



Northern Powergrid

Community DSO Innovation Project:
Consortium Brokerage Conference,
York

27.07.23

Event Report

Executive summary

Community DSO Innovation Project Background

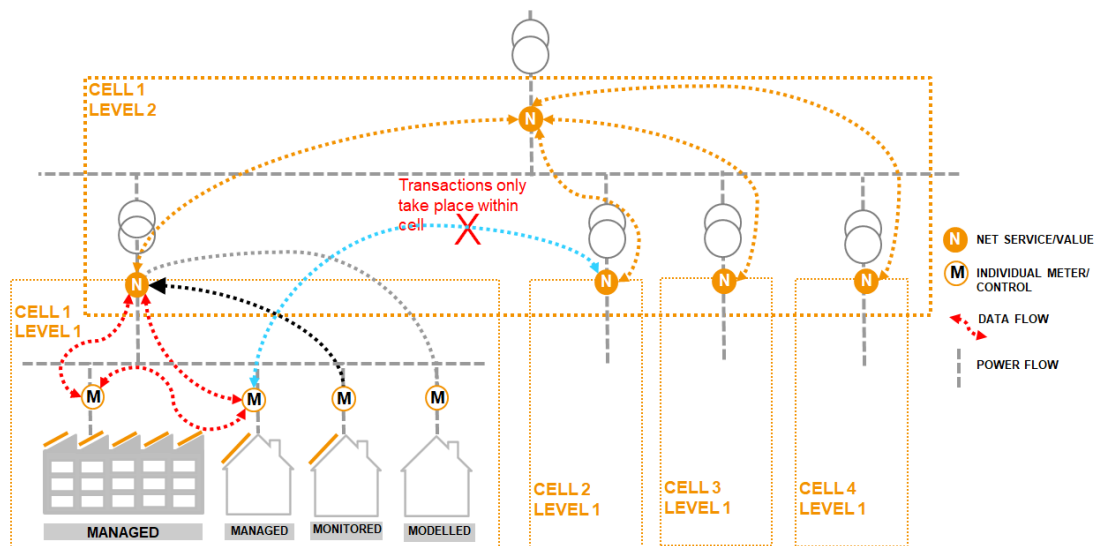
Decentralisation and the push for net-zero could have significant impacts on the electricity networks.

The Community DSO Innovation Project approach is intended to capture the potential for flexibility from individual consumers at the very lowest voltage level of the distribution network. It is believed that this can be achieved by distribution networks helping to facilitate the creation of smart energy communities – groups of engaged and physically connected customers who can both produce and consume power. These energy communities would become responsible for the management of energy flows at that level and perform at least some part of the DSO's role.

Community DSO differs fundamentally from other common energy community concepts in that it integrates community-led, market-led, network-led, and systems-led methods. In this approach, energy communities are developed to facilitate the energy transition for the overall system. Rather than accommodating energy communities in a top-down approach, energy communities will create services at the lowest level which add value to the system above.

Community DSO involves a cellular management approach by facilitating the development of energy communities within small cells, possibly as small as a single low voltage cable.

Each of these cells will transact energy with its neighbours at its point of connection, **the node**. Transactions take place across nodes in a simple, unidirectional hierarchy to simplify data, maintain better visibility and avoid conflicts between layers/voltage levels. Although some existing energy communities attempt to achieve similar transactive approaches within geographical boundaries, the approach in this project is to limit the cell boundaries to physical bounded circuits. This should ensure a proper alignment between economic transactions and physical delivery of services, that is between the commercial and engineering layers.



The Community DSO cellular hierarchy showing managed, monitored and modelled participation.

This method, besides being relatively simple to understand and implement from a technical perspective, also engages with local communities who are empowered to participate in the energy transition and create value for themselves and the overall energy system. Community DSO will help to provide standardisation (technical and commercial) to enable a DNO to easily manage large numbers of these nodes in a hierarchical manner and provide a DNO with insight as to how they can best be integrated into network operation.

Community DSO Consortium Brokerage Conference – York – 27th July 2023

Event background and objectives

Community DSO is a £14.5 million innovation project, led by Northern Powergrid and partners TNEI and LCP Delta. The Community DSO Consortium Brokerage Conference was held in York on 27th June 2023. The aim of the event was to help interested organisations and groups to network to form consortia with the intention of bidding for Community DSO funding.

The objectives of the event were:

- To facilitate face-to-face networking between organisations and groups interested in participating in Community DSO
- To introduce the partners in an open and welcoming setting
- To provide information and updates about the project, including the tendering process for Trial 1
- To welcome comments and answer questions relating to Community DSO.

Event delivery

A total of 90 delegates attended the event. The event consisted of presentations to the room to share information and updates about Community DSO, Question & Answer sessions, facilitated networking sessions, an advice surgery, and open networking opportunities. The event was independently chaired by Explain. Representatives from Northern Powergrid (including the procurement team), TNEI, and LCP Delta hosted and delivered the event.

Key observations

Observations were recorded on the day and reflections captured from partners who were in attendance. Key observations are summarised below:

Most delegates who left feedback said their understanding and knowledge of Community DSO had improved, and they had benefited from networking	<ul style="list-style-type: none">• Delegate feedback was positive; they were pleased to see the aspiration and commitment from Northern Powergrid for Community DSO
Overall, delegates were willing and ready to network, although a few had misaligned expectations of the event	<ul style="list-style-type: none">• A few delegates expected Northern Powergrid and partners to play a more instrumental role in matchmaking• A few delegates were there to sell technology, not realising the expectation to collaborate
Some delegates wanted longer networking sessions and more chaperoning from partners	<ul style="list-style-type: none">• Most delegate feedback on the event was positive. However, a couple of delegates said the networking sessions could have been longer and structured (like 'speed dating')
It was felt that some key organisations were not represented	<ul style="list-style-type: none">• This included groups such as housing developers and energy suppliers. Some delegates wanted to network specifically with representatives from these organisations• Energy community groups were in demand and more in attendance would have been valued
Some delegates questioned how communities would be encouraged to participate without being directly incentivised	<ul style="list-style-type: none">• This was a recurring theme, across questions and table discussions, with concerns expressed around the difficulty of recruiting communities if there was no clear incentive
Broader context of Community DSO needs to be shared to aid understanding	<ul style="list-style-type: none">• Delegates would have benefited from understanding of the broader context of Community DSO, including specific roles of each partner and individual work packages such as regulation and contracts• More insight into data and technical challenges was also suggested for discussion
Some delegates wanted more detail to be shared about the project eligibility requirements	<ul style="list-style-type: none">• Clear definitions of roles was suggested, particularly in relation to trial coordinator role, including a perceived risk in relation to contract management• Clear eligibility criteria, including eligible organisation types, was also requested

Conclusions and suggested actions

The following table summarises Explain's findings from the event and suggested actions for Northern Powergrid and partners.

Topic	Evidence	Suggested action
Clarity of communications	During the event, a few delegates did not understand some of the terminology used	- Use plain language where possible and provide a glossary of terms Please note: a useful NPg Glossary of Industry Terms can be downloaded via our website @ https://corpcms.npproductionadmin.net/downloads/59020
Communicating the Community DSO project	A few delegates left feedback wanting further clarity on elements of the Community DSO project	- Consider providing further clarity on and further differentiation between project roles, particularly the trial coordinator Please note: additional slides were shared at July 20th online networking conference and are also included in this Appendix.
Missing organisations	Some organisations were not present, such as housing associations and energy suppliers	- Review communications about the event shared with these types of organisations Please note: Communities have since advised evening events are preferred to network.
Representation of community groups	Feedback was received that there were too few community groups in attendance	- Ensure delegates are invited to community networking opportunities. Please note: All contacts were invited. - Offer additional chaperoning services or engagements with communities if asked. Please note: since this conference, NPg have hosted two Community Energy Forums (6th July in York & 7th July in Newcastle), which all invitees to this Conference were also invited to attend to introduce themselves and connect with Communities at the Forums.
Deferral of submissions to a later trial	There was concern that some consortia may choose to defer applying for Trial 1, resulting in fewer applications and reduced quality of bids	- Consider allowing the successful consortium of Trial 1 to bid for another trial To confirm: Consortia can bid for any number of trials without prejudice and are urged to apply as soon as they are prepared.
Future networking events	A few suggestions for improved networking	- Consider providing longer networking sessions if a similar event is delivered in the future. Please note:

	focused on more time and increased facilitation	<p>the final delegates departed before the 15:30 close time.</p> <p>- Consider a 'speed dating' style session, where delegates move quickly around the room to make 'elevator pitch' introductions to each other.</p> <p>Please note: since this conference, NPg have hosted an online 'Speed Networking Conference' on the 20th July as another facilitated opportunity to connect interested organisations. 31 guest contacts participated in networking at this event.</p>
Topics for future events	Some delegates shared their interest in other topics for discussion	<p>- Share details of future stakeholder events with those who opted in. Please note this is routine.</p> <p>- Consider holding events for innovation, data and digital transformation, and connections/constraints, as these were topics of interest to these delegates.</p> <p>Please note: these are already priority routine stakeholder event topics.</p>

Reflections & next steps

Maurice Lynch, Head of System Flexibility and host of this event thanks everyone attending the event and who have expressed interest so far in the Community DSO Innovation Project.

"It was a fantastic day with abundant interactions and enthusiasm felt. As a result of the conversations had on the 27th June, we already anticipate 4 or 5 groups are intending to submit a formal bid and we currently believe 8 communities are considering options to join consortiums.

We are keen that many more continue to work towards building their consortiums in the hope we will receive a high number of contrasting bids this Autumn to choose from as we have four trials to deliver!

To reiterate, we are not necessarily looking for six organisations in a consortium, it can be any number of organisations as long as the consortium can fulfil our need for the six competencies to supplement ourselves and partners, LCP Delta and TNEI. We believe 2 or 3 organisations can make up a consortium as long as they can demonstrate they satisfy all six competences sought. We will contact all registered contacts to announce the pre-qualifying questionnaire (PQQ) and subsequent invitation to tender (ITT) opening this Autumn 2023."

Please do continue to email communitydso@northernpowergrid.com any questions in the interim.

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Other Useful Content Links:

- Watch our Community DSO Launch Webinar [here](#)
- Download the Community DSO Request for Information (RFI) Questions and Answers [here](#)
- Visit all our Community DSO Project web pages [here](#)
- **Browse the latest A-Z listing of organisations wanting to network more @ [Community DSO | Explain Market Research \(explainresearch.co.uk\)](#)**



Introduction

An overview of the project background, objectives and methodology.

Introduction

Event background

Community DSO is a £14.5 million innovation project, led by Northern Powergrid and partners TNEI and LCP Delta. The purpose of the project is to drive local decarbonisation and strengthen local energy markets by trialling different approaches to Smart Local Energy Systems (SLES).

Project partners agreed to host a face-to-face event on 27th June 2023 in York with the primary aim of helping interested organisations and groups to network and form partnerships. These partnerships will be formed with the intention of bidding to deliver one or more of the trials for Community DSO. The event forms part of the pre-tender market activity undertaken by the project partners ahead of procurement of Trial 1 delivery.

Objectives

The objectives of the event were:

- To facilitate face-to-face networking between organisations and groups interested in participating in Community DSO
- To introduce the partners in an open and welcoming setting
- To provide information and updates about the project, including the tendering process for Trial 1
- To welcome comments and answer questions relating to Community DSO.

Methodology

Recruitment

The Community DSO Consortium Brokerage Conference took place on 27th June 2023 at the Principal Hotel, York. The event ran from 10am until 3.30pm. Invitations were sent by email to a wide range of stakeholders who had either previously expressed an interest in the Community DSO innovation project (e.g. they had participated in the Request for Information (RFI)) or were known by the project partners. These invitations were sent by Northern Powergrid, TNEI, or LCP Delta.



Delegates were required to complete a registration form to secure a place. The registration form captured key information about the group or organisation they represented, including:

- Key contact details
- Organisation type
- Interest in the event
- Core competencies
- Networking requirements.

Delegates were also asked to contribute to a networking directory and were prompted for their consent to share details with other attendees. These details included:

- Key contact details
- Key competencies of their organisation
- Key competencies they are looking for
- Short description of their organisation (300 words)
- Short description of their interest in the event (300 words).

Networking directory

[Browse the latest A-Z listing of organisations wanting to network more @ Community DSO | Explain Market Research \(explainresearch.co.uk\)](#)

Details submitted by delegates when registering for the event were used to produce a networking directory. This was available for delegates to download on the day via QR code. It provided the following:

- Introduction to the partners
- Agenda
- Delegate listings A-Z
- Organisation listings A-Z
- Delegate profiles, based on information
- Contact information



Networking on the day

In advance of the day, Northern Powergrid produced table plans for the event. These table plans ensured that organisations representing each core competency were represented on each table.

There were then two dedicated networking sessions:

- Facilitated networking (part 1) at tables. Each table had at least one partner present who helped to facilitate introductions and discussions about networking requirements.
- Facilitated networking (part 2). Each table in the room was taken over by a core competency. Delegates were encouraged to move around the room to find prospective partners at the respective tables. There was a dedicated table for the project partners to take questions in an 'advice surgery' style, one-to-one or one-to-many. There was also a table for the Northern Powergrid procurement team, where delegates could go to ask specific procurement-related questions.

Table 1   	Table 2 Energy Communities	Table 3 Trial Coordinators
Table 4 Trial Coordinators	Table 5 Enabling Hardware	Table 6 ERMS Energy Management Resource Systems
Table 7 Trading Software	Table 8 Other Competencies	Table 9 Northern Powergrid Procurement

While the facilitation of the event officially ended at 2.30pm, there was an additional refreshments reception from 2.30pm to 3.30pm to provide an opportunity for continued conversations amongst delegates.



Attendees (90)

There were 75 networking delegates at the event.

Full name:	Job title:	Organisation/ Co. name:
Adrian McLoughlin	Climate Change Advisor	Newcastle City Council
Alistair Roberts	Community Renewables Manager	Power Circle
Allister Stanton	Head of Investor Relations	Enoda
Alvin Ernest	Head of Strategy, Commercial & Energy	Electric Miles
Amarjit S-Jhutti	Director	Linklaser
Andrew Ross	Projects and Innovation Director at Centre for Energy Equality	Centre for Energy Equality
Andrew Turner	Strategy Specialist	SSE Energy Solutions
Angelos Patsidis	Head of Power Systems	SMPnet
Anne Hetherington	Trustee	Whitley Bay Big Local
Bethan Wynton	Director	Energise Barnsley
Bill Kirkup	Partner	CAG Consultants
Carmel Bawa	Sales Director Utilities	Schneider Electric
Charles Parkinson	Renewable Heat Project Officer	Together Housing
Charlotte Flowerdew	Head of Housing Solutions	E.ON Energy Solutions
Chris Broadhurst	CCO	Electron
Christopher Jackson	Co-founder	Advanced Infrastructure
Daniel Allington	Business Development Manager	ORE Catapult



Danny Jennings	Chief Revenue Officer	Equiwatt Limited
Darren Jones	Technology Manager	Hitachi Energy
David Brook	Innovation Strategy	GE Digital
Emilio Miguela-Martin	Team Lead - Modelling and Data Analysis	Enoda Ltd
Emily Arthur	Sales Account Manager	EA Technology
Faithful Chanda	Development Engineer (Community Energy)	National Grid
Florence Silver	DSO Transition Lead	Smarter Grid Solutions
Gemma Voaden	Delivery Manager Retrofit and Renewable Heat	Together Housing
Grace Martin	Head of Marketing	Advanced Infrastructure
Harry Taylor	Networks Partner (attended in lieu of David Middleton)	Baringa
Heather Wellings	Climate Change Officer	Bassetlaw District Council
Helen Grayshan	Climate Change Manager	Wakefield Council
Hongjian Sun	Professor in Smart Grid	Durham University
Ian Madley	Not given	Sustainable Bramhall
Jemma Howland	Principal Consultant	Ricardo Energy & Environment
John Macartney	Innovation Director - Energy Transition	GE
Justin Ma	Director	Orange Power Ltd
Leo Thomson	Co-founder at Local Energy Systems	Local Energy Systems
Khaliq Ali	DNO Key Account Manager - (Power Systems)	Schneider Electric

Kieran Larkin	Electrical Manager	Sembcorp Energy
Leo Thomson	Co-founded at Local Energy Systems	Local Energy Systems
Louise Guthrie	Net Zero Consultant	EA Technology
Luke Richardson	Chair	Zero Carbon Yorkshire
Mark Lufkin	Sales Director	Wondrwall
Mary Gillie	Director	Energy Local CIC
Matthew Osborn	Solutions Manager	Passiv UK Limited
Max York	Sales Manager UK	ZIV Automation UK
Melanie Taylor	Director	Just Strategy
Michael Avant-Smith	SVP Decarbonisation & Growth	BMA
Michael Feasey	Associate Director	Ricardo Energy & Environment
Molly Westby	Project Manager EDI+ Network	Durham University
Neil Bailey	Senior Consultant	NODES
Nick Huntbatch	Head of Product	Electron
Nick Merricks	Head of Smart Energy	Landis+Gyr
Patrik Lindvall	European Sales Lead	Piclo
Paul Jarvis	Senior Proposition Manager	SNRG
Paul McKeever	Head of Electrical Research	ORE Catapult
Phil James	Sales Executive	OSI
Phil Jeffrey	Head of Enhance	SSE Energy Solutions
Philip Inegbedion	CEO	Otaski Energy Solutions Ltd



Professor Rajat Gupta	Professor of Sustainable Architecture and Climate Change.	Oxford Brookes University
Robert Hunt	Partner	ESR Electrical
Robert MacDonald	EVP Consultancy & UK Sales	Smarter Grid Solutions
Samantha Harvey	District Councillor	WMDC
Samir Alilat	Head of Innovation & Business Development	Kelvatek
Sarang Jape	Digital & Software Business Development Manager	Schneider Electric
Seth Townsley	Head of Innovation	GTC
Stefanos Anagnostopoulos	CCO	SMPnet
Steven Armitage	Chief Commercial Officer	Perse Technology Ltd
Stuart Duckett	Creative Director	The Sustainable Design Studio
Sunyoung Lee	Software engineer	Entrust Microgrid Ltd
Tim Langhorn	Director	Linklaser Ltd.
Timothy O'Brien	Net Zero Officer	Yorkshire North & East Methodist District
Timur Yunusov	Senior Consultant	Baringa
Tom Bradley	Director	Decerna
Vicki Sharp	Development Officer	Community First Yorkshire
Will Maden	COO & Co-Founder	Fuuse Limited
Xiongwei Liu	Managing Director	Entrust Microgrid Ltd



There were 13 partner delegates at the event.

Full name:	Job title:	Organisation/ Co. name:
Paul Glendinning	Director of Policy & Markets	Northern Powergrid
Maurice Lynch	Head of System Flexibility	Northern Powergrid
Laura Brown	Commercial Manager – Flexibility / – Interim Programme Manager	Northern Powergrid
Nicole Butterworth	Analyst – Flexibility Services – Interim Project Manager	Northern Powergrid
Ian Hulbert	Procurement Compliance Manager	Northern Powergrid
Tracy Precious	Senior Buyer	Northern Powergrid
Jane Watson	Lead Stakeholder Engagement Advisor & Event Organiser	Northern Powergrid
Helen Priestley	Stakeholder Engagement Manager	Northern Powergrid
Lizzie Boyes	Local System Planning Engineer	Northern Powergrid
Jeremy Harrison	Principal Analyst & Senior Consultant	LCP Delta
Sarah Freshwater	Consultant	LCP Delta
Gordon McFadzean	Specialist Consultant, and Head of Data Science	TNEI
Sarah Sheehy	Senior Consultant	TNEI

This event was chaired by 2 representatives from Explain Market Research.

Full name:	Job title:	Organisation/ Co. name:
Rebecca Crinson	Partner & Insight Director	Explain Market Research
Rachel Gordon	Associate Director	Explain Market Research



Apologies

Six individuals sent their apologies and did not attend the event after registering. A further 13 registered names did not attend.

Full name:	Job title:	Organisation/ Co. name:
Maria Brucoli	Head of Research and Innovation	SSE Energy Solutions
Mark Degg	Engineering Director	CoGen
Rhona Pringle	Partner	CAG Consultants
Jon Cape	Managing Director	Power Circle Projects Ltd
Jacob Allinson	Senior Grid Connections Engineer	RWE Renewables UK Plc
Jessica Britton	Research Fellow	University of Edinburgh



Agenda

The event itself consisted of presentations to the room to share information and updates, Question & Answer sessions, facilitated networking sessions, an advice surgery, and open networking. The event was independently chaired by Explain. Representatives from Northern Powergrid (including the procurement team), TNEI, and LCP Delta were involved in the facilitation and delivery of the event. The full agenda is provided below.

Time	Item	Presenting
Morning		
10:00	Reception	Arrival of delegates
10:30	Welcome and housekeeping	Rachel Gordon, Explain
10:35	Opening remarks	Paul Glendinning, Northern Powergrid
10:45	Purpose of today	Maurice Lynch, Northern Powergrid
10:55	The Community DSO Project: <ul style="list-style-type: none"> - Project Scope and Aims - Energy Community Concept - Trial Timelines and Budget 	Laura Brown Northern Powergrid Jeremy Harrison, LCP Delta Sarah Sheehy, TNEI
11:20	Q&A	All
11:40	Comfort break	All
11:50	Facilitated Networking (Part 1)	All
12:40	Lunch	All
Afternoon		
13:25	Northern Powergrid Procurement Process with Q&A	
13:50	Facilitated Networking (Part 2) & Advice Surgeries	All
14:20	Round-Up and Thanks / Next Steps	Maurice Lynch, Northern Powergrid
14:30	Refreshments Reception	
15:30	Close	





'I got a much better understanding of where NPg were in their thinking and where any gaps are, which will help me prepare to submit a higher quality tender response when the ITT is issued.' (Delegate feedback)

Question time

An in-depth review of the findings of the research programme.

Question time

Questions & Answers

There were a number of opportunities for delegates to ask questions on the day.

Questions to Maurice

After Maurice talked about the purpose of the event, the opportunity to ask questions was offered to delegates. The questions and answers are outlined below.

Question 1: Where are you with Community DSO and what are the benefits?

Answer: More detail on this will be shared with you today. Other projects exist, such as Project CLEO, and we have been modelling scenarios in relation to the Community DSO approach. But ultimately Community DSO will be real life, real time, on the low voltage network.

Question 2: The event is framed as an opportunity for matchmaking to create a consortium. How organic do you expect this to be?

Answer: Very organic. The purpose of today is to enable you all to make connections.

Question 3: Is the plan still for multiple trials?

Answer: Yes. There will be four trials and they will be staggered. We have up to £8 million for those four trials. This is trial one of four.

Question 4: How do we avoid an issue like in Project CLEO that by the time the project gets off the ground, the activity is out of date?

Answer: The innovation is based on the consortium; we are looking for the successful bidder to ensure that is not the case.

Question 5: To what extent can the specification be tweaked?

Answer: There is nothing set in stone. We are happy for the specification to be flexed.

Morning Q&A session

A dedicated session to questions took place after presentations.



Question 1: Would Ofgem allow funding for a battery connected at the transformer? Would that be counted as flex?

Answer: Unsure about this. Will take the question away to find out.

Question 2: Can only companies who respond to the RFI then go onto respond to the tender?

Answer: No. it will be an open tender.

Question 3: Could the same consortium do all of the four trials?

Answer: There will be four separate tender events, and it is possible that the same consortium could be the best bid for each one. However, we do want to explore four different archetypes and so our assumption is there will be different consortia working on each trial.

Question 4: I noticed in the timeline there is a decommissioning phase. Would this not disenfranchise the community if the trial has been successful but it is then decommissioned?

Answer: I agree, we wouldn't decommission if the trial delivered benefits. We are not sure how this would work in practice yet, but would find a solution.

Question 5: If you don't fund LCTs, what is the benefit to the consumer of participating? That could be challenging for recruitment.

Answer: We are anticipating working with communities that have different levels of LCT adoption. Ofgem are clear the funding is not for LCT because the trials need to be sustainable. If you want to benefit you may choose to invest in LCT yourself. There are different ways the trial will create value that would cover the cost of investment, for example access to lower cost electricity.

Question 6: Could individual consumers be provided with their own data to control demand? That is currently only held by the aggregator.

A platform of this nature would be ideal but not realistic. We need good governance and exchange of data to enable existing platforms to work together.

Question 7: Would it be possible for local GPs to share data of residents to support the trial?

Answer: We would need to look into GDPR barriers but will explore all options.

Question 8: Independence can sometimes be lacking in the analysis of data and customer experience. A university can take an independent role in doing this. What are your views on that?



Answer: We would certainly need to conduct due diligence on any trial claims. The best way to validate is with an external organisation. That could be a university or another type of organisation. We are lucky in the UK to have a strong academic sector able to contribute in this way.

Question 9: Would you be able to use your modelling and intelligence to identify the community where there would be the greatest economic benefit from the trial?

Answer: The trial community will be based on willingness to participate. We are taking a bottom-up approach. We will adopt any learnings from the trial into business as usual as soon as possible.

Question 10: What are your expectations in terms of the size of the community?

Answer: We are looking at 100s of households and around 40% participation. We will monitor passive participation too. It is at that sort of street level we are looking at.

Question 11: In regard to the BEIS heat pump ready project, there was some real learning and they wanted to take it forward with their tech. However, they hadn't allowed that there was no way of monitoring the LV network or substations. Do you have a mechanism for monitoring secondary substations?

Answer: Yes, there is some budget set aside for this purpose and to try new things.

Questions 12: If we withdraw from the process, but then want to re-enter will this negatively impact how our bid is looked upon?

Answer: No, this will not impact how your bid is viewed.

Lunchtime questions

A few delegates posed questions to Northern Powergrid during the lunch break, which Maurice answered openly in the room once all delegates were ready for the commencement of the afternoon session.

Question 1: Where are the communities? There aren't enough communities in attendance at the event.

Answer: We have community energy networking sessions taking place the following week; these will be shared with you.



Question 2: What is a local community?

Answer: When we talk about a local community, we are thinking about a distribution transformer with LV feeds coming out.

Question 3: What is in it for the community?

Answer: The incentivisation is around the reduction in customer bills.

Questions for procurement

Following the presentation made by the Procurement Team in the afternoon, there was an opportunity for questions.

Question 1: Who leads the bid?

Answer: The trial coordinator leads the bid and the other members of the consortium would be subcontractors.

Question 2: Does each subcontractor need to register on Jaggaer?

Answer: The registration on Jaggaer is free therefore if a subcontractor wishes to register in their own right then there are no barriers to this. However, there is no requirement for the whole supply chain to be registered on Jaggaer.

Question 3: Will you share the slides?

Answer: Yes.

Question 4: Do the requirements for ISO9001 etc just apply to the lead bidder?

Answer: Yes, this will be proportionate.

Other questions

Question 1: Regarding the trial coordinator role; would this organisation be expected to hold all contracts with all other parties? Particularly in relation to individual trial participants (households)?

Answer: We expect one organisation to be the prime contractor, i.e. to hold all contracts with all other parties & with NPg. We had anticipated that this would be the trial coordinator, but on listening to feedback, we are open to it being any of the participants, so long as all roles and responsibilities are



clear to all parties involved. We anticipate that individual households will participate as part of an established community (a registered legal entity / charity or similar).

Question 2: Are the four trials intended simply to compete with each other with a view to achieve a single new standard, or will the most productive elements from each be co-opted into the end solution?

Answer: The trials are not intended to compete with each other, more to complement each other. We aim to build a toolkit with repeatable procedures and methodologies etc, to enable a more straightforward set up for future Community-DSOs. Learnings from all 4 trials will potentially be included in this, giving a menu of options to choose from (should this prove to be a sensible approach given trial learnings).

Question 3: How will the participating communities be: - incentivised? Suggestions: 1. Stable export price for electricity, 2. Fee for contribution to market balancing, 3. Socialised connection fee for new assets - protected from risk? "You take the risk & you might benefit" is perhaps not good enough?

Answer: It is up to each trial to define incentives for communities involved. All of these suggestions are potential options. Participating communities will only bear the brunt of the project risk if they are the prime contractor.

Question 4: "Alexa balance the street" ...is the data to be used, second by second, to be handled centrally (huge data transmission) or locally?

Answer: Up to the individual trial how data is handled (though locally would possibly make more sense, given the volumes, but depends on tech set up).

Question 5: Your expectations regarding the definition of a "community", is it a subdomain circuit? A postcode?

Answer: We anticipate that a community will consist of 100 – 200 homes (and possibly some businesses and other buildings) all connected to the same LV feeder and/or substation. We will shortly release a trial one specification which will provide further details.

Question 6: Is the benefit delivered only being judged on network investment? Or will it consider SROI, health benefits, economic stimulus etc?

We have yet to define all KPIs against which the trials will be evaluated. However, they will prioritise the key objectives of the project which are to: offer opportunity for passive and active community participation and equitable reward in the energy marketplace, provide a just transition route to net



zero energy for the local distribution system and its customers, provide system security in a cost and resource efficient way.

Question 7: You've stated that the trial coordinator will act as prime contractor. This means they take delivery accountability and delivery risk. Would be useful to explain why that contracting model is chosen.

We expect one organisation to be the prime contractor, i.e. to hold all contracts with all other parties & with NPg. We had anticipated that this would be the trial coordinator, but on listening to feedback, we are open to it being any of the participants, so long as all roles and responsibilities are clear to all parties involved.

Written questions

Submitted written questions are responded to here:

Question 1: What is the levelised cost to end-users?

A: There is no cost to the consumers, we are trying to incentivise them to participate in trials.

Question 2: What is the level of managed assets to (metered) monitored assets?

A: We are looking for a community that has a good blend of *LCT uptake already – ideally 50% upwards.

[*Low Carbon Technologies]



Observations from partners

Summarised below are observational comments recorded by partners at the event and captured at the event debrief the following morning on 28th June 2023.

Broader context of Community DSO needs to be shared

It was acknowledged that the event presentations could have been situated in the context of the broader Community DSO project. This would have enabled a clearer explanation of the work done by individual partners, including all the work packages like regulation and contracts.

Delegates were willing and ready to network

From observations and conversations on the day, overall, delegates understood the purpose of the event and were present for networking opportunities. Delegates demonstrated varying levels of preparedness in relation to potential projects and personal objectives for the day; nevertheless, all delegates were observed engaging in conversation, with some making the most of partners to help them connect to specific representatives.

A few delegates had misaligned expectations of the event

A few delegates appeared to have misaligned expectations of the event and wanted Northern Powergrid and partners to play a more deliberate role in matchmaking. There were delegates who wanted to sell their technology, not realising that there was a requirement to collaborate.

Some key organisations were not represented

A few comments were made in relation to missing key organisations, including housing developers and energy suppliers, despite invitations being sent to them.

How to involve and incentivise communities was questioned

This was a key challenge from some delegates: how can communities be encouraged to participate if there are no clear incentives?



Plain language needed

There was a reminder to use plain language where possible and provide a glossary of terms. There were a few delegates who questioned what certain terms meant.

Clarity needed about the role of trial coordinator

It was noted that some delegates were confused or hesitant about the role of trial coordinator. Many selected trial coordinator as a core competency, however, as the day progressed, they were less willing to fulfil this role. This could be related to:

- Perception of risk in relation to trial coordinator role e.g. contract management
- Confusion and overlap with other specialisms, such as microgrid coordination, which could be confused with trial coordinator

One partner said it might be necessary to make it clear that the trial coordinator is a project management role and this role could be fulfilled by an existing partner or a different partner.

Deferral of submissions to a later trial

One partner raised concerns that some consortia may choose to defer applying for Trial 1 because they want to wait to submit a bid for a more complex or technical trial later. This might affect the number and quality of submissions for Trial 1. There was a suggestion that a winning consortium could bid again in a later round.



Delegate feedback

Delegates were asked to complete an online feedback survey at the end of the event. The feedback survey was shared by QR code on the day and later in two separate emails sent by Northern Powergrid's Stakeholder Relations Team and by Explain. A total of 12 delegates have completed the feedback survey. The results are shown below.

Overall, the event met expectations

Looking across the feedback provided by delegates, it is fair to say that the event met expectations and delegates were satisfied with the event. Key feedback included:

- Most delegates (83%, 10 delegates) said that they agreed or strongly agreed that the event was what they were expecting.
- Most delegates (83%, 10 delegates) said that the event covered topics they were interested in.
- All delegates said that they understood the purpose of the event.
- Most delegates (83%, 10 delegates) agreed that the information presented was easy to understand.
- Most delegates (75%, 9 delegates) thought the event length was suitable for the subject.
- 67% strongly agreed that attending the event was valuable to them and/or Northern Powergrid.
- In terms of satisfaction, 9 delegates (75%) scored 8 or above for satisfaction (on a scale where 1 is totally dissatisfied and 10 is extremely satisfied). Two delegates (17%) scored the event 2 and felt very dissatisfied with the event.



Some delegates wanted more information and more time

The table below summarises the qualitative comments left by delegates who completed the feedback survey. The comments have been grouped by topic.

Topic	Summary	Comments
Even longer networking sessions	A couple of qualitative comments were left about the networking element of the event and how it could have been improved. One comment related to the layout of the room.	<p>☐ 'Longer networking, and enforce the "speed dating" a bit more, and offer extended networking session'</p> <p>☐ 'I think it needed to be longer and more discussions - I did have to leave early but wish the mix up of networking tables had more time'</p> <p>☐ 'Perhaps breakout session groups need to be further apart as background volume was an issue when trying to hear individuals at same table'</p>
More interaction wanted from Northern Powergrid and Partners	A couple of delegates suggested that partners could have interacted more with the tables, with more mixing of partners between tables. Please note: One NPg or Partner sat at every teams table in the morning session, and in the afternoon session all tables were signposted to visit the Partners table or Procurement table if they had any questions, but the purpose of the afternoon was for delegates to explore the room and actively network to find consortium partners.	<p>☐ 'Perhaps members of the NPg team could have visited the tables more?'</p> <p>☐ 'Arrangement of task co-ordinators could have been better – i.e. Insert one or two NPg recommended co-ordinators on each table, making it easier for the smaller suppliers to align themselves with their preferred co-ordinator'</p>
More detail, more focus wanted on discussion	There were some comments about the need for clearer definitions of roles and eligibility criteria, as well as	<p>☐ 'Some more definition of roles within the DSO Trial ahead of time might have made it clearer who needs to talk to who'</p>



around Community DSO	more detail about core elements of the project.	<p>□ <i>'A more data driven section might have been useful to focus attendees on the system needs and possible solutions'</i></p> <p>□ <i>'Minor suggestion: clearer communication on the submission criteria - i.e.: Are there guidelines on the size of the trial (kWp / impact on X number of people)? And which types of partners can be included (such as academics /researchers)?'</i></p> <p>□ <i>'The project is trying to do an awful lot. I think NPg might get value in using similar sessions to pull out some of the tensions between different learning objectives, to give both them and suppliers a more nuanced sense of priorities.'</i></p> <p>□ <i>'[More information on] any technical constraints from a network perspective that may complicate or even rule out specific communities. For example, a community being wholly or largely met by an IDNO.'</i></p>
Bespoke participation wanted from community representatives	One delegate said that they would have liked more energy communities to have been present at the event. Another delegate commented that there should be a separate event for matching communities after the trial framework has been specified.	<p>□ <i>'Participants from energy communities should be invited to a separate event after the trial framework has been specified.'</i></p> <p>□ <i>'Would like to have seen more of the Community Groups in attendance - even a 2 min intro from the ones that did attend from the stage.'</i></p>
Challenges for Community DSO:	A couple of delegates reflected on the challenges they had identified as a result	<p>□ <i>'There's a lot of tech available that aims to balance the distribution of energy, but most companies find it hard to access homes and buildings to trial it, due to</i></p>



communities and timescales	of their participation in the event.	<p><i>hurdles with councils, housing associations and grid application.'</i></p> <p>□ <i>'Some hesitancy shown from the delegates about the timeframe allowed. There were some suggestions that the September deadline should be pushed back a bit further...'</i></p>
Negative comment about the event and tender structure	For completeness, there was one delegate, who was dissatisfied with the event, who left a negative comment with an overall score of 2/10.	<p>□ <i>'It was a joke - poorly presented and a lack of thought around the tender structure.'</i></p>

Many delegates expressed thanks to Northern Powergrid for organising the event and for providing networking opportunities

A few delegates left written comments about the good organisation of the event, praising Northern Powergrid for their efforts. Gratitude was also expressed for the networking opportunities, with the sessions deemed a success. This was echoed by verbal feedback on the day, with the organisers receiving heartfelt thanks and applause from delegates for the organisation and delivery of the event.

□ *'The day went by really smoothly. It was great to see Directors in the room for the full day and demonstrated the importance of the project and procurement to NPg. Facilitation on the tables (Gordon for me) was very good.'*

□ *'Well organised, worthwhile attending!'*








□ *'I really appreciated the facilitated networking, it helped that once we were there, we all knew our purpose for networking and who we wanted to target. I was impressed by how well that worked. Helen & Jane from NPg introduced me to several useful connections that I might've otherwise missed.'*

□ *'Lots of opportunity for networking.'*





Many delegates who left feedback said their understanding and knowledge of Community DSO had improved, and they had benefited from networking

Many delegates talked about how their understanding and knowledge of Community DSO had improved. Some acknowledged the aspiration and commitment shown by Northern Powergrid to the development of solutions for regional decarbonisation. When asked how they had benefited from the event, these delegates said:

-  *'It's good to know more about the way NPg wants to run the Community DSO Project.'*
-  *'I got a much better understanding of where NPg were in their thinking and where any gaps are, which will help me prepare to submit a higher quality tender response when the ITT is issued.'*
-  *'Imagined a few solutions to the Community DSO innovation competition.'*
-  *'Northern Powergrid really mean it.'*
-  *'Great to hear what is in the pipeline and it is a great idea, but I worry that this should have been started earlier and the timescales for it [to be delivered] are far too long.'*
-  *'Aspirations of NPg in this space, the key players in NPg and the overwhelming appetite from NPg and the attendees to support localised community-based energy management and generation.'*
-  *'Timings, procurement details, potential partnerships.'*

Networking was also acknowledged by some delegates as a benefit of the event. Comments made were:

-  *'Contacts made.'*
-  *'Discovered new potential partners.'*



The logo for 'explain' is located in the top left corner. It consists of the word 'explain' in a lowercase, sans-serif font, followed by a small icon of a document with a speech bubble. The entire logo is contained within a white speech bubble shape that has a tail pointing towards the bottom left.

explain

Conclusions and recommendations

See also 'Executive Summary' for key observations and suggested actions

Conclusion and recommendations

The Community DSO Consortium Brokerage Conference was held in York on 27th June 2023. The aim of the event was to help interested organisations and groups to network to form consortia with the intention of bidding for Community DSO funding.

Most delegates who provided feedback said that their understanding and knowledge of Community DSO had increased as a result of attending the event. They also said that they had benefited from the networking opportunities on offer. This was echoed by verbal feedback received by Explain from delegates on the day, who offered their thanks.

For a few delegates, their expectations of the event were misaligned. These delegates had either attended with the intention of selling products or services or they wanted Northern Powergrid and partners to play a more instrumental role in forming consortia. It was felt by some delegates that some missing organisation types would have added value to the event, i.e. attendees such as housing developers and energy suppliers. Communities were most in demand and it was noted business organisations would have liked more communities to attend to connect with.

Northern Powergrid and partners were challenged on several occasions about incentivising communities to participate in a trial. This was addressed directly by Northern Powergrid, providing the opportunity for potential bidders to design incentives into their projects in eligible ways.

In post-event feedback, delegates said further clarity on what was expected for each of the six competences, particularly the trial coordinators role would be beneficial. There was also a couple of general comments to provide any early eligibility criteria would be appreciated.

Please note: the updated PowerPoint slides shared for the subsequent July 20th Online Speed Networking Conference addressed this, comprising more delineation between the six competencies/roles being sought. Anyone wanting more clarification is politely asked to enquire via emailing communitydso@northernpowergrid.com.

It was suggested that in any future events, it would be welcomed if Partners could give a deeper and broad explanation of their roles in the project for context. Also noted was a comment that providing the history and background of how the innovation project was realised would be of interest.



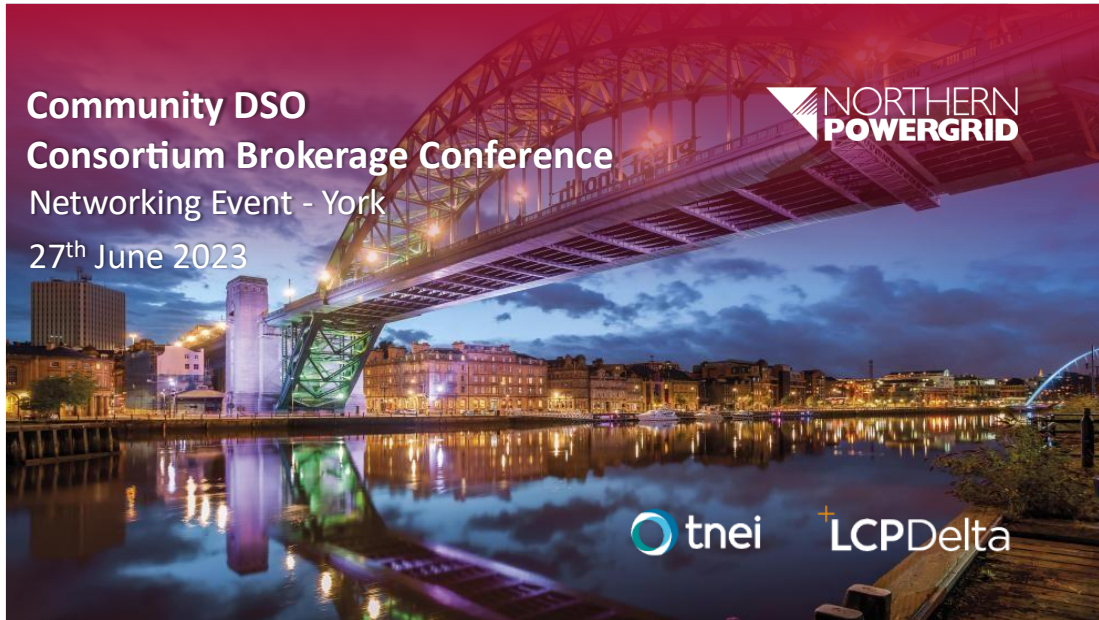


Appendix

Supporting documentation can be found in this section.

Appendix

Slides from the event:



Agenda this morning

Time	Item	Presenting
Morning		
10:00	Reception	Arrival of delegates
10:30	Welcome and housekeeping	Rachel Gordon, Explain
10:35	Opening remarks	Paul Glendinning, Northern Powergrid
10:45	Purpose of today	Maurice Lynch, Northern Powergrid
10:55	The Community DSO Project: <ul style="list-style-type: none"> - Project scope and aims - Energy Community Concept - Trial Timelines and Budget 	Laura Brown Northern Powergrid Jeremy Harrison, LCP Delta Sarah Sheehy, TNEI
11:20	Q&A	All
11:40	Comfort break	All
11:50	Facilitated Networking (Part 1)	All
12:40	Lunch	All

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Agenda this afternoon

Time	Item	Presenting
Afternoon		
13:25	Northern Powergrid Procurement Process with Q&A	Ian Hulbert, Northern Powergrid
13:50	Facilitated Networking (Part 2) & Advice Surgeries	All
14:20	Round up, thanks, and next steps	Maurice Lynch, Northern Powergrid
14:30	Refreshments Reception	
15:30	Close	

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Scan QR to browse the organisations already wanting to network with you!

Go to latest edition @ [Community DSO | Explain Market Research \(explainresearch.co.uk\)](#)

Networking eDirectory

To be added to the directory you must complete the online registration form @ [Northern Powergrid Stakeholder Community DSO Brokerage Event \(alchemer\)](#) and then also please email communitydso@northernpowergrid.com let us know you have done so, and a colleague will create your page and upload you to the online version as soon as possible.



SCAN ME



Community DSO Opening remarks

Paul Glendinning
Director of Policy and Markets



The net zero challenge

As we race to decarbonise the energy system by 2035, there is an opportunity for local energy users to co-ordinate and collaborate to support the effort while keeping the costs of the transition low.

Community DSO

This project will explore these opportunities that could be enabled by businesses, householders and the public sector taking a community approach to the design, planning and operation of their net-zero smart local energy system.



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DSO at Northern Powergrid

How DSO is currently supporting the journey to a net zero whole energy system at Northern Powergrid

- The traditional 'fit and forget' Distribution Network Operator model is no longer appropriate for managing the network system
- With growing amounts of local and intermittent generation, changing patterns of consumption and more complex resultant flows of electricity more agile and active solutions via a Distributed System Operator
- The implementation of the Northern Powergrid DSO plan is well underway via innovative projects and flexibility procurement pilots



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Community DSO – the opportunity

Community DSO has the potential to unlock huge value for customers and the network

- ✓ It will take advantage of state-of-the-art innovation in technology, data, analytics and market mechanisms
- ✓ It will offer opportunity for passive and active community participation and equitable reward in the energy marketplace
- ✓ Provide a just transition route to net zero energy for the local distribution system and its customers
- ✓ It will provide system resilience in a cost and resource efficient way



Net Zero Generation Capacity

- Smart and flexible connections allow more renewable generation to be deployed on the system without expensive reinforcement
- Sharing the value of this saving can become an important local energy system incentive for customers to install renewable energy technologies



Flexibility

- Smart EV charging
- Demand side response
- Smart Meters
- Forecasting
- Hybrid integrated systems
- Energy Storage



Efficiency

- Tackling system supply and demand challenges in the location of constraint provides the most efficient solution and limits system losses and need to build additional national infrastructure
- Avoidance of expensive reinforcement is efficient for cost as well as resources

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Community DSO Purpose of today

Maurice Lynch
Head of System Flexibility

tnei

LCPDelta

**NORTHERN
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Purpose of today

- Pre-tender market activity ahead of procurement of the Trial 1 Coordinator
- Introduce you to the Project Partners
- Provide information about the project and the Energy Community Concept
- Facilitate consortium building
- Explain our anticipated Tendering Process for Trial 1
- Answer your questions

Before we move on, is there anything else you need from today?

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Introduction to the partners



Northern Powergrid manages the electricity network that powers everyday life for 3.9 million homes and businesses in the North East, Yorkshire and northern Lincolnshire. More information on us later in the day.



LCP Delta specialise in broad market, regulatory and business changes in the electricity system, with a specific expertise of smart local energy system commercial and business models



TNEI is a specialist in modelling and analysis of transmission and distribution networks across GB and internationally



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Key Faces – Project Partners



Paul Glendinning
Director – Policy & Markets



Maurice Lynch
Head of System Flexibility



Laura Brown
Commercial Manager –
Flexibility / – Interim Programme
Manager



Nicole Butterworth
Analyst – Flexibility Services –
Interim Project Manager



Jeremy Harrison
Principal Analyst & Senior
Consultant



Sarah Freshwater
Consultant



Gordon McFadzean
Specialist Consultant, and Head of
Data Science



Sarah Sheehy
Senior Consultant

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Key Faces – Procurement + Engagement



Tracy Precious
Senior Buyer



Ian Hulbert
Procurement Compliance Manager



Jane Watson
Event Management & Project Marketing



Rebecca Crinson
Partner & Insight Director



Rachel Gordon
Associate Director

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Community DSO Project Scope and Aims

Laura Brown
Commercial Manager – Flexibility Services,
System Flexibility, Northern Powergrid



Project Scope

Demonstration at Community Scale

- Four distinctive community level trials of the Energy Community concept
- Incorporating innovations in markets, regulation, network management, customer inclusion

Bridging the Gap

- Innovatively linking sector approaches
- Utilising the co-ordination and control of the network led approach
- Blending with agility of the market and consumer led opportunities

Unlocking local system flexibility

- Adapting the governance and operation of the low voltage network
- Allowing electricity system users to act as a community to provide a range of contribution and reward levels



Project Aims

▪ Trial the Energy Community concept in different areas of our network



- Utilising Flexibility Services to incentivise and facilitate groups of physically connected Customers to produce and consume power locally to support the wider system



- Enable the integration of Smart Local Energy Systems (SLES) including low carbon technologies (LCTs) such as PV, EV charging and heat pumps



- Manage the introduction of SLES into our low voltage networks to release the maximum flexibility benefit from the solution while maintaining our high level of system reliability for our Customers



- Explore the technical enablers, commercial models, regulatory framework, market tools as well as the community co-ordination and management that will be required to make the concept viable as business-as-usual (BAU) proposition

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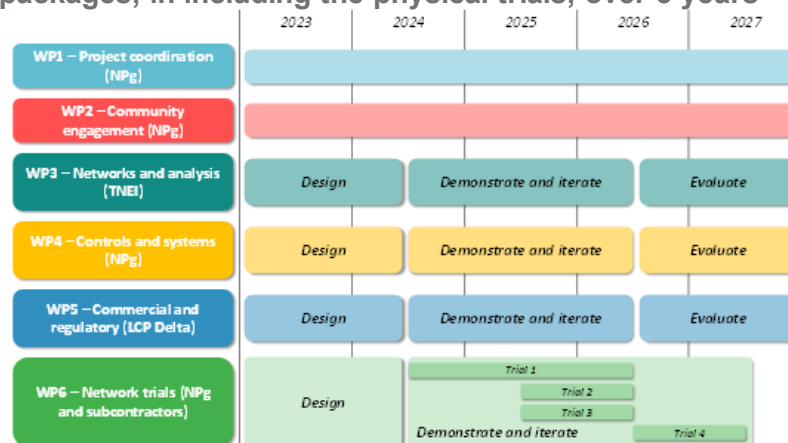
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Please note this supplementary slide has since been included and presented at the July 20th Speed Networking Conference:

Project plan

Information added following the event, taken from the FSP

▪ 6 work packages, in including the physical trials, over 5 years



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Community DSO

The Energy Community Concept

Jeremy Harrison
Local Energy System, LCP Delta



Energy Communities

Energy Communities in Europe



EU initiative to accelerate the energy transition through energy communities

- Citizen Energy Communities (CEC)
- Renewable Energy Communities (REC)

Intended to:

- Increase consumer acceptance of renewable energy
- Increase distributed system flexibility
- Provide a new funding stream for renewables

Features

- Legal framework facilitates implementation
- Reduced use of system charges to reflect lower impact
- Allows for local markets

Benefits to community

- Allow consumers to take control of their energy
- Reduced energy costs
- Value retained within community
- Transparency
- Long term stability

Challenges

- "Just Transition" need to ensure some consumers do not benefit at the expense of others
- CDSO aims to create mutual value not simply accommodate or subsidise



Community DSO – the role of energy communities in the DSO transition

Energy communities (EC) can support the transition from DNO to DSO and vice versa, providing economic, technical and societal benefits

Connecting new DER generation



- As we move to a low carbon generation system, there is an increasing need to accommodate renewable generation
- Renewable energy resources are often in rural areas with smaller networks
- High demand for network capacity can slow the development of e.g. wind farms
- Network capacity at both distribution and transmission levels can result in curtailed generation

Connecting new electrical demands



- Increasing dependence on electricity for decarbonising heat and mobility
- Additional demand from home working
- Some of these applications are critical, increasing the need for resilient supplies
- Although local balancing is not inherently more resilient, it does open opportunities for participants to implement resiliency technologies such as energy storage

Facilitating energy communities

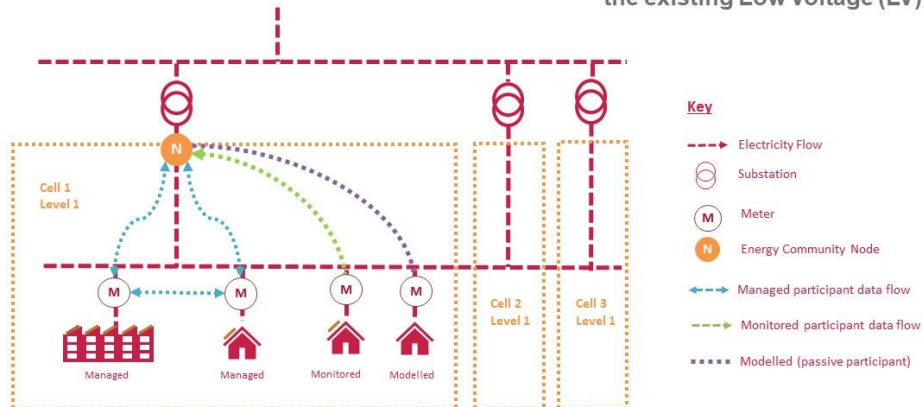


- Historically many EC projects impose a burden on existing infrastructure
- EU focus on accommodating EC rather than mutual value creation
- Community DSO balances at local level to overcome many of the structural challenges of system-wide interventions
- Local or district balancing can be more efficient and responsive than centralised approaches

Please note:
DSO: Distribution
System Operation
DER: Distributed
Energy Resource

Community DSO Concept

Communities formed in cells structured around the existing Low Voltage (LV) network



An **Energy Community** in Community DSO is a group of consumers and generators connected by a common energy system – **the cell**

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Community DSO – Proposed project configurations

<ul style="list-style-type: none"> Three types of participants Manage, Monitor and Model Each cell will include one or more of the following, but the aim is to <i>manage</i> as far as possible 	<p>Manage</p> <p>Control of generation, storage and demand to align demand with available generation</p> <p>Monitor</p> <p>Full visibility (but no explicit control) of demand and generation within each property</p> <p>Model</p> <p>No visibility of generation or consumption but using AI to understand impact on remainder of cell</p>	<ul style="list-style-type: none"> Example of the types of cells that could be trialled, based on existing and emerging cell archetypes 	<p>Minimising impact</p> <ul style="list-style-type: none"> Will involve an existing community Identified network constraints on additional renewable generation <p>Substantially balanced</p> <ul style="list-style-type: none"> As microgrid but without the ability to operate in island mode Aim to substantially balance local demand with generation annually <p>Fully balanced system (microgrid)</p> <ul style="list-style-type: none"> System capable of islanding must be able to balance load with available generation in real time Remains connected to grid for majority of time facilitating the transfer of (balancing) energy and energy services to the grid Economic incentives within the microgrid minimize impact on grid No conflict between TSO (ESO) flexibility services and DSO requirements
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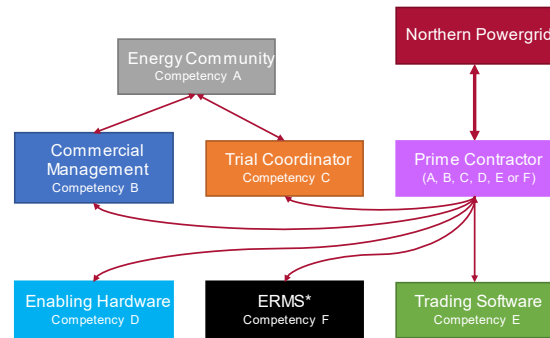
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Please note slide 23 below has been updated with more explanation following conference feedback.

Competencies

- Anticipate that six competencies needed for each of the four trials

- Organisations could meet one or several required competencies
- We expect organisations to group together to deliver a trial
- This is a mix of hardware, software, and management skills needs, alongside an Energy Community and its corresponding low voltage network to host the trial
- One organisation needs to be the prime contractor for NPg to contract with



*Energy Resource Management System

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Further, the slide below has since been added and presented at the July 20th Speed Networking Conference to aid more understanding of the delineation of roles:



Competencies

- A. Energy community:** The formation of an energy community with the right assets is essential to the trials. Consumers within the community will have to be as engaged as possible.
 - B. Commercial Management:** Manage commercial arrangement and deliver business model to share value generated, (e.g., customer contracts, specificities, billing).
 - C. Trial Coordinator:** Day-to-day management of the trials, signing up participants, etc.
 - D. Enabling hardware:** Activating/installing the necessary components, software, or settings so that hardware can perform the intended function. This might include hardware within the community/ cell, as well as possibly hardware within individual customer premises.
 - E. Trading software:** To dynamically balance supply and demand, members of a community need to be able to trade excess generation or share the output of a communal generation asset. Trading must align economic incentives with the physical management of the local energy system to realise benefits for the wider energy system.
 - F. Energy Resources Management System:** Power flows within a cell must be coordinated to align the trading platform with the realities of the electrical network. Need a software platform to manage DERs within a cell and to ensure a robust integration with the wider network. HEMS may also be required within individual premises.
 - Prime Contractor:** All competencies are required in a consortium, but NPg will only contract with a single commercial entity as the prime contractor. We expect this to be one of the organisations providing other competencies within the trials who will then subcontract with the other organisations. Other options (e.g., joint ventures) could be considered.
- A single organisation within a consortium can provide multiple competencies.

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Community DSO

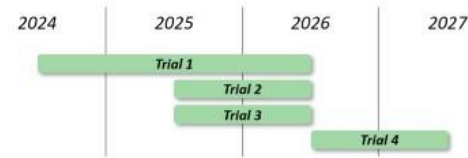
Trial 1 Timelines and Budget

Sarah Sheehy
Senior Consultant, Networks & Innovation,
TNEI

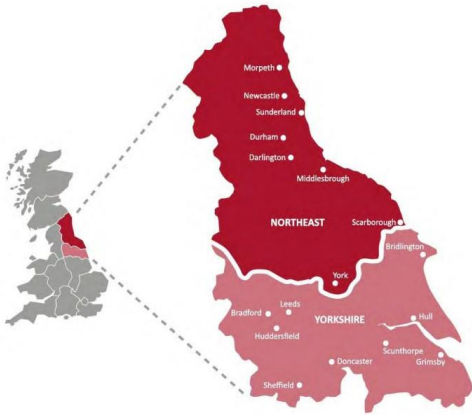



Further, the slide below has since been added and presented at the July 20th Speed Networking Conference to aid understanding of the forecast timing for the 4 trials:

Project Trials



Our aim is for each trial to be slightly different	Demographics, types of premises, technologies, business models, mix of energy resources etc
Every trial must be centred around a specific area within the low voltage network	One secondary substation (or possible, one cable feeder)
Trial 1 is unique because of its timescales	Needs to mobilise very quickly



Aims of the first procurement stage

▪ Focus on trial one, getting ready to start Autumn 2024



- Appoint partners to deliver the 1st (and only the 1st) of 4 trials



- Contract with a single organisation, who will subcontract if necessary.
 - This organisation will be ultimately responsible for delivering all aspects of the trial, managing all the interfaces, and managing delivery risks
 - This contracting approach aligns with the commercial relationship that we expect DNOs to have with Community DSOs in BAU, providing opportunities for learning



- Trial communities must demonstrate an ability to shift or reduce their energy consumption, to support the secure operation of their existing local low voltage network



- Trial communities must be based within Northern Powergrid's Licence areas (North East, Yorkshire and North Lincolnshire)



Indicative timescales

	2023		2024				2025				2026			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Procurement (PQQ then ITT)	■	■												
Contracting			■											
Set-up				■	■									
Target Go-live						■								
Trials						■	■	■	■	■	■	■		
Decommissioning												■		

- We want the first trial to cover two winter seasons (2024/25 and 2025/26)
- Note compressed timescales for contracting and trial set-up
- The successful consortium must present a convincing plan for how this will be achieved
- Could potentially adopt a phased approach when rolling out trial functionality

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Budgets

▪ Details of the project funding



- We anticipate the project will fund approximately ~£2.8 million for the first trial
 - This is around 40% of the project's total budget for running trials (£7m)
 - This reflects the longer trial duration and compressed timescales for project set-up



- The project will fund:
 - Hardware and software **required to implement the concept** (e.g., controls and comms)
 - Incentives for customers
 - Labour costs for running the trials



- The project will **not** fund other customer equipment such as low-carbon technologies
- Match funding, or funding for other costs not covered by NIC, is encouraged but not essential

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The below slide 28 has since been accompanied by a second 'How the trials work (2)' slide - presented at the July 20th Speed Networking Conference to aid understanding of the forecast timing for the 4 trials:

How the trials might work (1)

- **Demonstrate and test the extent to which Energy Communities can be collectively flexible**



- Data and analysis will **establish baseline levels** of capacity for the trial community



- Challenge the community to **sustain reductions in capacity** below this baseline
 - Expect these reductions to get progressively more difficult
 - Up to the consortium to decide how this is achieved, but we currently expect some form of transactive energy using energy resources within the community
 - Prove that communities can manage assets within existing network limits



- Extensive monitoring throughout the community's electrical network.
 - Some LV monitoring from NPg
 - Access to customer monitoring from the trial provider where possible
 - Data provided to the project team for analysis

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How the trials might work (2)

- **Test the extent to which Energy Communities can be collectively flexible**



- The Community DSO approach creates values for the distribution network. Retention of some of this value will provide an incentive for communities to take part.
 - However, we are not explicitly trialling these incentive mechanisms (e.g., DUoS changes) within the project. This will be studied within other work packages in the project.
 - In the absence of incentives for communities to retain this value, trials should include sufficient budget for direct incentives to ensure participation. This has been accounted for in the funding request.



- Extensive monitoring throughout the community's electrical network.
 - Some LV monitoring from NPg
 - Access to customer monitoring from the trial provider where possible
 - Data provided to the project team for analysis



- Analysis of trial data will be completed by NPg and project partners
 - No deliverables expected – and no funding available – for trial providers to carry out this analysis

Subsequent trials

- Plans for trials 2-4, feedback from each trial informs the next



- Hope to explore multiple technology solutions within each trial
- So, organisations that are not successful now may still get involved later, and vice versa – if a consortium feels they may not be ready for Q4 2024, there is still an opportunity for the later trials



- Deliverability within compressed timescales is a big focus of Trial 1
- Honest feedback about your ability to achieve this is very welcome



- Later trials may be more technically complex or explore a wider range of technical solutions

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Community DSO Q&A

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Comfort Break
(10 minutes)







Community DSO

Facilitated Networking



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Facilitated Table / Room Networking

11:50 – 12:40 (50 minutes)



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Lunch
12:40-13:25







Community DSO

Welcome back



Recap of the agenda this afternoon

Time	Item	Presenting
Afternoon		
13:25	Northern Powergrid Procurement Process with Q&A	Ian Hulbert, Northern Powergrid
13:50	Facilitated Networking (Part 2) & Advice Surgeries	All
14:20	Round up, thanks, and next steps	Maurice Lynch, Northern Powergrid
14:30	Refreshments Reception	
15:30	Close	





Community DSO

Northern Powergrid Procurement Process

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Northern Powergrid



Introduction to Procurement

Trial 1

Duration – 22 Months
(20 Months of Live Trial / Monitoring)

Trial 1 - Budget of £2.8m



Introduction to Northern Powergrid

- Berkshire Hathaway Energy Company (**Berkshire Hathaway Energy**), a subsidiary of Berkshire Hathaway, Inc., is the parent company of the Northern Powergrid Group.
- Berkshire Hathaway Energy comprises of thirteen individual business platforms around the world that operate autonomously but share the common purpose of putting the customer first.
- The Northern Powergrid group includes Northern Powergrid (Northeast) plc, Northern Powergrid (Yorkshire) plc and Integrated Utility Services Limited (IUS).
- IUS provides electrical engineering solutions to commercial and industrial markets throughout the United Kingdom by demonstrating an ability and vision to deliver diverse and complex engineering solutions whilst being totally customer focused.



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Introduction to Northern Powergrid

Northern Powergrid is driven by reference to our six key priorities, which underpin all our decisions and actions:

- | | |
|-----------------------|--------------------------|
| * Customer Service | * Environmental Respect |
| * Employee Commitment | * Regulatory Integrity |
| * Financial Strength | * Operational Excellence |

To ensure the organisation meets and exceeds its goals, it is critical that key suppliers of goods and services are aligned to the key priorities.

Further information on Northern Powergrid can be viewed on the company's website
www.northernpowergrid.com

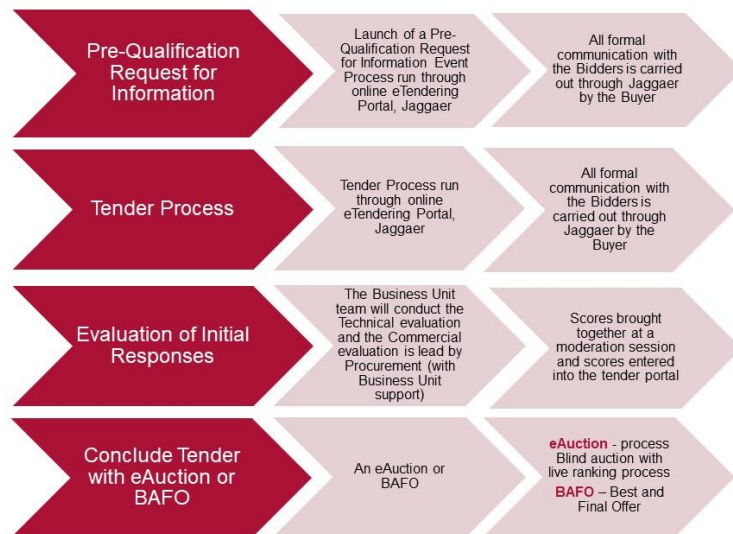
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Tendering Process

- Invite all the companies that submitted a RFI and companies which have shown an interest.
- The winning Bidder following the eAuction or BAFO will be taken forward as the final Bidder in the procurement process, if the bid is compliant.



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Pre-Qualification Request Information Documentation

- Documents
 - Pre-Qualification Request Information – Instruction to Bidders
 - Operating Region
 - Requirement Overview
 - Request Information Questions and Evaluation Methodology
 - Bidders Response Template
 - Insurance Requirements
 - BHE Information Security Questions – PQ Stage
 - Data Protection Questionnaire
 - PPN 03/23 – Standard Selection Questionnaire

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Tender Documentation and Forms of Contract

- Documents
 - Instructions to Negotiate (ITN) – Instruction to Bidders
 - Form of Tender
 - Evaluation Criteria and Methodology
 - Scope of Works and Specifications
 - Pricing Schedules
 - BHE Information Security Questions – ITN Stage
 - Responsible Procurement Charter
 - Fit and Proper Persons
 - Any other relevant documents
- Forms of Contract
 - Professional Services Contracts – Bespoke Contract Created by Legal Services

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Award Criteria

- We are procuring for a Trial Co-ordinator who will then subcontract all the competencies [and any other they feel are necessary to deliver the project].
- The objective of the procurement is to identify the most economically advantageous tender (MEAT) as determined by the evaluation process which is still to be decided on.

Response Envelope	Weighting %	Criteria %	Sub Weighting %
Technical ("Technical Envelope")	TBC	Technical and/or Operational Conditions of Contract	TBC
Commercial ("Commercial Envelope")	TBC	Price	TBC

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Outline Timeframe

Procurement Phase	Estimated Date
1. PQ Stage Documents Issued	DD/MM/2023
2. PQ Stage Clarification Questions Deadline	DD/MM/2023
3. Company PQ Clarification Response Deadline	DD/MM/2023
4. PQ Stage Submission Deadline	DD/MM/2023 @ 15:00
5. PQ Stage Evaluation	DD/MM/2023
6. Notification of Successful Bidders to ITN Stage	DD/MM/2023
7. ITN Issued	DD/MM/2023
8. ITN Round 1 – Bidder Clarification Queries Deadline	DD/MM/2023
9. ITN Round 1 - Company Clarification Response Deadline	DD/MM/2023
10. ITN Round 1 - Submission Deadline	DD/MM/2023 @ 15:00
11. ITN Round 1 - Evaluation And Clarifications by the Company	Month 2023
12. ITN Round 1 - Bidder Shortlisting And Notification of Successful Bidders to the Next Stage of the ITN	Month 2023

Procurement Phase	Estimated Date
13. ITN - Interviews / Clarifications	Month 2023
14. ITN - Interview/Clarifications Evaluation (No Down-Selection) and Calculation of Clarified Technical Envelope Score and Clarified Commercial Envelope Score (For eAuction)	Month 2023
15. ITN - eAuction to Take Place or Best And Final Offers Submission Deadline	Month 2023
16. ITN - Shortlisting of Final Bidder(S) and Notifications	Month 2023
17. Conditions of Contract Negotiation Period with Final Bidder(s) (Final Bidder Negotiation Stage)	Month 2023
18. Contract Award Decision - Start of Standstill Period	Month 2023
19. Standstill Period Ends	Month 2023 at midnight
20. Contract Issued	Month 2023
21. Contract Award Notice Dispatched To FTS	Month 2023

Please note:
PQ: Pre-Qualification, an initial evaluation in the bidding process
ITT – Invitation to tender

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Instructions to Register with the Northern Powergrid E-Tendering Portal

If you have not previously registered, or have not been invited by Northern Powergrid onto the e-tendering portal ("Portal"), you will need to register your company in order to access Northern Powergrid's procurement opportunities. Please access <https://berkshirehathawayenergy-npg-app.laggaer.com> to register your company. Click on the "Register" button to begin the registration process and follow all instructions that you see on screen.

Once you have registered your company, each user will be required to follow these instructions to access the tool.

You will need to use Google Authenticator multi-factor authentication (MFA) preferably via smartphone to access the Portal, though PC based options are also available. For PC based options, please contact the help desk whose number is at the bottom of these instructions. The instructions on using Google Authenticator with the use of a smartphone are as follows:

1. Enter username and temporary password
2. OTP (one-time password) token required
 - a. Install Google Authenticator (official Google Authenticator app only available on iOS and Android; third party alternatives for Blackberry and Windows Phones)
 - i. Android – [download](#) from the "Play Store" – You will need an active Google Account to access the Play Store and continue to use the app.
 - ii. iOS – [download](#) from the "App Store" – You will need an active Apple ID on your phone to do this.

b. The Google Authenticator App looks like this:



c.



3. Open Google Authenticator app and scan barcode. You will receive a 6 digit code – input the Token Number and Submit
4. Agree to User Agreement
5. Change Temporary Password
6. Registration Data
7. Basic Profile

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Q&A

If you have any further questions regarding procurement, please contact:-

Ian Hulbert – Procurement Compliance Manager

Tracy Precious – Senior Buyer

Once the event is live, Bidders must submit any queries via the E-Tendering Portal messaging service only. No other means of contact is allowed **including contacting project partners.**

Technical issues with Jaggaer

Northern Powergrid use Jaggaer's online platform for carrying out tenders, but they are a separate company and therefore any technical issues in the portal should be resolved through them.

Help Desk Contact:

UK: 00-800-2255-4626

Email: customersupport@jaggaer.com

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Community DSO Q&A



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Facilitated Networking and Advice Table Surgeries



Afternoon table plan

Table 1   	Table 2 Energy Communities	Table 3 Trial Coordinators
Table 4 Trial Coordinators	Table 5 Enabling Hardware	Table 6 ERMS Energy Management Resource Systems
Table 7 Trading Software	Table 8 Other Competencies	Table 9 Northern Powergrid Procurement





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Round up and thanks

Maurice Lynch
Head of System Flexibility



Please scan this QR Code to
give us your feedback on
today's event



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Email the Team communitydso@northernpowergrid.com



Maurice Lynch
Head of System Flexibility



Laura Brown
Commercial Manager – Flexibility
Services – Interim Programme
Manager



Nicole Butterworth
Analyst – Flexibility Services –
Interim Project Manager



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Please Stay for our final Networking Refreshments Reception

14:30 – 15:30

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Community DSO Project Site Pages

Bookmark to your favourites & keep checking out updates
@ www.northernpowergrid.com/community-dso



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