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Integrated Transmission Planning and Regulation (ITPR)

STC Committee

29th October 2014

Contents

- Ofgem published their ITPR draft conclusions on Monday 29th September
- This opened an eight week consultation period

Contents

- Summary of our workstreams
- Overview of our engagement
- What could the Network Options Assessment (NOA) look like
- Next steps

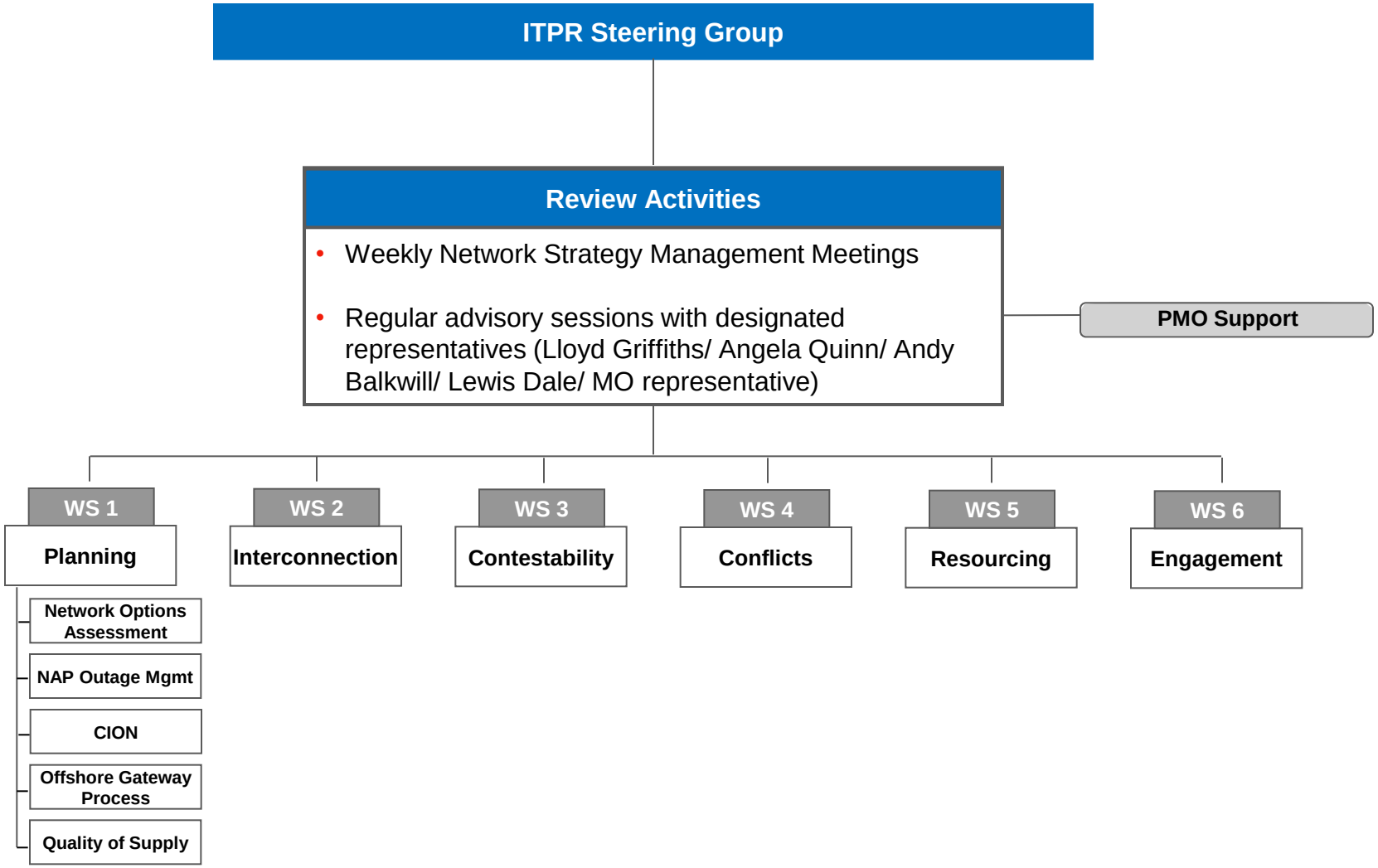
What does this mean for the SO?

- Broader advisory role to TOs, developers and Ofgem
- Identification of Interconnection opportunities
- Network Options Assessment (NOA) methodology
- Greater role developing needs cases for strategic investment

Key areas for the STC Committee?

STC Code Changes	• Potential STC changes to formalise enhanced SO role and processes
Network Options Assessment (NOA)	• Develop and implement a new Network Options Assessment (NOA) methodology with active stakeholder engagement to ensure that options development is transparent with annual reporting obligations
Formalise the CION	• Expand the use of and formalise the Connection infrastructure option note CION

ITPR Project Organisation



Workstream Overview (1)

Workstream	Sub Group	Deliverables	Lead	Working Group
Planning	Network Options Assessment (NOA)	(1) Scope our interpretation of the concept (+ engage Ofgem) (2) Draft the high level process steps for delivery (3) Document what we believe we need from industry to deliver this (all stakeholders) (4) Document what we do today (5) Scope how we would: (a) engage industry in ongoing development of this workstream (b) Expect to publish outputs of this workstream (6) Identify impact on our function: Volume of work, capability, systems (7) Draft response "paragraphs"	Emma Carr	Stewart Whyte
	Offshore Gateway Process		Chandima Dutton	AH to spk with Mark Perry Bridget Morgan/Mark Perry
	Quality of Supply		Emma Carr	Graeme Stein Mark Perry?
	Outage Management	As (3), (4), (6), (7) above	Chandima Dutton	Nick Harvey
	CION	As (6), (7) above	Hannah Kirk-Wilson	Katherine Clench

Workstream Overview (2)

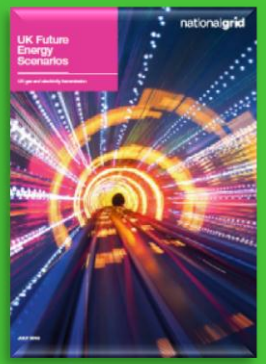
Workstream	Deliverables	Lead	Working Group
Interconnection	(1) Scope our interpretation of the concept (+ engage Ofgem) (2) Draft the high level process steps for delivery (3) Document what we believe we need from industry to deliver this (all stakeholders) (4) Document what we do today (5) Scope how we would: (a) engage industry in ongoing development of this workstream (b) Expect to publish outputs of this workstream (6) Identify impact on our function: Volume of work, capability, systems (7) Draft response "paragraphs"	Emma Carr	Electricity Interconnection Co-ordination Group
Contestability		Hannah Kirk-Wilson	Angie Quinn; Lewis Dale; Jon Fenn/Lloyd Griffith; Karan Monga; Adam Lloyd; Michelle Clark
Conflicts	As (1) – (7) above (8) Data and information flows (Call for evidence, data handling, existing requirements for sharing/ protocols) (9) Licence drafting	Hannah Kirk-Wilson	Dianne Burke; EMR rep; Andy Balkwill; Rosie Eyre; Xiaoyou Zhou; Steve Mccaffrey; Cheng Chen
Resourcing	(1) Develop impact assessments (2) Identify consultancy planning for business case (3) Identify no regrets resourcing strategy, or design principles and process (scope)	Chandima Dutton	Stewart Whyte HR rep David Philips Cathy Rylah
Engagement	(1) Develop strategy on how to engage with Ofgem and other external stakeholders (2) Develop Internal Communications (3) Knowledge sharing of NG external publications i.e. ETYS	Jenny Doherty	Ben Graff Vicky Tolley

Engagement

- We are trying to provide as full a response as we can around the implementation and timescales for the enhanced SO role
- To do this, we would like to work with industry to understand how our proposals may affect different parties
- To date we have reached out to:
  - All onshore TOs, OFTOs and interconnector developers
  - Presented at the ENFG
  - Attended Ofgem's stakeholder event
  - Contacted Renewable UK
- Planned engagement with:
  - Energy UK
  - DNOs

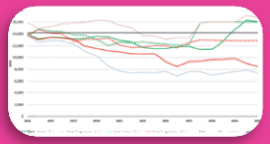
Network Options Assessment (NOA) could follow a similar process to the NDP

Future Energy Scenarios



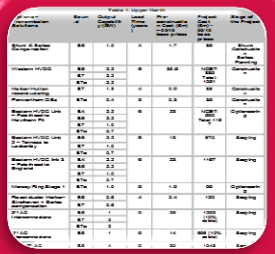
- Stakeholder engagement
- Generation scenarios
- Interconnection
- Demand scenarios

Requirements

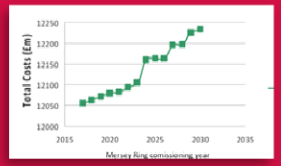


Identify future transmission capability requirements

Solutions



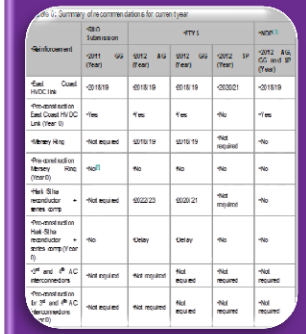
Identify future transmission solutions



Calculate operational costs for transmission solutions

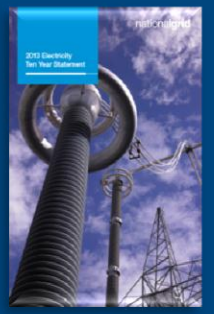
Select

Development of options



Selection of preferred option

Electricity Ten Year Statement



ETYS is produced by National Grid with the assistance of the Transmission Owners (TOs), Scottish Power Transmission (SPT) and Scottish Hydro Electric Transmission (SHE Transmission).

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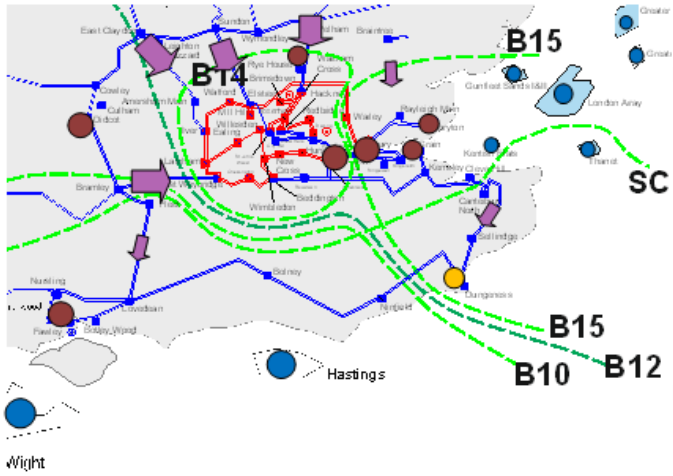
Option Assessment

South England Summary

Inputs

- High demand from London and the South
- European interconnectors have a large influence on power flows supporting demand supply when importing from Europe.
- Interconnector export to Europe draws additional power through London and the surrounding areas

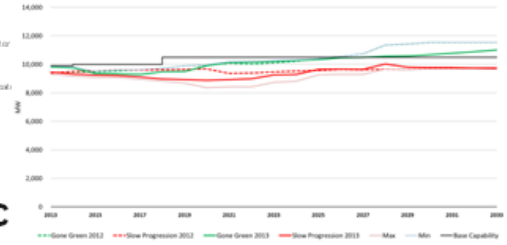
Generators
Wind
Nuclear
Conventional
Hydro/Pumped Storage
Power Flow



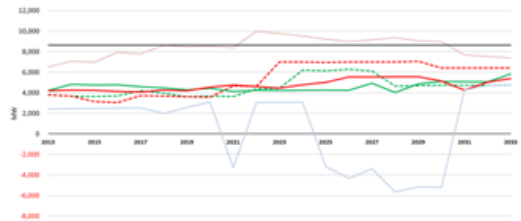
Boundary Drivers

SC1 boundary requirements

B14 boundary requirements

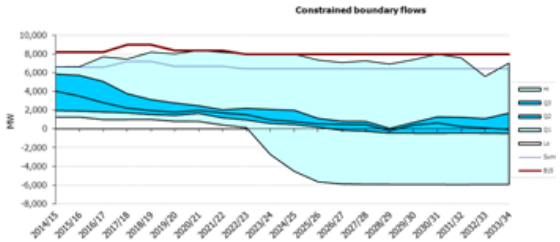


B15 boundary requirements



Range of Power Flows

B15 ELSI boundary constraints



Reinforcement Options

Transmission Solution	Strategy		
	Scenario Completion date		
	Slow Progression	Gone Green	Local Contracted
Wymondley Turn-In	2017	2018	2018
Barking Lakeside Tee	2014	2014	2014
Hackney-Tottenham Waltham Cross Uprate	2024	2022	2022
Wymondley OBs	2018	2019	2019
Dungeness-Sellindge-Canterbury reconductoring	N/A	2019	2019
South Coast Reactive Compensation	2019	2019	2019
New Transmission Route on South Coast	N/A	2023	2023

Solution Recommendations

Option	Decision
Wymondley Turn-In	Commence pre-construction
Barking Lakeside Tee	Complete
Hackney-Tottenham Waltham Cross Uprate	Delay
Wymondley OBs	Commence pre-construction
Dungeness-Sellindge-Canterbury reconductoring	No decision is required
South Coast Reactive Compensation	Complete pre-construction
New Transmission Route on South Coast	Commence pre-construction scoping

Network Option Assessment Output

- On Completion of Least Regret Network Development Policy Analysis
- Network Options Assessment report shared in addition to ETYS overview
- NOA report to contain
  - Overview of Network Requirement
  - Analysis of all options provided
    - Incremental boundary Capability (Benefit to system)
    - Required dates by scenario
  - High level scope of option
  - Least regret development to be taken forward in following year
  - Instruction of phased development and next years progress required

Next Steps

- Consultation closes on the 24th November
- We would particularly like your support on the impact on the STC and STCPs and how we could develop these together
- We welcome your input in the coming weeks

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