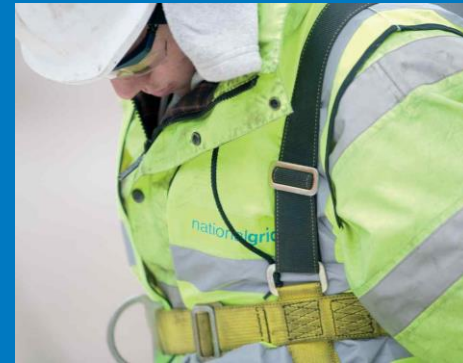


Gas Charging Review UNC0621



NTSCMF – 20 December
UNC0621 Workgroup

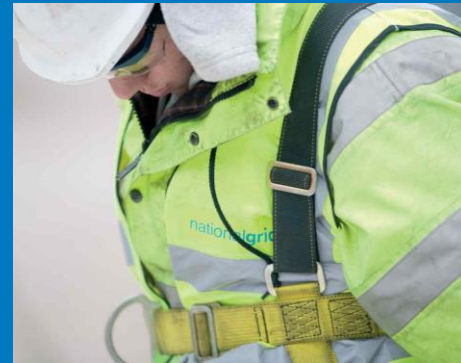
Please note: this is an updated slidepack. Updated slides are marked with a blue star.



Agenda

Area	Detail
UNC 0621 Development	<ul style="list-style-type: none">• Diary Planning
UNC Modification 0621 – updated draft for discussion	<ul style="list-style-type: none">• Thoughts since 14 December
UNC Modification 0621 proposals	<ul style="list-style-type: none">• Updates on the proposals and rationale behind proposals and areas of discussion• Additional thinking and development on certain aspects
Developing the analysis	<ul style="list-style-type: none">• Developing the analysis for UNC0621
Plan and GB/EU Consultation and change process	<ul style="list-style-type: none">• Overview of high level timeline
Next Steps	<ul style="list-style-type: none">• Next Steps for UNC0621

Gas Charging Review

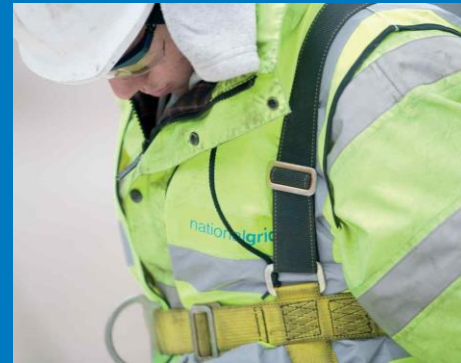


UNC Modification 0621 –proposals
Amendments to Gas Transmission Charging Regime

UNC 0621: Diary Planning

- Workgroups have been planned for Jan, Feb and March 2018.
- The next workgroup is scheduled for 3 Jan 2018
- What will the attendance be for the 3 Jan workgroup?
- Should it be rescheduled?

Gas Charging Review



UNC Modification 0621 –proposals
Amendments to Gas Transmission Charging Regime

Gas Charging Review:

UNC0621 – Modification proposals

- Further updates have been made in an updated draft published on the 20 December workgroup pages for UNC0621 to advance some of the areas.

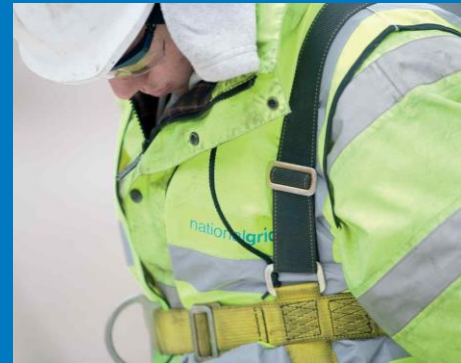
<https://www.gasgovernance.co.uk/0621/201217>

- These have been updated from the published UNC0621 available on the modifications page

<https://www.gasgovernance.co.uk/0621>

- This draft will be discussed at the 20 December UNC0621 workgroup
- Following workgroup discussions a further update will be published on 21 December and be issued as an amended Modification

Gas Charging Review



UNC Modification 0621 – updated draft
Latest thinking, proposals and options for discussion

Gas Charging Review:

UNC0621 – Key topics and proposals

- At recent NTSCMF meetings we have shared our updated thinking on the main aspects of the charging framework under review
- Further thoughts are provided in the following slides on the main topics including additional material for some including latest thinking ahead of final proposals in some cases
- It also focuses on certain areas that have progressed from previous updates and highlight any further discussions or developments or analysis that may be needed under UNC0621 or other changes.

Gas Charging Review: Reference Price Methodology (RPM)

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> Capacity Weighted Distance for the methodology to calculate reference prices and subsequent reserve prices (through any applicable adjustments) Introduces updated (or floating) payable price for capacity for Entry and Exit at all points.
Additional thinking for 20 December	<ul style="list-style-type: none"> CWD remains the approach for the proposal Netting off the Existing Contracts and Interim Contracts* ensures that required target revenue is recovered across the targeted capacity (subject to FCC being updated over time) Transition package – potential changes for 2021 to adjust CWD generated charges to minimise any Transmission Services top up charge. See further discussion.
Rationale for the proposal	<ul style="list-style-type: none"> Moves to a methodology that provides greater stability, reduced volatility and better predictability for capacity charges Reflects more the use of the network given that the NTS is not in a state of continued expansion Extensive work undertaken to review impacts of changing the current LRMC approach and comparisons to a CWD approach CWD provided a simpler framework and also improvements in line with target objectives for the charging methodology and stakeholder developed objectives.
Further Discussion	<ul style="list-style-type: none"> Treatment of CWD generated zero prices – reviewing magnitude of use of alternatives to assess materiality and likelihood. Treatment of Existing Contracts and Interim Contracts and revenue recovery approach linked to revenue reconciliation charges. Transition package – For 2021 adjust CWD generated charges to minimise the recovery charge to being mostly the forecast/actual variance. This means any under recovery driven by any discounts would result in an adjustment to ex ante reserve prices.

*Interim Contracts - Long Term Entry capacity allocated after 6 April 2017 but before the date of the Ofgem direction to implement this Proposal.

Gas Charging Review: Forecasted Contracted Capacity (FCC)

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> To use Obligated Capacity and transition to a forecast in the short term Have a transition arrangement to accommodate this change
Additional thinking for 20 December	<ul style="list-style-type: none"> Anticipate unpredictable capacity booking behaviours given the range of changes proposed under UNC0621. Revenue recovery and impacts on charges a concern to mitigate Believe move to an updated FCC linked to some evidence of behaviours is reasonable More certain proposals for transitioning FCC needed. Proposal to use obligated from October 2019 and using a National Grid generated forecast from October 2021.
Rationale for the proposal	<ul style="list-style-type: none"> Whilst accept that Obligated may not be the most appropriate to use, that to deliver the most cost reflective prices would require it to be based on a forecast of bookings, it is a reasonable starting point to be in keeping with objectives and deliver improved cost reflectivity in the short term. Moving from one framework to another, especially moving away from zero capacity prices, will drive unpredictable behavioural changes. Believe benefit from evidence of these changes post 2019 and in the short term move to a forecast of capacity bookings linked to this evidence.
Further Discussion	<ul style="list-style-type: none"> Zero CWD generated prices – other options besides using the nearest non-zero priced Entry or Exit Point’s reference price Compliance and Transition, how the impacts of FCC selection drives balance between capacity and commodity.

Gas Charging Review: Multipliers

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> To have a multiplier as a default, proposal was [1] and to be updated through a subsequent consultation Multipliers will not be 0, Calculated ex ante
Additional thinking for 20 December	<ul style="list-style-type: none"> More certainty for October 2019 needed. An ex ante value of 1 for all products eligible for a multiplier for October 2019. Multipliers more linked to driving behaviours than revenue recovery Provide flexibility to update in future years using appropriate governance.
Rationale for the proposal	<ul style="list-style-type: none"> A value of 1 places no preference between incentivising Long Term or Shorter Term Capacity bookings Do not want to have multipliers that put too much downward pressure on the capacity charges thereby driving recovery of revenues elsewhere into the methodology Generally with little scarcity of capacity, incentivising either Long term bookings or short term bookings for the purposes of signals for investment less necessary Gives those who book the choice of booking long or short term without any cost differential given choice of when to commit, with the same liability Provides framework to review and update this on a annual basis
Further Discussion	<ul style="list-style-type: none"> Timeline and method for updates beyond 2019

Gas Charging Review: Interruptible/Off-peak

Area	Detail
<p>Proposal in draft discussed on 13 October</p>	<ul style="list-style-type: none"> • Interruptible will be a discount from corresponding firm capacity product • To have an adjustment calculated through subsequent consultation • Interruptible adjustment will not allow zero reserve prices • Calculated ex ante, Single approach for all points
<p>Additional thinking for 20 December</p>	<ul style="list-style-type: none"> • To have an ex ante value in the proposal for October 2019 of 10% for Entry and Exit. • Beyond 2019, propose ranges (e.g. 10% bands) for adjustments linked to the outcome of the Interruptible calculation. Value linked to a probability of interruption and the 'A' factor. Likelihood of interruption is very low. • Banding provides stability in interruptible discount assuming interruption stays low providing certainty going forward.
<p>Rationale for the proposal</p>	<ul style="list-style-type: none"> • Acknowledge there is a probability of interruption even though it would likely be small. Would be subject to National Grid's forward view of interruption probability taking into account interruption to date. Therefore not zero for probability. • Can use the EU TAR NC framework for interruptible which would use a combination of the probability and an 'A' factor linked to the economic value associated to the interruptible capacity. • Use of ranges helps manage variances of resulting calculations.
<p>Further Discussion</p>	<ul style="list-style-type: none"> • Timeline and method for updates beyond 2019.

Gas Charging Review: Specific Capacity Discounts

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> Storage to receive 50% discount from the CWD generated capacity charge No other specific capacity discounts proposed
Additional thinking for 20 December	<ul style="list-style-type: none"> No change to proposed values for storage. Include other qualifying categories under TAR NC even if the proposed values would be zero (under this proposal) to allow for future changes as needed or beneficial to do so. (i.e. LNG introduced with 0% discount)
Rationale for the proposal	<ul style="list-style-type: none"> We have considered the positions put forward. On some areas we do not agree with the “value” attributed to certain categories and other aspects we understand the desire to consider in making a decision for a proposal however we do not believe we can address all of these as they are subject to the views of other industry participants. We have yet to hear many views in support of any discounts beyond our proposals for Storage and Interconnection (those parties who have formally provided representation to date). Mindful that any discounts have the potential to drive recovery of revenues elsewhere into the methodology Some criteria assessed against are better suited to consideration under an Impact Assessment Aligns with the minimum proposed under the TAR NC therefore ensuring compliance with the TAR NC
Further Discussion	<ul style="list-style-type: none"> Timeline and method for updates beyond 2019

Gas Charging Review:

Avoiding Inefficient Bypass of the NTS (1)

- Further thinking for AIBoNTS (“Shorthaul”) or Optional charge
- Understand appetite to self-limit the access to the Shorthaul charge through the calculation. To do this would require material changes to cost inputs and substantial volume changes.
- We have felt it more appropriate to index costs, retain the volumes as they are, introduce a distance limit
- Keeps product accessible in keeping with the product’s principles

Gas Charging Review:

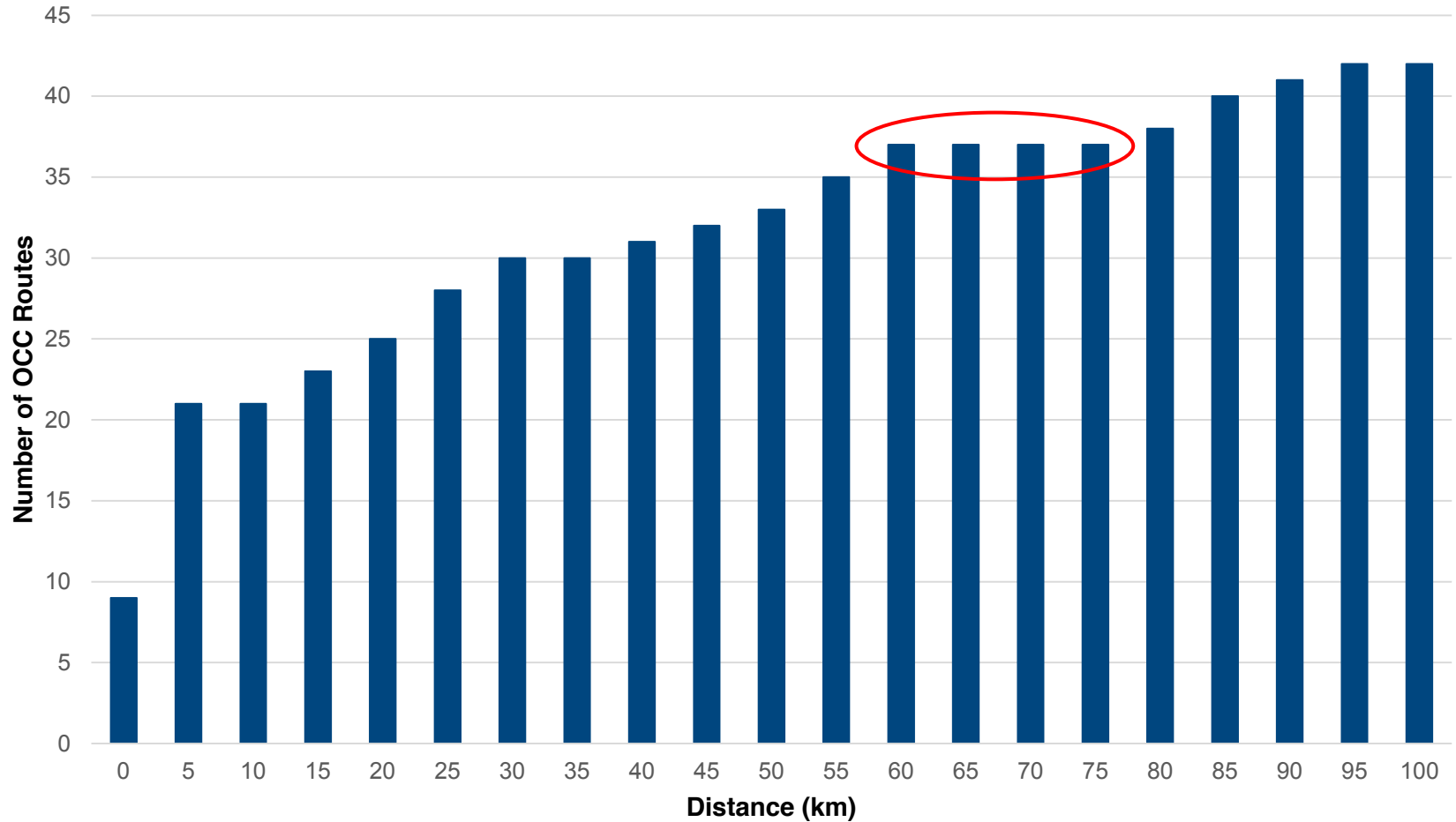
Avoiding Inefficient Bypass of the NTS (2)

- For the Transition period (i.e. October 2019 to 30 September 2021) the charge will be an alternative to Transmission Services Recovery charges.
- From 1 October 2021, if the product is considered to be required then it will require a further change proposal, at the appropriate time, to develop and implement suitable charging arrangements.



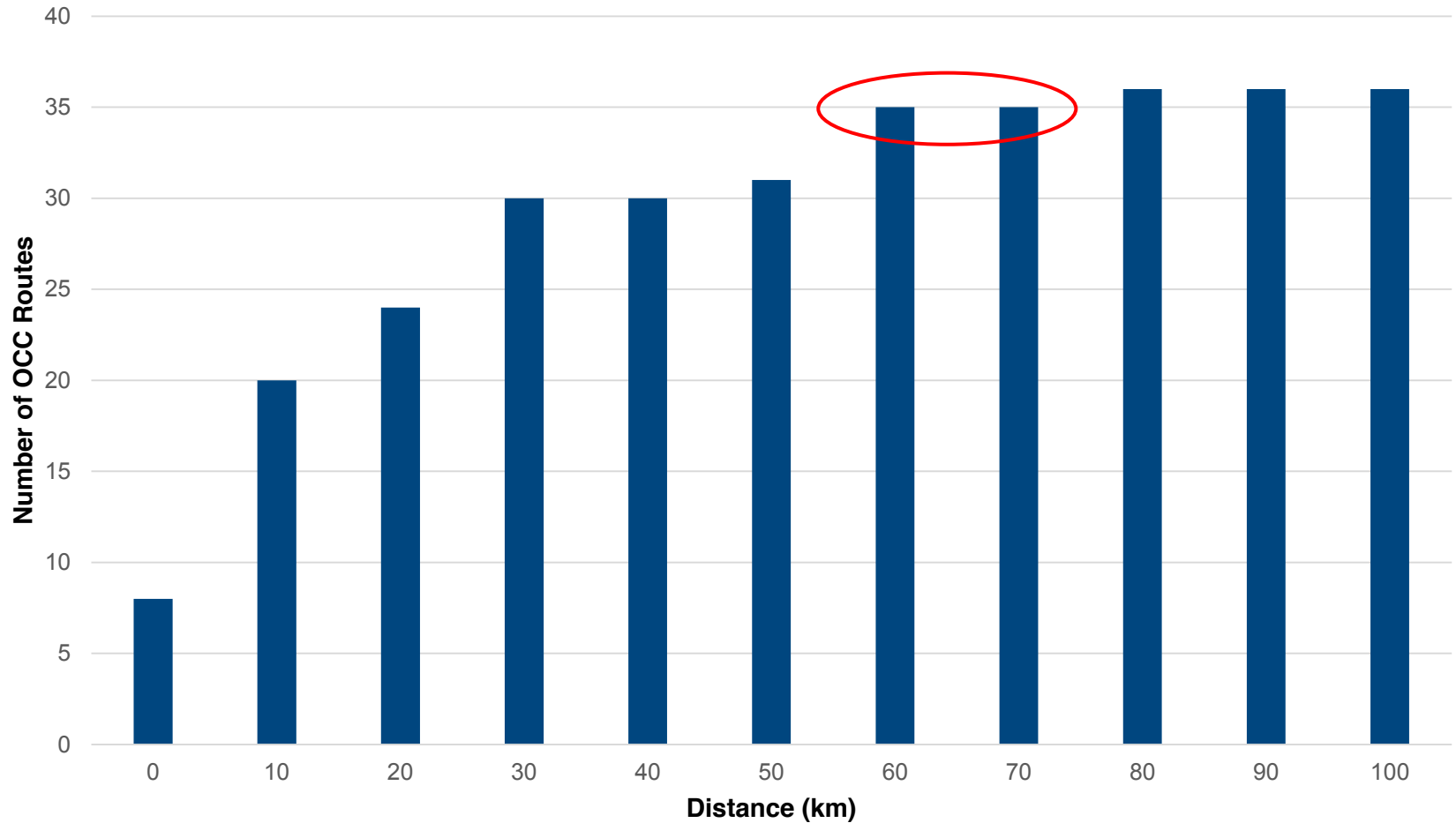
Avoiding Inefficient Bypass: OCC Routes by Distance (current)

nationalgrid





Avoiding Inefficient Bypass: OCC Routes by Distance (proposal)



Gas Charging Review: Avoiding Inefficient Bypass of the NTS

Area	Detail
<p>Proposal in draft discussed on 13 October</p>	<ul style="list-style-type: none"> • Transmission Services only charge (no link to Non Transmission) • Methodology can be in the UNC, any formula can be outside to allow efficient update over time allowing components to be updated each year. • Use of a distance cap for use of the charge (initial value of [50km] placed in draft) • Recognise this must work with the overall methodology and framework both from October 2019 and with the Transition approach.
<p>Additional thinking for 20 December</p>	<ul style="list-style-type: none"> • Commodity alternative in the Transition period (2019 to 2021), for Transmission Services Recovery charges (i.e. Transmission Commodity Charges) • At end of Transition it will end given there will be no Transmission Services Commodity charges. Product for 2021 will be via separate change. • Distance Cap of 60km.
<p>Rationale for the proposal</p>	<ul style="list-style-type: none"> • Given the size of the current charges not paid by shorthaul users and paid by non shorthaul users this is something in need of material change • Should be reviewed along with the rest of the methodology . • For “short” distances and not have a material influence on other charges, reducing the charges distributed to others from current. • Should be a genuine alternative to investment and a genuine choice to incentivise its use. Increased use should not make it more accessible as it does now. • Distance cap is finding a “plateau” of distances where avoids “just missing out”.
<p>Further Discussion</p>	<ul style="list-style-type: none"> • Some further thinking needed regarding IP charging. • Changes for 2021 and a requirement beyond 2021 subject to separate development. Timing for this to be considered relative to UNC0621.

Gas Charging Review: Transmission Services Revenue Recovery




- The application of the Transmission Services Revenue Recovery charge is to help manage the anticipated under or over recovery for any given year.
- It should help mitigate the risk of carrying over significant under or over recoveries into subsequent years impacting charges.
- The size of the revenue to recover via this charge should reduce as the FCC is updated as per the Transition arrangements.

General approach to Transmission Services Revenue Recovery

- Current UNC rules – reconciliation is received through the commodity charge.
- Mod 621 transition rule – reconciliation will continue to be through a commodity charge.
- Mod 621 enduring rule – reconciliation will be replaced with a capacity top up charge.
- General arrangements shown below. Specific applications to be discussed further in following slides.

	Current rules → Oct 2019	Mod 621 transition rule → Oct 2021	Mod 621 enduring rule →
Reconciliation	Commodity	Commodity	Capacity top up
Flow (entry & exit)	✓	✓	-
Capacity	-	-	✓




1. Entry Capacity – General Rule

	 Oct 2019	 Oct 2021	
	Current Rules	Transition Rules	Enduring Rules
Capacity Charge (historic)	Set Price	Set Price	Set Price
Capacity Charge (new)	-	Floating Price	Floating Price
TS Reconciliation	(TO) Commodity	TS Commodity	Capacity Top Up

- Specific consideration for Storage and IPs is given in the next slides.




#Historic Capacity - Long Term capacity allocated before the date of the Ofgem direction to implement this Proposal. (this includes but is not limited to Existing Contracts as defined under TAR)

2. Exit Capacity – General Rule

	 Oct 2019	 Oct 2021	
	Current Rules	Transition Rules	Enduring Rules
Capacity Charge	Floating Price	Floating Price	Floating Price
TS Reconciliation	(TO) Commodity	TS Commodity	Capacity Top Up




- Specific consideration for Storage and IPs is given in the next slides.

3. Entry Capacity – Storage

	 Oct 2019	 Oct 2021	
	Current Rules	Transition Rules	Enduring Rules
Capacity Charge (historic)	Set Price	Set Price	Set Price
Capacity Charge (new)	-	Floating Price	Floating Price
TS Reconciliation	(TO) Commodity = 0	TS Commodity = 0	Capacity Top Up*




- *The capacity top up rules are proposed as follows:
 - Historic Capacity: Top up = 0
 - New Capacity (bought post mod 621x implementation):
Top up = standard rate

4. Exit Capacity – Storage

	 Oct 2019	 Oct 2021	
	Current Rules	Transition Rules	Enduring Rules
Capacity Charge	Floating Price	Floating Price	Floating Price
TS Reconciliation	(TO) Commodity = 0	TS Commodity = 0	Capacity Top Up

- Note: there is no identified need for extending the concept of historical capacity from entry to exit.
- Users are free to Reduce any Enduring Annual (flat) Exit Capacity they hold before the start of gas year Oct 21.
- Capacity top up will be applied to all Exit Capacity from Oct 21.




5. Entry Capacity – IPs

	 Oct 2019	 Oct 2021	
	Current Rules	Transition Rules	Enduring Rules
Capacity Charge (historic)	Set or floating price as prevailing at time of allocation*	Set or floating price as prevailing at time of allocation*	Set or floating price as prevailing at time of allocation*
Capacity Charge (new)	-	Floating Price	Floating Price
TS Reconciliation	(TO) Commodity	Interim Capacity Top Up charge	Capacity Top Up

- A commodity charge can not be applied during the transition period.
- From a practical point of view, NG considered simply not applying reconciliation to IPs during the transition, but this seemed hard to justify from a principles point of view.
- An interim Capacity Top up charge is proposed for the duration of the transition period.

#IP Entry prices purchased since approval of modification 611s have been allocated under a floating price arrangement.

6. Exit Capacity – IPs

	 Oct 2019	 Oct 2021	
	Current Rules	Transition Rules	Enduring Rules
Capacity Charge	Floating Price	Floating Price	Floating Price
TS Reconciliation	(TO) Commodity	Interim Capacity Top Up charge	Capacity Top Up

- A commodity charge can not be applied during the transition period.
- From a practical point of view, NG considered simply not applying reconciliation to IPs during the transition, but this seemed hard to justify from a principles point of view.
- An interim Capacity Top up charge is proposed for the duration of the transition period.



Interim Capacity Top up charge for IPs

- The amount applied will be based on volume of flow.
But it will be applied to capacity holdings.
- [example to be discussed on 20 December]

Gas Charging Review: Transmission Services Revenue Recovery

Supporting Data

- Interconnection Point Data
- The following slides show the % of flows at Interconnection Points for Entry and Exit to illustrate the revenue recovery sensitivity based on how it may be applied.

IP flows - Exit

year	% flow IP/system	% flow IP / (system net of storage)
14/15	15%	16%
15/16	14%	15%
16/17	13%	14%

- Approximately 15% of flow contributing towards the SO revenue is at the IP.
 - Note that the proportion of IP flow on shorthaul (c.50%) is higher than the system average (c.19%), so the actual % figure will be lower than this.
- If IPs stopped paying reconciliation during the transition then this amount would be picked up by other sites.

IP flows - Entry

year	% flow IP/system	% flow IP / (system net of storage)
14/15	5.5%	6.0%
15/16	4.5%	4.9%
16/17	6.1%	6.6%

- Approximately 6% of flow contributing towards the SO revenue is from the IP.
 - Note that the proportion of IP flow on shorthaul (c.10%) is lower than the system average (c.19%), so the actual % figure will be slightly higher than this.
- If IPs stopped paying reconciliation during the transition then this amount would be picked up by other sites.

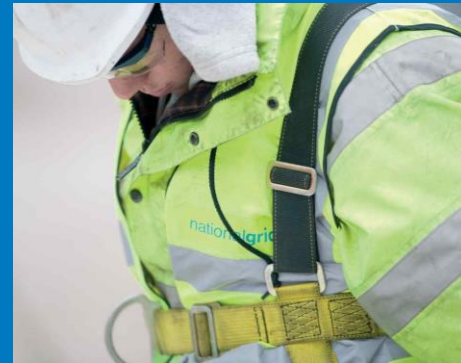
Gas Charging Review: Transmission Services Revenue Recovery

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> Primarily managing Revenue Recovery through a flow based recovery charge Recovered across flows excluding storage flows (as flow based charges are currently)
Additional thinking for 20 December	<ul style="list-style-type: none"> As part of the transition, we are supportive of transmission charges being wholly capacity based after a short period to manage the impacts of unpredictable behaviour changes for capacity bookings. Commodity from October 2019 with capacity as revenue recovery charge from October 2021. All Capacity picks up the enduring rule of applying the recover capacity based charge. Non-discriminatory. Flow based charges do not apply to Storage. Historical Entry contracts for storage will not attract top up charges. When top up becomes capacity it will spread a relatively small amount over a large capacity base
Rationale for the proposal	<ul style="list-style-type: none"> Commodity provides an established way for managing revenue recovery compared to the expected unpredictable changes in capacity bookings Storage exemption of commodity avoids double counting flows The application of a commodity charge at IPs should be mindful of the restrictions under TAR article 4 – size of distribution could be material in transition.
Further Discussion	<ul style="list-style-type: none"> Application of commodity from 2019 and capacity from 2021 – in assessment of overall impacts, interactions with Shorthaul will need to be assessed. Capacity classification discussions at Transmission workgroup.

Gas Charging Review: Non Transmission Services Charging

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none">• Primarily levied through a flow based recovery charge to recover revenues not anticipated to be collected from St Fergus Compression, DN Pensions and NTS Metering charges.• Recovered across flows excluding storage flows (as flow based charges are currently)
Additional thinking for 20 December	<ul style="list-style-type: none">• No change.
Rationale for the proposal	<ul style="list-style-type: none">• Provides an established way for managing revenue recovery compared to the expected unpredictable changes in capacity bookings• Storage exemption avoids double counting flows
Further Discussion	<ul style="list-style-type: none">• Are there any further questions for Non Transmission Charging?

Gas Charging Review



Developing the analysis

UNC0621: Analysis

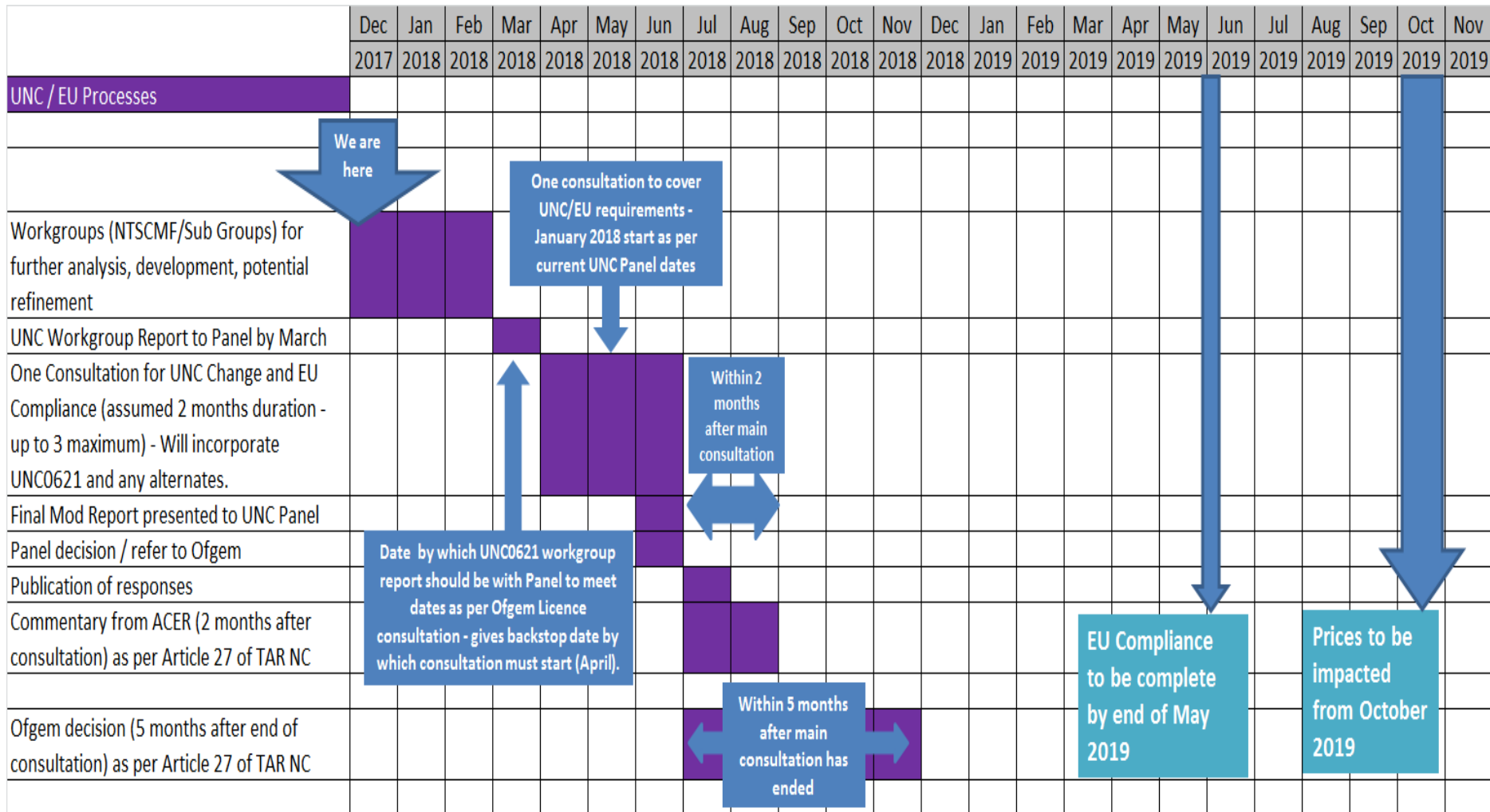
- There will be analysis produced on the back of this proposal
- This analysis will be shared at the workgroups and also support the development of the workgroup report
- The modification may be subject to additional changes and refinements
- Further updates to the modification can be done up to the time the workgroup report is submitted to Panel

Gas Charging Review

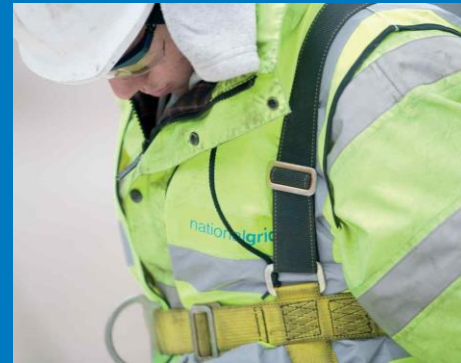


Plan and change process

Gas Charging Review: Overview of potential Plan Timescales



Gas Charging Review



UNC0621 Modification
Next Steps

Gas Charging Review: UNC0621 Next Steps

- Analysis to go along with the updated drafting of the proposals
- Some refinements to the mod ahead of publishing as an amended mod on 21st December
- Next UNC0621 workgroup scheduled for 3rd January, others are scheduled into Jan, Feb and March
- Any further updated drafts to be shared ahead of, and discussed at, future workgroups for UNC0621
- Development and publication of updated charging models

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