



## **Mod 670R – Avoiding inefficient bypass**

Idea 3: Cost reflective bypass  
avoidance charge

## Basis of idea

The following elements have been considered in creating the idea

- Creation of a capacity based charge for relevant routes
- Based on a proxy of costs for building and maintaining a pipeline of a predefined distance (similar to the approach used currently)
- Could be self-limiting, or include a distance cap
- Not available to storage sites
- User commitment through application process and non-use charges

# Current Assumptions

- A UNC 0621 Mod has been in effect since October 2019 that features:
  - CWD or Postage stamp RPC
  - No NTS Optional Charge exists after October 2021
- The RPC introduced does not reflect the costs of building or maintaining pipelines, it being focused on the allocation or allowed revenues
- Yearly product
- Technically available to all Users, except storage
- The level of charge derived provides enough incentive to avoid inefficient bypass

# Methodology

Charge is intended to replace standard entry and exit capacity charges at applicable points.

**Approach 1** (as described in NTSCMF\_Gas Charging Review\_6 Nov 2017\_ppt)

Using current approach for determining OCC rate (underlying cost assumptions tbd)

a) 
$$\frac{\text{OCC Rate (p/kWh)} \times \text{AQ (MNEPORx365)}}{365} = \text{Daily Pipeline cost (£)}$$

b) 
$$\frac{\text{Daily Pipeline Cost}}{\text{Capacity Forecast (kWh/day)}} = \text{Capacity Shorthaul Rate (p/kWh/day)}$$

Capacity Charge allocated at Exit only, with no charge at entry?

See later slide to guard against exploitation

# Example (using Mod 621 model)

- Entry Point Teesside
- Exit Point Billingham ICI
  - MNEPOR (Baseline) = 43m kWh/d
  - FCC = 19m kWh/d
  - Distance = 8.7 km

OCC Rate using current formula = 0.008198 p/kWh

Daily Pipeline Cost = £3525

Shorthaul Capacity Rate = 0.00018 p/kWh/d

If MNEPOR is booked, total Shorthaul Charge = £7,977 per day or £2.9m p/a

- Without shorthaul using Mod 621 model
  - Teesside Entry = 0.0426 p/kWh/d
  - Billingham ICI = 0.0161 p/kWh/d
- If MNEPOR is booked, total capacity charge = £25,241 per day or £9.2m p/a

# Alternative approach

- **Approach 2**

- Same as Approach 1, except total fee to be recovered from shorthaul User is equivalent to Daily Cost of Pipeline

- Daily Cost of Pipeline = Capacity shorthaul rate

MNEPOR

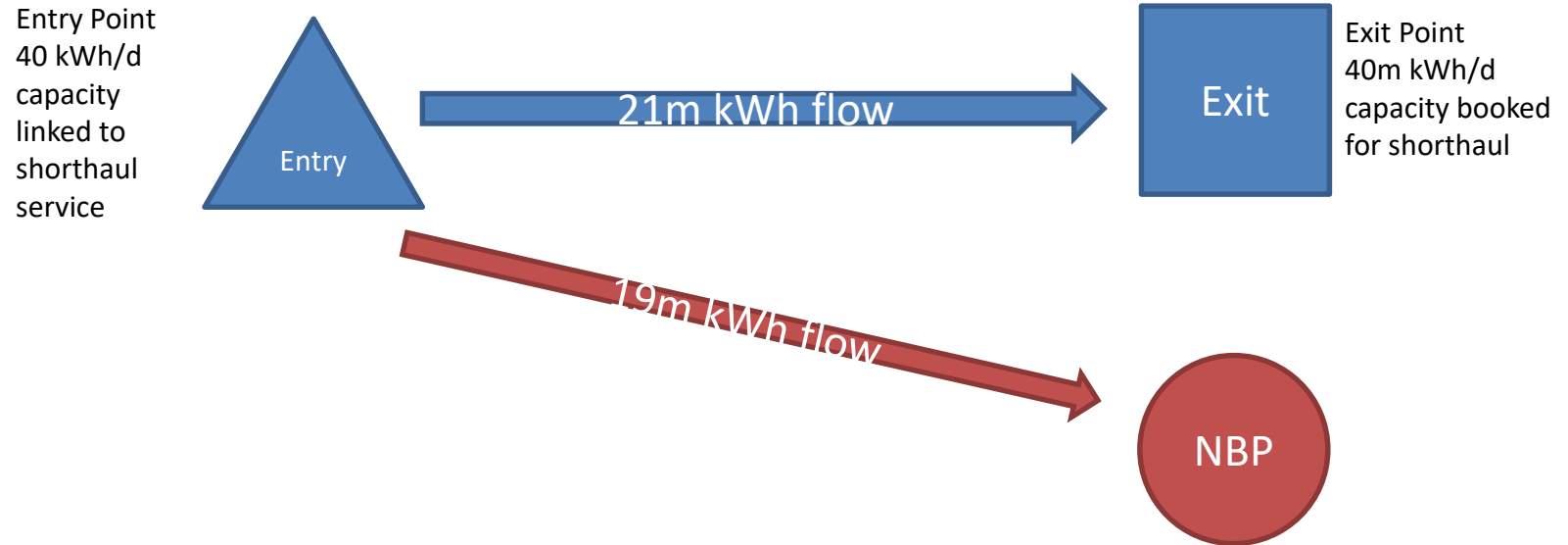
- User(s) required to book capacity equivalent to MNEPOR over the year
  - Where bookings are less than MNEPOR then additional fee applied
  - Note could use a p/kWh/km rate as an alternative

## Example – Approach 2

- $\text{£}3525 / 43\text{m kWh/d} = 0.000082 \text{ p/kw/d}$
- Assume bookings = 32m kWh/d
- Total capacity booking revenue =  $\text{£}2624$
- Where bookings are less than MNEPOR, difference is paid by User at Exit Point
  - Difference to be paid by shorthaul users =  $\text{£}901$  p/day

# Prohibiting exploitation under either approach

- As capacity bookings are not linked to flow, it would be possible to utilise entry capacity “allocated” for shorthaul purposes to be used more generally



- Potential solution would be to link nominations between entry and exit point in order to assign shorthaul capacity
- In the example, 21m kWh would be assigned shorthaul capacity, the remaining 19m kWh would be charged at standard entry capacity rates



# Proposed assessment criteria

- Consideration of underlying cost assessment for generating valuation of bypass pipeline
- Consider need for distance cap
- Comparison with non-cost based approaches (ideas 1 and 2)
- Consider possibility of using a p/kWh/km for approach 2
- Review impacts on all users
- Cross-check for compliance