Gas Transmission

NTSCMF

Action updates

04 May 2021

nationalgrid

Outstanding Actions:

- **0107 –** National Grid (CW) to provide documented explanation and diagrams detailing the relationship between the SO/TO and TS/NonTS revenue services
  - Some minor updates to the material shown on 12 April (and reproduced here)
- **0301 –** National Grid (CW) to provide detailed information regarding the cash flows around capacity neutrality
  - To be provided as part of the workgroup on UNC0765 (https://www.gasgovernance.co.uk/0765)

Outstanding Actions:

- **0401 –** National Grid (CWi) to consider the definition of TS-Related NTS System Operation Revenue within UNC TPD Section Y paragraph 1.5.1 (d) whether it could be better defined.
  - Over time, if there are aspects as we move into the new set of charges, any such clarification could be considered. Does not need to be restricted to this aspect should there be any other beneficial clarifications to make.
- **0402 –** National Grid (CWi) to provide an explanation of what the gas SO does and what it receives revenue for
  - Verbal update
- **0404 –** National Grid (CWi) to confirm whether to expect any outcome from the CMA appeal to affect prices and/or allowed revenue.
  - Verbal update
- **0405 –** National Grid (CWi) to provide clarification of how debits and credits will be processed under Modification 0765.
  - Will be expanded upon under the 0765 workgroup

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Action updates

Action 0103

nationalgrid

Licence – determining target revenues for a Formula (or Regulatory Year) (April to March)

- Transmission Owner Allowed Revenue is as per the Licence for a given Formula (or Regulatory) Year. Below is the high level equation from the new Licence effective 01 April 2021
- $ARt = ADJRt + Kt + LARt$
- System Operator Allowed Revenue is as per the Licence for a given Formula Year. Below is the high level equation from the new Licence effective 01 April 2021
- $SOARt = SOADJRt + SOKt + SOLARt$

- Allowed Revenues for a given year are essentially a set of allowances, adjustments and incorporating an under or over collection from a previous year

Transmission Services and Non-Transmission Services Revenues

- **Calculating the revenue to use for Transmission Services and Non-Transmission Services**
- There are some key steps here:
- Step 1: Regulatory Year outputs for the year ending within the Gas year being priced
- Step 2: Removal of the Kt value to be split across Entry and Exit
- Step 3: Determining other adjustments (the forecast revenue to consider as Transmission that may sit as recovered SO Revenue)
- Step 4: Apportioning across the Gas Year in line with the UNC (each for Entry and Exit)

Transmission Services

- **Step 1**: Regulatory Year outputs for the year ending within the Gas year being priced
- Under the Licence there is a Total TO and Total SO Revenue determined under the annual iteration process that sets the revenues for the Formula Year which runs April to March.
- As part of these two Revenues there is a “K” value (“K” for TO and “SOK” for SO). for each marking an under / over recovery from a previous year.
- For the purposes here for Transmission Services, the TO needs this separated so there is a Base revenue (net of Kt) and a Kt value.
- These values are also adjusted to deduct any Pensions deficit charges and Metering charge values
- **This marks the end of this step and fulfils the Licence determination of the Allowed Revenues to be input into the UNC processes**

Transmission Services

- **Step 2**: Removal of the Kt value to be split across Entry and Exit
- The Kt value represents the total Kt value for TO. This needs to be separated into an Entry and Exit proportion.
- This is split by a ratio determined by the UNC that represents the Entry and Exit “performance” for the year in which Kt relates so the Entry proportion can be added or subtracted from a target Entry revenue and the Exit proportion can be added or subtracted from a target Exit revenue.
- **This marks the end of determining the Kt value and the proportion to be applied to Entry and Exit to adjust the revenues in line with the UNC processes**

Actions: 0107

- **Step 3**: Determining other adjustments (the forecast revenue to consider as Transmission that may sit as recovered SO Revenue)
- This is referred in the UNC as “Allowed TS-Related NTS System Operation Revenue” which is made up of:
  - Allowed TS-Related NTS System Operation Entry Revenue
  - Allowed TS-Related NTS System Operation Exit Revenue
- This amount should represent the revenue to be recovered from Capacity that would sit as SO Recovered Revenue (not allowed Revenue).
- **This marks the end of determining the adjustment values to apply**

Actions: 0107

- **Step 3**: Determining other adjustments (the forecast revenue to consider as Transmission that may sit as recovered SO Revenue)
- This is referred in the UNC as "Allowed TS-Related NTS System Operation Revenue" which is made up of:
  - Allowed TS-Related NTS System Operation Entry Revenue
  - Allowed TS-Related NTS System Operation Exit Revenue
- This amount should represent the revenue to be recovered from Capacity that would sit as SO Recovered Revenue (not allowed Revenue).
- **This marks the end of determining the adjustment values to apply**
- **The adjustments under the term "Allowed TS-Related NTS System Operation Revenue" term are:**
  - **Non Obligated Entry Capacity**
  - **Non Obligated Exit Capacity**

Actions: 0107

- **Step 4**: Apportioning across the Gas Year in line with the UNC (each for Entry and Exit)
- This step follows a calculation outlined in the UNC to take the output from Step 1, Step 2 and Step 3 and a number of other elements:
  - Allowed Revenue (Entry or Exit) for the Formula Year ending in the Gas Year being priced (Step 1)
  - K_t (apportioned between Entry and Exit) (Step 2)
  - Allowed TS-Related NTS System Operation Entry or Exit Revenue (Step 3)
  - Corresponding Revenue for the period falling within the Formula Year prior to the Gas Year being priced (this will include Capacity and Revenue Recovery charges)
  - The F_{ry} factor – an estimate dividing the average expected revenue per month across the Gas Year (October – September) being priced divided by the average monthly expected revenue per month in the period falling within the Formula Year of the Gas Year being priced (October to March)
- **This delivers the revenue to use for the purposes of setting charges for Transmission Services**

Illustration

Allowed FY Transmission Services Entry Revenue (AFTSEnRt)

AFTSEnRt = (0.5 * BMTOExcNTRt) + ATSSOEnRt – KEn,t

Where:

BMTOExcNTRt is the Base Revenue from Step 1

ATSSOEnRt is Entry value from Step 3

KEn,t is the Entry value from Step 2

This resulting value is then the adjusted under Step 4

N.B. The polarity of the KEn,t adjustment is being updated with UNC0764 to be "+" to align to the current Licence

Allowed FY Transmission Services Exit Revenue (AFTSExRt)

AFTSExRt = (0.5 * BMTOExcNTRt) + ATSSOExRt – KEx,t

Where:

BMTOExcNTRt is the Base Revenue from Step 1

ATSSOExRt is Exit value from Step 3

KEx,t is the Exit value from Step 2

This resulting value is then adjusted under Step 4

N.B. The polarity of the KEx,t adjustment is being updated with UNC0764 to be "+" to align to the current Licence

Illustration

Allowed FY Transmission Services Entry Revenue (AFTSEnRt) is then adjusted under Step 4

ARy = (ARt – Rpt) * Fry * 2

Where:

ARt is the output Entry Revenue from completing the process in the previous slide

Rpt is the Entry Revenue estimated to be earned in the Formula Year falling prior to Gas Year Y

Fry is a ratio determined by dividing (A/B) where:

A = amount of Entry Revenue expected to be earned on average in any month in Gas Year Y as a whole

B = amount of Entry Revenue expected to be earned on average in any month in the part of Formula Year t that falls in Gas Year Y

Allowed FY Transmission Services Exit Revenue (AFTSExRt) is then adjusted under Step 4:

ARy = (ARt – Rpt) * Fry * 2

Where:

ARt is the output Exit Revenue from completing the process in the previous slide

Rpt is the Exit Revenue estimated to be earned in the Formula Year falling prior to Gas Year Y

Fry is a ratio determined by dividing A/B where:

A = amount of Exit Revenue expected to be earned on average in any month in Gas Year Y as a whole

B = amount of Exit Revenue expected to be earned on average in any month in the part of Formula Year t that falls in Gas Year Y

Transmission Services Entry / Exit Revenues for Gas Year Y

Example of adjusting the Entry Allowed Revenues across the Gas Year to determine the target Entry Revenue for setting Entry Reserve Prices

Entry

Formula Year	Apr - Sep 2020	Oct - Mar / 21	Apr - Sep 2021	Oct - Mar / 22	Apr - Sep 2022	Oct - Mar / 23
AR_t (£m)	374.6		460.9			
Gas Year		2020/21		2021/22		
R_{pt} (£m)	99.9		*230.2*		*193.4*	
AR_y (£m)		504.9		424.0		
A		42.1		35.3		
B		45.8		38.4		
FR_y (A/B)		0.9		0.9		

Example of adjusting the Exit Allowed Revenues across the Gas Year to determine the target Exit Revenue for setting Exit Reserve Prices

Exit

Formula Year	Apr - Sep 2020	Oct - Mar / 21	Apr - Sep 2021	Oct - Mar / 22	Apr - Sep 2022	Oct - Mar / 23
AR_t (£m)	372.19		448.28			
Gas Year		2020/21		2021/22		2022/23
R_{pt} (£m)	152.9		*224.6*		*229.1*	
AR_y (£m)		443.91		452.77		
A		37.0		37.7		
B		36.6		37.3		
FRy (A/B)		1.0		1.0		

Licence mapping for Recovered Revenues

Main Transmission and Non-Transmission Charges

Transmission Services Revenue

- Entry Capacity Charges
- Entry Revenue Recovery Charges
- Exit Capacity Charges
- Exit Revenue Recovery Charges

Non-Transmission Services Revenue

- General Non-Transmission Entry & Exit Charges
- St. Fergus Compression
- Pensions & Metering Charges

- Income associated to the Entry Capacity charges, Exit Capacity charges, Entry Revenue Recovery charges and Exit Revenue Recovery charges are recorded as Transmission Services collected income. The majority of the revenue coming from the charges under Transmission Services will be TO Recovered Revenue.
- Capacity Neutrality is part of the SO Recovered Revenues but neutral overall due to the nature of the recovery and payments process. Overruns where contributing towards recovered revenues are under the SO Recovered Revenues. All of the Non-Transmission Services Revenue except the Pensions and Metering will be SO Recovered Revenue.
- Whilst unlikely, to consider how this impacts TO and SO Recovered Revenues, if all forecasts were “perfect” then for a relevant period such as the Formula Year then we would see a an under recovery against the TO and an over recovery against the SO even though for the same period Transmission Services and Non-Transmission Services would be exact. This would be expected, the Licence and UNC do not need to perfectly align for this.

Contact

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