Transmission Planning Code Review 2014

Transmission Workgroup

3rd April 2014

Richard Hounslea, National Grid NTS

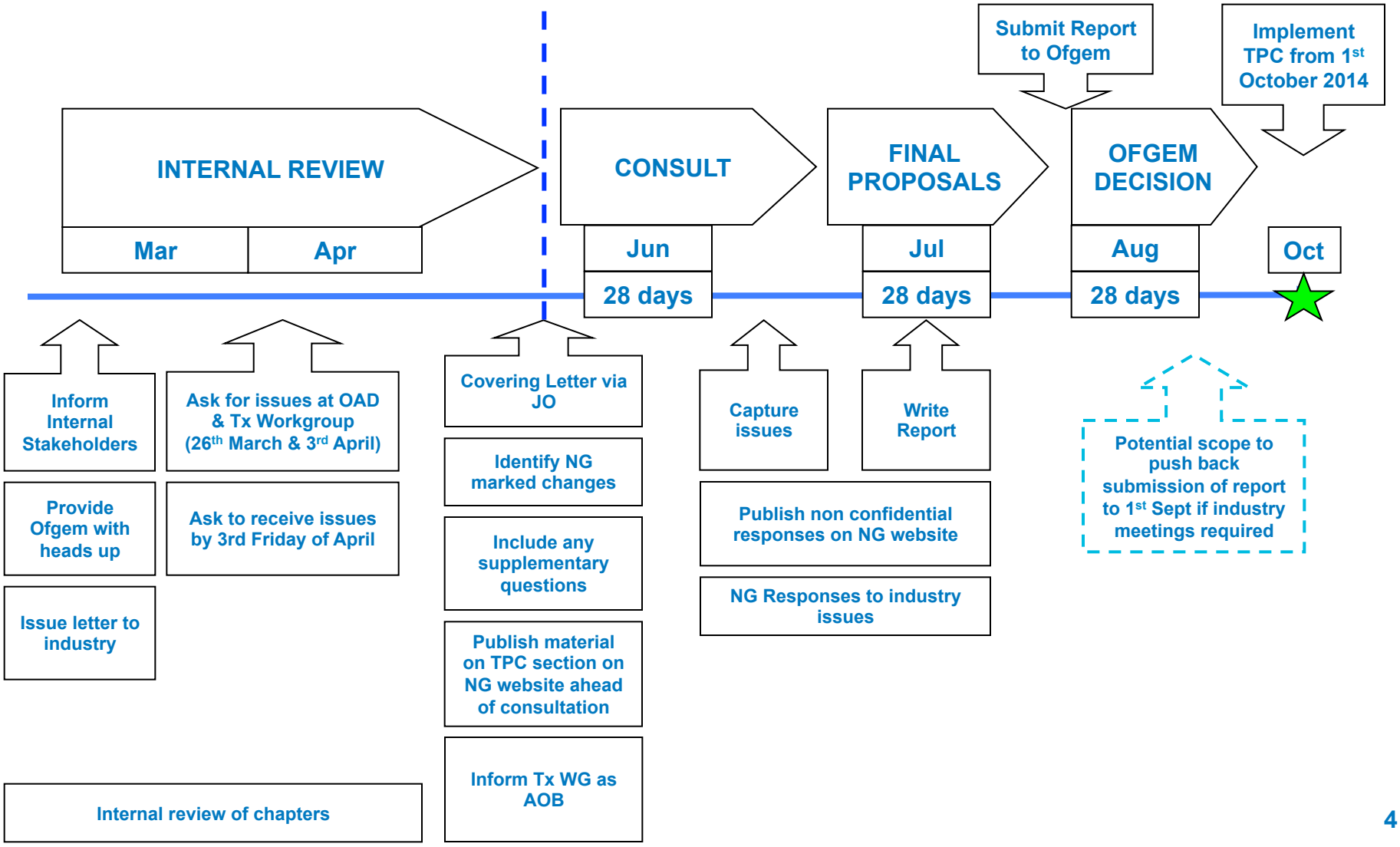
Background

- National Grid Gas plc ("NGG") has a Licence obligation under Licence Special Condition 7B to review, and consult on, the Transmission Planning Code ("TPC")
- Developed to improve transparency of NTS planning process
- Description of the main technical factors that affect the planning and development of the NTS and includes a methodology to determine the physical capability of the NTS
- NGG must comply with and maintain the TPC, reviewing it at least every two years
- Review cycle will include consultation with interested parties
- NGG will produce a report and submit it to GEMA ("Authority")
- Modifications to this code must be approved by the Authority before they are implemented from 1st October 2014

TPC – What is it?

- Framework document relating to the planning and development of the NTS discharging three requirements stipulated in the Licence;
  1. Main technical factors that affect the planning and development of the NTS
  2. Methodology to determine the physical capability of NTS considering:
     - Entry (Sp. C 5F) and exit (Sp. C 5G) capacity release obligations
     - How much capacity can be transferred / traded between entry points
     - How incremental flows at entry and exit affect system capability
     - "1-in-20" Statutory Network Security Standard
  3. Detailed assumptions on:
     - Likely developments in the patterns of gas supply and demand
     - Likely developments in the levels of gas supply and demand
     - The operations of the system under different supply and demand scenarios

TPC timeline 2014



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Issues…

As part of the TPC 2014 review we propose to review the application of the "1-in-20" Statutory Network Security Standard taking into account recent industry developments;

- RIIO
  - Generic Revenue Driver Methodology
- PARCAs
  - Capacity Release / Substitution Methodologies
- Uniform Network Code Modifications, EU codes, EU Third Energy Package related Directives
- Other issues identified through customer & stakeholder engagement

Summary

- Notice of TPC review and formal consultation
- NGG request that any issues with areas of the TPC which may require review to be notified to Richard Hounslea by Friday 25th April 2014 via any of the following methods;
  - e-mail: richard.hounslea@nationalgrid.com and/or ntsinvestment@nationalgrid.com
  - Post: Richard Hounslea
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Appendix

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Chapter Summary

- Chapters 2 & 3:
  - Legislative framework, policies and guidelines which have a direct bearing on the planning of the NTS and lead times for investment
- Chapter 4:
  - Overview of the Planning Cycle
- Chapters 5 & 6:
  - Supply and Demand assumptions used for planning
- Chapters 7 & 8:
  - Commercial entry and exit capacity release processes and their effect on investment planning decisions
- Chapter 9:
  - Assumptions used for planning analysis

Special Condition 7B

7B.2 The first requirement is that the TPC must cover all material technical aspects relating to the planning and development of the pipe-line system to which this licence relates, that may have a material impact upon persons connected to or using (or intending to connect to or use) that pipe-line system.

Chapter 2: Legislative framework

- Gas Act 1986 and Licence
- Planning Act 2008
- Pipeline Safety Regulations 1996
- Pressure Systems Safety Regulations 2000
- Gas Safety (Management) Regulations 1986
- Environment Impact Assessment Directive
- Town and Country Planning Act 1990
- Integrated Pollution Prevention & Control Directive 1996
- EU Emissions Trading Scheme Directive 1996

- Chapter 3: Policy and Guidelines
  - Relevant IGEM guidelines
  - National Grid planning policy

Special Condition 7B.3

7B.3 The second requirement is that the TPC must include a methodology to determine the physical capability of the pipe-line system to which this licence relates ...”

Chapters 5 and 6: Supply and Demand

- Physical capability is dependent on supply/demand assumptions used

Chapter 4: Investment Planning

- Network capability analysis and investment planning analysis

Chapter 9: Network Analysis

- Network analysis assumptions

Special Condition 7B.3

"...that specifies in detail how the Licensee takes into account:

(a) its entry capacity release obligations ... and its exit capacity release obligations ...;

(b) the amount of capacity that may technically be transferred or traded between NTS entry points;

Chapter 7: Entry Capacity

- Influence of QSEC, IECR and capacity substitution on plan
- T&T undertaken in operational timescales
- IECR and Entry Capacity Substitution Methodologies contain detail

Chapter 8: Exit Capacity

- Transitional period only
- Interaction of OCS and load enquiry data with plan
- ExCR contains detail

Chapter 4: Investment Planning

- Physical model results compared against commercial obligations

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Special Condition 7B.3

(c) the impact of incremental gas flows upon the capability of the pipeline system to which this licence relates at each NTS Entry Point and NTS Exit Point; and

(d) The Statutory Network Security Standard.

Chapter 4: Investment Planning

- Planning cycle, network capability and investment planning

Chapter 9: Network Analysis

- Network analysis assumptions
- 1-in-20 peak as in S.Sp.C. A9
- *also GSMR requirement for adequate pressure for gas leaving the NTS*

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Special Condition 7B.4

7B.4 The third requirement is that the TPC must include the detailed planning assumptions that the Licensee is uses in respect of:

(a) the likely developments in the patterns of the supply of gas and the demand for gas;

(b) the likely developments in the levels of the supply of gas and the demand for gas; and

(c) the likely operation of the pipe-line system to which this licence relates for any given pattern and/ or level of supply of gas or demand for gas.

Chapters 5 and 6: Supply and Demand

- Scenario based approach
- TYS, Demand Forecasting Methodology contain details

Chapter 9: Network Analysis

- Use of network analysis models for relevant gas year and supply/demand scenarios
- Network analysis assumptions