

Gas System
Operator

Data Enhancement Project - Update

Transmission Working Group
05/09/2019

nationalgrid



Context: Energy Data Taskforce Recommendations

The Energy Data Taskforce, commissioned by Government, Ofgem, and Innovate UK, has set out five key recommendations that will modernise the UK energy system and drive it towards a Net Zero carbon future within their report: A Strategy for a Modern Digitalised Energy System:

1. Digitalisation of the Energy System
2. Maximising the Value of Data
3. Visibility of Data
4. Coordination of Asset
5. Visibility of Infrastructure and Assets

Martin Cave, Ofgem chairman, said: “Data will play a crucial role in enabling competition and innovation to drive down prices for customers and provide them with new products and services. “This is why Ofgem fully supports the Taskforce’s five recommendations to improve data use. We will be working with BEIS, consumer groups and the industry to ensure better use of data unlocks a brighter future for energy consumers.”

There is an increasing need for more visible and relevant data for all industry participants to be able to utilise. An agile process will facilitate the access to this data.

Background

Real Time Supply Data

- Modification 0006 - *3rd Party Proposal : Publication of Near Real Time Data at UK sub-terminals* was implemented in October 2006. The modification was raised to mandate Transco to publish the data as Transco had been reluctant to do so without discussion for the legal, commercial and technical issues.
- This obligated near Real Time Supply Data to be published in line with TPD – V Annex V-1
- Any amendments to this data would need to be via a Uniform Network Code (UNC) modification

Real Time Demand Data

- Following customer feedback and to provide additional information to the industry National Grid has been publishing Real Time Demand Data
- This is currently not governed

Both Real Time Supply Data and Real Time Demand Data are published on the National Grid Website in the same place

Governance of Real Time Data

With the improvements to the provision of data being offered by NTS we have come up with the following options to govern the Real Time Supply Data (Supply Data) and the Real Time Demand Data (Demand Data)

| Option | Pros | Cons |
|---|---|---|
| Add Demand Data to UNC via a modification | Both Supply Data and Demand Data will be governed the same | Resource and time of a modification which may require development at workgroup Any subsequent changes require a modification |
| Supply Data to be removed from UNC and governed with Demand Data via the Data Dictionary route | Both governed in the same place Data dictionary to be a single repository of data provisioning, governed by the Uniform Network Code Operations Reporting Manual via UNCC* Quicker to change than the UNC process | Resource and time of a modification (anticipated self-governance, straight to Code Administrator Consultation) |
| Continue to provide Supply Data in line with UNC requirements. Add Demand Data to the Data Dictionary | Adding in Demand Data to the Data Dictionary is via UNCC approval; no modification required No changes to UNC | Governance of real time data in different places |
| No governance process for Demand Data | No change required | No governance of Demand Data |

* Uniform Network Code Committee

Clarification on the change being proposed

The change is:

- Proposing to introduce a consistent way to govern data; with both Real Time Supply Data and Real Time Demand Data governed alongside all other Data within the UNC Data Dictionary
- To agree a robust governance process that provides comfort for future changes; whilst being more agile than introducing UNC modifications for any change
- Not changing any data currently published
- Not changing the platform that data is currently published on

Transmission Workgroup Discussion 01/08

National Grid's preferred option is for Real Time Supply Data to be removed from UNC and governed via the UNC Data Dictionary and the UNC Operations Reporting Manual because:

- There is a process for engagement with the industry. No data will be added or removed without industry consultation
- The UNC Data Dictionary and Operations Reporting manual governs most of the data provided by National Grid. EU mandated data will be excluded from this process
- There is already a robust process in UNC to govern the data via the Operations Reporting Manual and Data Dictionary
- The process to update is a quicker process and more agile than UNC modification development which aligns to Energy Code review aspirations

At Transmission workgroup in August the general feedback was for Real Time Demand Data to be added to UNC via a modification

Transmission Workgroup Concerns - REMIT

REMIT: (REGULATION (EU) No 1227/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL, of 25 October 2011 on wholesale energy market integrity and transparency) obligations include:

- Provisions that require publication of data under Article 4.
- Provisions related to the inside information.
- The publication of data and data availability (i.e. data may need to be available to all market participants at the same time).

Transmission Workgroup do not want any risks with regards to data required to be published under REMIT, nor any disclosure of information that has an adverse impact

REMIT obligations / EU mandated data are deemed superior to UNC obligations.

All EU mandated data will be treated separately and is not being proposed to be amended via the UNC Data Dictionary or UNC processes.

A process for objection to new data items proposed has been included within the process whereby Users can flag any concerns if it is viewed as impacting on EU mandated data.

Current Governance of Data

| Data subject to Governance via the UNC Operations Reporting Manual and UNC Data Dictionary | | Data subject to Governance via the UNC modification process |
|--|--------------------|---|
| Balancing | LNG | Real Time Supply Data |
| Capacity Auction | Storage | |
| Capacity entry | Prices | |
| Capacity Exit | Shrinkage | |
| CV | Supply | |
| Demand | Throughput | |
| Gas Trading | Weather | |
| Interruption | Transitional Items | |
| Linepack | | |

Real Time Demand Data is currently not subject to any formal governance arrangements

Gas Operational Data Community

The Data Community website was created to help facilitate collaboration across the gas industry, providing further transparency of gas operational data. Its aim is to maximise the transparency of data and decisions, to enable efficiencies within business decisions.

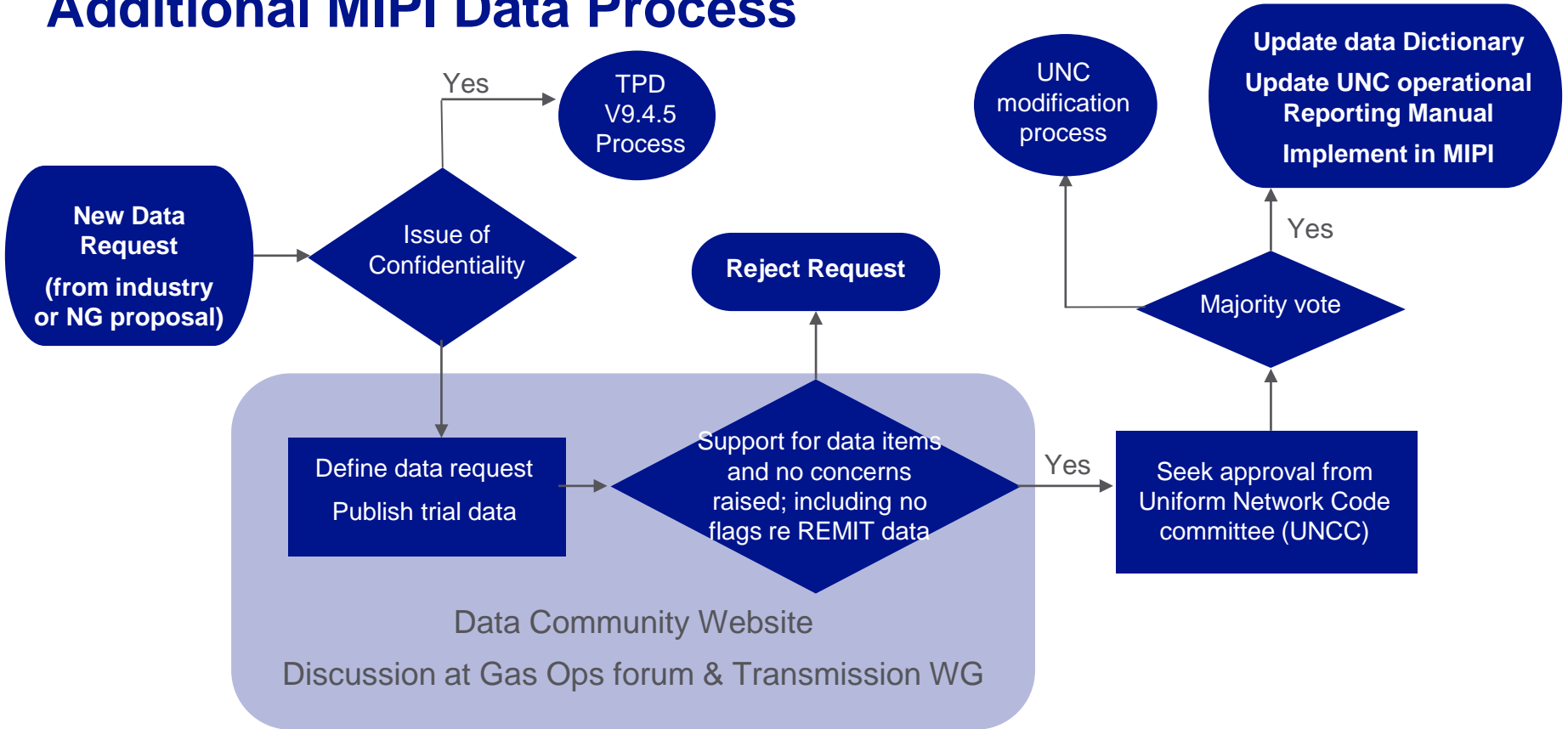
This enables NG to communicate to the market in an efficient manner on residual balancing decisions, to provide better visualisation, to test concepts and gain feedback.

The website is available to all to register, engage in discussion forums, vote and read up on all updates.

- There are currently over 110 organisations signed up and over 250 participants

Feedback to date is that the industry want an agile process to implement new data requirements efficiently – with limited cost and time

Additional MIPI Data Process

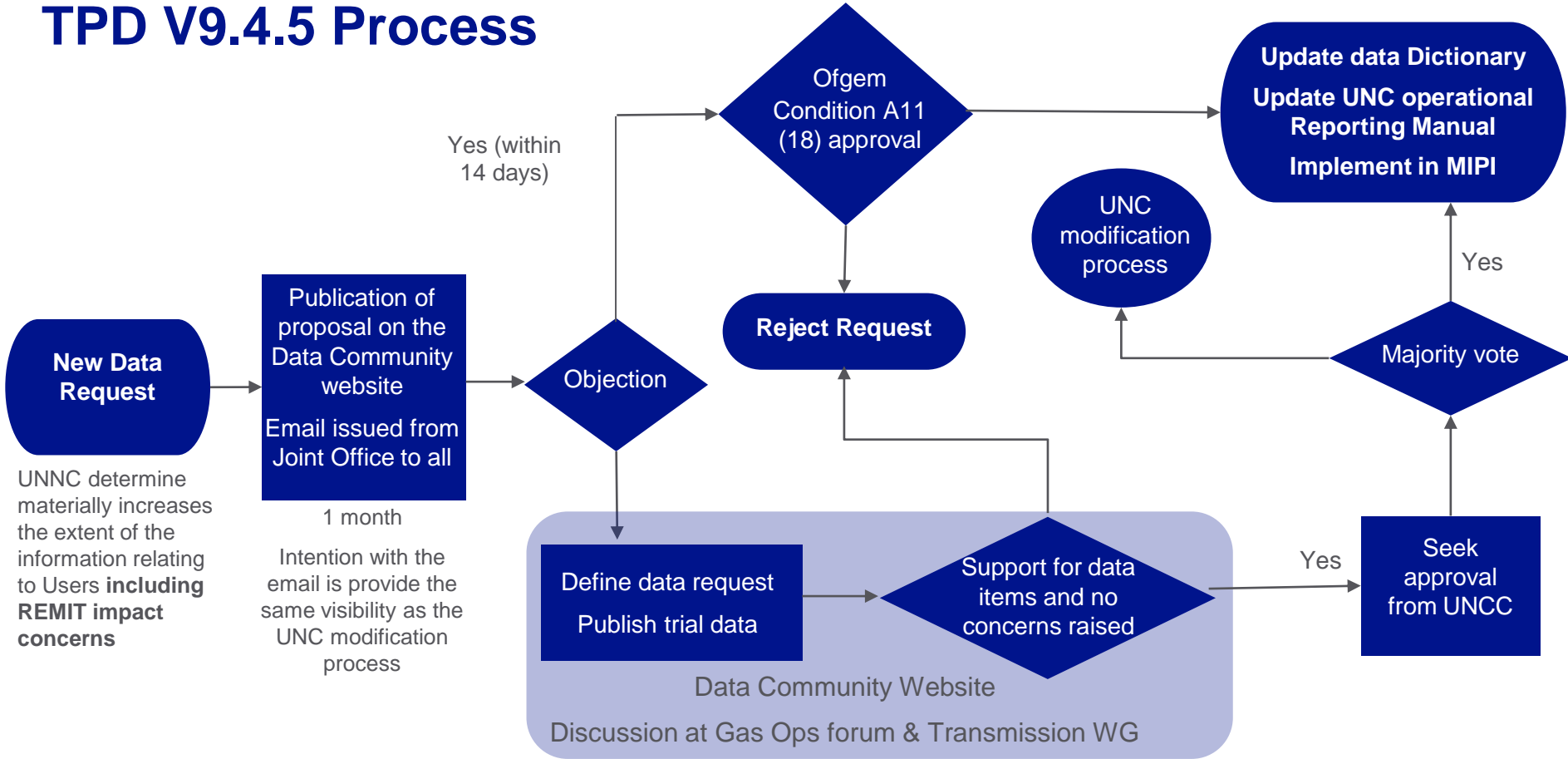


UNC TPD - Section V

9.4.5 If National Grid NTS proposes to revise the Uniform Network Code Operations Reporting Manual, it shall obtain prior approval by Panel Majority of the Uniform Network Code Committee, and if such revision materially increases the extent of the information relating to Users to be published pursuant thereto:

- (a) National Grid NTS will notify Users of its proposal not less than one month before implementing such proposal;
- (b) any User may, within 14 Days after National Grid NTS's notification under paragraph (a), notify National Grid NTS that the User objects to such revision, providing reasonable details of the grounds for the User's objection;
- (c) if a User so notifies an objection to National Grid NTS, National Grid NTS will not implement the revision unless the Authority shall (upon National Grid NTS's application) give Condition A11(18) Approval to its doing so.

TPD V9.4.5 Process



What is captured in the UNC Data Dictionary

Balancing Data Dictionary

| Data Item | Unit of Measurement | Publication Frequency (Daily, Weekly Monthly) | Publication For (Hourly,D, D+1,D+2,M+15 etc OR ADHOC) | Approx Scheduled Publication Time | Relates to Network (NTS,LDZ or Both) | Data Source | Associated Data | Short Definition | Description of data item (eg.North, South, Consolidated) |
|--------------------------------|---------------------|---|--|-----------------------------------|---------------------------------------|-------------|-----------------|--|---|
| Input Balance Requested Energy | kWh | Daily | D-1 - D | Hourly | NTS | - | - | The unapproved aggregate Shipper requested input nominations | The unapproved aggregate Shipper requested input nominations, determined hourly from midnight the day ahead through to 02:00 on the Gas Flow Day. |
| Input Balance Scheduled Energy | kWh | Daily | D-1 - D | Hourly | NTS | - | - | The approved aggregate Shipper scheduled input nominations | The approved aggregate Shipper scheduled input nominations, determined hourly from midnight the day ahead through to 02:00 on the Gas Flow Day. |

What is captured in the UNC TPD-V

Annex V-1

Operational and Market Data

| Column | Name | Description | | |
|---|---|--|--------------|------------|
| 1 | Data | data definition and indication of the time period to which the data corresponds | | |
| 2 | Timing | initial publication timing and where appropriate, timing of updates if the data is subject to any change | | |
| 3 | Format | tabular, graphical, other | | |
| 4 | Presentation | downloadable, viewable or both | | |
| 5 | Disclosure | public or restricted (and if restricted, list of entities to whom the data can be released) | | |
| Data | Timing | Format | Presentation | Disclosure |
| The rate of flow of gas (in MSCM per Day) over a 2 minute period into the NTS at each Individual System Entry Point capable of flowing (in aggregate) more than 10 MSCM per Day of gas into the System. | Every 12 minutes, in respect of the six 2 minute periods commencing 24 minutes before the time of publication and ending 12 minutes before the time of publication. | Tabular | Viewable | Public |
| The rate of flow of gas (in MSCM per Day) | Every 12 minutes, | Tabular | Viewable | Public |

Data Governance through UNC Data Dictionary

| | |
|---|--|
| <p>Engagement</p> | <p>It is proposed to engage as wide as possible via:</p> <ul style="list-style-type: none"> • The data community website which currently has over 250 participants • The Gas Ops forum • Transmission Workgroup • Distribution Workgroup (where a change would impact on LDZ data) • Change Management Committee (where a change would impact on UK Link or Gemini data) <p style="text-align: right;">} Same discussion forums as UNC modification proposals</p> |
| <p>The Data Community Website</p> | <p>Allows National Grid to:</p> <ul style="list-style-type: none"> • Obtain feedback from a wide group of stakeholders including smaller market participants who may lack resources to attend Regulatory meetings. • Allows Grid to obtain a body of evidence (level of interest/benefit to the market) for proposed new data to justify the cost of data provision. • Provides Grid with the ability to trial data proposals and develop the maturity of the final proposal prior to seeking regulatory approval. |
| <p>UNC Data Dictionary process</p> | <p>Benefits for the process</p> <ul style="list-style-type: none"> • It is a robust process in place with lots of engagement and the opportunity to veto a change at various stages or to defer to a UNC modification • Could see a change within a few months instead of a lengthy UNC modification development process. • A uniform process will be introduced for all data changes rather than the mix and match or regulated/non-regulated data in the current regime |

Energy Codes Review

At Transmission Workgroup in August one member expressed concerns in case UNCC was no longer operational following the outcome of the Energy Codes Review. If this is the case all the provisions for approval via UNCC will need to be catered for e.g. the AUGE is governed through UNCC therefore we believe this will be considered within the review.

We feel that moving all the data into the governance framework of the UNCC aligns to the Energy Codes review for the following reasons:

- One of the outcomes of the Energy Code Review is to make the energy code framework agile and responsive to change that benefits energy consumers – the UNC modification process is lengthier and more resource intensive than approval via UNCC
- One of the four areas of code reform is for *Code simplification and consolidation* - adding data items into UNC is making the Code more granular and complex

Discussion and questions?

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