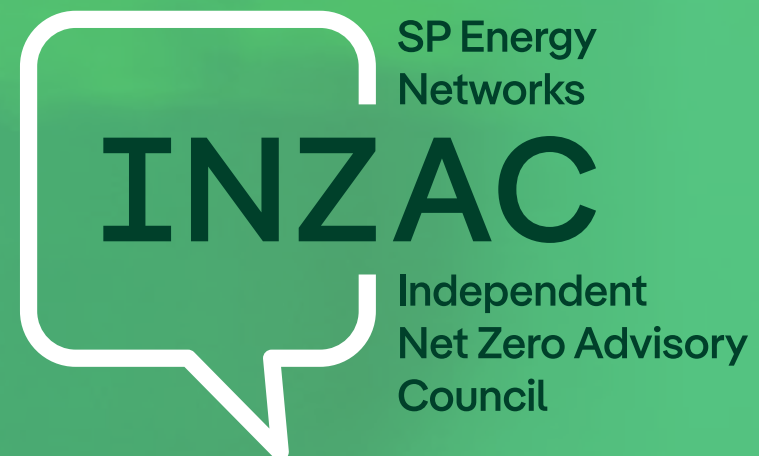


Annual Report 2023



Find out more about our activities:
spenergynetworks.co.uk/pages/inzac.aspx

Contents

Introduction	Pg 03	Customer Group Feedback	Pg 09	Technical Group Feedback	Pg 15	Emerging Themes	Pg 19
About the INZAC	Pg 04	Challenge for now and the future	Pg 09	Strategic Connections and Connections Reform	Pg 16	Customer Group	Pg 19
The INZAC's role in detail: what is RIIO?	Pg 04	Decision-making framework (DMF)	Pg 10	Regional Energy Strategic Planner	Pg 17	Technical Group	Pg 19
Delivering RIIO-2 and beyond	Pg 05	Community Benefits	Pg 10	Network Planning and Development	Pg 18	Broader messages from the Group	Pg 20
INZAC Structure	Pg 06	Customer Service	Pg 11			Message from Vicky Kelsall	Pg 20
The INZAC members	Pg 07	Stakeholder Engagement	Pg 11				
INZAC at work	Pg 08	Sustainability	Pg 12				
		Sustainable Business Strategy	Pg 12				
		Strategic Connections and Connections Reform	Pg 13				
		Vulnerability	Pg 13				
		Future of Systems and Network Regulation (FSNR)	Pg 14				

Introduction

It has been my pleasure to assemble and lead the SP Energy Networks (SPEN) Independent Net Zero Advisory Council (INZAC) in 2023. Having been involved with SPEN on the development of their RII02 Business Plan for Transmission and the subsequent oversight of the delivery of their plan, it was a logical step for the group to evolve to both scrutinise and work with the company to challenge them around, not only transmission, but also their distribution businesses. Recognising the benefits to the RII02 plans, SPEN decided to put in place this encompassed group, ahead of Ofgem deciding what they would like to do on an on-going basis.

In assembling the new group, myself and the company considered the main aspects of the price control business plan delivery and the expertise that would be needed within the INZAC to both challenge and help the company. This meant looking at the areas that are both key to delivering new infrastructure, but also new areas of focus, which the company has much more limited expertise, for example around digitalisation and distribution system operation.

The group that myself and the company have created has a wealth of experience over many of the aspects that feature in the delivery plan, including environment, digital, cyber security, engineering, customer vulnerability and technology. I am pleased to say that the experts within the INZAC also in some cases include major SPEN customers, including EDF Energy, OnPath Energy and Network Rail.

Over the period since the group was formed we have taken our time to ensure that we get the right structure in place to meet our objectives. This has seen us adopt a structure of the main INZAC Group meeting on a quarterly basis, with two sub-committees operating below it. These sub-committees are the Technical and Customer Groups, which are Chaired by Martin Kearns and Ashleyle Gunn respectively. Along with the sub-committee structure the INZAC also has a “buddy system”. This sees experts from the INZAC work more closely and in-depth with SPEN’s internal team to challenge their ideas and bring their experience and expertise to bear in developing the plans that the company is developing. All of this work is focused on ensuring that SPEN is considering stakeholders and end consumers in their business plan and operations.

The way that the group has been operating is to “bring the outside in”, where the experts from the INZAC broaden SPEN’s team’s thinking and challenge them to think of new ways of working and consider different perspectives, approaches and technology developments – all with a focus on aiding in the immense challenge of meeting the Governments’ Net Zero targets.

I look forward to leveraging the brilliant experience and expertise of the INZAC to ensuring that the INZAC is optimally positioned to help SPEN deliver the most ambitious, but achievable, business plan which will bring benefits to stakeholders and end consumers.



Angela Love

Angela Love, Chair

Independent Net Zero Advisory Council (INZAC)

About the INZAC

The Independent Net Zero Advisory Council (INZAC) has two main purposes:

- To feed back on delivery of SPEN's RIIO-2 commitments
- To provide challenge as SPEN prepares its RIIO-3 business plans.

The INZAC and SPEN have a common purpose: to meet the combined challenge of enabling the transition to a Net Zero economy and meeting consumers' expanded needs from the electricity network.

To achieve these challenges requires the independent INZAC members to build an in-depth understanding of the company – but they have to remain independent. There is a general danger that as a group such as the INZAC becomes more embedded in the company it challenges, it becomes 'captured' and aligns too closely to the company viewpoint. However, SPEN highly values the independence and external viewpoint provided by the group and its members and the group is set up to avoid the risk of capture.

Through its Chair, Angela Love, the INZAC is ultimately responsible to SPEN chief executive Vicky Kelsall.

The INZAC's role in detail: what is RIIO?

All monopoly gas and electricity network operators are regulated by the Office of Gas and Electricity Markets (OFGEM). On a regular basis (currently five years) the companies individually agree a contract with the regulator referred to as a 'price determination' or 'price control'. The contract determines the investment required in expanding or maintaining the network and the customer service standards that must be met. To deliver these, the regulator sets a revenue figure that the network can collect from its customers over the period, increasing with inflation throughout the years of the contract. This determines the price paid by customers.

The current regulatory framework is known as RIIO (short for Revenue = Incentives + Innovation + Outputs).

The RIIO outputs are in three categories:

Licence Obligations (LOs) – these set minimum standards that network companies must achieve. LOs include strengthened quality-of-service targets, particularly in key customer priority areas such as connections, reliability, and environmental impact.

Price Control Deliverables (PCDs) – these specify the deliverable(s) for the funding allocated, and the mechanism(s) to refund consumers if an output is not delivered (or not delivered to a specified standard). Mechanistic PCDs are set in cases where work is repeatable with a defined volume of work and unit costs. Evaluative PCDs are set in cases where the exact work delivered has potential to vary in part from the company submission, either in cost or output. Ofgem does an in-depth assessment of the output delivered and whether an adjustment to allowances is necessary to protect consumers.

Output Delivery Incentives (ODIs) – these drive service improvement through reputational and financial incentives. This can include incentives to improve reliability and reduce interruptions, enhance customer and stakeholder engagement, as well as reduce the impacts of the networks on the environment.

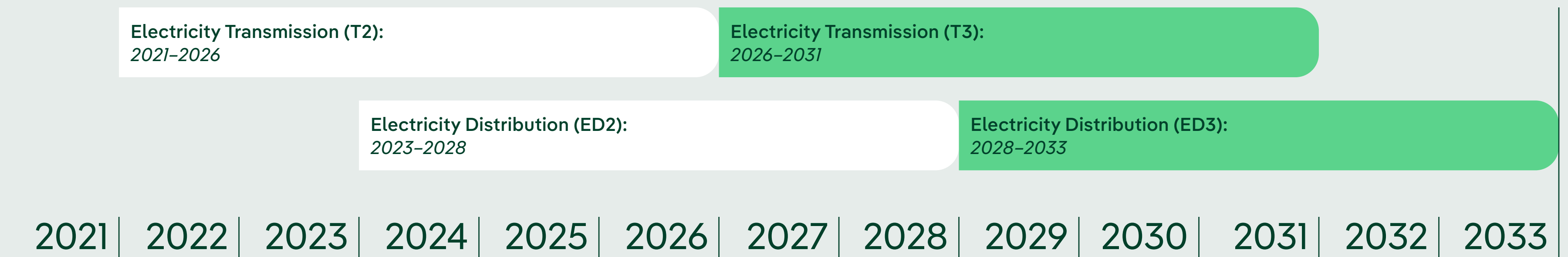
As part of the development of RIIO-2, Ofgem introduced an enhanced engagement process requiring each network company to set up an independent stakeholder group to strengthen the customer voice in the price determination and in day-to-day operation of the network companies.

The role of the groups was to provide challenge to the network companies as they developed their RIIO-2 business plans, on whether they adequately addressed the needs and preferences of consumers and network users and delivered good value for money.

At the end of the RIIO-2 determination process, Ofgem concluded, "*The Groups' reports enabled us to better understand stakeholder priorities in areas such as vulnerability and environmental impact which we used to inform the strategic direction and ambition for Draft and Final Determinations.*"

In line with Ofgem's requirement for RIIO-2, like other networks, SPEN established a Transmission Operator User Group (TOUG) for its transmission business plan and a Customer Engagement Group (CEG) for its distribution business plan.

Timeframes for the current regulatory period (RIIO-2) and the upcoming period (RIIO-3):



Delivering RIIO-2 and beyond

Initially there was no formal requirement for network companies to retain their TOUGs or CEGs during RIIO-2, but Ofgem recommended companies have arrangements in place for customer challenge and assurance, to meet their specific needs and goals. The groups were expected to focus on how the companies delivered their ongoing commitment to their customers.

However, during the RIIO-2 business planning process, SPEN believed that it derived significant value from the input from both the TOUG and the CEG. SPEN wanted to maintain a similar level of engagement to help deliver the maximum outputs for its customers.

SPEN believes it is important to work together with an enduring engagement group, to seek stakeholder views to create business plans that deliver maximum benefit for SPEN's customers, both domestic and industrial, and including vulnerable consumers. For this reason, for their enduring group, SPEN decided to combine Transmission and Distribution groups to benefit both parts of their business. The combined group that understands the end-to-end operation of SPEN's business and the challenge that it faces.

As a result, SPEN formed an 'Independent Net Zero Advisory Council' (INZAC) with two main tasks:

- Feed back on delivery of RIIO-2 commitments
- Provide challenge in preparing RIIO-3 business plans across both the Transmission and Distribution licences.

The INZAC has a wide perspective and reviewing plans across the Transmission network and the ScottishPower and Manweb Distribution networks (see box) allows a more holistic approach to identifying concerns and offering challenge to create the best value for customers. Its cross-section of industry expert members, representative of a broad range of stakeholder groups, can provide necessary challenge and an alternative view.

Since SPEN set up the INZAC Ofgem has decided it will require network companies to have an Independent Stakeholder Group (ISG) and INZAC fulfils this requirement.



About SP Energy Networks

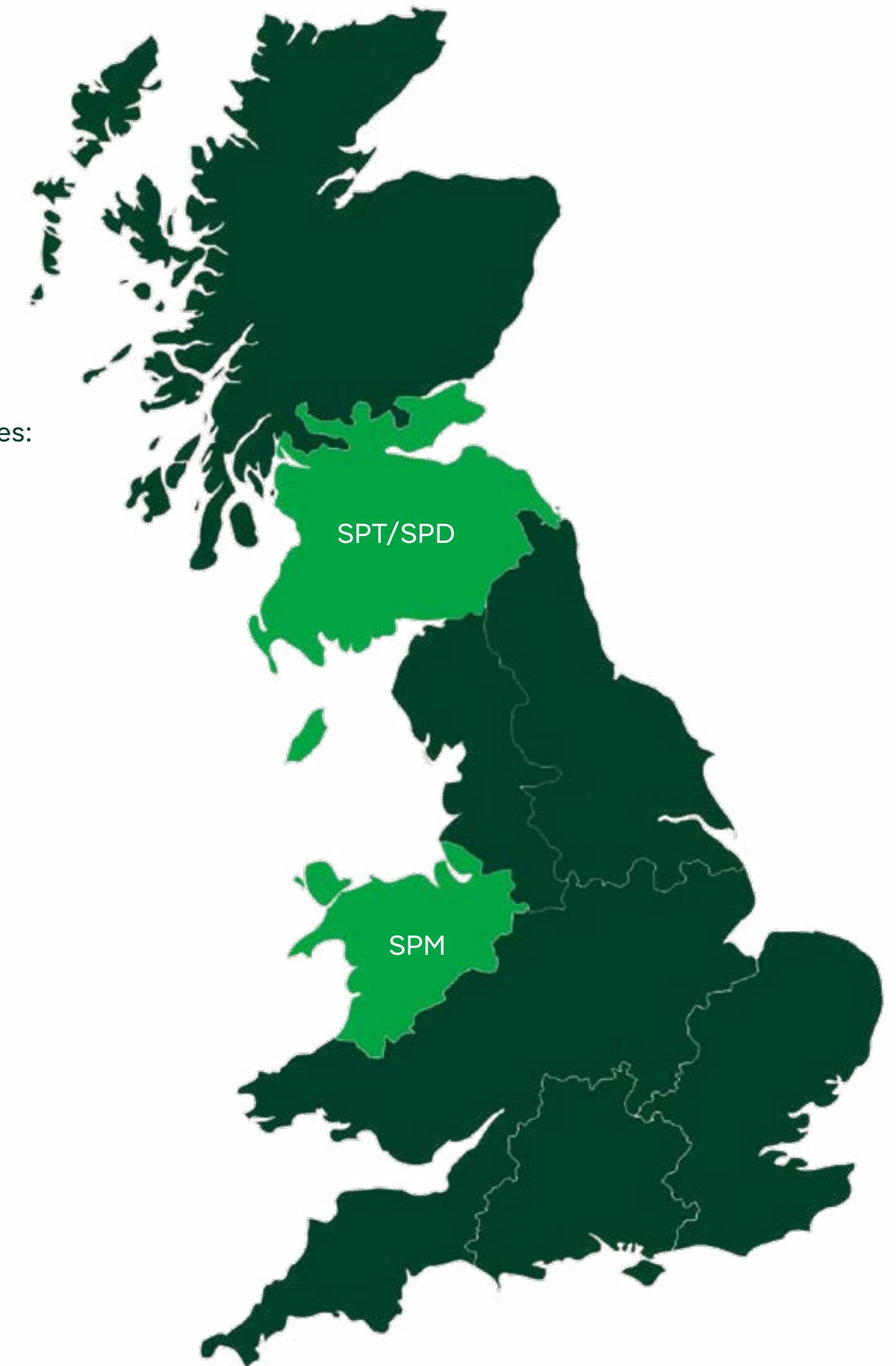
SP Energy Networks (SPEN) is owned by ScottishPower, part of the Iberdrola Group. SPEN is the Distribution and Transmission Network Operator that keeps electricity flowing to homes and businesses throughout Central and Southern Scotland, North Wales, Merseyside, Cheshire and North Shropshire.

It plays a critical role in providing security of supply across GB and in facilitating the connection of new renewable energy.

SPEN has three regulated electricity businesses:

- SP Transmission PLC (SPT)
- SP Distribution PLC (SPD)
- SP Manweb PLC (SPM)

SPEN operates as a 'ring fenced' entity within the ScottishPower group to ensure it adheres to the business separation requirements set in earlier EU and UK legislation and by Ofgem. This separation ensures all parties have equal access to the networks.



INZAC Structure

The INZAC is part of SPEN’s broad stakeholder engagement programme, providing confidence across the RIIO-2 price control, improving transparency and decision-making.

Key to the INZAC’s work is that it is independent from all other bodies involved in the price control process. Members provide expert input and challenge to ensure customer and stakeholder views have been considered and incorporated into proposals and solutions and will provide additional scrutiny to RIIO-3 business plan delivery.

Having been instigated by SPEN, it provides independent challenge and expert external insight on an enduring basis to aid SPEN with its strategic approach to stakeholder engagement. SPEN believes this level of engagement will be imperative to delivering the best outcomes for the energy transition and will maximise impact in terms of decarbonisation and innovation, helping SPEN play its part in delivering the UK’s Net Zero ambition.

Under its Terms of Reference, during the RIIO-2 price control period, the purpose of the INZAC is to:

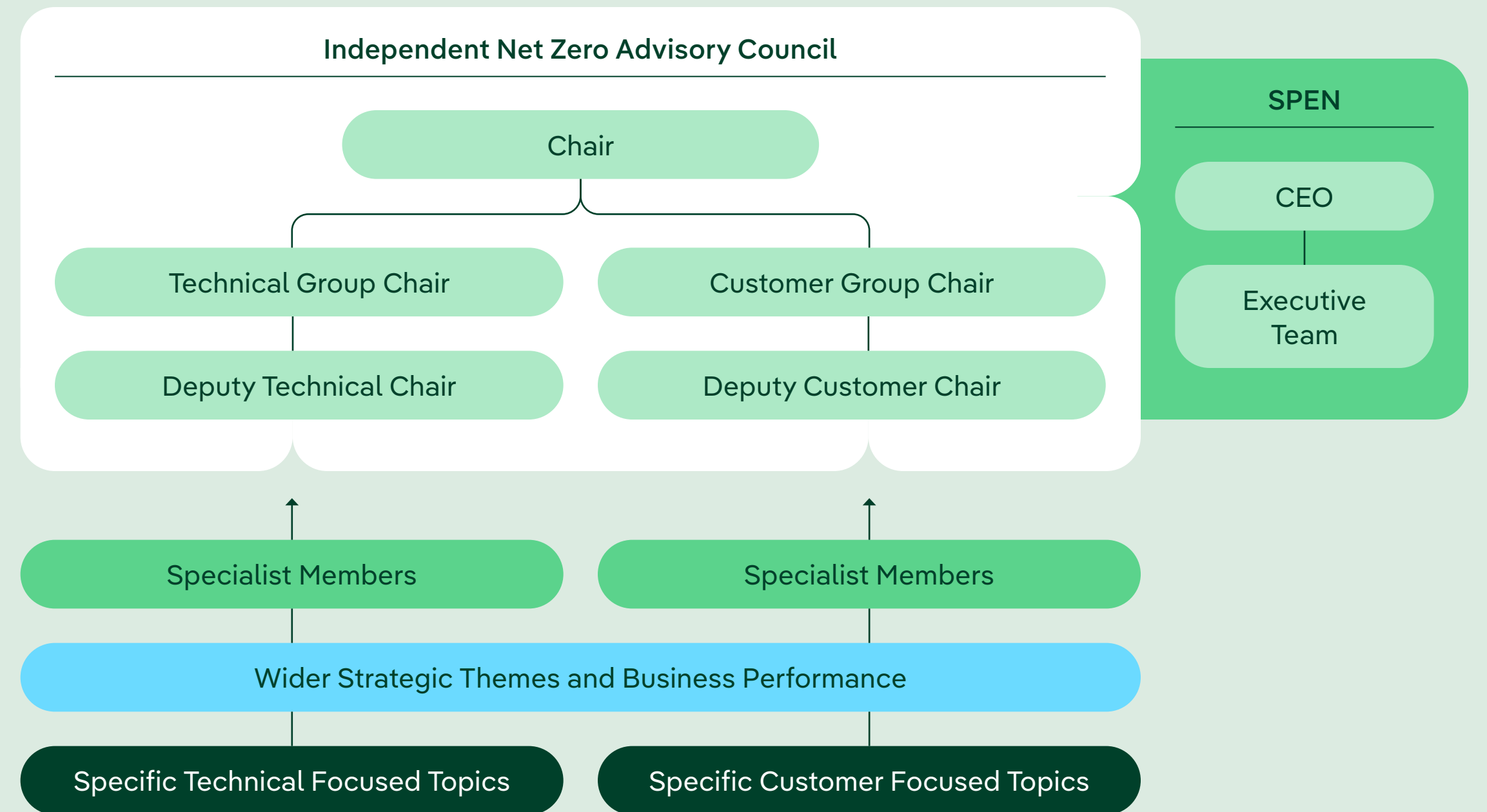
- Work with SP Energy Networks to review performance, provide constructive challenge and an external viewpoint in delivery of T2 and ED2 business plan commitments throughout the RIIO-2 period. One of the main objectives of the INZAC is to assess and monitor SPEN’s delivery performance against RIIO T2 and ED2 business plan commitments.
- Provide stakeholder insight in developing key price control submissions, particularly those that are likely to have a strategic impact.
- Offer independent challenge and specialist knowledge to aid SPEN as it creates RIIO-3 Business Plans for Transmission and Distribution, ensuring consumer issues are reflected and stakeholder views are incorporated.
- Provide informed, independent oversight of SPEN’s Just Transition Strategy. The road to Net Zero will involve multiple intertwining social and environmental challenges. The Just Transition Strategy is a response to this challenge, and it is both a process and an end goal. The annual Just Transition governance cycle aims to ensure that SPEN’s commitments are being delivered in accordance with its Just Transition Principles. SPEN is committed to reviewing progress regularly and working collaboratively with stakeholders including customers, staff, communities, regulators and other industry players. The INZAC will ensure that SPEN’s strategy and approach remains sufficiently ambitious and fit for purpose.



The INZAC takes a whole-system approach, looking across the Distribution and Transmission licences. For specific issues it is split into two subgroups, one with technical interest and expertise and the other with a customer focus, as shown below.

The INZAC’s ‘ways of working’ are still evolving. We welcome growing transparency from SPEN, and we are learning how to make the best use of the limited time available for SPEN and the INZAC. The group’s growing familiarity with SPEN is increasingly allowing us to have two-way discussions and we welcome feedback on where our input has been useful.

In the coming year individual members of the INZAC will additionally engage as ‘buddies’ with SPEN on specific areas of responsibility, and that deeper engagement will be fed back to the INZAC as a whole.



The INZAC members

Angela Love

Chair

Angela has worked with energy companies and regulators at the centre of gas and electricity markets. She is passionate about placing the customer at the heart of what companies do. Her experience includes setting up the Energy Retail Association's Home Heat Helpline and she is currently also chair of the Smart Energy Code Panel and of gas network Cadent's customer engagement group. Angela is also on the Board of the System Operator of Northern Ireland (SONI).



Ashleye Gunn

Chair, Customer Group

Ashleye's focus is on how companies can deliver better for their customers. She has in-depth insight into customer behaviour and is used to conducting rigorous analysis of complex situations. Ashleye is also a member of the Competition and Markets Authority Panel.



Kate Martin Bruintjes

Deputy chair, Customer Group

Kate has over 25 years of experience as a sustainability professional, advising organisations from major businesses to charities. She is passionate about using her skills to make a positive impact on the environment.



Martin Kearns

Chair, Technical Group

Martin is a Chartered Engineer and Fellow of the Institution of Engineering and Technology (IET). He is Chief Electrical Engineer at EDF Energy, Nuclear Generation. He is motivated to help ensure resources are deployed in an efficient manner to deliver on our Net Zero commitment.



Professor David Flynn

Deputy chair, Technical Group

David is Professor of Cyber Physical Systems at the University of Glasgow, Chair of the Institution of Engineering and Technology (IET) Scotland and Fellow of the Royal Society of Edinburgh. He always asks: How can we deliver an inclusive, resilient and prosperous energy transition in response to the climate crisis?



Matthew Cole

– has dedicated his career to making sure the energy system delivers for customers. He was a founder member of SPEN's Customer Engagement Group for its ED2 business plan and says the drive to Net Zero presents an opportunity to ensure that all customers and communities benefit from low-carbon investment. At Npower he set up the Fuel Bank and now he heads the Fuel Bank Foundation. (Customer Group)

Dr Jamie Stewart

– is working on storage solutions at Everoze. He was previously deputy director for the Centre for Energy Policy at the University of Strathclyde and worked with Citizens Advice Scotland. (Customer Group)

Rob Cormie

– has over 25 years of commercial experience primarily in the energy and financial services sectors, for two decades specialising in energy and infrastructure. He was part of the original leadership team of the Green Investment Bank. (Technical and Customer Groups)

Janet Wood

– is a specialist energy journalist. Her focus is on whole systems and industry transformation, drawing out the implications of change for different user groups. (Technical and Customer Groups)

Colin Lamb

– has experience in project engineering and management, maintenance and asset management in industries from rail to semiconductor, manufacturing and steel. He is now working with NetworkRail, where he is Route Asset Manager, Electrification and Plant in Scotland. (Technical Group)

Julian Leslie

– has over three decades of experience in transmission system operation, planning, and investment. He is currently responsible for defining future network needs, which enables market and network owners to invest in the right technology solutions at the right time. (Technical Group)

Professor Stephen MacArthur

– is Distinguished Professor of Intelligent Energy Systems and Associate Principal and Executive Dean of Engineering at the University of Strathclyde. He specialises in applying artificial intelligence in power and energy systems. (Technical Group)

Professor Jovica Milanovic

– is a leader in Electrical Power Engineering, currently Head of the Department of Electrical and Electronic Engineering at the University of Manchester and a Visiting Professor at the University of NoviSad and University of Belgrade, Serbia, and Honorary Professor at the University of Queensland, Australia. (Technical Group)

Dan Thomas

– has over 24 years of experience in the power industry. He is responsible for OnPath Energy (formally known as Banks Renewables) operational portfolio of renewable generation projects and the delivery of new grid connections for projects in development. (Technical Group)

Professor Jianzhong Wu

– is a researcher in smart grid and multi-vector energy systems. His roles include Professor and Head of the School of Engineering at Cardiff University, Co-Director of the UK Energy Research Centre and Associate-Director of EPSRC SuperGen Energy Networks Hub. (Technical Group)

Damien Yeates

– has over 30 years experience in labour market analysis, workforce planning and skills development across national, regional and sectoral interests. He's passionate about collaborative skills development ensuring public, private & academic investment is aligned and responsive to the needs of industry. He's currently the Chief Executive of Scotland's national skills agency, Skills Development Scotland. (Technical Group)



Find out more about the members at:
spenergynetworks.co.uk/pages/inzac.aspx

INZAC at work

The group had a two-day launch briefing in Glasgow in November 2022, meeting the SPEN Executive Team and visiting various sites across the SPD licence area. The INZAC met 18 times in 2023 as set out opposite.

The chairs also met quarterly on 22 February, 8 June, 6 September and 20 December.

The group expressed its thanks to teams across SPEN who gave their time, answered questions and stepped up to invite scrutiny and challenge.



Date	INZAC Team	Topics
1 March	Full group	ASTI and Strategic Connections, Network Planning & Regulation Director and Senior Team Introduction
18 April	Technical Group	DSO, Decision Making Framework, Strategic Connections, Batteries
27 April	Customer Group	DSO, Decision Making Framework, ASTI, Community Benefits
24 May	Technical Group	DSO, Future Network Regulation
1 June	Customer Group	Customer Service, Future of Network Regulation
13 June	Full Group Quarterly Meeting (Glasgow)	CEO Introduction, DFES, ED2 Settlement, Process & Technology Director Introduction and Cyber Overview
25 July	Customer Group	Stakeholder Engagement
26 July	Technical Group	DSO
15 August	Customer Group	Sustainability
24 August	Full Group	Strategic Connections, ASTI
5 September	Customer Group	Consumer Vulnerability
7 September	Full Group Quarterly Meeting (Liverpool)	SPM Director and Senior Team Introduction, site visits including LV support room and de-looping project
11 October	Technical Group	Regional Energy Strategic Planners (RESPs)
3 November	Full Group	INZAC Feedback Session, Business Performance Update
9 November	Customer and Technical	Net Zero Fund Review Panel
27 November	Full Group	DSO – Flexibility and Network Planning & Development
30 November	Customer Group	Workforce Renewal
7 December	Full Group Quarterly Meeting	T3 Planning, Business Transformation Director Introduction and Digitalisation Strategy

Outcomes

SPEN now has a log of 171 “reflections and recommendations” provided by the two INZAC groups following meetings in 2023. The following details a sample of the recommendations. In certain aspects of the INZAC and SPEN’s joint areas of work it also details some of SPEN’s responses to the INZAC’s reflections and illustrates an evolving dialogue between the company and the INZAC.

In a number of cases there has been regulatory or industry progress since the group meetings, which is not reflected in the reflections or responses that applied at the time.

Some meetings for a specific purpose call on a selection of members of the INZAC, or respond to a specific event. For example:

Five members of the INZAC met with SPEN with regard to the Net Zero Fund Review Panel for T2 and it was described by SPEN as follows.

“We plan to continue to utilise the INZAC members to be part of our expert panel on an enduring basis, as we found their input invaluable. Each member understood their responsibility and made sensible funding recommendations that we were able to take forward. We look forward to working with them again at our next panel session which is planned for June 2024.”

The INZAC members were invited to reflect on SPEN’s response following Storm Arwen, see below:

Feedback from SPEN teams

“I have been working on our Storm Arwen reopener submission. I just wanted to ask if you could pass on our thanks to the INZAC for their feedback on 20th November.

There are some really important points in there that we feel will be met by the proposals outlined in the reopener, and we appreciate the feedback being provided so quickly to allow us to feed it into the main document. We will share a copy of the reopener with the INZAC once finalised and submitted to Ofgem.”

Customer Group Feedback

The Customer Group aims to optimise discussion time during meetings: presentation and background materials are requested to be provided by SPEN ahead of the meeting, sometimes with direct questions or requests from SPEN for the group to consider. The group members then detail comments, questions and other relevant material, before curating them to determine areas where it can add value or require further information; a discussion during the meeting is followed by a note of 'reflections' from the INZAC for SPEN to draw on.

Among the topics which have been considered by the Customer Group are:

Decision-making framework (DMF), which was also covered by the Technical Group	→
Community Benefits	→
Customer Service	→
Stakeholder Engagement	→
Sustainability and the Sustainable Business Strategy	→
Strategic Connections and Connections Reform	→
Vulnerability	→
Future of Systems and Network Regulation (FSNR)	→

Challenge for now and the future

The Customer Group work with SPEN has two aspects: reports of current progress in meeting required standards and benchmarks for the current period; and putting in place the customer information and engagement that will allow it to meet future needs.

For example, in addressing stakeholder engagement the Customer Group reflections were both immediate and long term.

SPT Annual Performance Report

The INZAC said

- Ask yourselves:
Why are we producing this?
Who is the audience?
What do we want them to take away?
- 'Show as well as tell', using case studies and such like.

SPEN response

This feedback has been really valuable, for example it has prompted us to add a case study to our report. We have also added a section to highlight our new digital collaboration tool and benefits.

With our projects being measured with the new SROI (social return of investment) tool, we have now included an explanation of the social benefits being realised from some of these projects.

This feedback will also be used to shape our Distribution and Transmission Annual Performance Reports for our stakeholders next year.

T2 Commitments

The INZAC said

Evaluate usefulness of your Stakeholder Engagement annual review process now; will it help SPEN engage to meet the challenges of the energy transition?

SPEN response

We get a great deal of value from the framework we currently use. It provides us with clear and detailed recommendations, from which we identify areas to improve. We will evaluate the process on an annual basis to ensure it remains fit for purpose and is delivering value for money and will remain open to reconsider alternatives. We will evaluate the process on an annual basis to ensure it remains fit for purpose and is delivering value for money and will remain open to reconsider alternatives.

The INZAC said

Potential gaps: commitments in respect of collaboration with other transmission operators, with communities affected by transmission projects, re connections.

SPEN response

We accept this feedback and will consider these points as part of our commitment setting for the next price control.

The INZAC said

Social return on investment (SROI) is suspected of being easily manipulated; consideration of it for any T3 commitment should acknowledge this.

SPEN response

We acknowledge SROI is open to interpretation, therefore, we have set out a new statement, which explains how we interpret the language in any of our relevant commitments and what we are seeking to achieve. For next year, we will review projects being assessed to bring further clarity to this method of evaluating benefits

The INZAC said

Do all commitments have to have a quantum/target against which they can be measured? Could one of the quantum be focused on action taken?

SPEN response

Previously, we have been encouraged by regulatory guidance for commitments to be; measurable in some way. For the future, we will look to ensure that a focus on action taken is embedded in our commitments.



Decision-making framework (DMF)

SPEN's decision-making framework document shows, for the benefit of regulators and non-industry parties, how it balances the use of new market frameworks and system reinforcement to meet future needs. SPEN's initiative to develop a decision-making framework document was welcomed by the INZAC. The group made a number of points on the draft, including:

The INZAC said

The DMF document must be clear about how SPEN will make decisions, and that the decisions will be genuinely impartial. Check with successful bidders what potential bidders need to know.

SPEN response

In our Decision-making framework, we have sought to articulate clearly, in simple, logical detail the process which our separate teams undertake in their decision making, and have outlined the responsibilities which these teams have, and the use of customer and stakeholder data and impartial analytical capabilities in our decision making. We have now completed our first iteration of our decision making framework and will seek customer and stakeholder views on this to further improve the content.

The INZAC said

Is there potential for collaboration with other DNOs, e.g. are there potential clients with multiple relevant sites in GB?

SPEN response

We are continuously seeking opportunities to collaborate with other DNOs, and have collaborated with SSE, the EOS, and the wider industry - sharing and engaging on a bilateral basis. We work collectively in areas such as Data Sharing and Smart Optimisation, and now Chair the ENAs Data and Digitalisation Steering group. We have also ran trials and sought developments with Octopus Energy and the ESO, and work with technical providers to support us in developing software and system solutions.

The INZAC said

Write the core DMF document with a client in mind who is a key decision maker but is not expert in energy; the content will be clear for energy expert audiences too.

SPEN response

We have tested the content of our Decision-making framework with individuals who are not close to either the engineering or the technical decisions being made and have ensured the language articulates the process without the need for or use of overly technical content. The sign off of our documentation is from a stakeholder perspective, and from a non-technical reviewer. We have also sought and addressed valuable feedback from the INZAC. We have now completed our first iteration of our decision-making framework, and will seek customer and stakeholder views on this to further improve the content.

The INZAC said

Beyond the core DMF document, what could SPEN's role be in increasing awareness and understanding?

SPEN response

Through our DSO conferences, our planned newsletters, and our webinars, our intention is to bring the DSO to life, focussing our communication on "a day in the life of the DSO" and explaining what it means at the heart of our organisation, and what this means for our network, our customers, and our stakeholders. We welcome suggestions on how to continue to simplify and communicate this complex framework.

The INZAC said

The various potential audiences will need different access points and levels of detail. SPEN's team should understand the barriers to considering and participating in flexibility, and the various decision-makers within participants

SPEN response

We have sought to improve the ability to engage with relevant, and stakeholder specific content, and have launched our improved DSO website, which sets out how you can engage with the team at the heart of our DSO transition, and access topic specific documentation and data in an easily accessible format. We also commissioned Oxera to understand the barriers to flexibility market participation, using their independent review to build our future plans.

Community Benefits

The INZAC said

A SPEN-established and defined, but independently delivered and managed fund, could show SPEN's commercial interests are not influencing decisions. This option might also provide transparency over costs of managing the fund itself.

SPEN response

We are incorporating the proposal for an independently delivered and managed fund into our response to government on Community Benefits, as well as proposals for how such a fund could operate.

The INZAC said

Any proposed spend must have a clear link to Net Zero and the energy transition, particularly given the challenge around the cost of living, and the level at which customer's money should contribute to such initiatives.

SPEN response

We are incorporating the need to link spending to Net Zero and the energy transition into our response to government on Community Benefits, as well as proposals for how such a fund could operate.

The INZAC said

Try connecting with the team at OnPath Energy who have experience in this area, working with local community relationships. You can benefit from shared learnings which may help influence your strategy.

SPEN response

This was a very useful connection, we have met with the team at OnPath Energy to share experiences, thoughts and ideas and are incorporating learnings into our developing strategy.

The INZAC said

Consider how to ensure 'the usual suspects' will not automatically benefit from any Fund.

SPEN response

We have directly engaged with DESNZ on this topic, requesting that independent decision making is a feature of the government guidance on community benefit. Regardless of this, we will also ensure appropriate compliance around any funding mechanisms designed to ensure management of conflicts of interest and consider how to engage stakeholders in the planning, so their objectives and opinions can inform the final design.

The INZAC said

Consider how to engage stakeholders in the planning, so their objectives and opinions can inform the final design.

SPEN response

We will ensure the final design is fully informed by engagement with stakeholders and demonstrate this to the INZAC.

The INZAC said

Be clear on the target outcomes - not simply outputs - from the Fund and track them.

SPEN response

We will consider this as part of the design of Community Benefits funding.

Customer Service

Output reporting on targets customer service for RII02 was a key aspect of this discussion.

The INZAC said

Does current output reporting show whether the intended outcome was delivered?

SPEN response

Output reporting is on track and links to key outcomes for customers. Outputs are progressing well, either in place or in progress and whilst our ED2 targets are very challenging, work has been delivered to ensure the foundations are in place for delivery of our targets through the price control.

The INZAC said

As SPEN develops a multi-channel approach for service elements, outcomes per channel will identify performance anomalies so they can be improved.

SPEN response

A significant amount of work has been delivered through our CRM programme and deployment of further channels will be delivered in 2024 providing reporting, analytics and insight. We have also restructured our team to gain learnings from the deployment of Salesforce and drive continuous improvement of our processes and technology once the programme concludes in the summer of 2024.

The INZAC said

Consider the maximum service rating that is attainable without excessive spend and potential future bill impact.

SPEN response

We have a plan to achieve our ED2 targets which have been tested with customers for acceptability and affordability. We continuously improve our services for customers, ensuring we stay ahead their evolving needs, continuously reviewing and acting on customer feedback and having the appropriate technology to support our service offer. Our CRM programme is allowing us to drive efficiencies across the business in processes and multi-skilling our teams to drive more tailored support for customers.

The INZAC said

Customer expectations will evolve: consider how to establish targets to identify and meet new expectations.

SPEN response

Customer Service Strategy will be reviewed annually throughout ED2 as will our vulnerability strategy. These will be informed by trends, insight, patterns, benchmarking and customer feedback to ensure we stay ahead of customer expectations.

Two other issues were discussed:

The INZAC said

On the switchover from analogue to digital phones: consider how communities may become acutely vulnerable when a power outage switches off digital connectivity. SPEN can ensure there is a debate with a wider group of stakeholders about the solution and link cross-sector with concerned organisations such as healthcare.

SPEN response

Cross Industry engagement has taken place across all DNOs and GDNs and innovation projects have been instigated. The UPS solution has developed a device which can be installed into customer properties to ensure land line services are maintained in a power cut. In addition to that, we have lobbied Ofgem collectively as a DNO group and OFCOM have recently announced a charter.

The INZAC said

On broad customer service principles: move from resolving complaints to reducing them; use customer service data to understand and reduce the source of complaints; customer research and Intelligence gathering to ensure SPEN knows what customers will want or expect tomorrow.

SPEN response

The root cause of complaints is analysed and actions taken to drive improvements in the reasons for complaints. This closely aligns with our Customer Satisfaction Feedback and forms part of our wider strategy considerations. In addition, a practical measure we have introduced a customer first model this year into our front line teams where complaints experts are embedded into the teams to ensure we resolve first time and knowledge is quickly shared. Ensuring customers get fast resolutions and front line staff have the same access and empowerment to deliver resolutions for their customers.

Stakeholder Engagement

How does stakeholder engagement influence SPEN? It is a substantial challenge to show this. The Group thinks SPEN's continued commitment to rigour but with a practical 'business as usual approach' is the right one.

The INZAC said

Engagement should be purposeful not routine and disseminated so other teams can use the insights.

SPEN response

Based on this feedback from the INZAC we developed new case studies, which we are uploading to our internal portal system for employees to see examples of the value of engagement.

The INZAC said

Balance eliciting stakeholder priorities with getting reactions to proposals; both have a role to play at different stages.

SPEN response

We have a new stakeholder prioritisation survey which is going out in Q1 2024.

The INZAC said

Show how stakeholder views have been utilised, particularly where they cannot fully be acted on.

SPEN response

This is to be considered as part of our business plan engagement - we intend to set out where feedback cannot be acted upon.





Sustainability

The Customer Group provided review of SPEN's Annual Environmental Reports (AERs), including a specific request about how to make the reports more engaging.

The INZAC said

The audience for regulatory reports will always be limited, but can be increased:

- Think about why you want greater readership, who the audiences are and why they should make time to read it
- Use signposting and summaries
- Provide the detailed data in appendices

SPEN response

- The T2 AER is an online report as well as pdf, with more graphical and pictorial representation with animation and a significantly reduced word count. The structure and headings hopefully make it easier for readers to navigated to specific areas of interest more easily.
- We have conducted stakeholder mapping that identifies the key potential audiences for these reports. We wish to increase readership to ensure that those stakeholders can get the information they want to see, and to ensure that the effort expended to produce the report delivers the desired outcomes.
- For the T2 AER, we included a table at the end of the report listing all the key metrics to enable readers to review year on year performance.

The INZAC said

A clear 'route' for each theme (e.g. biodiversity, low carbon)

SPEN response

As a result of the online format, we were able to improve the navigation, using our sustainability icons and hyperlinks to help navigate the report and provide the ability to get to areas of interest more easily. For the 2023/24 report we are planning to have a bar down the side of the report on each page that will quickly take you directly to the area of interest.

The INZAC said

Include clear information on progress, and how this is being achieved. Focus on substance, avoid 'greenwash'

SPEN response

The full performance metrics table was added at the end of the report to enable readers to easily compare performance data and year on year trends. A separate report detailing all commitments with a status update and RAG status was provided to show progress against our commitments. From a data assurance point of view, we included the Business Carbon Footprint certification statement from Planet Mark.

The INZAC said

Greater consistency between the two Environmental reports (SP Transmission Annual Environmental Report and SP Distribution Environmental & Innovation Report) – common sections where appropriate

SPEN response

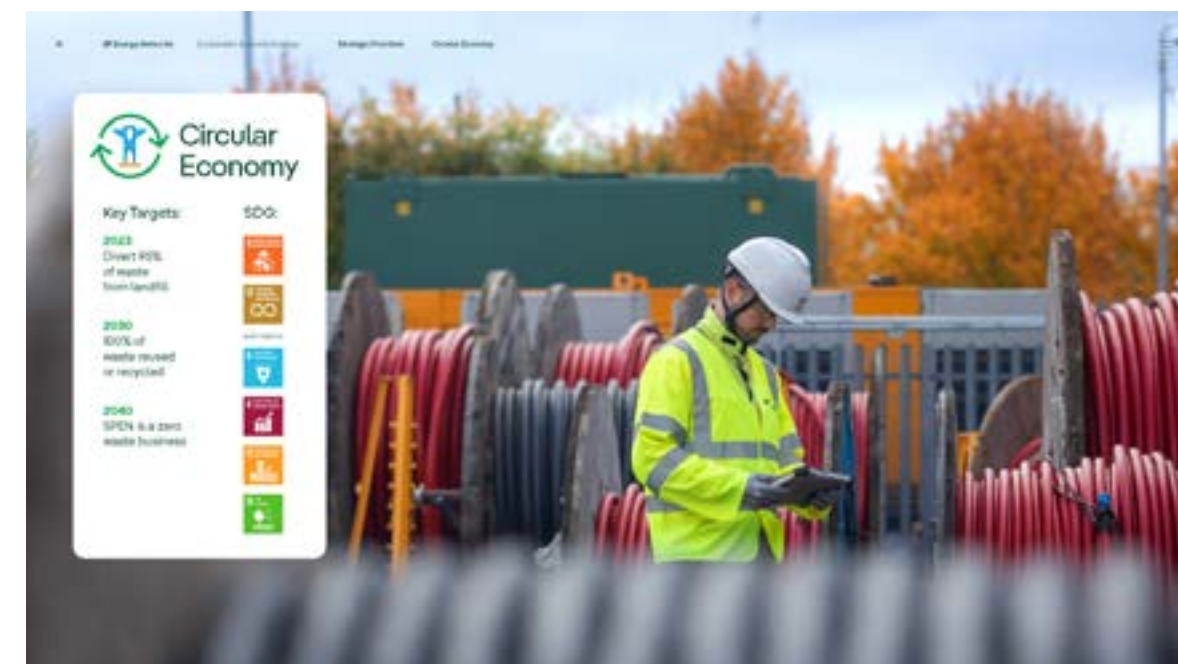
The 2022 ED1 Distribution E&I Report was adapted to bring it more in line with the forthcoming ED2 reporting requirements and therefore with the T2 Transmission Annual Environmental Report, within the constraints of the differing Ofgem reporting guidance for the two different RIIO periods. With the move into the first year of ED2 for the next reporting cycle, these two reports will be very consistent. We adopted the new Iberdrola branding – this presents the report in a clearer way, with more space and removes the 'shades of green' that was in previous reports

The INZAC said

A detailed data mapping and gap analysis exercise

SPEN response

A data mapping and gap analysis is currently underway. We have updated our Data and Reporting matrix detailing new data points and the reports they support. We are carrying out a gap analysis to ensure all data required for annual reports is collected. We have also been involved in the Iberdrola European Sustainability Reporting Standards gap analysis and double materiality review and the SPEN results from that project will be fed into our gap analysis review.



Pages from SP Energy Networks Sustainability Strategy

Sustainable Business Strategy

When reviewing SPEN's draft Sustainable Business Strategy, the Customer Group welcomed recognition of the need to publish a SPEN-wide update on progress in addition to separate reports for Transmission and Distribution. It described the draft mission statement "positive outcomes" as vague and said any Net Zero target should be validated by the Science-Based Targets Initiative for credibility.

Feedback from SPEN teams

"Please see attached our final Sustainable Business Strategy. We would like to thank you for your contribution and feedback to the document. We will be due to publish it on our website soon. The team are planning to present to you in more detail at the next session on how they acted on your feedback however, they've provided a few examples below."

The INZAC said

With the development of multiple reports and updates, it is recommended that the reporting structure is mapped and outlined in a simple way for stakeholders to navigate.

SPEN response

We have developed a graphic on strategy/reporting lines of sight.

The INZAC said

It is important for any Net Zero target to be SBTi validated for credibility. The Green Claims Code is driving the requirement for certification, and it should be noted that there is a view that non-certified claims will be seen as greenwash.

SPEN response

We added SBTi certification to our Net Zero GHG target.

Strategic Connections and Connections Reform

The reforms needed are significant, and sensitive in both a political and regulatory sense.

- With multiple stakeholders there will be winners and losers.
- There is reputational risk for the network companies without reform.
- Lobbying government and the regulator to play their necessary parts is unlikely to deliver quick wins.

Recommendations

The INZAC said

Prepare for a lengthy process with repeated engagement at different levels.

SPEN response

We are in agreement. We are therefore engaging with the Connections Reform work at all levels from bilateral meetings with Ofgem and the ESO, as well as SPT representation on the CPAG and CDB, as well as the code working groups which will develop and design the revised code proposals to introduce the new connections model.

The INZAC said

Ensure all proposals are evidence based and demonstrate why they are the best solution for customers and stakeholders.

SPEN response

This will be drawn out in our RIIO-T3 Business Plan proposals. Evidence will include the use of our agreed connections assessment methodology to identify connections projects that we consider likely to connect during the RIIO-T3 period.

The work under the Connections Action Plan is progressing at pace and whilst we fully understand and support the need for timely change, we also recognise the importance of robust assessment and input from stakeholders.

The INZAC said

Continue to engage with stakeholders and customers. Be clear about what is in SPEN's control and what is not

SPEN response

We agree that keeping our customers informed of SPT specific, and wider, connections related initiatives is important. That is why, as of last year, we doubled the number of Connections Summits held to provide these important updates to customers, whilst hearing directly from them on their own challenges. Our last SPT Connections Summit was held on the 30th November 2023 and our next Connections Summit will be held on 30th May 2024.

In addition, for distribution connections at 132kV we are offering surgeries to each individual customer which incorporates technical design, commercial and delivery input. These can be held at any stage and allow customers to receive clarity and discuss specific challenges they may be facing.

The INZAC said

The industry seems to have come together and achieved a lot, at pace. Continuing to collaborate is likely to result in a stronger voice than acting alone.

SPEN response

We agree. As well as the engagement with Ofgem and the ESO, SPT is meeting with NGET, SSEN and the ENA on a weekly basis to continue to push for connections reform, at both transmission and distribution, at the earliest possible opportunity.

Vulnerability

The Customer Group welcomed SPEN's ambition and shared its frustration that additional measures proposed for ED2, e.g. domestic energy efficiency, were rejected.

The INZAC said

Welcomed SPEN's ambition in relation to the Priority Service Register and encouraged SPEN to work directly to understand barriers on data sharing initiatives and explore further innovation and technology to improve outcomes.

SPEN response

SPEN are making excellent progress on PSR reach and have invested in developing our VEST tool to give us insight and data to best target our activities. We continue to evolve our vulnerability strategy informed by trends, partner insight and horizon scanning as well as customer feedback. We are progressing innovation projects in several areas. An example of this would be our UPS initiative to overcome the communication challenges faced when customers move over to digital in the digital switchover. This will allow a UPS device to be fitted at the customer property to ensure land line communications can be maintained throughout a power cut, this project also looks at a solution developed for satellite phone communications.

Developing a phone which could be attached to a community building where customers or staff could use a single button phone to contact their DNO. SPEN have included both initiatives in our Arwen Re-Opener to OFGEM and have linked the satellite phone initiative with our Resilient Community Hub initiative.

The INZAC said

Encourage SPEN to utilise its position as a universal energy service provider to alleviate the impact of fuel poverty

SPEN response

SPEN have in place a significant programme relating to fuel poverty services which will deliver £10.24m value across the ED2 period. Our organisation has been reshaped to deliver this programme and commercial contracts placed. We will also conduct regular horizon scanning and benchmarking to ensure we are always delivering the best services for our customer and optimising the value we deliver. We have engaged partners to support us in data analysis and mapping and have developed new tools to ensure we can best target our activities and maximise the value to customers and satisfaction levels when we do. We also continue to progress our Coalition of Partners initiative to deliver the broadest possible support and engage with stakeholders to understand the changing landscape and understand opportunities and gaps.

The INZAC said

Supported a possible challenge to Ofgem to approve more funding, especially if early results from SPEN's programmes demonstrate high value

SPEN response

SPEN will deliver on our commitments and programme and take stock as we move through the ED2 period. We will report annually to OFGEM on progress and will engage where appropriate on our progress and successes and can decide further throughout the price control if we wish to engage OFGEM further. In addition, we have taken the opportunity to ask for additional funding on very specific initiatives to support vulnerable customers which we have identified as a gap currently as part of the Storm Arwen Re-Opener. This covered initiatives such as Warm Resilient Community Hubs, Digital Switchover solution, Battery Back Ups for Medically Dependant Customers, Medical Beds for very vulnerable customers

Future of Systems and Network Regulation (FSNR)

The INZAC said

There is a gap on 'whole systems' in this consultation. The Future System Operator could fill this as a 'wide, shallow' body with strategic responsibilities across infrastructure (including gas, EV charging etc).

SPEN response

The FSO (now NESO) has been given a huge portfolio of responsibilities. The benefits of growing the NESO role at regional level are still unproven. Despite this NESO has been given responsibility for a range of complex duties. There is a risk to overloading the FSO to the point that it risks the timely development of network infrastructure and deliverability of the CSNP, RESP and potentially the flexibility market facilitator role. This would ultimately be at the cost of the consumer. We firmly believe DNOs know their assets and communities to the level required to manage a safe and efficient network.



The INZAC said

SPEN must demonstrate that its decision-making is impartial.

SPEN response

This year, SPEN consulted with the INZAC on the development of our "Decision making framework", and we have now published our first iteration of this, in which we set out how we are comparing all viable network intervention options - including energy efficiency and flexibility - in a transparent and fair manner. This includes using our independent tools such as our ENZ platform and our linear optimisation engine to impartially assess solutions and create an intervention plan for every LV and HV network constraint identified on our network, and working with flexibility service providers to improve the availability of flexibility services as a solution.

The INZAC said

The deficiencies in the supply chain and access to it apply across the industry and should be a key concern for UK Plc.

SPEN response

We are active participants in the ENA forum on Supply Chain interventions. In addition, we were working with DBT and DESNZ to explore Green Industries Growth Accelerator (GIGA) and Green Job Delivery Plan opportunities, in advance of the Spring Budget. GIGA investment will support the expansion of clean energy supply chains across the UK, including carbon capture, utilisation and storage, electricity networks, hydrogen, nuclear and offshore wind. This is intended to help enable the UK to seize growth opportunities through the transition to Net Zero.



Technical Group Feedback

The following gives a flavour of the Technical Group's discussion and feedback, which have been followed up with direct discussions, further information exchange and detailed exploration of specific points (e.g. see Digital Twin box).

Its feedback is structured as:

- Situation Assessment
- Constraints
- Recommendations
- References

In 2023 the Technical Group's discussions have covered several 'live' issues that have seen technical and policy development over the year and the Group gave feedback on:

Strategic Connections and Connections Reform →

Regional System Planner →

Network Planning and Development →

Decision Making Framework, *This aspect is covered earlier in the Customer Group Section* →



Strategic Connections and Connections Reform

The group began discussions on connections early in 2023 (see meeting list above) and it has continued to engage throughout the year as reforms have been implemented.

Situation Assessment

Unprecedented and accelerating growth in connection requests, with the large volume of battery systems seeking to connect, sterilising capacity across the system, presenting a significant barrier to Net Zero and wider economic growth.

Constraints

Licence obligations mean that SPEN cannot discriminate between connections even if this is to the detriment of an efficient whole-system development of the network. The extensive growth in battery schemes is unlikely to be halted by a reform of the GB connections process. Moving from a ‘first come, first served’ approach to ‘shovel ready’ may actively promote them and network impact needs to be considered.

Recommendations

The INZAC said

Make Ofgem aware of limited workforce resources and skills.

SPEN response

We agree with the importance of this recommendation, and we continue to use SPEN’s engagement with Ofgem within the Connections Reform work, including the CPAG and Connections Delivery Board, to highlight the need for additional skilled resource as well as significant changes to the current connections process, to allow TOs and DNOs to effectively manage the growing volumes of connection applications that we continue to receive.

The INZAC said

Consider investing in research and development of technical solutions that could optimise grid utilisation and minimise the sterilisation of capacity by Battery Energy Storage Solutions (BESS) and other connection projects.

SPEN response

We consider the use of the ESO’s new Accelerating Storage policy, will assist with optimising the use of BESS on the network, through the wide spread use of non-firm access. SPT has been involved in inputting into the development of this policy.

Our work under the Battery Storage Connections Subgroup (which SPEN Chair) introduced Tactical Solutions in relation to new storage connections last year and the group is now developing proposals relating to existing contracted connections.

The INZAC said

Engage with battery and other distributed energy resources (DERs) developers to encourage them to consider alternative locations, grid connection points, or technologies that can reduce the impact on network capacity such as co-locate with other connection projects to facilitate greater benefits to the system as a whole at the time when implemented.

SPEN response

Whilst an interesting idea, we consider this should be a developer-led activity, rather than one which is directly influenced by the TO, who has to deliver the customer’s connection, on behalf of the ESO.

We have however, had a strong influence on the ESO’s new “Accelerating Storage” policy which aims to encourage and accelerate the use of BESS in the appropriate network conditions.

We are seeing more distribution connection applications coming through for BESS and other technologies to be co-located, and the BSC sub-group mentioned above offers a suitable forum to consider such solutions.

The INZAC said

Consider implementing a revised queue management system that prioritises projects with the most significant benefits, offer grid services and are ready to go – consider potential negative impact of some projects.

SPEN response

As the current connections queue is governed under industry codes and the responsibility of the ESO, this is not something which SPT could implement.

However, we are committed to supporting connections projects which are progressing at pace. We will do this through the use of our new TECA Connections Assessment methodology to ensure the connection of these projects are included in our load related proposals within our RIIO-T3 Business Plan.

With regard to Transmission, the connection queue management process is agreed at industry level. However, we are working with the ESO to implement the Technical Limits identified at individual GSPs to allow earlier connections where possible. Such connections require the implementation of CMZ sites and we have established a Steering Group to focus on delivering the necessary systems and policies to facilitate such connections.

The INZAC said

Consider how micro-grids can be facilitated that can allow for ‘light’ connection to the national network.

SPEN response

Connections to our network need to meet the necessary technical and safety requirements, in addition we are required to work within the current rules with regards to queue management, flexible connections etc. We continue to implement and explore options to facilitate connections, such as working with the ESO to implement technical limits, making the necessary preparations to offer curtailable connections and considering how flexibility services could be utilised.

The INZAC said

Actively collaborate with Ofgem to understand the challenge and advocate regulatory reforms. SPEN’s current approach is logical and will certainly help, however further clarification from Ofgem is needed so that SPEN’s approach can be finely tuned.

SPEN response

SPT will work to engage with the INZAC, ahead of putting forward our connections related investment proposals in our RIIO-T3 Business Plan. This will include working to finalise our TECA connections assessment methodology for SPT’s current contracted background to identify those progressing connection projects which should either be included in the RIIO-T3 load baseline or supported, via reopener mechanisms during the RIIO-T3 period.

In addition, we intend to work with the INZAC to seek their views in terms of how we can continue to influence the wider Connections Reform work being undertaken by the ESO, Government and Ofgem.

We continue to provide significant support to the Connections Action Plan sub-groups and industry meetings, ensuring representation from both Transmission and Distribution.

To date, our heavy involvement in the Access SCR and Battery Storage Connections industry groups has led to tangible change and we continue to lobby Ofgem through working groups and bilaterally in support of reform.

Regional Energy Strategic Planner

There has been considerable progress over the year in firming up the role of Regional Energy Strategic Planners.

Situation Assessment – pros for the Strategic Planner role

- Greater familiarity with local needs and perceived network demand growth
- Ability to engage with stakeholders and customers including local authorities in a more meaningful way
- Ability to liaise with different energy providers considering local constraints and needs
- Ability to ensure well-informed decision making on network planning.
- Could resolve some of the stochastic and limited view of the network
- Could aggregate to remove inefficiencies on the network and reduce curtailment and help with energy costs.

Situation Assessment – cons for the Strategic Planner role

- Technically and financially feasible integration of local needs into overall plans
- Staffing resources and expertise - an issue across the sector.
- Geographical separation may need to be considered very carefully.
- A new market facilitator may lead to changes in the rules and processes of local flexibility markets.

The INZAC said

SPEN should familiarise itself with the goals and plans of the regional system planners.

SPEN response

Ofgem published their decision on high level principles for the now Regional Energy Strategic Planner (RESP) in November 2023. Ofgem's intent is that RESPs will ensure well-informed decision-making on network infrastructure investment enabling greater whole energy system coordination. The main output of RESP will be production of a regional strategic plan for each RESP area. The RESP plans will aggregate top-down national targets and scenarios with local and regional insights. Network companies will remain responsible for detailed network planning activities, but these must align to the regional strategic plan. Further detail of the RESP function is still in its infancy. We are continuing to engage via the Ofgem and ENA workshops. Ofgem plans a further consultation on RESP by end of July 2024.

The INZAC said

SPEN should be prepared to adapt to new rules or processes, including in local flexibility markets.

SPEN response

We are ready to adapt to the new roles and processes required as they are clarified following the on-going design process. Ofgem have specified an intention to assign a market facilitation function to a single entity with expertise and capability to deliver accessible, transparent, and coordinated flexibility markets. There remains uncertainty and further detail on which entity will undertake this function. We continue to utilise flexibility as an innovative option to manage capacity constraints on our networks.

The INZAC said

SPEN should align investment strategies with the objectives and to meet requirement of the regional plans to ensure efficient development.

SPEN response

There remains a number of uncertainties on the requirements of the regional plans which are the output of the RESP. The design of the RESP function is currently on-going with further consultation by end of July 2024. We anticipate clarification on the role of RESP will flow from this process and allow sufficient understanding to align efficient investment strategies to meet the objectives of RESP development.

The INZAC said

SPEN should stay informed about regulatory changes or requirements.

SPEN response

We are a member of Ofgem and ENA working groups, which focuses on the design of the RESP. ENA Working Groups have been taking place throughout 2023, and Ofgem's working group on the detailed design phase started 30 January. The design consultation is expected end of July 2024. There are three main workstreams in the Ofgem design phase: function, including strategic planning, cross vector coordination and place-based engagement, governance mechanism and RESP boundaries. Together with the ENA and the other DNOs we are developing recommendations for RESP Role and Responsibilities, which can be used to inform Ofgem's detailed design process.

The INZAC said

SPEN should be in touch with other organisations that affect power needs. DfT which is placing duties on Local Transport Authorities to produce local electric vehicle (EV) charging strategies and ensure provision of charge points; Chambers of Commerce with information on planned business expansion; suppliers, housing associations, installer networks with data on heat pump rollout.

SPEN response

Our Distribution Future Energy Scenario (DFES) process facilitates decarbonisation objectives and enables Net Zero by forecasting and understanding our customers' changing electricity requirements. (DFES) forecasts customer demand and generation metrics up until 2050. We proactively engage both the Scottish and Welsh Governments in the collaborative development of our DFES, to reflect government ambition. This feedback loop is vital to making sure our forecasts reflect the plans and ambitions of the local communities we serve.

Our stakeholder team have regular engagement with local and regional stakeholders on energy planning, which feeds our DFES. For example, within Scotland there is a well-developed engagement cycle, we engage at all levels to support regional strategic energy planning. Scottish Government set high-level national policy direction which then flows to regional level through the development of regional energy masterplans.

Supporting these masterplans are local authorities that each develop LHEES (supported by SPEN) for local area energy planning which feed back into the regional energy masterplans. A similar approach exists in Wales and we are also closely involved by working in conjunction with eight local authorities on their LAEPs which is used to develop regional energy masterplans (for north and mid-Wales), which in turn inform a national energy masterplan for Wales with Welsh Government.

We work with other network companies and vectors, and provide a team of specialists (Strategic Optimisers) to partner with local authorities and regional governments to support the optimisation of network planning, design, and implementation of public EV charging and heat electrification initiatives.

Network Planning and Development

Situation Assessment

The electrical network has become an interface for supporting heat and transport decarbonisation. Uncertainties associated with new highly distributed demand profiles (electric vehicles, heat pumps etc), and variable generation require new forecasting, coordination, and flexible demand management solutions.

The current investment model is broken. National and local mandates creating an acceleration of convergence of new and distributed demand and generation profiles onto the grid. (DfT has secured 40% of UKRI R&D funding with no framework for collaboration that would support coordination and planning)

The Constraints

Meeting customer interruption and 'minutes lost' targets with an increasingly stochastic problem coupling new demand and intermittent (distributed) generation in safeguarding services. Growth of whole system (multi-sectoral) convergence on the network but no supporting information on forecasted demand. Challenging decisions on CAPEX forecasting for asset investment. Reducing private sector investment into networks.

Recommendations

The INZAC said

The INZAC Technical Group recommend collaboration with national and local policymaking bodies as well as planning and investment partnerships.

SPEN response

SPEN have built our organisation, and our teams, with collaboration in mind. We have created a Planning and Network development team who work with and incorporate local plans into our distribution future energy scenarios, and we have built a team of "Strategic optimisers" within our Whole System team, who's role is to work with the local authorities within our licence areas and support them in developing their own energy plans. We also work actively with and lobby government and industry bodies to support our own and the wider decarbonisation agenda, and publish our strategies to set out our ambition, including publishing our Just Transition Strategy.

The INZAC said

SPEN to consider operational initiatives such as local markets: improved intelligent demand response, stakeholder partnerships and benchmarked resilience, reliability, decarbonisation, and cost performance indicators.

SPEN response

SPEN have sought and supported the creation of new markets, and the removal of barriers to participation. We have developed a market in operational flexibility, and we have sought and tested demand response on our network. We continue to seek and deliver new initiatives, working closely with industry, and taking an active role in the ENAs Open Networks programme which seeks to further enhance market opportunities, increase the level of standardisation, and deliver change.

The INZAC said

The INZAC Technical Group recommend digital resilience of Energy Services: an integrated network of Digital Twins

SPEN response

SPEN seek opportunities to develop digital twinning capabilities, through our innovation project ENSIGN, through working with the industry on the Digital Spine initiative, and through opportunities in other sectors such as Heat and Transport.



Emerging themes

Customer Group

SPEN has an increasingly public-facing role. Demonstrating that SPEN has understood customers' and stakeholders' needs, and is responding to them, has multiple advantages.

The Energy Transition will place huge demands on all network companies and there is already evidence that effective collaboration has a role to play – but it does have costs, not least in terms of time.

Ofgem reporting requirements often focus on inputs and outputs. Outcomes are also important. For example, resolving complaints quickly is important, while reducing their number in the first place may be better for customers overall.

Technical Group

Visibility as broad sector activities (e.g. DfT) have greater impact on electricity networks.

Microgrids and variable service levels.

Benefiting from the Strategic Spatial Energy Plan, which will set out what, where and when.

Growing staffing and expertise requirements both in incumbent organisations and new bodies such as regional energy system planners will likely impact on SPEN's resources or cost of them.

Securing the people and supply chain resources to deliver the plans .

The importance of Digital Twins (more detail provided opposite).

Digital Twins

Reducing uncertainty and risk to future investments

Digital Twin Features

- Responsiveness- right time information (could be real time) flow
- Interconnectedness within and between systems
- Scenario-based testing in the digital world (safer, faster, cheaper)
- Predictive analytics & management
- Remote access
- Linking separate data sources
- Parallelisation of development/analysis.

Digital Twin Benefits

- Timely awareness & insights
- Scalability and modularity
- Linking systems together, showing dependencies and enabling collaboration
- Create 'Single Point of Truth'
- Intuitive interaction and collaboration
- Increased performance/optimisation
- Accelerated testing & development
- Increased resilience and responsiveness
- Show emergent phenomena.

Capability Building in Data and Digitalisations

Responsible Research and Innovation Framework: Given the disrupted engagement and increasing influence.

Trusted Research

Creating a scalable architecture for both BDA and information integration, along with data governance as to enable design for security, ethics, resilience, scalability, privacy, Transferability and control.

Broader messages from the Group

During the INZAC's discussions with SPEN it was clear that some issues would apply to companies across the sector. In some cases that meant the company was affected by industry-wide or even economy-wide issues. In others it required new skills or ways of thinking, for example because organisations will be working with a wider range of organisations and representatives who are not familiar with the energy sector.

As T3 approaches and T2 and ED2 implementation continues, we feel we are a better informed group, ready to engage constructively at a deeper level, and evolve our working together with and productively challenging SPEN.

The industry should be aware that:

- Staffing resilience is an industry-wide issue
- The 'whole system' view in energy formally encompasses gas and electricity at distribution and transmission level. Increasingly with electrification the industry interconnects with other sectors and may be affected by policymaking elsewhere. Does horizon scanning fully incorporate initiatives and funding from converging sectors (e.g. Department for Transport).
- Networks' are changing from an 'invisible service' to an enabler that is visible and present in communities, whether as a facilitator of active customers or because of network expansion and change. This is a fundamental change for the networks.
- Recognising the vital role that networks play in the UK's transition to Net Zero and staying on track to meet short and long-term internal sustainability targets and commitments.
- Balance eliciting stakeholder priorities with getting reactions to proposals, and show how stakeholder views have been utilised
- Considering outcomes as well as outputs will also help companies place their actions in context for stakeholders
- As networks build partnerships with people who would not previously have had active interaction with the electricity sector they should think about their language and whether it is easily accessible. Before deciding the structure of a report, ask why the target audience should make time to read it, then design it to meet their needs. Check, before publishing, that it is communicating the intended key messages.

Message from Vicky Kelsall, CEO of SP Energy Networks

As the INZAC conclude their first annual report, I want to take this opportunity to express my gratitude to every member of the group for their dedication, valuable insights, and collaborative effort, which is already benefiting a wide range of functions and teams across our business.

Our decision to establish an Independent Net Zero Advisory Council back in 2022 to oversee and challenge our efforts to enable the path to Net Zero at the accelerated pace required, was a pivotal moment for our business, and testament to our commitment to supporting the wider energy transition on our journey to a greener future.

This first year has been hugely successful, with the group proving to be an invaluable resource for SPEN, providing strategic comments and recommendations for consideration and action. It has been a privilege to work with such a strong group of stakeholders with the wealth of experience and expertise they bring from across the industry and beyond. They have remained completely independent to maximise their ability to push us, not only technically but also providing a non-industry viewpoint of our customers and the wider population.

As we look forward, the INZAC have a vital part to play in the development of our RII03 price control business plans for both our Transmission and Distribution businesses, scrutinising our technical plans, as well as ensuring emerging consumer issues are fully considered.

We do not underestimate the role of our networks in achieving Net Zero, therefore, I am committed to continuing to work closely with our INZAC, welcoming their challenge and feedback as we continue to deliver industry leading service for our customers, stakeholders and communities.



Vicky Kelsall

Vicky Kelsall
CEO, SP Energy Networks

