Gas System Operator

Charging methodology to avoid the inefficient bypass of the NTS

Idea 2a: NTS Bypass Avoidance Charge, National Grid

NTSCMF 0670R Workgroup
10th January 2019

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Contents page

01	Basis of Idea	03
02	Assumptions	05
03	Methodology	07
04	Assessment	12

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01

Basis of Idea

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Basis of Idea

The following elements have been considered in creating the idea for the NTS Bypass Avoidance Charge:

- Adjustment of **capacity charges**
- Based on **CWD**
- Self limiting – **no distance cap**, methodology/formula should restrict application
- **Not available to storage sites**
- **No direct link to pipeline cost** calculations, factor applied to make distance a non-linear formula element to represent varying costs
- **User commitment** through application process and non-use charges…and only available where firm capacity booked

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Assumptions

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Current Assumptions

- **A UNC 0621 Mod** has been in effect since October 2019 that features:
  - CWD using National Grid FCC from October 2021
  - No NTS Optional Commodity Charge exists after October 2021
- **Yearly application product** can be combined with a standard daily product with multiplier
- Additional element can be applied into the **anticipated bookings** process
- **Technically** available to all users (apart from storage)
- The level of charge derived provides enough incentive to avoid inefficient bypass

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03

Methodology

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Methodology

Charge is intended to provide reduced entry and exit capacity charges at applicable points.

As with 0653, there is the need for defining an Applicable Quantity (Q) per gas day

- Q = MIN {CAPen, CAPex, FLOWen, FLOWex } where
- CAPen = User's entry capacity entitlement on the day at the applicable ASEP
- CAPex = User's exit capacity entitlement on the day at the applicable exit point
- FLOWen = User's gas flow entry allocation on the day at the applicable ASEP
- FLOWex = User's gas flow exit allocation on the day at the applicable exit point

Transmission Services charges or Non-Transmission Services charges will apply, as appropriate, to those capacities or gas flows not covered by the Applicable Quantity (Q)

Methodology

Reserve Charges for the Applicable Quantity:

Alternative Entry Capacity Charge = ((D x Z) / WADen) x RPen

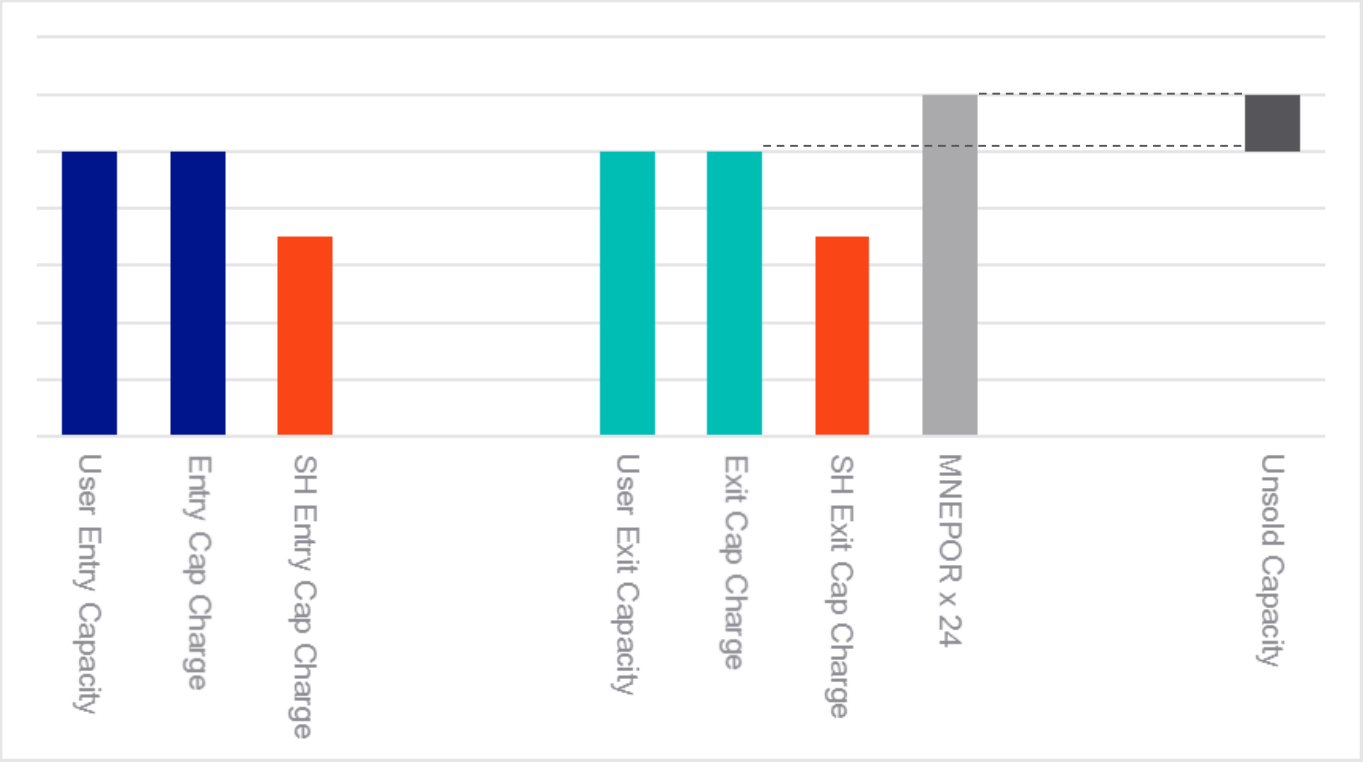
Alternative Exit Capacity Charge = ((D x Z) / WADex) x RPex

- D is the straight-line distance between the entry and exit point
- Z is a factor (yet to be determined) applied to D in order to reflect the likelihood of increased cost and complexity of pipeline projects over distance
- WADen is the capacity weighted average distance for the entry point
- WADex is the capacity weighted average distance for the exit point
- RPen is the prevailing capacity reserve price for the entry point
- RPex is the prevailing capacity reserve price for the exit point

Methodology

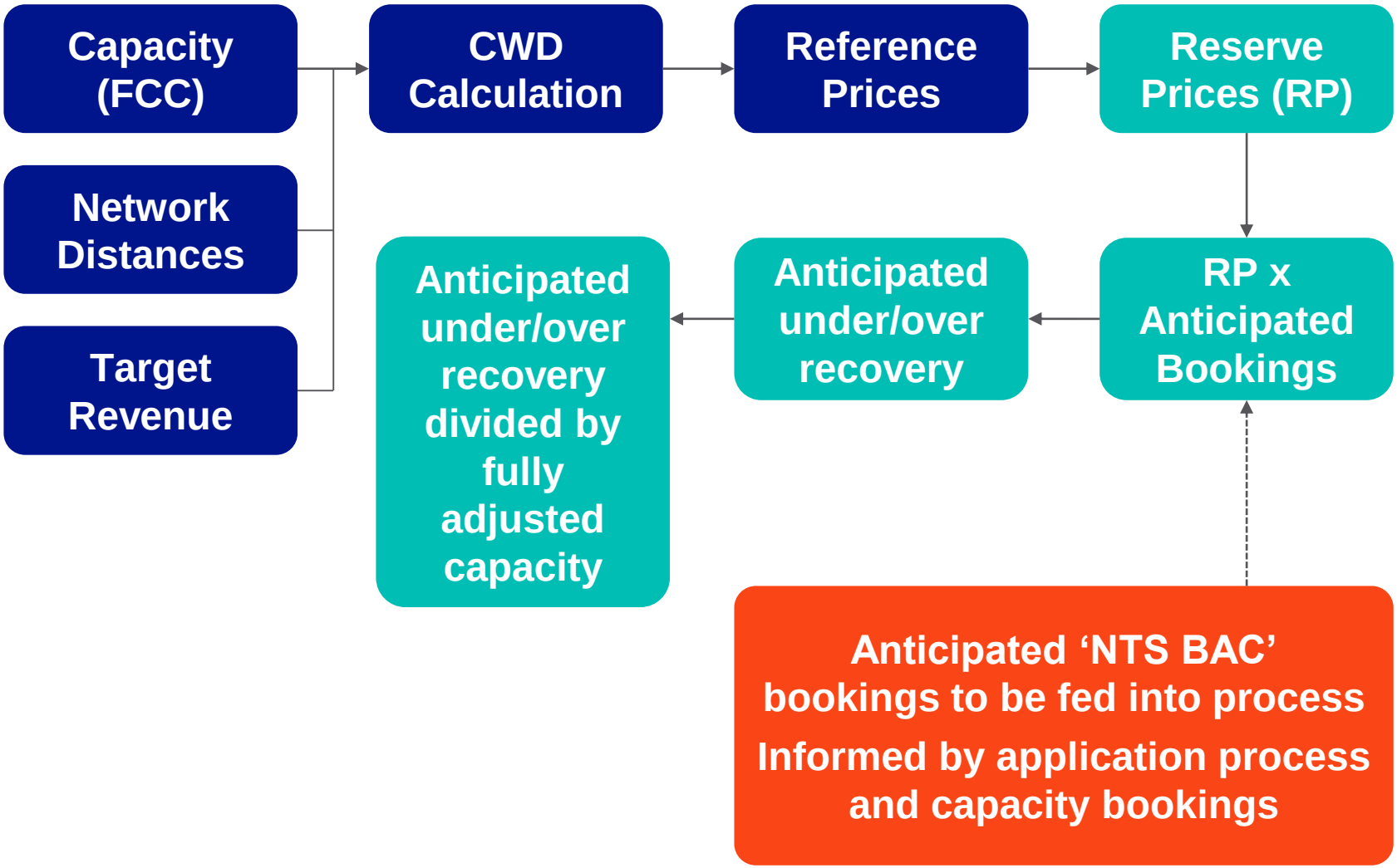
If an independent pipeline was in operation, associated costs would be incurred regardless of capacity or flow on the day. A Nominal Charge could be applied to unsold capacity of exit point:

- NCQ = (Maximum NTS Exit Point Offtake Rate (MNEPOR) x 24) – (all Users CAPex)



Note: Graphical example, variance of SH charges not based on any calculation

Methodology



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Assessment

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Proposed Assessment Criteria

- Reliant on FCC, therefore **assumptions need to be made** on change between obligated capacity baseline and FCC, influenced by behavioural changes anticipated from lack of zero priced capacity
- Analysis to be completed against a **clear methodology** that covers a **range of scenarios** – e.g. workgroup agreed variance in firm to interruptible/off-peak bookings
- **Comparison** of the potential impact on current users
- Check against relevant legislation for **compliance**

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