



Transmission Connections Summit

Scott Mathieson
Network Planning and
Regulation Director

Aim of Today:

- Share some of our 2017 successes
- Discuss opportunities for continued improvement
- Check how you think we are doing
- Share our plans for the future
- Explore how these plans can be shaped with your input

Agenda

10.00am Networking Breakfast

Opening Statement – Scott Mathieson
Transmission Investment Programme – Pearse Murray
Outage Planning and LMS – Milorad Dobrijevic & Craig McTaggart
SPD – IRM Bid, DSO, T/D Interface – Deborah MacPherson

12.30pm LUNCH

Opening remarks – Scott Mathieson
SPT RIIO T2 Plan – John Rodger & Martin Hill
NGET The Future of the SO – Ian Pashley
Stakeholder Engagement – Cheryl Blenkinsop
Closing Statements and Questions – Gareth Hislop

3.00pm CLOSE

Key facts and figures
Our performance at a glance

Over
£1Bn
Cumulative Investment
over last 4 years

Forecasting additional
network capacity
3,332MVA in
RIIO T1

Against a planned increase in
network capacity of 1073MVA
931MVA cumulative capacity
delivered to date, with 66%
delivered in year

Participation up
51%

Stakeholder
engagement annual
survey
7.9

Energy we failed to supply
0.00006%

10.3MWh, is the amount of energy we failed to
supply to our customers because of faults on our
network – 0.00006% of the total energy.

The assessment score of
our stakeholder
engagement via our
independent annual
survey result up from 6.9
last year.

Improved Connection
Offer Process

Of our output targets
**48.8% are
achieved**

Our % of output targets achieved
for the period to 2021 is 48.8% –
this compares to 32.2% at this
stage under our original plans. We
have replaced 508km of overhead
line in 4 years.

179
connection offers
made in last 2 years

100%
issued on time

Our tCO2e business carbon footprint losses have
reduced by 6%
Down from 10,764 the previous
year to 10,132 this year, excluding losses.

We are industry leading with an
88% score in the Environmental
Discretionary Award (EDR) achieving
the highest ever TO score.

RIIO-T1
Cumulative
872MW
Connected with 46%
delivered in year



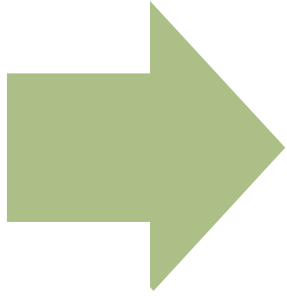
SPT Update

Pearse Murray
Transmission Director

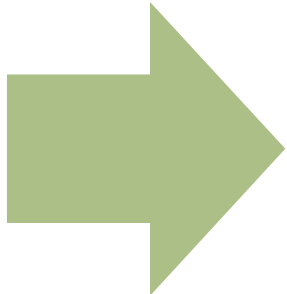
SPT Update - Overview

- Business Performance Highlights
- Progress on Major Network Upgrades
- Project Delivery Organisation Update

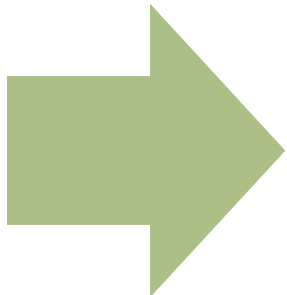
Business Performance Highlights



- No public safety incidents or accidents to staff.
- Contractor Total Recordable Injury Rate (TRIR) of 0.5 (incidents per 100,000 hours worked), with over 3 million manhours in year
- Leadership position maintained in Ofgem’s Environmental Discretionary Award scheme, the only TO to achieve this level



- Outstanding network reliability – only 103MWH of energy undelivered in regulatory year 16/17 – a reliability level of 99.99994%
- Stakeholder survey score up to 7.9 from 6.9 in 2016, with a 51% increase in participation
- 63 connection offers made in 2016/17, 100% of which were on time




- Total investment of £338M in 2016/17. Massive increase in load related spend - more investment in last 2 years than previous 6 years
- 49% of modernisation outputs for T1 delivered by March ‘17, half way point in RIIO-T1. 59% will be achieved by end December ‘17
- Good progress made on ‘Visor’, ‘Fitness’ and ‘Phoenix’ projects. We continue to lead the industry as the only TO to have won funding under all 3 of the RIIO-T1 innovation funding mechanisms



RIIO-T1 Major Network Reinforcements – Baseline Project

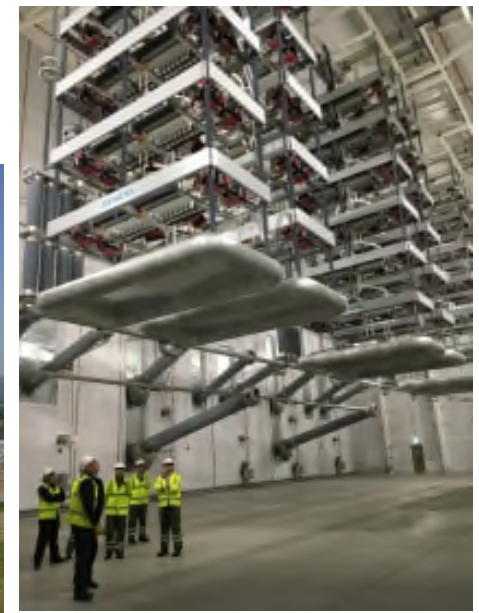
Project	Purpose	Complete
Beauly-Denny Overhead Line	Increase transfer capacity from SHETL area by 1200MVA (TIRG)	<input checked="" type="checkbox"/>
South West Scotland 275kV	Additional 240MVA grid capacity to accommodate around 600MW of new renewable generation (TIRG)	<input checked="" type="checkbox"/>
Hunterston – Kintyre Sub-Sea Link	Increase transfer capacity from SHETL area by 240MVA	<input checked="" type="checkbox"/>
MSCDNs	Increase onshore Scotland – England interconnector capacity by 500MW to 3300MW	<input checked="" type="checkbox"/>
East- West 400kV Upgrade and Series Compensation	Increase onshore Scotland – England interconnector capacity by 1100MW to 4400MW	In progress, almost complete
Western Link HVDC	420km bi-directional offshore link increasing Scotland- England transfer capacity by 2200MW to 6600MW	In progress, almost complete
South West Scotland 132kV	Grid connections for up to 1000MW of new renewable generation	In progress, almost complete

RIIO-T1 Major Network Reinforcements – Additional Projects

Project	Purpose	Complete
XY and YY Route Conductor Upgrade	Increases in circuit capacities of 240 and 350 MVA respectively through UK's first large scale deployment of HTLS conductor (Innovation Rollout Mechanism project)	
Kilmarnock South 400 /275kV Upgrade	Reinforcement of Kilmarnock to accommodate up to 1000MW of renewable generation in South West Scotland	In progress
Kendoon to Tongland Reinforcement	Modernise aged network and provide capacity for an additional 250MW of renewable generation in the Dumfries and Galloway area	In development

Western Link HVDC

- 2200MW, 420km, 600kV Offshore DC Link from Hunterston, Scotland to Flintshire Bridge, Wales
- Largest link of its type in the world
- Construction substantially complete at converter stations and all marine and on-shore cabling installed
- Link currently undergoing final commissioning trials for operation up to 1100MW
- Repairs underway at Hunterston, following an incident during commissioning in September, to reinstate full link capability



SWS Project Progress (Stages 2-4)

Stage 2 New Cumnock – Blackhill

Stage 3 Blackhill - Glenglass

Stage 4 New Cumnock - Margree

- Stage 2 commissioned on single circuit in June 2017 to Dun Hill. Second circuit currently being installed, due to complete 10 December
- Stages 3 and 4 in construction, 168 steel tower and 151 heavy duty wood pole structures, 319 in total:
 - 95% accesses complete
 - 82% foundations complete
 - 61% tower erection complete
 - 53% conductoring complete
- Substations at Dun Hill, Blackhill and Glenglass substantially complete. Stage 3 due to complete Jan 2018 and Stage 4 in December 2017





Kendoon to Tongland Reinforcement (KTR)

- Previously Dumfries & Galloway Strategic Reinforcement SWW
- Construction of 44km of 132kV overhead lines between Kendoon and Tongland
- Allows removal of 90km of existing 132kV overhead lines
- Substation extension works at Glenlee with reconfigurations at Kendoon and Tongland

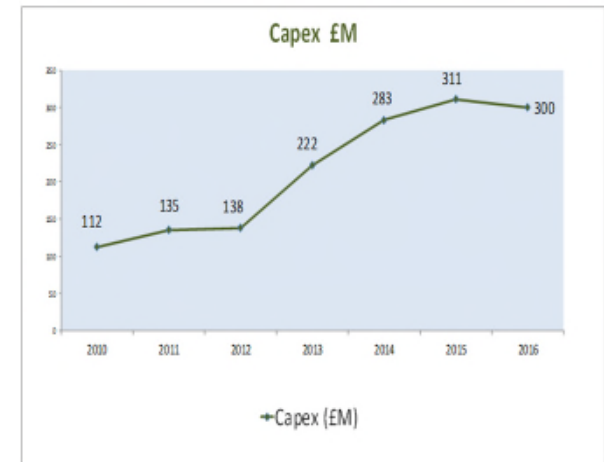
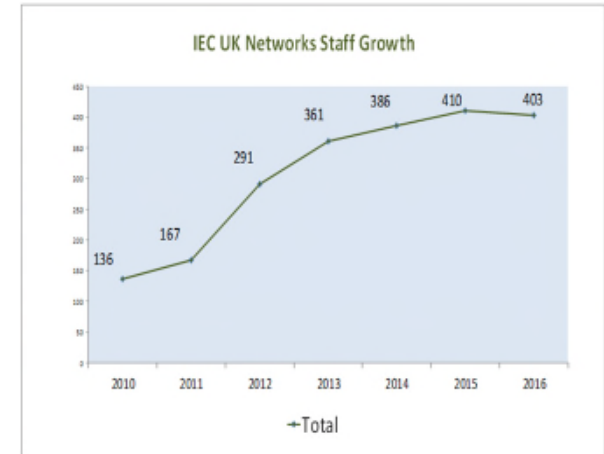
Next steps

- 3rd round of consultation started Nov 2017
- Application for Section 37 consent early 2019
- Completion Q4 2023
- SPT due to submit derogation
- Working with NGET on non-build commercial solutions
- Next D&G Developer Forum 6th December



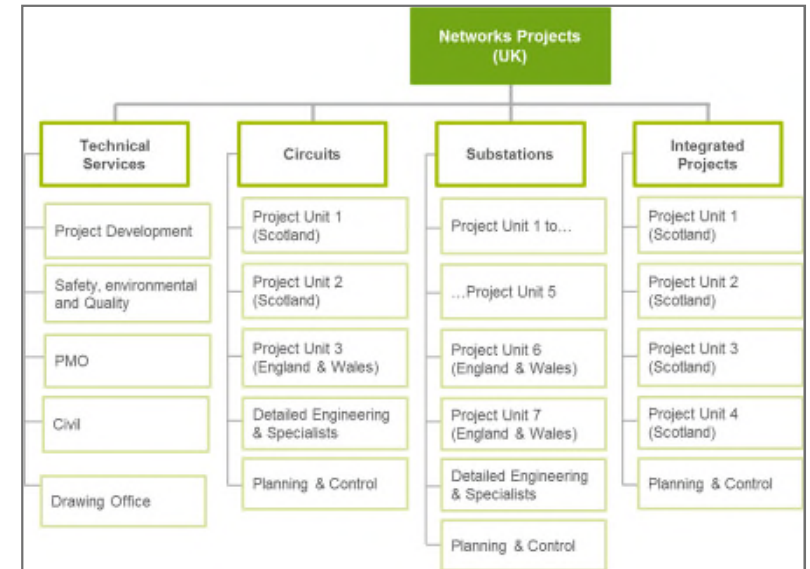
Project Delivery Organisation Update

- Since 2010, SPT has built a very successful partnership with Iberdrola Engineering and Construction (IEC).
- From its formation in the late 90's in Spain, IEC grew internationally, providing services to Iberdrola Group and third party clients
- IEC Networks UK formed to provide engineering design and project management services to SPT and SPM (132kV programme)
- Partnership facilitated the rapid increase in investment within SPT's RIIO-T1 investment plan
- New 'disaggregated contracting' project delivery model introduced, delivering enhanced control and significant cost savings on the previous predominantly EPC (turnkey) approach
- Further savings achieved through standardisation and global procurement within the Iberdrola Group
- Substantial growth in the level of professional engineering and project management staff available to the business



Project Delivery Organisation Update

- Given the Iberdrola Group’s extensive investment plans worldwide, decision taken in 2015 to focus IEC’s resources on internal clients’ needs
- Following a drop off in third party activity worldwide, the Group decided earlier this year to integrate IEC’s activities into internal client businesses
- The staff and activities of IEC Networks UK transferred into SPT /SPM in October 2017
- A new organisational structure / process model is being implemented to maximise the value of the integration:
 - Making best use of the talent and capabilities available in the expanded organisation
 - Removing unnecessary processes and activity duplication
 - Delivering additional cost efficiencies
 - Providing flexibility for the future
- We will continue to operate and enhance our disaggregated contract delivery model
- New organisation will be in place from January 2018



Customer Service Operational Control Centre

Milorad Dobrijevic
Outage Planning
Manager

1. OUTAGE PLANNING PROCESS & OPERATIONAL STAKEHOLDER ENGAGEMENT

i. TRANSMISSION

- i. Internal process change to incorporate feedback from generators at the System Operator OC2 forum

ii. DISTRIBUTION

- i. Process changes implemented to meet the needs of our embedded generation customers

1. **FOLLOWS THE SYSTEM OPERATOR – TRANSMISSION OWNER CODES OF PRACTICE (STCP's)**
 - i. OCC planning department are engaging with generation stakeholder at the Long Term planning phase to identify suitable outage window in the next outage planning year that will minimise impact to stakeholder
 - ii. Number of examples in 2017 for work planned in 2018\19

2. **OTHER CONNECTED PARTIES FOLLOW THE GRID CODE – SECTION OC2**

3. **TRANSMISSION OWNERS \ GENERATORS \ DISTRIBUTION NETWORK OPERATORS \ “T” CONNECTED CUSTOMERS ALL SUBMIT OUTAGE PROPOSALS TO SYSTEM OPERATOR (SO) AT YEAR AHEAD STAGE. SYSTEM OPERATOR CREATES THE OUTAGE PLAN**

4. **YEAR AHEAD OUTAGE PLAN IS REQUIRED TO BE SECURITY and QUALITY of SUPPLY STANDARDS (SQSS) COMPLAINT**

5. **WITHIN YEAR – FOLLOW THE PLAN.....**
 - i. If the plan changes – new communication process in place with SPEN Operational Control Centre to involve the stakeholder early in the new outage placement discussion
 - ii. The System Operator is the “FINAL” approver of outages on the network. Any outage will only go ahead when the System Operator has officially informed all parties of the outage

1. **OVER 52 DIFFERENT PROJECTS INCLUDED IN THE PLAN FOR THE NEXT OUTAGE PLANNING YEAR (55 in this current year)**
2. **APPROX 650 OUTAGES IN 2018 – 19, PLACED TO MEET SPT'S PROJECT & OPERATIONAL REQUIREMENTS**
3. **MAINTENANCE OUTAGES ALIGNED WITH MAJOR PROJECT OUTAGES WHEREVER POSSIBLE**
4. **ONGOING NETWORK CONSTRUCTION & WINDFARM CONNECTION CONTINUING IN SW SCOTLAND**
5. **MASSIVE CAPITAL PROGRAM CONTINUEING TO MODERNISE AND REINFORCE THE SCOTTISH TRANSMISSION NETWORKS**
6. **NOW AT THE HALFWAY POINT IN RIIO-T1**

1. DISTRIBUTION NETWORK BECOMING MORE “ACTIVE”, REQUIREMENT TO ENHANCE THE OUTAGE PLANNING PROCESS
 - i. New outage planning process being developed involving Long Term year ahead plan and within Year Quarterly Plan

2. TRANSMISSION OUTAGE PLANNING PRINCIPLES TO BE IMPLIMENTED INTO DISTRIBUTION

3. IMPROVED CUSTOMER & STAKEHOLDER ENGAGEMENT REQUIRED
 - i. OCC planning working with various SPD districts to identify key customer s\ stakeholders that will be directly \ indirectly impacted by these works
 - ii. SPEN full focused on improving our customer engagement

4. £4.5 BILLION CAPITAL PROGRAM UNTIL 2023 TO MODERNISE & REINFORCE SPD’S DISTRIBUTION NETWORKS NORTH & SOUTH



Thank You
Any Questions?

Milorad Dobrijevic
Outage Planning
Manager



Load Management Schemes

Craig McTaggart
Transmission Network
Manager

Purpose

- Refresh on the background to Load Management Schemes
- Description of LMS Schemes and operation
- Update from August workshop

What are 'Load Management Schemes'?...

SPT defined term:

“A system comprised of geographically distributed measuring devices and site specific customer interfaces to detect, in real-time, unacceptable overloading of transmission assets and disconnect the generation contributing to the overload in accordance with contractual agreements.”

Purpose of LMS:

- To protect assets from unacceptable overloads allowing SPT to comply with its licence
- To permit connections in advance of necessary enabling works usually in areas of the network which are, at times, already operating at or beyond capacity.
- To facilitate enduring non-firm Transmission access.

Load Management Scheme Applications

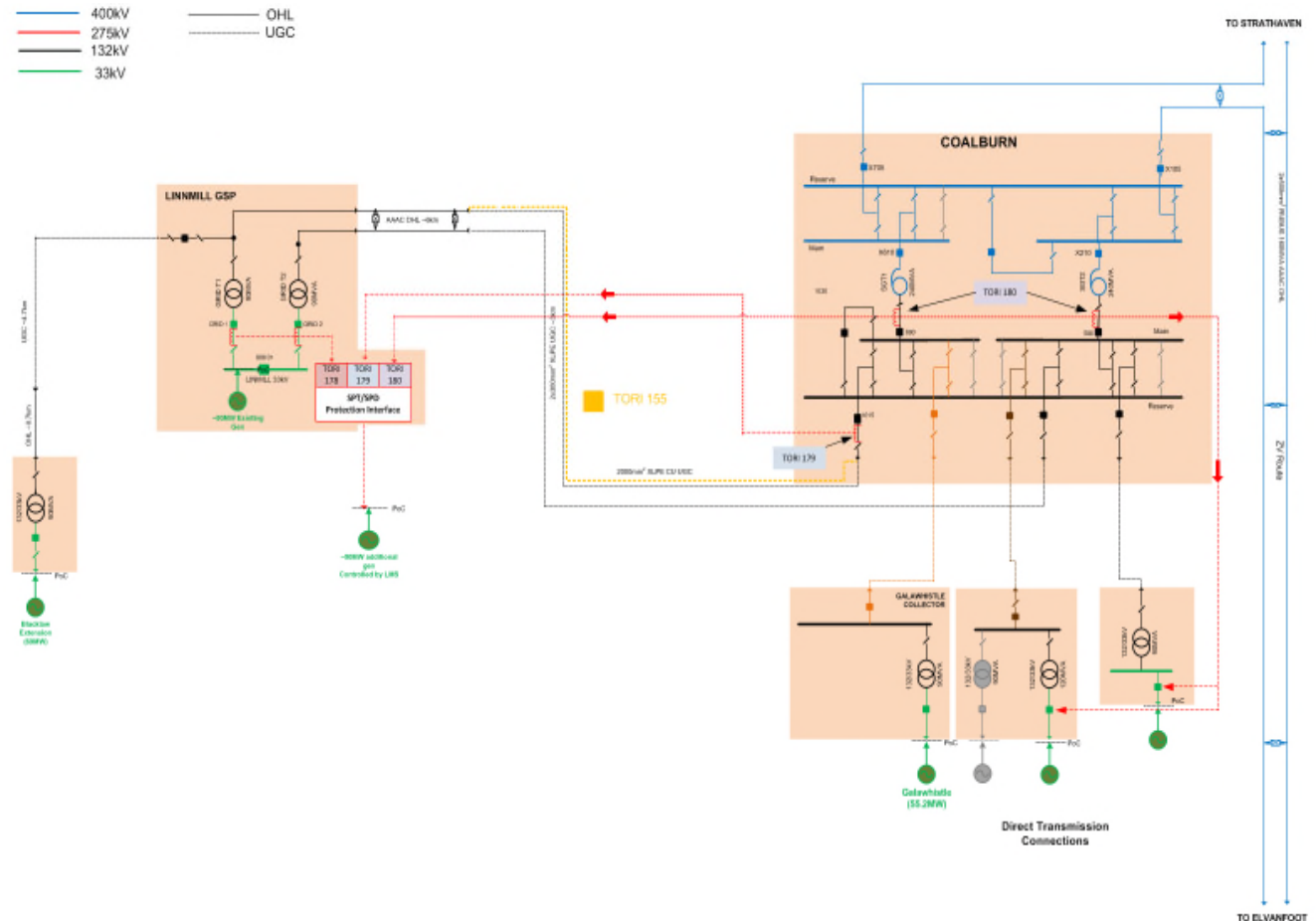
- Meshed, radial and mixed network areas
- Complex, multiple 'LIFO' queue orders
- Large number of constrained circuits
- Constraints are significant e.g.
 - Some GSPs at or beyond non-firm capacity: e.g. 180MVA net export with 2x90MVA circuits
 - 275kV circuits and 400kV transformers are constraints



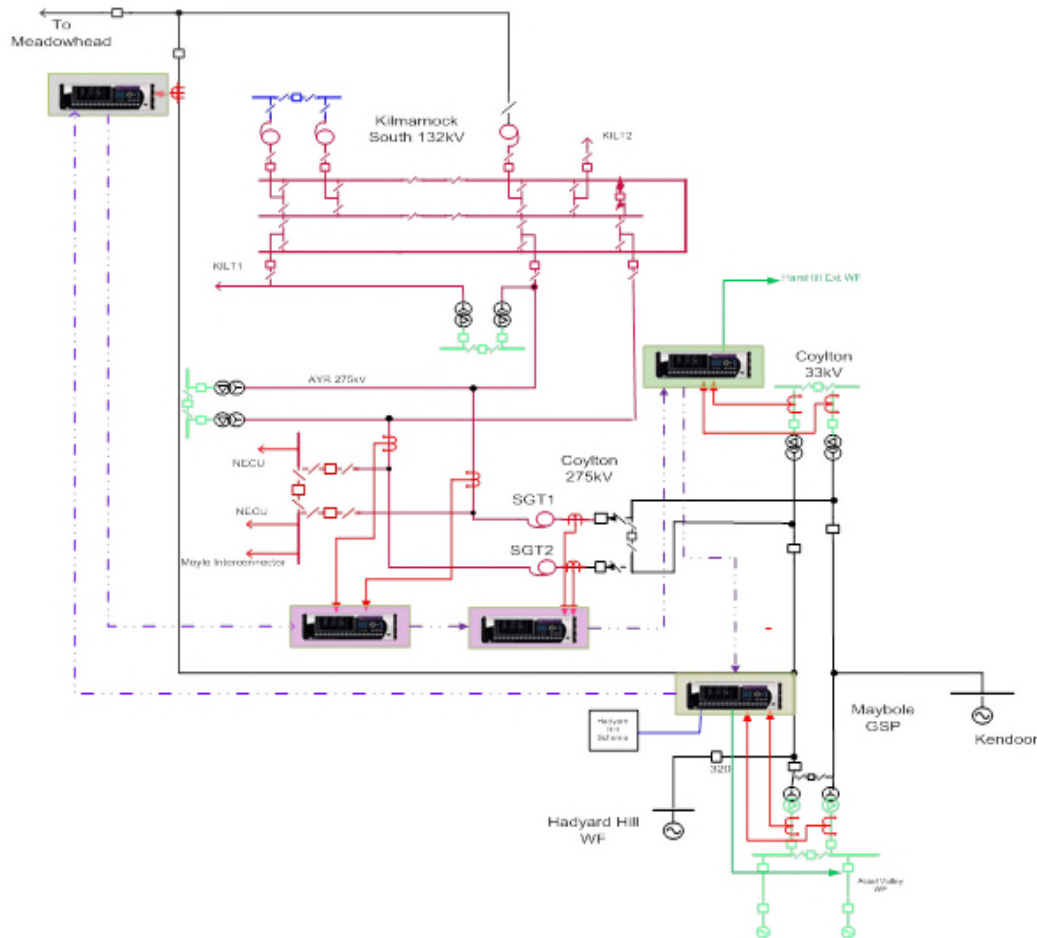
LMS Schemes: Coalburn – Linnmill 400kV/132kV

- LMS overcomes limitations at – GSP Txs, 132kV network & Coalburn SGTs
- Permits earlier connections instead of/or in lieu of reinforcements.
- 3 levels of transmission access
 - Firm
 - Non-Firm
 - Restricted Available Access (RAA)

(TORI Transmission Owner Reinforcement Instruction)



LMS Schemes: Coylton/Maybole/Kilmarnock South 132KV & GSPs



- LMS overcomes limitations at – GSP TxS, 132kV network & Coalburn SGTs
- Permits earlier connections instead of/or in lieu of reinforcements.
- 3 levels of transmission access
 - Firm
 - Non-Firm
 - Restricted Available Access (RAA)

(TORI Transmission Owner Reinforcement Instruction)

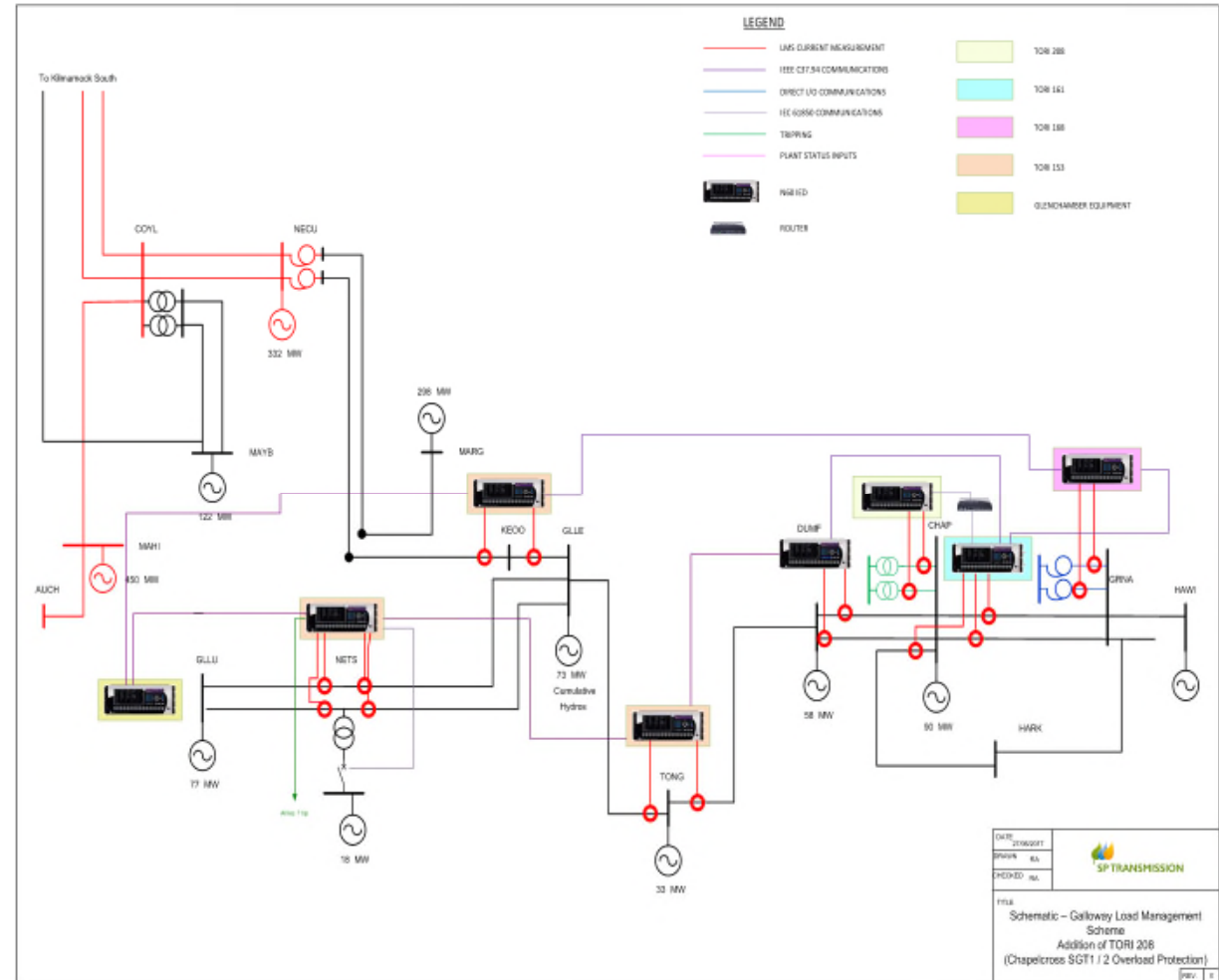
Existing LMS Schemes Cont.

Dumfries & Galloway
LMS (TORI 153)

Chapelcross 132kV
LMS (TORI 161)

Gretna SGTx LMS
(TORI 168)

Chapelcross GSP
LMS (TORI 208)



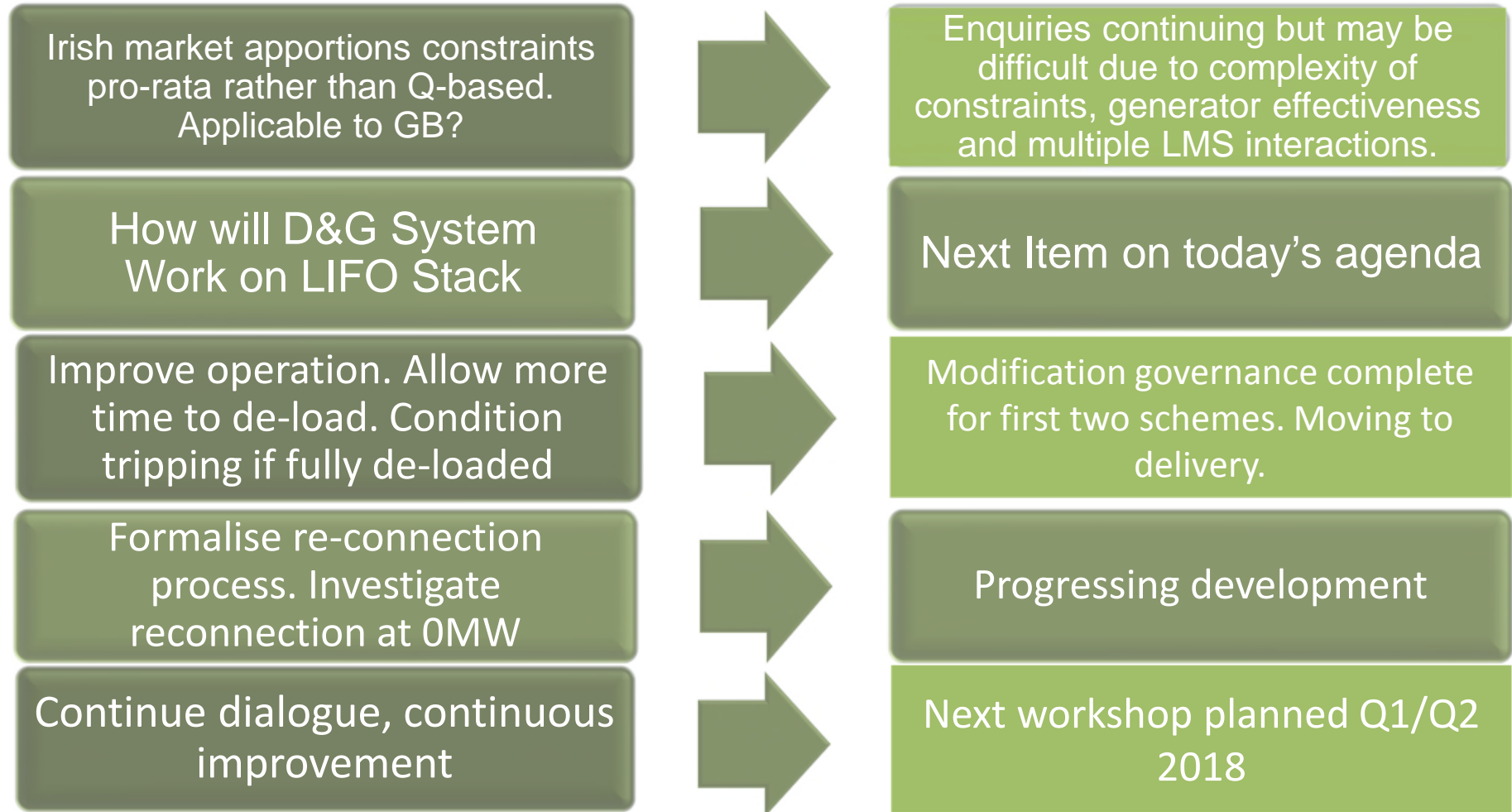
LMS Summary

- LMS schemes to maximise utilisation of existing and future networks providing non-firm and RAA access, and provide earliest possible connection date.
- Approximately 10 individual LMS schemes commissioned to date on SGTs, 275kV circuits, 132kV circuits and 132/33kV transformers.
- Further LMS schemes planned (New Cumnock area and Galashiels)

LMS Workshop – August 2017

- Organised in response to feedback following commissioning of first schemes
- Aimed at front-line staff to ensure information provided at offer and contract stage was available to operations
- Covered the full life-cycle:
concept → design → installation → operations.
- SPT, SPD and NGET SO control engineers contributed.
- 10 companies attended, well received

LMS Workshop – Feedback and Actions





Load Management Schemes Backup Slides

Craig McTaggart
Network Transmission
Manager

LMS Development for Future Schemes

Purpose: Reminder

- To permit connection in advance of necessary enabling works
- To enable enduring non-firm connections
- To protect network assets from unacceptable overloads

ENA ANM Good Practice Guide Definition

“Using flexible network customers autonomously and in real-time to increase the utilisation of network assets without breaching operational limits, thereby reducing the need for reinforcement, speeding up connections and reducing costs.”

Where is ANM Applied?

ENA ANM Good Practice Guide

- *“ANM should only be used on radial elements of the network, where its impact on network operation can be easily understood”*
- *“On more complicated meshed transmission networks, the effect of ANM actions are thought to be too complex and unpredictable to implement safely”*

SPT Applications - Reminder

- Meshed, radial and mixed network areas
- Complex, multiple ‘LIFO’ queue orders
- Large number of constrained circuits
- Constraints are significant
- Some GSPs at or beyond non-firm capacity: e.g. 180MVA net export with 2x90MVA circuits

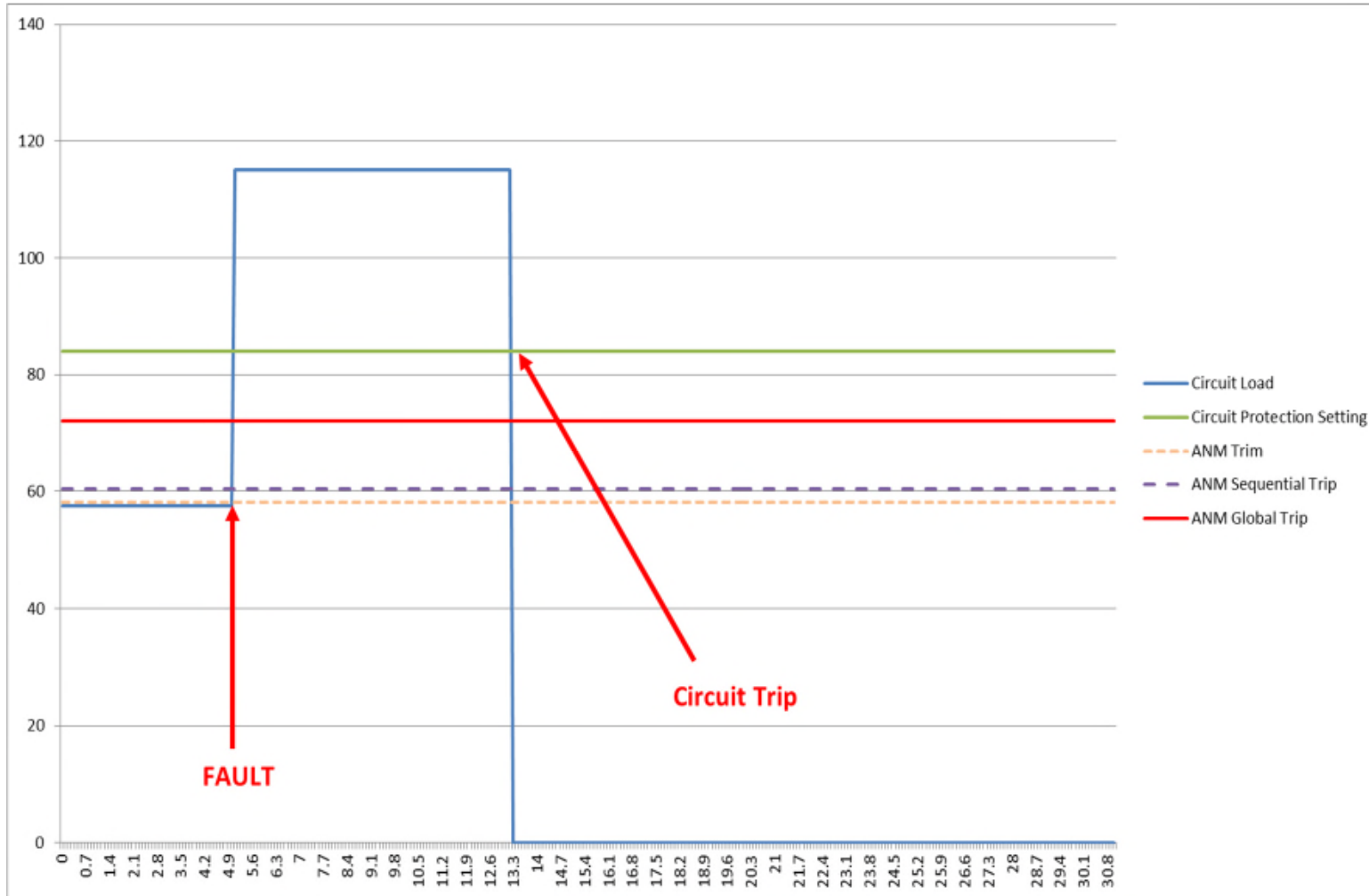
LMS & ANM

LMS Schemes

- Less sophisticated control actions
- May result in more trips than ANM

SPT Applications - Reminder

- Uses protection hardware for speed and dependability: protect the assets
- Uses protection-class comms
- Multiple LIFO stacks
- Multiple, geographically distant circuit measurements



LMS & ANM – Future Plans

SPT Proposals

- ANM hardware, architecture and comms to satisfy LMS requirements
- Develop supply chain to facilitate solution for interconnected transmission
- Interface with EBS to co-ordinate with balancing actions
- Challenge the ENA guide

Requirements

- Substation grade hardware & comms
- Real-time contingency analysis
- Wide Area control with PMU and R-GOOSE

When and How

- Dovetail with SPD innovation project
- KTR application



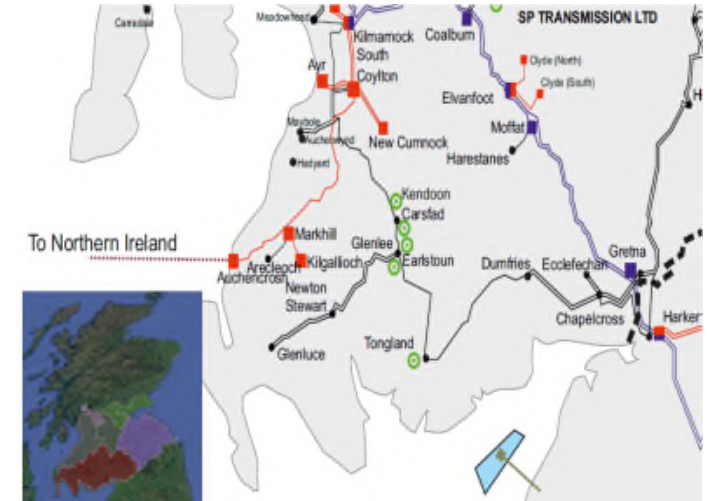
Dumfries and Galloway Smart Zone

Deborah MacPherson
Lead Commercial Analyst
SP Energy Networks

Dumfries and Galloway – Distribution Award 2017

Design & Deliver:

- First multi GSP ANM Scheme of this scale in the UK
- First geographical ANM Scheme designed to alleviate transmission constraints
- First ANM Scheme designed with capability to interface with the GBSO in real-time



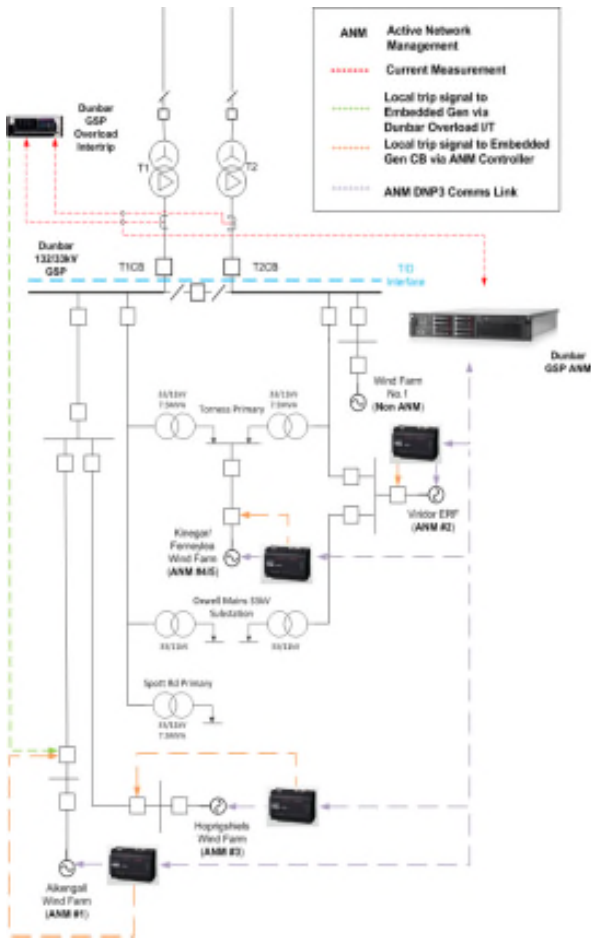
Outstanding Opportunity for SP Energy Networks

- Only successful IRM bid in UK (2017)
- **£8m award** allows wide scale ANM on Distribution and Transmission Networks in D&G
- Funded to deliver an industry leading ANM project, wider in scope and ambition than any project to date
- Building the capability and skills required for future flexible networks
- **Scalable ANM solution for SPEN and other IBE networks**



Paving the way towards becoming a DSO

Dumfries and Galloway – Distribution Award 2017



Significant Increase in Complexity

Scale
11 GSPs

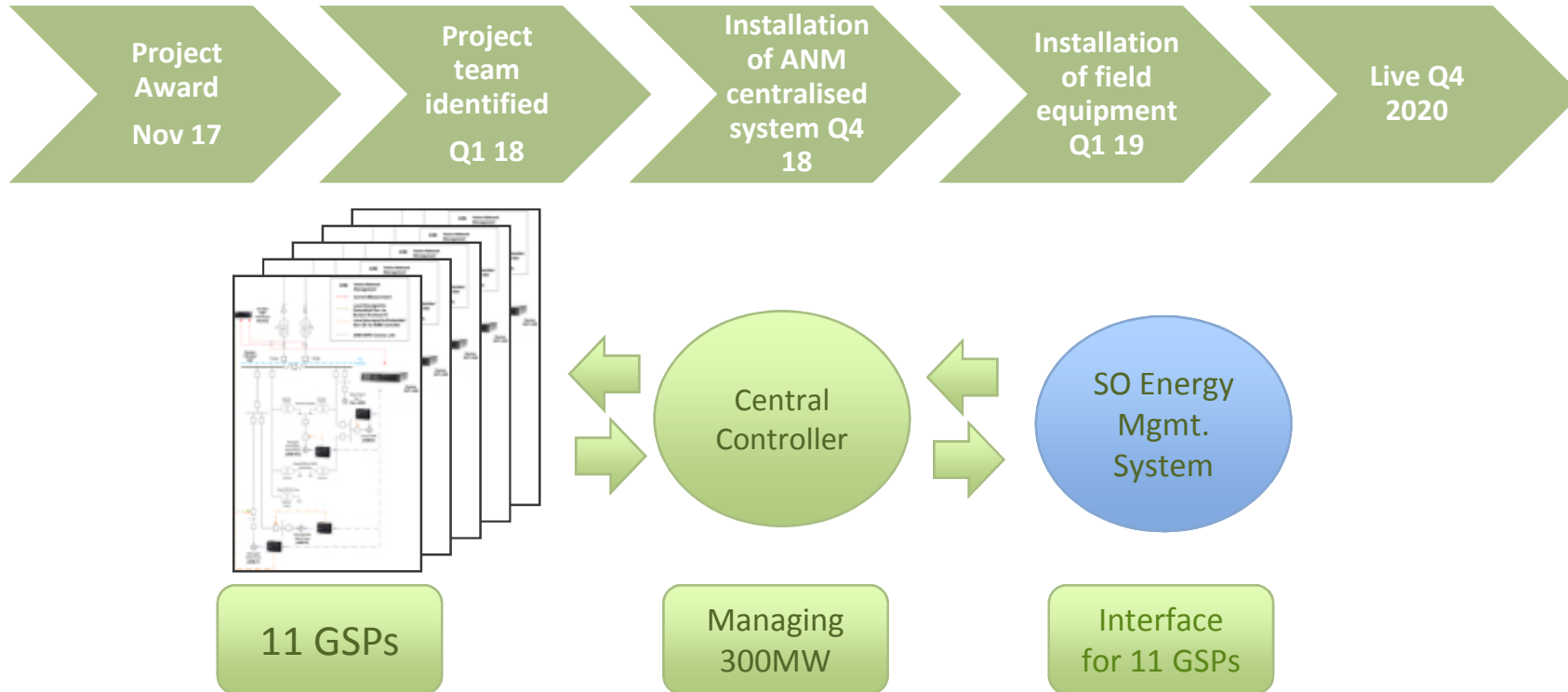
Interaction
SO/TO interface

Volume
Up to 300MW

Future Proofing

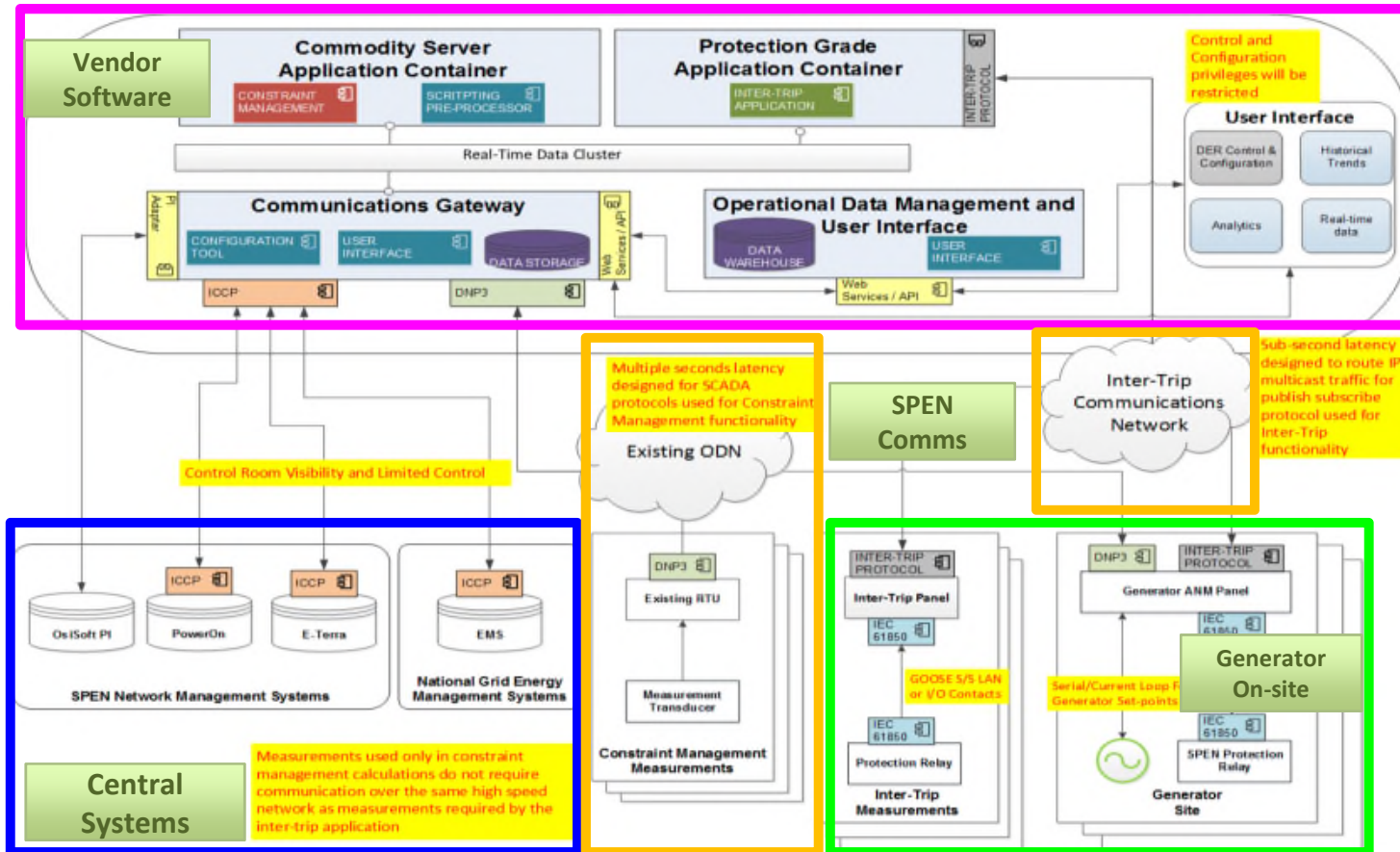
- Central controller not capped on MW that it can control
- Further 500MW identified across 13 GSPs as potential future ANM managed capacity
- Functionality built in to notify customers of curtailments

Dumfries and Galloway – Distribution Award 2017



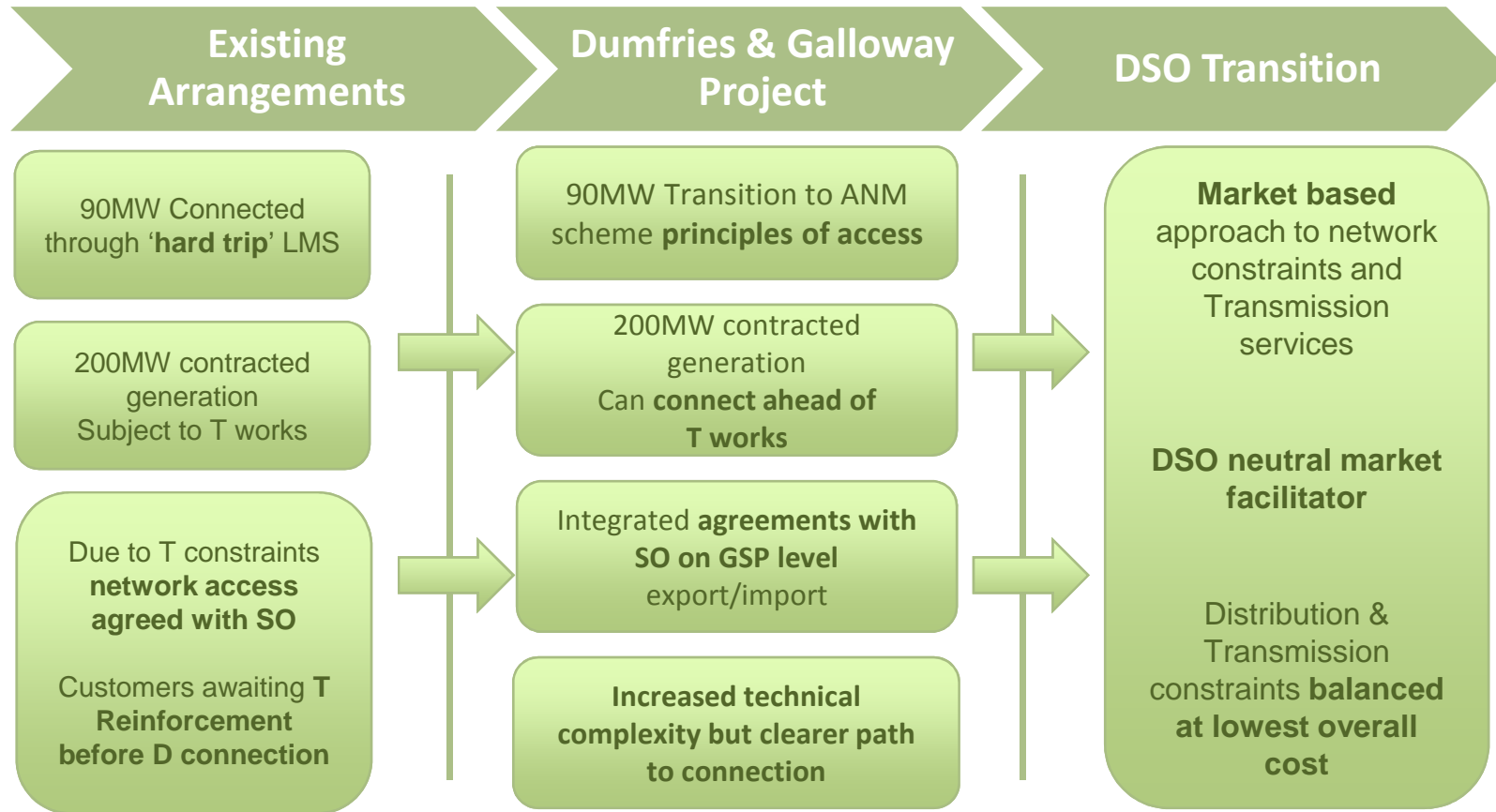
- Complex ANM managing 11GSPs across each other and across T-D boundary
- Managing principles of access across 11GSPs in real time co-ordinating with SO

Dumfries and Galloway – IT Architecture



Central Controller – most cost effective solution if ANM deployed at scale

Dumfries and Galloway – Commercial Arrangements



Commercial arrangements at the heart of the Dumfries & Galloway

Summary

- Wide scale ANM solution covering entire Dumfries & Galloway area
- Complex interaction with Transmission SO to manage network constraints on a real time basis
- Solving network challenges through innovation and paving the way towards a DSO

RIIO T2

Preparing for the Future

John Rodger &
T2 Programme
Manager

Martin Hill
Network Development
Manager

What is the T2 Price Control?

The T2 price control determines the amount of revenue that SPT can recover from 2021-2029 for providing network services to our customers.

Ofgem's RIIO price control framework:

Revenue = Incentives + Innovation + Outputs



Put stakeholders at the heart of their decision making process



Invest efficiently to ensure continued safe & reliable services

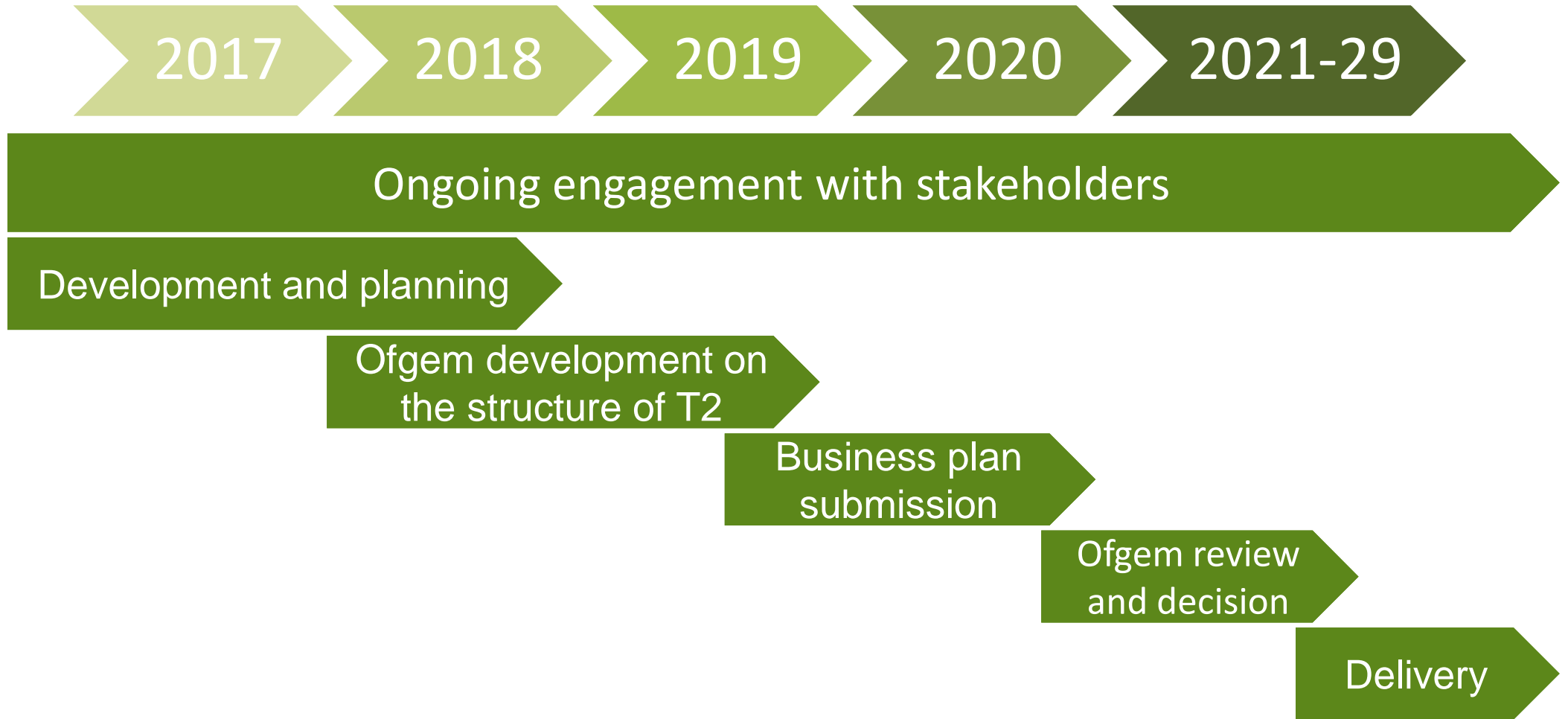


Innovate to reduce network costs for current and future customers



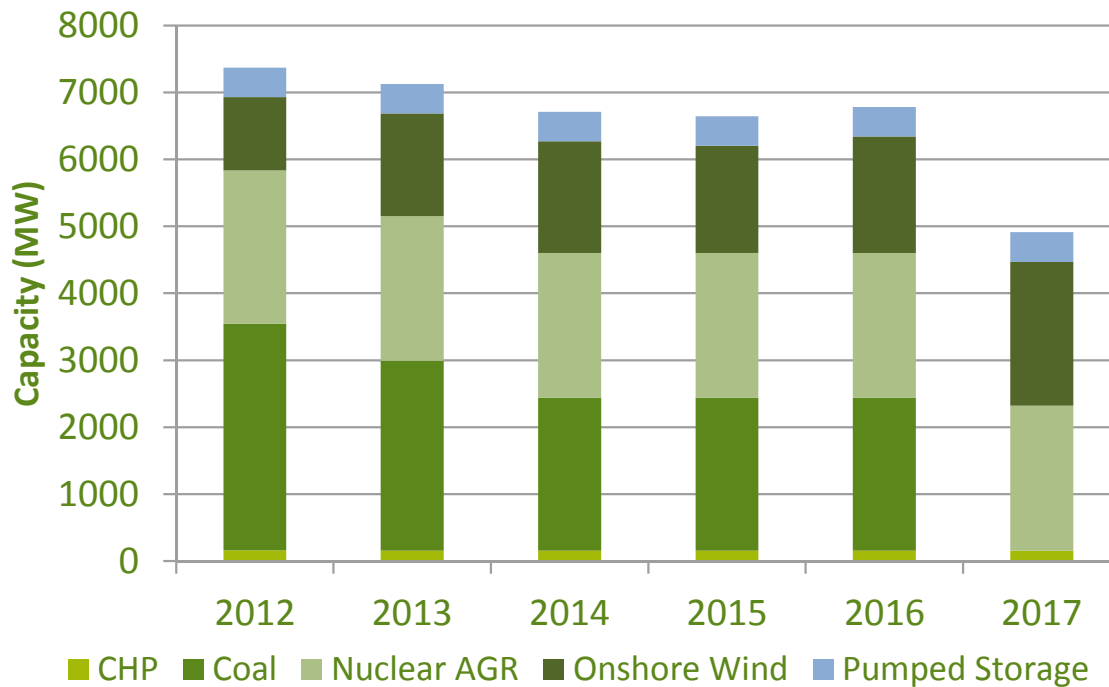
Play a full role in delivering a low carbon economy and wider environmental objectives

RIIO T2 Indicative Timeline



Increasing Uncertainty – Generation

SPT Connected Generation



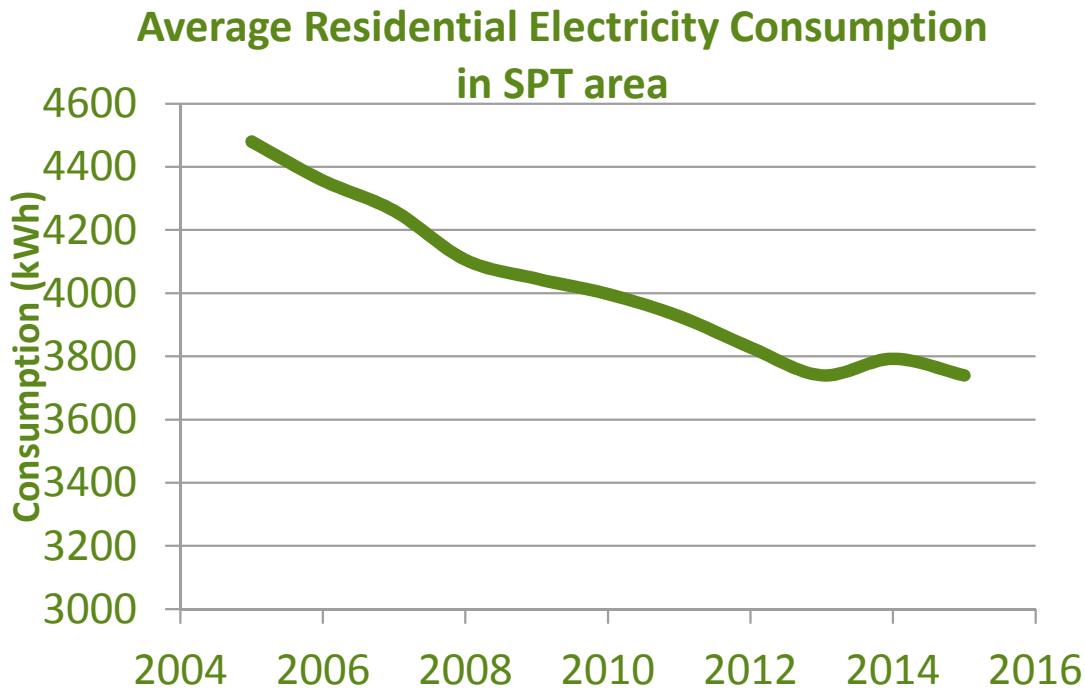
- More extreme variations in power flow
 - 5600MW swing over 44 hours in November 2016
- Large power station closures
 - Reduced system inertia

SPT/NG boundary transfer – Nov '16



SPT network is vital to facilitating ongoing system security

Increasing Uncertainty – Demand



SPT network will be designed to accommodate this transition.

- Ambitious government targets
- More customer choice and engagement
- Changing technology
- Distribution System Operator



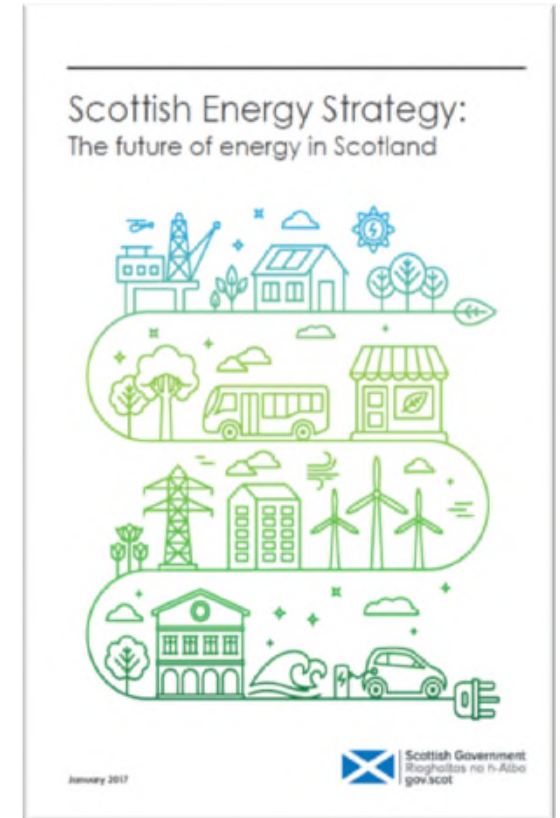
Our Approach for RIIO-T2

Justified by local requirements

Informed by stakeholders

Flexible and smart solutions

Coordinated with Distribution, DSO and other parties



Group Discussion on T2 Challenges

What are your views?

Group discussion for 15 minutes, 2 questions per group:

What is the future role of storage?

How will renewables evolve in the next decade?

How do we ensure investment in the network aligns with customer need?

What is the appetite for more SMART network solutions?

Next Steps

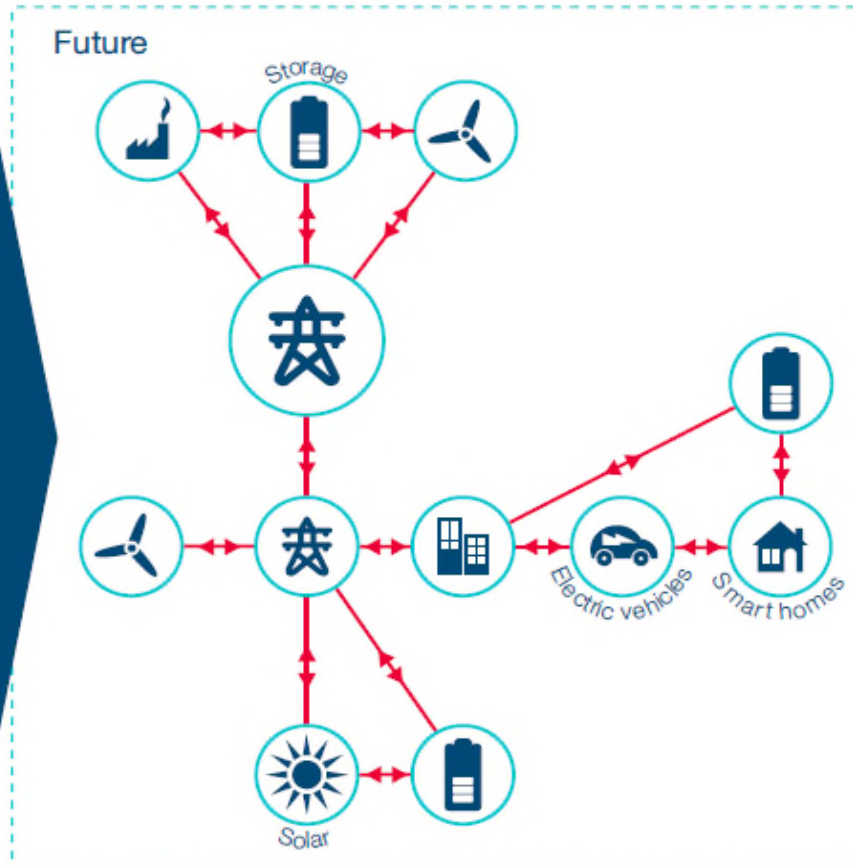
- Discussion points and questions will be documented to inform our T2 plans.
- Further T2 stakeholder events planned in 2018 to provide updates on our plans and seek feedback.
- For further information or share any other comments:
- Email: **RIIO_T2@spenergynetworks.co.uk**

National Grid Electricity System Operator: Update



SPT Connection Summit
30th November 2017

We are in a period of fundamental change



Did you know?

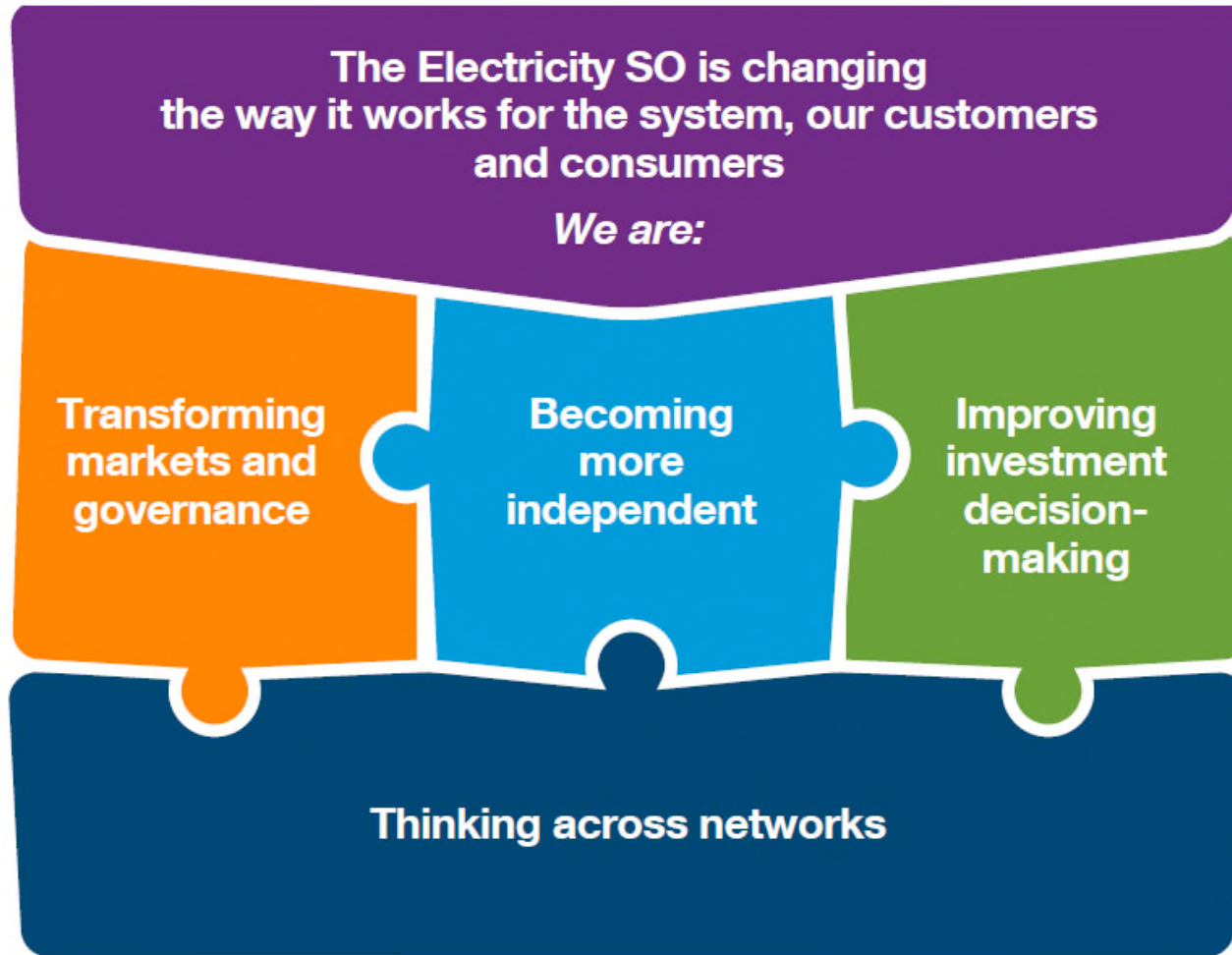
21 April 2017
Great Britain goes without coal generation for the first time since 1880s

26 May 2017
Solar power accounts for 25% of GB electricity generation

7 June 2017
Lunchtime – renewables providing over 50% of GB generation
2pm – low carbon generation accounts for 70% of total

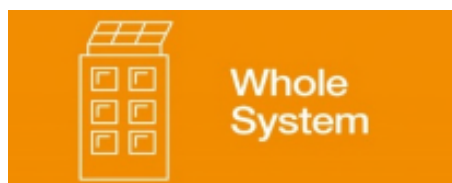
11 June 2017
“Stunning Sunday” - 70% low carbon generation and carbon intensity below 100g CO₂/kwh for first time ever

What are we doing to rise to this challenge?



How are we working to deliver this?

AREAS OF WORK



ACHIEVING GREATER INDEPENDENCE

Practicalities

- Creation of new licence
- Separate ESO Board
- ESO managers incentives based on SO
- Separable premises

Behaviours / Ways of working

- Create distinct ESO & ETO identities
- Showing independence
- One SO: Gas & Electricity

What does this mean in a Scottish context?

New challenges to enable efficient connection processes, network management and system operation

Enabling Distributed Energy Resource connections

- Visibility & Controllability
- Market Opportunities
- Balancing Services Opportunities

Balancing operability (non-build) vs investment in assets (build) solutions

- Getting the most out of existing assets
- Realising the value of flexibility
- Efficient trade-off with asset build

Focusing on regional issues, and associated solutions

- Understanding 'whole system' capability
- Clearly articulating regional system needs
- Encouraging innovative solutions

What are we doing about it?

Engaging with industry to improve 'whole system' understanding and develop new capabilities/processes

'Whole system' approach to ops and investment

- Collaborative network modelling across T/D
- Understanding cross-network impacts
- Seeking D solutions to regional T issues

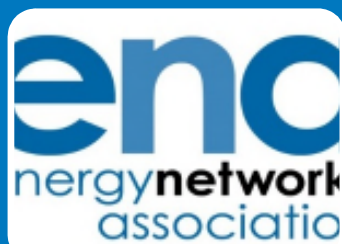
New approach to Connections

- Streamlined connections process
- Extension of 'connect & manage' principles
- Broader pool of SO balancing tools

Enhancing participation in flexibility markets

- Simplifying Balancing Services
- Opening up routes to market (incl. T&D)
- Greater provision of relevant information

Continuing the conversation...



ENA's Open Networks project

- Focus for developing a 'whole system' approach
- Informing the DNO-DSO transition
- <http://www.energynetworks.org/electricity/futures/open-networks-project/>



Ofgem's Charging Futures Forum

- "The primary place for users of the electricity network to learn, contribute and shape the future of charging arrangements."
- <http://www.chargingfutures.com/>



SPEN's Dumfries & Galloway Developer Forum

- Next event: 6th December 2017
- Opportunity to discuss issues specific to South West Scotland and Dumfries and Galloway

...one more thing...



- Please note the Open Letter issued on 5th November regarding the impact of European Network Codes on T and D connections from 2018 onwards...
- <https://www.nationalgrid.com/sites/default/files/documents/Open%20Letter%20-%20European%20Connection%20Codes.pdf>

Transmission Connections Summit

30th November 2017



Reacting to Your Feedback

Cheryl Blenkinsop
Senior Commercial Analyst

Areas We Do Well In:

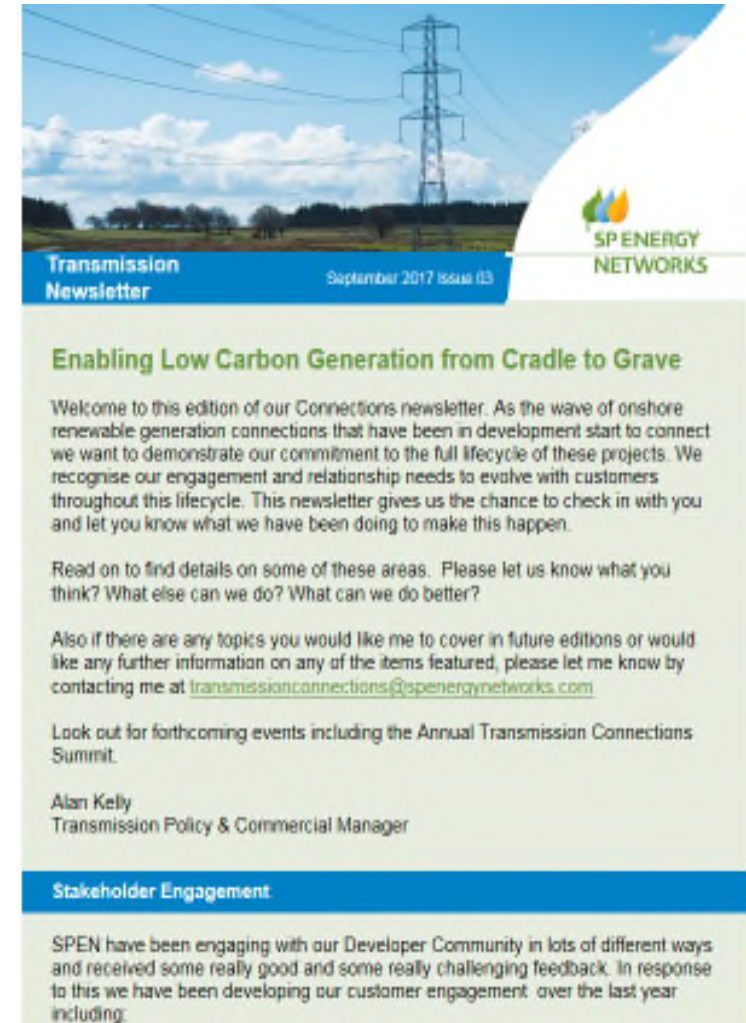
- Good communication & updates
- Professional & well run organisation
- Events are hitting the mark

Areas for Improvement:

- More consultation feedback
- D/T interface
- More construction information

More Personalised Approach

- Bi-annual newsletter
 - Provides updates in between events
 - Personal updates on key topics
- Face to face meetings
- Connections Leaflet to explain the process



How many of you have taken part in a Pre-Application Meeting?

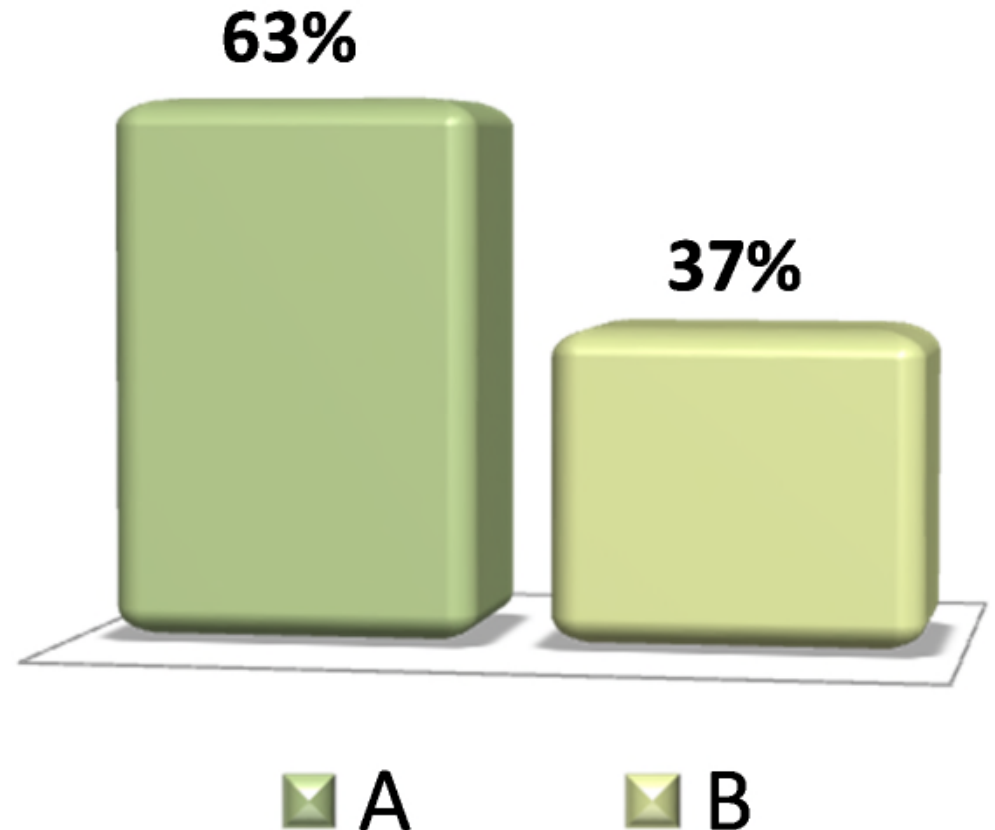
A) Yes

B) No

How many of you have taken part in a Pre-Application Meeting?

A) Yes

B) No



How many of you have taken part in a Portfolio Review Meeting?

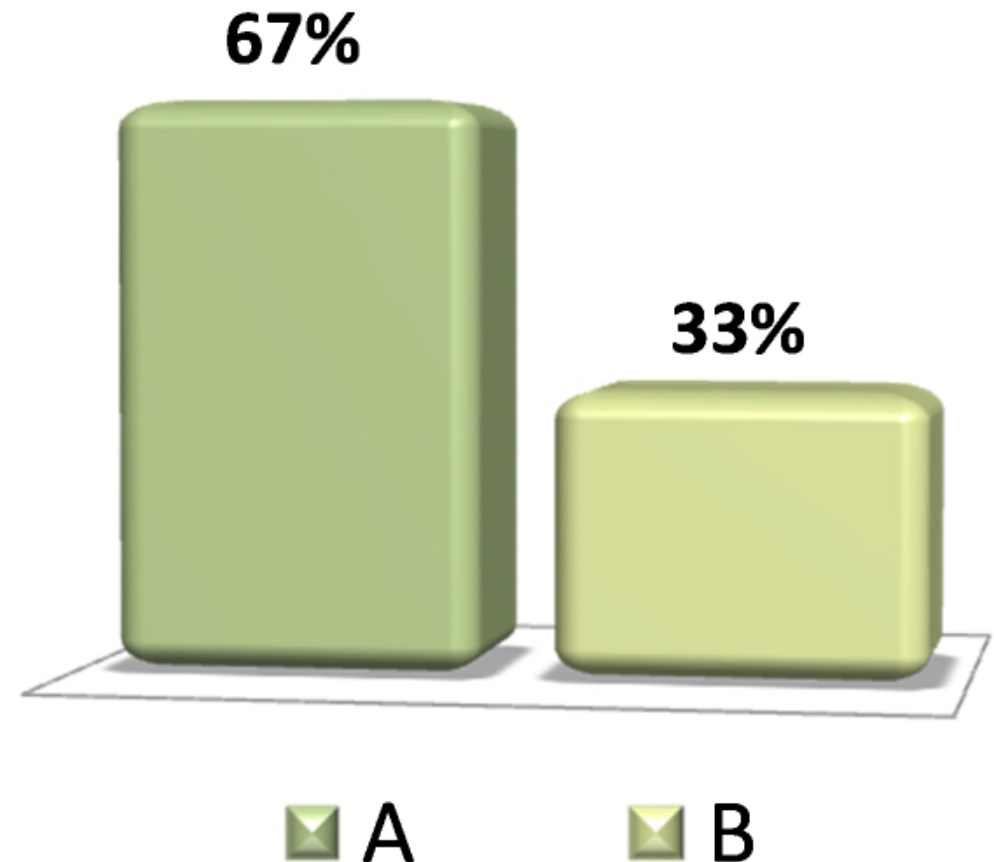
A) Yes

B) No

How many of you have taken part in a Portfolio Review Meeting?

A) Yes

B) No



How many of you have taken part in an Interface Meeting?

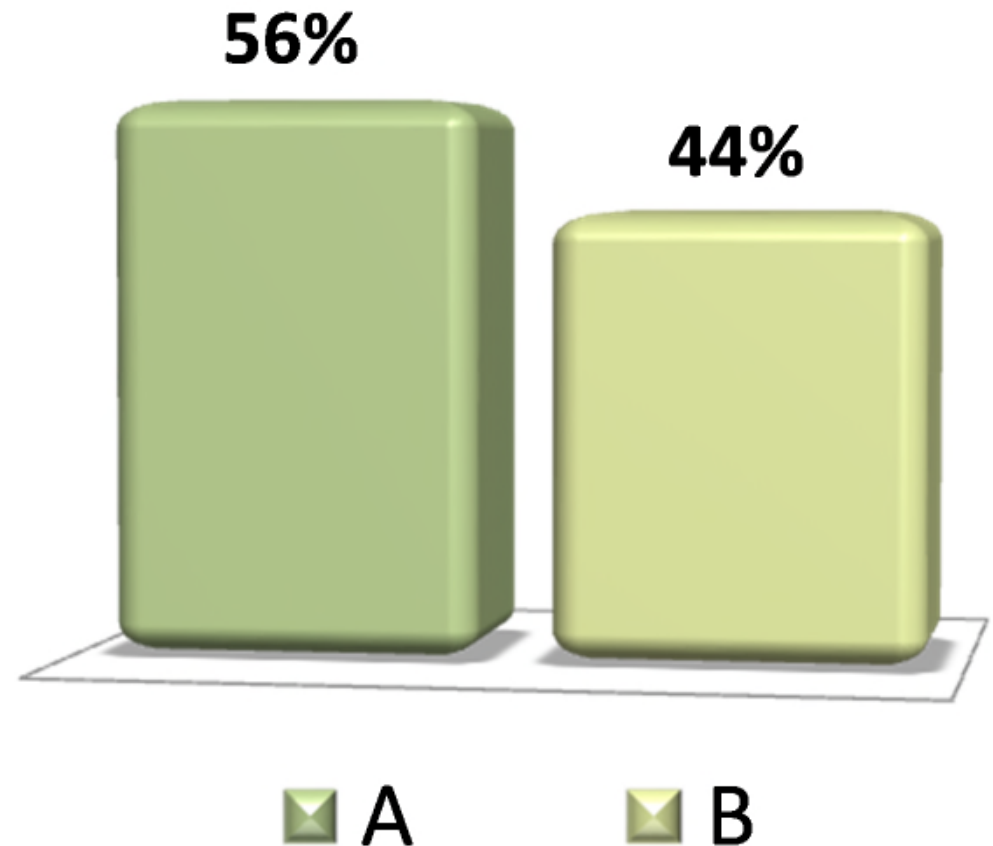
A) Yes

B) No

How many of you have taken part in an Interface Meeting?

A) Yes

B) No



How many of you are aware these meetings are available?

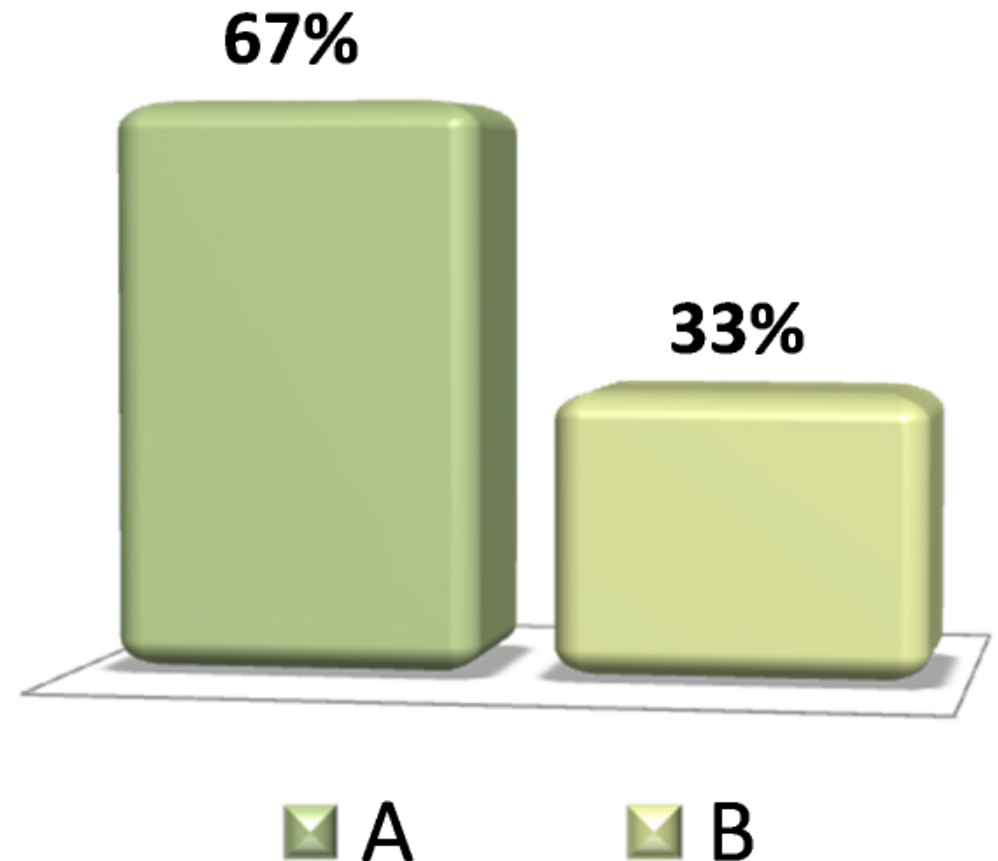
A) Yes

B) No

How many of you are aware these meetings are available?

A) Yes

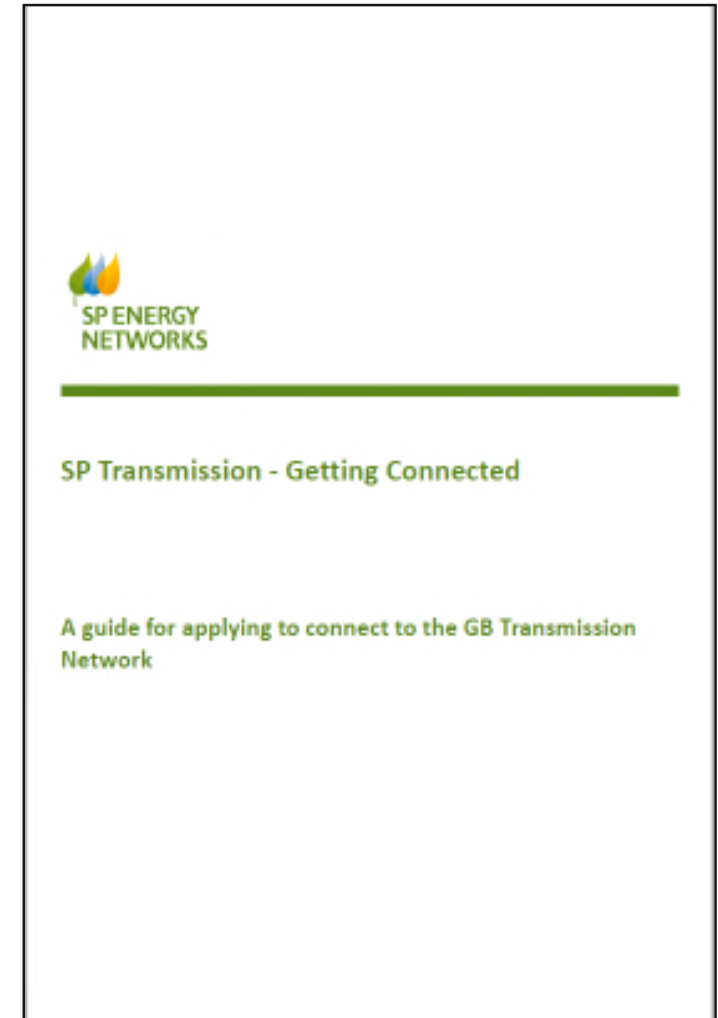
B) No



Engagement Activity

Between April and October we have held:-

- 23 Pre-Application Meetings
- 36 Portfolio Review Meetings
- 105 Interface Meetings
- 3 Developer Events
- Issued SPT Newsletter
- Issued 2 TORI Quarterly Reports.



Transmission/Distribution Interface

- SPEN are participating in the Open Networks project.
- SPEN are committed to building upon the learnings from our SOW trials and network wide roll out programme.
- We have been revisiting internal processes to ensure teams are aligned on processes and tools.



Questions for Discussion:

- Do you know who to talk to if there are issues? Are there other ways we could improve that?
- Is the newsletter informative? What other topics would you like to see? Should we consider alternative approaches e.g. online community, webinars?
- What is the best way to give you updates on construction programmes?
- What more do you think we could do?

SURVEY

Please take part

Transmission Connections Summit - Questions

Gareth Hislop
Commercial and Policy Manager