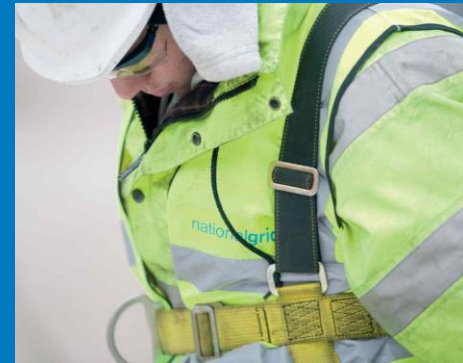


# Gas Charging Review UNC0621

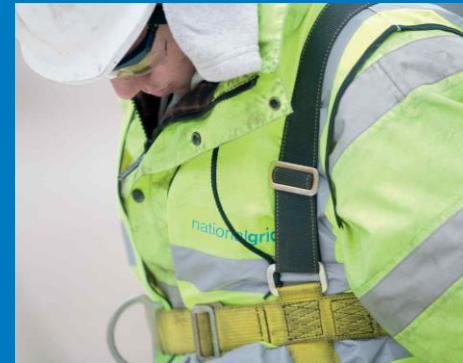


NTSCMF – 11 January 2018  
UNC0621 Workgroup

# Agenda

Area	Detail
Diary Planning	<ul style="list-style-type: none"><li>• Meetings for 2018</li></ul>
UNC Modification 0621 – amended modification	<ul style="list-style-type: none"><li>• Amended modification published 21 December 2017</li><li>• Updates on the proposals and rationale behind proposals and areas of discussion</li><li>• Additional thinking / analysis on certain aspects</li></ul>
Developing the analysis	<ul style="list-style-type: none"><li>• Developing the analysis for UNC0621</li><li>• Analysis needed to help workgroup report</li><li>• Consideration for alternate modifications</li></ul>
Plan and GB/EU Consultation and change process	<ul style="list-style-type: none"><li>• Overview of high level timeline</li><li>• Workgroup report development</li><li>• ACER TAR NC Consultation template</li></ul>
Next Steps	<ul style="list-style-type: none"><li>• Next Steps for UNC0621</li></ul>

## Gas Charging Review



UNC Modification 0621 – Diary planning  
Amendments to Gas Transmission Charging Regime

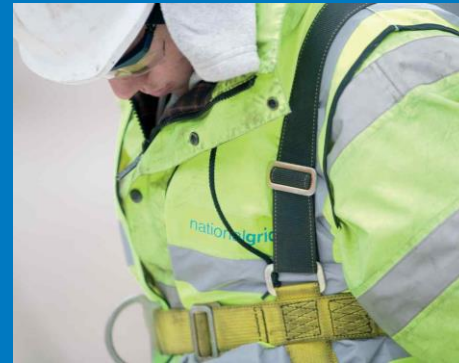
# UNC 0621:

## Diary Planning

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- Workgroups have been planned for Jan, Feb, March and early April 2018.
- In order to start the workgroup report what further work, information is necessary?
- Under the analysis section of this slide pack we provide opportunities to discuss aspects of this and under some of the specific topics
- When it comes to workgroup report updates and dedicated workgroups to discuss, can or should meetings be more frequent than twice per month?

## Gas Charging Review



UNC Modification 0621 – Amended Modification  
Amendments to Gas Transmission Charging Regime

# Gas Charging Review:

## UNC0621 – Modification proposals

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- Amended modification for UNC0621 (V2.0) published on 21 December 2018.

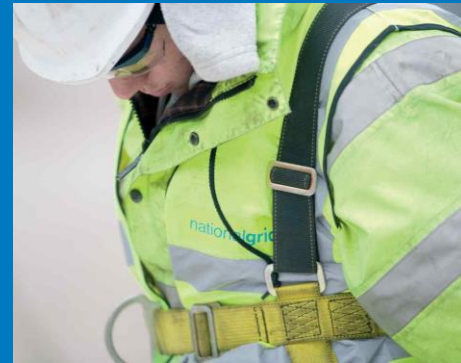
<https://www.gasgovernance.co.uk/0621>

- A clean and track changed version are available on the modifications page above and on the workgroup pages:

<https://www.gasgovernance.co.uk/0621/110118>

- This version will be discussed at the January UNC0621 workgroups
- Following workgroup discussions further updates will be published and be issued through the Joint Office.

## Gas Charging Review



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

# Gas Charging Review:

## UNC0621 – Key topics and proposals

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- 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"> <li>Capacity Weighted Distance for the methodology to calculate reference prices and subsequent reserve prices (through any applicable adjustments)</li> <li>Introduces updated (or floating) payable price for capacity for Entry and Exit at all points.</li> </ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"> <li>CWD remains the approach for the proposal</li> <li>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)</li> <li>Transition package – potential changes for 2021 to adjust CWD generated charges to minimise any Transmission Services top up charge. See further discussion.</li> </ul>
Rationale for the proposal	<ul style="list-style-type: none"> <li>Moves to a methodology that provides greater stability, reduced volatility and better predictability for capacity charges</li> <li>Reflects more the use of the network given that the NTS is not in a state of continued expansion</li> <li>Extensive work undertaken to review impacts of changing the current LRMC approach and comparisons to a CWD approach</li> <li>CWD provided a simpler framework and also improvements in line with target objectives for the charging methodology and stakeholder developed objectives.</li> </ul>
Further Discussion	<ul style="list-style-type: none"> <li>Treatment of CWD generated zero prices – reviewing magnitude of use of alternatives to assess materiality and likelihood.</li> <li>Treatment of Existing Contracts and Interim Contracts and revenue recovery approach linked to revenue reconciliation charges.</li> <li>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.</li> </ul>

# Gas Charging Review: Forecasted Contracted Capacity (FCC)

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"><li>• To use Obligated Capacity and transition to a forecast in the short term</li><li>• Have a transition arrangement to accommodate this change</li></ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"><li>• Anticipate unpredictable capacity booking behaviours given the range of changes proposed under UNC0621.</li><li>• Revenue recovery and impacts on charges a concern to mitigate</li><li>• Believe move to an updated FCC linked to some evidence of behaviours is reasonable</li><li>• More certain proposals for transitioning FCC needed. Proposal to use obligated from October 2019 and using a National Grid generated forecast from October 2021.</li></ul>
Rationale for the proposal	<ul style="list-style-type: none"><li>• 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.</li><li>• Moving from one framework to another, especially moving away from zero capacity prices, will drive unpredictable behavioural changes.</li><li>• 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.</li></ul>
Further Discussion	<ul style="list-style-type: none"><li>• Zero CWD generated prices – other options besides using the nearest non-zero priced Entry or Exit Point's reference price</li><li>• Compliance and Transition, how the impacts of FCC selection drives balance between capacity and commodity.</li></ul>

# Gas Charging Review: Multipliers

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> <li>To have a multiplier as a default, proposal was [1] and to be updated through a subsequent consultation</li> <li>Multipliers will not be 0, Calculated ex ante</li> </ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"> <li>More certainty for October 2019 needed.</li> <li>An ex ante value of 1 for all products eligible for a multiplier for October 2019.</li> <li>Multipliers more linked to driving behaviours than revenue recovery</li> <li>Provide flexibility to update in future years using appropriate governance.</li> </ul>
Rationale for the proposal	<ul style="list-style-type: none"> <li>A value of 1 places no preference between incentivising Long Term or Shorter Term Capacity bookings</li> <li>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</li> <li>Generally with little scarcity of capacity, incentivising either Long term bookings or short term bookings for the purposes of signals for investment less necessary</li> <li>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</li> <li>Provides framework to review and update this on an annual basis</li> </ul>
Further Discussion	<ul style="list-style-type: none"> <li>Timeline and method for updates beyond 2019</li> </ul>

# Gas Charging Review: Interruptible/Off-peak

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> <li>• Interruptible will be a discount from corresponding firm capacity product</li> <li>• To have an adjustment calculated through subsequent consultation</li> <li>• Interruptible adjustment will not allow zero reserve prices</li> <li>• Calculated ex ante, Single approach for all points</li> </ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"> <li>• To have an ex ante value in the proposal for October 2019 of 10% for Entry and Exit.</li> <li>• 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.</li> <li>• Banding provides stability in interruptible discount assuming interruption stays low providing certainty going forward.</li> </ul>
Rationale for the proposal	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• Use of ranges helps manage variances of resulting calculations.</li> </ul>
Further Discussion	<ul style="list-style-type: none"> <li>• Timeline and method for updates beyond 2019.</li> </ul>

# Gas Charging Review: Specific Capacity Discounts

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> <li>Storage to receive 50% discount from the CWD generated capacity charge</li> <li>No other specific capacity discounts proposed</li> </ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"> <li>No change to proposed values for storage.</li> <li>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)</li> </ul>
Rationale for the proposal	<ul style="list-style-type: none"> <li>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.</li> <li>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).</li> <li>Mindful that any discounts have the potential to drive recovery of revenues elsewhere into the methodology</li> <li>Some criteria assessed against are better suited to consideration under an Impact Assessment</li> <li>Aligns with the minimum proposed under the TAR NC therefore ensuring compliance with the TAR NC</li> </ul>
Further Discussion	<ul style="list-style-type: none"> <li>Timeline and method for updates beyond 2019</li> </ul>

# Avoiding inefficient bypass:

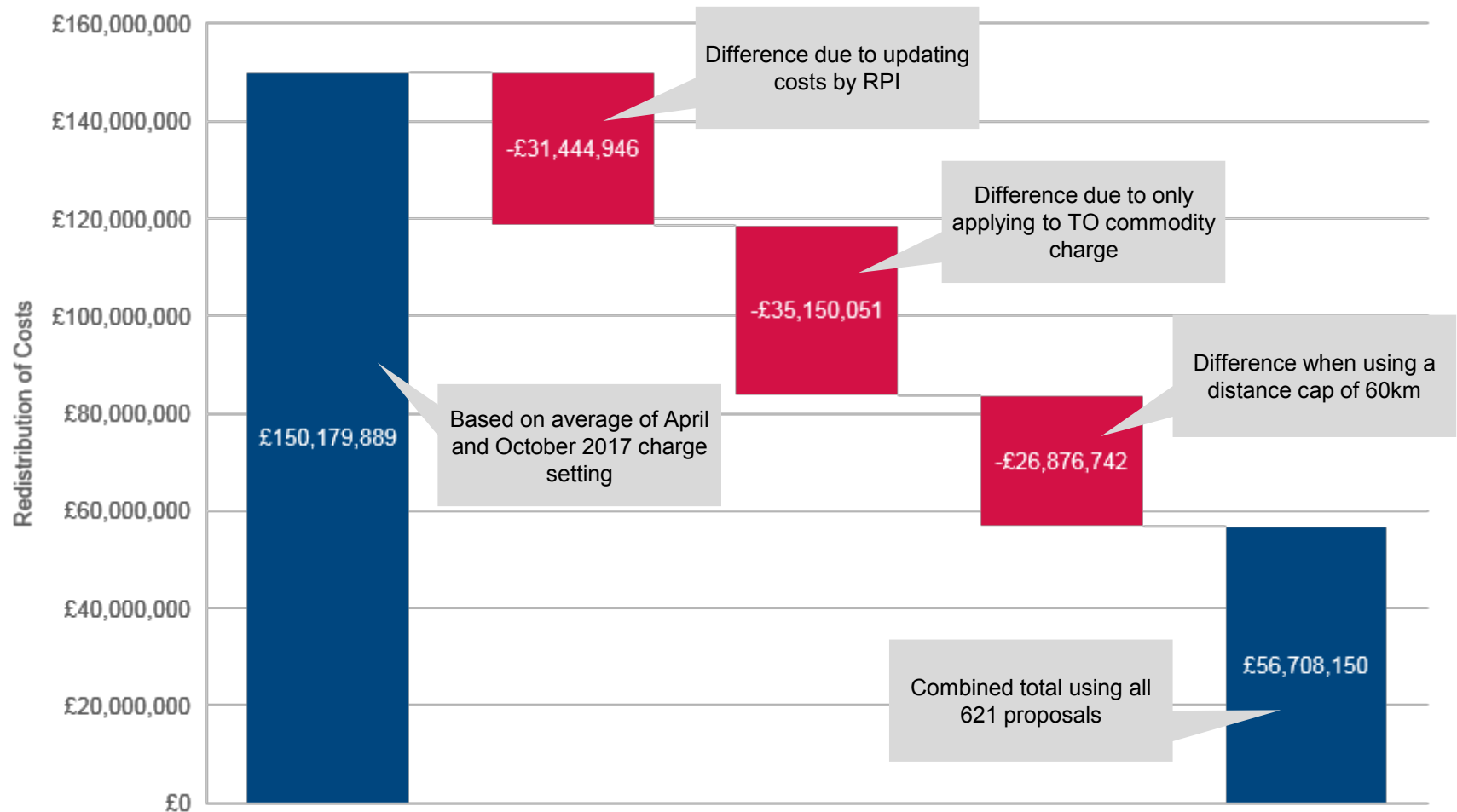
## Current vs 621 Proposal – Step changes (1)

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- Amended modification on 21 December 2017 proposes an update to the Avoiding inefficient bypass charge
  - Update of costs using RPI
  - Change to Transmission only so only an alternative to Transmission Services commodity charges under its design
  - Distance limit of 60km
- To show the impact at a high level of these changes the following chart demonstrates the impact of these three changes on the amounts “redistributed”.
- This provides a comparison to the impact or influence of the current “shorthaul” charge

# Avoiding inefficient bypass:

## Current vs 621 Proposal – Step changes (2)



# IP Charging and AIBoNTS: Transmission Services (Transition period)

## Non Interconnection Point

### Scenario 1 – Non-IP Entry



No change to the current process except it's only applicable to Transmission Services

- 200 units qualify for Optional Charge
- 100 units are subject to entry commodity charges
- 0 units are subject to exit commodity charges

### Scenario 2 – Non-IP Entry



- 300 units qualify for Optional Charge
- 0 units are subject to entry commodity charges
- 200 units are subject to exit commodity charges

## Interconnection Point

### Scenario 3 – IP Entry



- 200 units qualify for Optional Charge
- 600 units are subject to entry capacity top up charge
- 0 units are subject to exit commodity charges

### Scenario 4 – IP Exit



- 200 units qualify for Optional Charge
- 100 units are subject to entry commodity charges
- 600 units are subject to exit capacity top up charge
- 0 units are subject to exit commodity charges



# Gas Charging Review: Avoiding Inefficient Bypass of the NTS

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> <li>• Transmission Services only charge (no link to Non Transmission)</li> <li>• Methodology can be in the UNC, any formula can be outside to allow efficient update over time allowing components to be updated each year.</li> <li>• Use of a distance cap for use of the charge (initial value of [50km] placed in draft)</li> <li>• Recognise this must work with the overall methodology and framework both from October 2019 and with the Transition approach.</li> </ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"> <li>• Commodity alternative in the Transition period (2019 to 2021), for Transmission Services Recovery charges (i.e. Transmission Commodity Charges)</li> <li>• At end of Transition it will end given there will be no Transmission Services Commodity charges. Product for 2021 will be via separate change.</li> <li>• Distance Cap of 60km.</li> </ul>
Rationale for the proposal	<ul style="list-style-type: none"> <li>• 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</li> <li>• Should be reviewed along with the rest of the methodology .</li> <li>• For “short” distances and not have a material influence on other charges, reducing the charges distributed to others from current.</li> <li>• 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.</li> <li>• Distance cap is finding a “plateau” of distances where avoids “just missing out”.</li> </ul>
Further Discussion	<ul style="list-style-type: none"> <li>• Some further thinking needed regarding IP charging.</li> <li>• Changes for 2021 and a requirement beyond 2021 subject to separate development. Timing for this to be considered relative to UNC0621.</li> </ul>

# Interconnection Points: Revenue Recovery in Transition Period

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- In the amended modification it proposes a charge for the purpose of revenue reconciliation at interconnection points during the Transition period
- In order to build the picture of the materiality the following slide starts to show the sensitivities of charges on the inclusion of applying a charge to IPs
- Further work is needed to complete for the inclusion of AIBoNTS. This starts to show the potential materiality for the transition period for revenue recovery charges for Transmission Services.

# Interconnection Points:

## 'simple' analysis 19/20 (excluding shorthaul)

- Allowed Revenue to be collected = c.£433m for Exit

% allowed rev. from capacity	30%	50%	70%
Rev. from exit capacity sales	£130	£216.5	£303
Rev. from exit commodity	£303	£216.5	£130
System annual demand (GWh/d)*	867,686	867,686	867,686
IP annual exit flow** (GWh/d)	130,000	130,000	130,000

- a) IPs pay a share of reconciliation proportional to (forecast) IP flow.

Exit Commodity unit rate (p/kWh)*	0.0349	0.0250	0.0150
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- b) IPs are excluded from reconciliation.

Exit Commodity unit rate (p/kWh)**	0.0411	0.0293	0.0176
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\* Volume Forecast

\*\* Forecast based on typical historical annual flows over past 3 years

# Gas Charging Review: Transmission Services Revenue Recovery

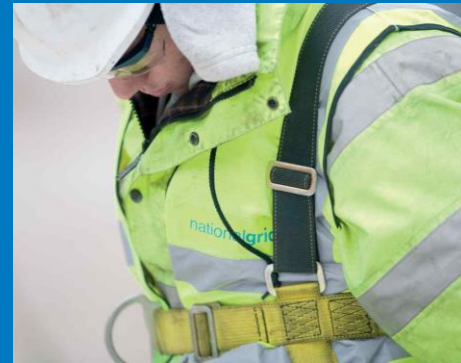
Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"> <li>Primarily managing Revenue Recovery through a flow based recovery charge</li> <li>Recovered across flows excluding storage flows (as flow based charges are currently)</li> </ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"> <li>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.</li> <li>Commodity from October 2019 with capacity as revenue recovery charge from October 2021.</li> <li>All Capacity picks up the enduring rule of applying the recover capacity based charge. Non-discriminatory.</li> <li>Flow based charges do not apply to Storage.</li> <li>Historical Entry contracts for storage will not attract top up charges.</li> <li>When top up becomes capacity it will spread a relatively small amount over a large capacity base</li> </ul>
Rationale for the proposal	<ul style="list-style-type: none"> <li>Commodity provides an established way for managing revenue recovery compared to the expected unpredictable changes in capacity bookings</li> <li>Storage exemption of commodity avoids double counting flows</li> <li>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.</li> </ul>
Further Discussion	<ul style="list-style-type: none"> <li>Application of commodity from 2019 and capacity from 2021 – in assessment of overall impacts, interactions with Shorthaul will need to be assessed.</li> <li>Capacity classification discussions at Transmission workgroup.</li> </ul>

# Gas Charging Review:

## Non Transmission Services Charging

Area	Detail
Proposal in draft discussed on 13 October	<ul style="list-style-type: none"><li>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.</li><li>Recovered across flows excluding storage flows (as flow based charges are currently)</li></ul>
Thinking for 21 December amended modification	<ul style="list-style-type: none"><li>No change.</li></ul>
Rationale for the proposal	<ul style="list-style-type: none"><li>Provides an established way for managing revenue recovery compared to the expected unpredictable changes in capacity bookings</li><li>Storage exemption avoids double counting flows</li></ul>
Further Discussion	<ul style="list-style-type: none"><li>Are there any further questions for Non Transmission Charging?</li></ul>

## Gas Charging Review



UNC Modification 0621:  
Developing the analysis

## UNC0621: Developing the Analysis (1)

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- For the analysis, the intention is to present analysis and show the sensitivities of the proposals for changes to certain aspects.
- This will require some “base case” scenarios to be developed to show the impacts of changes to the variables and assessment of the proposals
- This will require updates to the models presented so far to provide a static model for UNC0621
- Other elements to include Cost Allocation Assessment and the assumptions made in accommodating it
- Ambition is to present this analysis at the next two workgroups (23 January and 6 February)

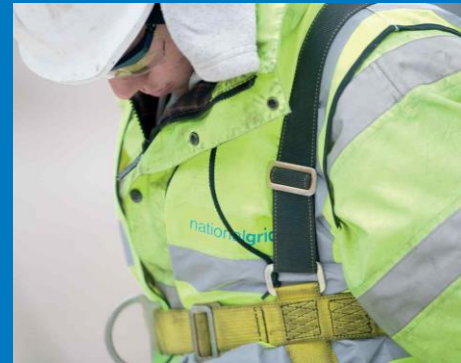
## UNC0621: Developing the Analysis (2)

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- Further analysis may be needed beyond this
- A key driver is getting the modification to a point where the workgroup report can be drafted and commented on
- Taking into consideration alternate modifications too and any analysis to produce for those

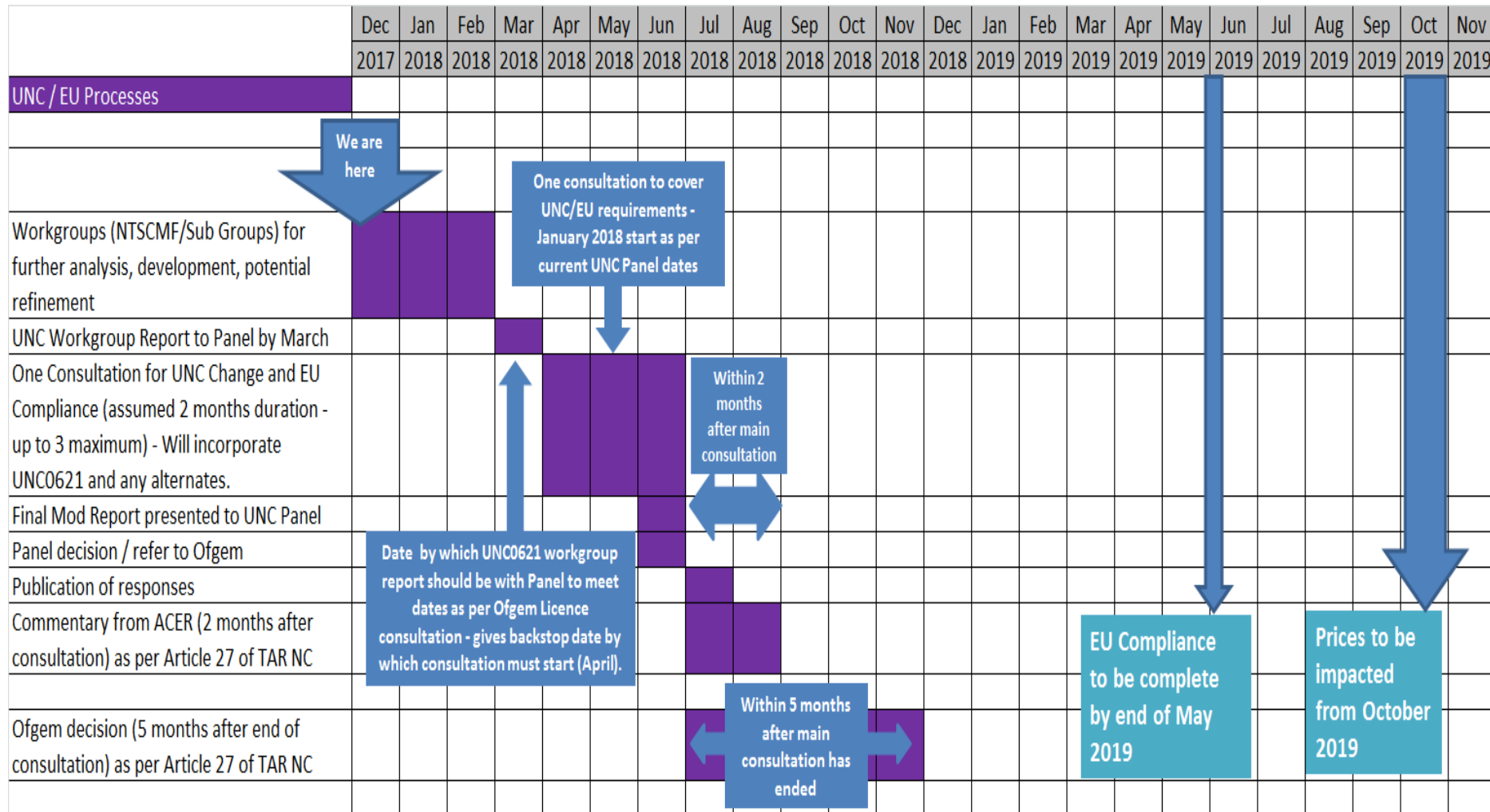


## Gas Charging Review

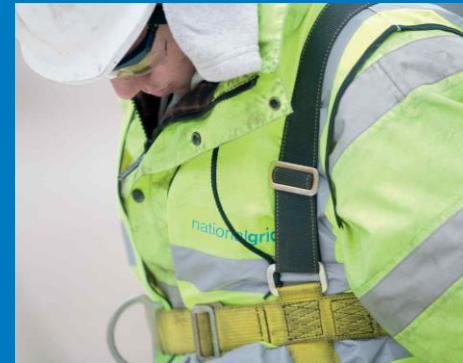


UNC Modification 0621:  
Plan and change process

# Gas Charging Review: Overview of potential Plan Timescales



## Gas Charging Review



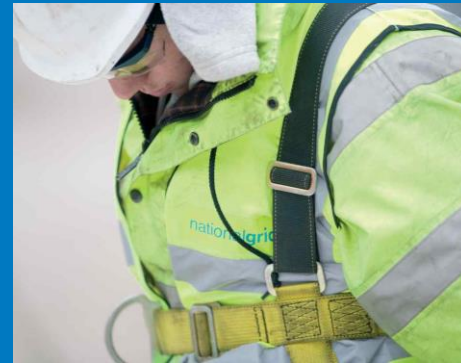
ACER template for TAR NC Consultation

# EU TAR NC Consultation: ACER Template for submission

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- The link to the content required can be found [http://www.acer.europa.eu/Official\\_documents/Public\\_consultations/Pages/ACER-Consultation-Template.-Tariff-NC-Article-26\(5\).aspx](http://www.acer.europa.eu/Official_documents/Public_consultations/Pages/ACER-Consultation-Template.-Tariff-NC-Article-26(5).aspx)
- Whilst the actual template will be completed online the structure and content required is outlined in the check list.
- A copy of this list has been updated to the Joint Office website:  
<https://www.gasgovernance.co.uk/ntscmf/110118>

## Gas Charging Review



UNC0621 Modification  
Next Steps

# Gas Charging Review: UNC0621 Next Steps

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- Analysis to go along with the amended modification proposals.
- Updated models to include additional functionality.
- Next UNC0621 workgroup scheduled for 23<sup>rd</sup> January, others are scheduled into Feb and March and April (tbc)
- Any further updated drafts to be shared ahead of, and discussed at, future workgroups for UNC0621

## Contact us:

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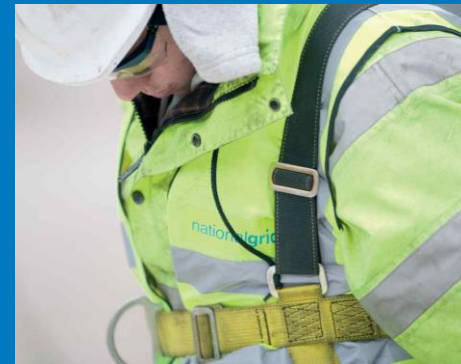
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