions to be complied with in relation to SHIELD - Smart Heat and Intelligent Energy in Low-Income Districts (the "Project") as a condition of it being funded under the SIF Funding Mechanism.⁵

Unless otherwise specified, defined terms in this SIF Project Direction have the meaning given to them in the Licence or Appendix 1 of the SIF Governance Document.

References to specific sections of the Funding Party's Application in this SIF Project Direction are, for ease of reference, made by referring to the section number in the Funding Party's Application.

3. PROJECT SPECIFIC CONDITIONS

In accepting funding for the Project, the Funding Party is subject to the following Project-specific condition(s):

Condition 1

The Funding Party must not spend any SIF Funding until contracts are signed with the Project Partners named in Table 1 for the purpose of completing the Project.

⁵ The SIF Funding Return Mechanism is defined in the SIF Governance Document.



Table 1. Project Partners

ESSEX COUNTY COUNCIL ELECTRICITY NORTH WEST LIMITED URBANCHAIN LTD POWER CIRCLE PROJECTS LTD THERMIFY HOLDINGS LIMITED CITIZENS ADVICE ESSEX LIMITED EASTLIGHT COMMUNITY HOMES LIMITED UK COMMUNITY WORKS CIC

Condition 2

The Funding Party must report on the financial contributions made to the Project as set out in its Application. Any financial contributions made over and above that stated in its Application should also be reported and included within the Project costs template.

Condition 3

The Funding Party must make reasonable endeavours to participate in all meetings related to the Project that they are invited to by Ofgem, UKRI and DESNZ during the Alpha Phase.

Condition 4

The Funding Party must provide to its monitoring officer by the end of the Alpha Phase a summary and explanation as to whether the overall costs of the proposed solution, including the investment costs, will be lower than the counterfactual.

Condition 5

The Funding Party must provide to its monitoring officer by the end of the Alpha Phase a written deliverable which demonstrates consideration for protection aspects of the future business model of the proposed solution, including:

- what happens if something goes wrong with the system
- whether consumers will be locked in to this model on a long term basis
- what happens in the event of consumers who want to change the heating system.
 For example, where a new tenant/occupant takes over the property and wants to change the heating system
- what protection do consumers have should the data centre provider ceases to operate? For instance, is any insurance provided for these consumers?



We encourage the Funding Party to work closely with consumer bodies to answer the above questions.

4. COMPLIANCE

The Funding Party must comply with Special Condition 9.9 of the Electricity Distribution Licence, the SIF Governance Document and with this SIF Project Direction.

5. SIF APPROVED AMOUNT

The SIF Approved amount of £383,384.00 (as detailed under Section 1: Project details of this Project Direction) will be recovered by National Grid Electricity System Operator from GB customers and transferred to the Funding Party. The Funding Party is responsible for notifying National Grid Electricity System Operator of the bank account details to which transfers must be made, in addition to completing Annex 2 of this SIF Project Direction. If a Funding Party is required to return funding to National Grid Electricity System Operator, the reverse applies. The Funding Party must provide bank account details to National Grid Electricity System Operator within two weeks of accepting this SIF Project Direction.

6. PROJECT BUDGET

The Project Budget is set out in Annex 1 of this SIF Project Direction.

The Funding Party must report on expenditure against each line under the category total in the Project Budget and explain any projected variance against each line as part of its detailed report which will be provided, in accordance with Chapter 7 of the SIF Governance Document. The Funding Party must report variations in the Project budget as outlined in Chapter 6 of the SIF Governance Document.

7. PROJECT IMPLEMENTATION

The Funding Party must undertake the Project in accordance with the commitments it has made in the Application and with the conditions of this SIF Project Direction. These include (but are not limited to) the following:

- (i) undertake the Project in accordance with its Application,
- (ii) complete the Project on or before the Project completion date as detailed under section 1 of the schedule of this SIF Project Direction, and



(iii)disseminate the learning from the Project at least to the level described in chapter 3 of the SIF Governance Document. Dissemination of learning must be carried out whether the Project was concluded successfully or otherwise.

8. REPORTING

Ofgem and UKRI may issue guidance (and amend it from time to time) about the structure and content of the Project reporting required by Chapter 6 of the SIF Governance Document. The Funding Party must follow this guidance in preparing the reports.

As set out in chapter 6 of the SIF Governance Document, the Funding Party may be required to submit an end of Phase report to the UKRI monitoring officer for the round 2 Alpha Phase. An end of Phase report is required for the round 2 Alpha Phase if the Project is not planning on submitting an Application to the round 2 Beta Phase and, if the Funding Party submits an Application for the Project for the round 2 Beta Phase but is not successful. Within this report, the Funding Party must submit information related to questions on Project delivery as detailed in chapter 6, table 6 of the SIF Governance Document.

9. MONITORING

The Funding Party must comply with any reasonable request for information by its monitoring officer at UKRI and related deadlines. Ofgem, with the support of UKRI, will together monitor Project delivery, impacts and benefits. Throughout the term of the Project, progress is monitored by UKRI through a monitoring officer. The monitoring officer is the first point of contact for official notifications, queries and correspondence with UKRI and the Authority, unless otherwise required by this SIF Project Direction.

As detailed in Chapter 6 of the SIF Governance Document, meetings with the monitoring officer will take place at regular intervals, as advised by Ofgem or the monitoring officer during the delivery of the Project, and at the end of each Project Phase.

10. EVALUATION

The Funding Party has acknowledged when it submitted its Application for this Project, that reporting information and data gathered during the Project's timescales (as detailed in Section 1 of this SIF Project Direction) will be used to evaluate Project performance. In addition, the Funding Party may be required to provide requested information outside of the Project timescales and, in particular, for the period from the Project end date to



the end of the SIF Programme. Further data and reporting information may be requested (frequency and method based on requirement) outside of standard monitoring and reporting requirements as deemed necessary. Further data and information requirements must be complied with by the Funding Party and Project Partners.

11. DATA SHARING

As set out in Chapter 3 of the SIF Governance Document, the Funding Party must follow Data Best Practice Guidance with regards to all data gathered or created in the course of a Project. We expect the Funding Party to document any reasons, such as commercial sensitivities, for desensitising data. As defined by, and in accordance with, Data Best Practice Guidance, Funding Parties must have a data triage process. Where multiple Project Partners are collaborating on a Project, the consortium must adopt a consistent Open Triage Process for the data related to the Project. Ofgem may require that Project information and data is also shared with other specified parties, such as parties working on complementary innovation funding programmes (subject to redaction of sensitive data).

12. CYBER SECURITY

It is the responsibility of the Funding Party and all Project Partners to implement and maintain appropriate security measures to protect personal data in accordance with The GDPR (General Data Protection Regulation)⁶ and <u>DPA (Data Protection Act) 2018</u>⁷. Protection of computer systems from unauthorised access or being otherwise damaged or made inaccessible must be in place alongside effective working practices. These must be maintained in line with the Funding Party's IT Management Strategies and policies.

13. PROJECT MILESTONES

The Funding Party must provide an outline in its end of Project Phase meeting with its UKRI monitoring officer that verifies the Project milestones have been achieved or explains why they have not.

Project milestones are outlined below in Table 3, based upon details contained within Question 7 and Appendix Question 9 in the Funding Party's.

⁶ <u>https://ec.europa.eu/info/law/law-topic/data-protection/data-protection-eu_en</u>

⁷ https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted



Table 3. Project milestone⁸

Reference	Project milestone	Deadline	Overall objectives and key tasks	Summary of milestones	SIF Funding Request
	Work package	31 March	Overall Work Package Objectives:	M1: Alpha Phase Completed	£10,471.00
	1: Project	2024	Effective record keeping and	(£10,471.00).	
	Management		communications across the period of		
			Alpha Phase activity.		
Milestone 1			Key Tasks:		
milestone 1			1. To ensure accurate and complete		
			record keeping of activities carried out		
			during the Alpha Phase.		
			2. To ensure frequent, effective and		
			meaningful communications across the		
			delivery partnership.		
	Work package	31 March	Overall Work Package Objectives:	M1: Tenant engagement	£19,843.00
	2: Tenant	2024	Production of tenant engagement plan	draft materials and plan	
Milestone 2	Engagement		and draft versions of all engagement and	completed (£19,843.00).	
	Plan		communications materials.		
			Key Tasks:		

⁸ As outlined in in the Application or Project Plan appendix.



			 Production of tenant engagement plan and draft versions of all engagement and communications materials. 		
Milestone 3	Work package 3: Tenant Engagement Conducted	2024	Overall Work Package Objectives: Undertake engagement and confirmation of 100+ tenants willing to participate in Beta Phase. Key Tasks: 1. Engagement and comms material briefed to the Citizens Advice Essex advisors 2. In person, over the phone and digital engagement conducted by Citizens Advice Essex and independent advice given	 M1: Engagement insights and learnings completed (£3,326.00). M2: Confirmation of tenants willing to participate in Beta Phase (£48,184.00). 	£51,510.00
Milestone 4	Work package 4: Sites, Technology and Modelling	2024	Overall Work Package Objectives: Completion of preparation for Beta Phase in relation to mix, location of technologies at sites and integration of technologies, provision of grid services and grid connections informed by site surveys for a sample set of potential Beta Phase participating homes	 M1: Site survey's undertaken of a sample set of potential Beta participating homes (£4,277.00). M2: Connection, network & flexibility impact assessment complete (£15,600.00). 	£111,023.00



			Key Tasks:	M3: Beta Technology	
			1. Complete plan for technology rollout	readiness activities	
			at Beta Phase		
				completed (£59,946.00).	
			2. Establish Connection, network &		
			flexibility impacts of Beta roll out with	M4: CBA completed	
			UKPN connection team and assess	(£31,200.00).	
			outcome		
			3 .Complete site surveys at 10-20		
			properties		
			4. Complete cost benefit analysis of		
			proposition		
	Work package	31 March	Overall Work Package Objectives:	M1: Beta tenant agreement	£61,039.00
	5: Beta Phase	2024	Supplemental tenant agreement drafted	completed (£11,088.00).	
	Commercial		to enable tenants to sign up and Beta		
	Agreements &		Phase route to market and the project's	M2: Beta route to market and	
	Funding		operating, funding, and commercial	commercialisation activities	
Milestone 5	Structure		structure & model defined	completed (£49,951.00).	
			Key Tasks:	M3: Tenant agreement	
			1. Approach to Beta Phase legal	testing completed (£0.00).	
			agreement/tenant consent defined and		
			supplemental tenant agreement reviewed		
			2. Existing tenant agreement reviewed		



			 Tenant agreement document tested with potential participating tenants as part of engagement Discussion between partners reroute to market and commercial agreements 		
	Work package 6: Deploy Pilots	2024	Overall Work Package Objectives: Deploy and test SHIELD technologies in a pilot.	M1: SLES pilot readiness activities completed (£3,785.00).	£62,459.00
Milestone 6			Key Tasks: 1. Engage with tenants and get approvals for pilot 2. Install technologies 3. Measure and monitor install 4. Gather feedback from users	 M2: SLES Pilot approvals obtained from Eastlight Community Homes and tenants (£2,246.00). M3: Co-ordination and management of SLES Pilot (£24,254.00). 	
				M4: Completion of SLES pilot in tenants homes (£16,056.00).	



				M5: Post install tenant	
				engagement and feedback	
				completed (£3,793.00).	
				M6: Completion of Thermify	
				Kensa integration pilot at test	
				facility (£12,324.00).	
	Work package	31 March	Overall Work Package Objectives:	M1: Electricity supply and	£26,023.00
	7: Energy	2024	1. Develop the terms and conditions of	peer to peer contract options	
	Supply and		the private p2p market for the project	developed (£21,118.00).	
	Peer to Peer		2. Develop legal p2p documents that		
	Trading		matches with the terms and conditions of	M2: Alpha Phase p2p pilot	
			the private market, as well as the legal	delivery (£4,905.00).	
Milestone 7			documents in WP6 and WP9		
Milestone /			3. Run a small pilot		
			Key Tasks:		
			1. Meetings with project partners to		
			understand what the terms and		
			conditions are from the partners' point of		
			view as well as tenants' point of view		



£2,001.00



			2. Document evaluating considerations for scaling SHIELD to other DNO's /license areas		
			3. In-person dissemination event		COO 04 E 00
	Work package	31 March	Overall Work Package Objectives:	M1: Mobilisation complete	£39,015.00
	9: Alpha Phase	2024	Ensure SHIELD meets UKRI and Ofgem	(£7,500.00).	
	Governance		project direction and governance.		
				M2: Dissemination materials	
Milestone 9			Key Tasks:	completed (£1,662.00).	
			1. Lead meetings with UKRI		
			2. Coordinate and mobilise partners	M3: Project Governance and	
			3. Coordinate dissemination	Dissemination completed	
				(£29,853.00).	



14. USE OF LOGO

The Funding Party and the Project Partners, External Funders and Project Supporters or subcontractors⁹ must not use the Innovate UK/UKRI and/or Ofgem logo for purposes associated with the Project in any circumstances.

As an alternative for use of both Ofgem and UKRI logos, all external Project communications must include

de the following standard form of wording:

(i) "this project is funded by network users and consumers under the Strategic Innovation Fund, an Ofgem programme managed in partnership with UKRI."

For additional guidance, refer to the communications and media guidelines for competition winners, detailed as part of your delivery pack. These guidelines are designed to help with some suggestions and encourage you to take a proactive approach to communicating about your Project.

15. SHARING OF LESSONS LEARNED

The Funding Party is required to ensure that the sharing of lessons learned and the facilitation of knowledge transfer is conducted as effectively as possible, to ensure that all parties, and therefore all consumers including future consumers, can benefit from Projects.

As contained within Chapter 3 of the SIF Governance Document, we require the Funding Party to work collaboratively to maintain the ENA Smarter Networks Portal so that all reporting and dissemination of learnings on Projects (as required by chapter 6 of the SIF Governance Document) is available via the ENA Smarter Networks Portal.

16. COLLABORATION

The Funding Party must collaborate with third-party innovators as Project Partners, as well as work closely with other parties in the energy supply chain, as set out in Chapter 3 of the SIF Governance Document.

The Funding Party must collaborate with other parties and with UKRI to organise an annual conference in a format appropriate to enabling the building of consortiums and

⁹ As detailed in the Application.



disseminating learning widely. The conference may be a single event for gas and electricity, or more than one event, as appropriate.

17. AMENDMENT OR REVOCATION

As set out in Chapter 7 of the SIF Governance Document, this SIF Project Direction may be amended or revoked under the following circumstances:

- (i) if the Funding Party considers that there has been a material change in circumstance that requires a change to the SIF Project Direction, and the Authority agrees; or
- (ii) to reflect amendments made to the Licence.

18. HALTING OF PROJECTS

This SIF Project Direction is subject to the provisions contained in Chapter 7 of the SIF Governance Document relating to the halting of Projects. By extension, this SIF Project Direction is subject to any decision by the Authority to halt the Project to which this SIF Project Direction relates and to any subsequent relevant SIF Funding Direction issued by the Authority pursuant to Special Condition 9.9 of the Electricity Distribution Licence.

Further to the requirements in Chapter 7 of the SIF Governance Document, in the event the Authority decides to halt the Project, to which this SIF Project Direction relates, the Authority may issue a statement to the Funding Party clarifying the effect of that halting decision as regards to the status and legal force of the conditions contained in this SIF Project Direction.

NOW THEREFORE:

In accordance with the SIF Governance Document issued pursuant to Special Condition 9.9 of the Electricity Distribution Licence of the Licence the Authority hereby issues this SIF Project Direction to the Funding Party in relation to the Project.

This constitutes notice of reasons for the Authority's decision pursuant to section 49A (Reasons for decisions) of the Electricity Act 1989.

Failure to comply with the conditions of this SIF Project Direction means that Ofgem may treat all or part of the SIF Approved Amount received by the Funding Party as SIF Disallowed Expenditure.



ANNEX 1: PROJECT BUDGET

SIF Project Direction costs		
Cost Category	Total Project costs (£)	
Labour	316,946	
Materials	60,064	
Subcontracting	170,650	
Travel and subsistence	6,616	
Other costs	2,000	
Total	£556,276	

Project Partner	Total project costs (£)	Project contribution (£)	Total SIF Funding requested (£)	Project contribution (%)
UK POWER NETWORKS (OPERATIONS) LIMITED	£95,725.00	£9,572.00	£86,153.00	10%
ESSEX COUNTY COUNCIL	£11,635.00	£1,164.00	£10,471.00	10%
ELECTRICITY NORTH WEST LIMITED	£1,656.00	£1,655.00	£1.00	99%
URBANCHAIN LTD	£30,639.00	£4,616.00	£26,023.00	15%
POWER CIRCLE PROJECTS LTD	£161,894.00	£16,306.00	£145,588.00	10%
THERMIFY HOLDINGS LIMITED	£19,776.00	£1,978.00	£17,798.00	10%
CITIZENS ADVICE ESSEX LIMITED	£78,184.00	£30,000.00	£48,184.00	38%
EASTLIGHT COMMUNITY HOMES LIMITED	£22,176.00	£2,218.00	£19,958.00	10%
UK COMMUNITY WORKS CIC	£32,633.00	£3,425.00	£29,208.00	10%
Total	£454,318	£70,934	£383,384	16%



ANNEX 2 TO SCHEDULE: TEMPLATE OF BANK ACCOUNT DETAILS TO BE PROVIDED TO EITHER NGT (<u>BOX.GSOSETTLEMENTS@NATIONALGRID.COM</u>) OR NG ESO (<u>revenue.invoice@nationalgrideso.com</u>)

Company name:

Primary Contact Details (only one contact permitted)

First	Name:
Last	Name:

Email address:

Mobile phone number:

Work phone number:

Address details

Banking details

These should be evidenced in non-editable format. The evidence provided must show company name and bank details and it should be dated within the last 6 months. Any of the below documents will suffice:

- Bank statement (scanned document)
- Void cheque
- Paying in slip
- Screenshot of online banking (showing a logged in account with bank account

and sort code, with browser visible)