

# Network Flexibility...

## Recap of where we are so far



## RIIO

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- The new RIIO regulatory framework will apply to NGG Transmission from April 2013 to March 2021
- Over the past 18 months National Grid has been consulting stakeholders on our business plan for the RIIO-T1 period
- A number of workshops have been held under the banner of 'Talking Networks'
- Consultation at this stage of the process allows agreement of high level requirements – avoiding 'TPCR4-like surprises' in the licence

## Background

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- Historic network foundation of flat offtake and stable supply sources
  - Little uncertainty other than absolute demand level
  - Revenue Drivers set based on stable flow assumptions
  - Build requirements clear against a demand level criterion
- Changing dynamics of network
  - Diverse sources and diverse options for market supply
  - Drivers increasing future variability of intra-day take – CCGTs and Storage
  - Currently no clear funding mechanism

# System Design Considerations

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- System has been designed for peak flows and not for the dynamic profiling behaviour which is becoming prevalent
- It is important that the network configuration can be adjusted quickly and safely in case network users respond differently than expected
  - “Turning the supertanker in the Network”
- A new approach to design and operational standards may be required to ensure the level of flexibility required by customers can be delivered
- We need to develop an understanding of users’ requirements and priorities

## Recent discussions

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- At the start of our Talking Networks network flexibility was defined in a broad sense, aggregating multiple drivers
- Common theme
  - Lack of clear funding signal under existing user commitment regime
  - All driven by changing system flows
- To aid clarity, we identified the individual drivers, which are grouped under two separate issues:
  - Problems we are seeing on the NTS now
    - e.g. Scotland – maintaining obligations; ‘Central Corridor’ West/East Flows
    - Addressed in our TPCR4 Rollover and RIIO business plans
  - Concerns for the future
    - e.g. ‘Windy world’
    - Wider stakeholder discussion is required to agree a way forward

## Putting Network Flexibility in context

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- The investments identified in our initial Talking Networks workshops represented 4.7% of our TO capital expenditure plan
- This investment is not about new pipes
  - Compression modifications
  - Flow Control Valves / Multijunctions
- Relatively minor works to allow us to extract extra capability from existing assets
- Adding additional ability to control movement of gas
  - Not additional capacity

## Stakeholder feedback

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- Stakeholders supported the proposed investments identified to maintain obligations in Scotland
- Stakeholders requested more information on the need case for investment in relation to the central corridor, however they agreed that some funding be retained in the plan to keep investment options open
- Stakeholders questioned whether other options (operational and commercial had been considered)
- The majority of stakeholders agreed that we should use tools we have available to us before investing

# Management options available to us

## Network Operability

Physical infrastructure vs. Commercial regime

### Commercial (Rules)

Shape commercial regime, products, tools and incentives to better align cost of customer actions, to encourage efficient behaviour and allow flexibility of usage desired

### Operational (Tools)

Enhance capabilities and tools to enable optimal use of the NTS under evolving rapid dynamic within day conditions

### Investment (Assets)

Targeted investment to NTS to support dynamic operation at strategic points on the network in order to meet customer requirements



# Order of management action approach

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**More Dynamic  
Network**

**More tools to  
operate**

**Where tools are  
not the answer,  
more network**

**Ongoing Security  
of supply**

## What we proposed

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- Our business plan to be submitted in March should propose we are funded upfront for:
  - Maintaining our obligations in Scotland
  - Design work to keep investment options open for central corridor diversity of flows
- An uncertainty mechanism is used to trigger any further funding
  - An industry process is developed to discuss the 'central corridor' issue further as well as wind intermittency

## Latest developments

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- Since our last workshop in November 2011, other topics in the area of ‘network flexibility’ have been raised...
- A number of stakeholders have approached us asking for specific products to be developed
- Modification 407 raised (proposes removing the rule for DNs to give 2 hours notice of greater than 5% change to offtake rates)
- We propose that further development of the RIIO discussions, plus the above two points are now taken forward by industry through transmission workgroup