

Objectives / Impacts for 621

Reference Price Methodology 0621

Aim of the RPM / overall framework of charging.

To recover the Transmission Services Revenue from Capacity based charges.

Analysis and critique of the current methodology and potential alternatives have been conducted through the NTSCMF and UNCO621 workgroups. The results of this assessment were published in January 2017 (<https://www.gasgovernance.co.uk/ntscmf/subg1page>) and [the updated analysis presented](https://www.gasgovernance.co.uk/0621/200418) April 2018 (<https://www.gasgovernance.co.uk/0621/200418>). From January 2017 it was considered more relevant, in the context of the EU Tariff Code, measurement against relevant charging objectives and stakeholder objectives that the current LRM methodology is no longer suitable and not be continued under the Gas Charging Review (that became UNCO621). This continues to be the view and reflected in the analysis.

The conclusion from [this workgroup](#) is support for this approach to move away from LRM.

[A number of drivers have been considered for the reference price methodology. This includes moving from a forward looking investment focused model \(that does not deliver revenue recovery via capacity\) to one that is more a revenue recovery based approach based on usage/capacity reservations. Workgroup supported this move away from a incremental focused model as the network is not expanding. CWD still provides some geographical diversity in charges whereas postage stamp provides uniform charges across the network.](#)

[All the proposals, with the exception of UNCO621J, have adopted CWD as the basis to underpin the methodology.](#)

[UNCO621J adopts a postage stamp model to underpin the methodology.](#)

Moving away from LRM was supported by the workgroup. The critique of the LRM methodology highlighted [that even small changes to the inputs to the methodology can drive significant variations in the charges. These arose mainly from the boundary issues of supply merit order requirement in the LRM methodology that is not a feature of either CWD or PS. If adjusting the supply merit order and applying revenue adjustments, as highlighted in the analysis \[link\], then the resulting methodology is similar to a CWD approach, albeit more complicated. There is an expectation that CWD or PS will provide more stable and predictable charges than LRM to the extent that the inputs are stable.](#)

[Therefore, it was considered an alternative approach was more appropriate than attempting to adjust the LRM methodology.](#)

Legislative Compliance 0621

The Workgroup recognised and acknowledged that elements of the Proposal are driven by a need for the GB arrangements to comply with EU Regulation 2017/460. Principle areas of the proposed methodology subject to such compliance issues are:

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Deleted: Through the workgroups, taking into account views expressed on cost reflectivity in the workgroups and those mentioned in TAR NC, National Grid is proposing CWD as the replacement for LRM. When considering cost reflectivity it should be noted that this can be a subjective. Reflecting on the cost drivers and those mentioned in TAR NC as capacity AND distance, Postage stamp does not have both of these, and could be considered as not having capacity as a specific driver as it only considers in aggregates. Therefore CWD does have both of these cost drivers using capacity and distance to derive the reserve prices. CWD, through the workgroups is considered more cost reflective using these cost drivers.

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- the Reference Price Methodology (*Articles 6 to 8*);
- the categorisation of Transmission and Non-Transmission Services (*Article 4*);
- the transition to a capacity based charging regime (*Article 4(3)*); and
- application and extent of site and capacity product specific discounts (*Articles 9 and 16*).

The broad Workgroup consensus was that the Proposal is compliant with Regulation 2017/460 [however specific concerns expressed by one or more individual members of the Workgroup are recorded in the relevant section/s of this impact assessment].

Historical / Existing Contracts 0621

The workgroup had agreement around some National Grid interpretation of article 35 of Regulation 2017/460 that while entry capacity was relevant, exit capacity was not on account of exit capacity already being subject to a variable price. It was concluded that Existing Contracts therefore relates to entry capacity booked prior to 6/4/17 (which is the entry into force date of TAR). It was recognised that there is a disconnect between the entry into force date of TAR, and the implementation date of the related UNC modification proposal. National Grid therefore created the category of 'Interim Contracts' to cover entry capacity booked between these 2 dates. Together then Existing Contracts and Interim Contracts can be referred to as Historic Contracts. National Grid also stated its belief that Article 35 does not in general cover commodity charges, again on account this being a variable charge. This was more debate around this point, but broad consensus with National Grid's view.

The existing/historic contracts matter because they are treated in a particular way under some of the other processes. There was some WG debate around the treatment of Existing Contracts, including a paper produced by ENI which recognised the status and contribution of Existing Contracts, and argued for special consideration under the new regime. National Grid confirmed in its modification that Existing Contracts do not feed into the CWD model (as part of the capacity input) for producing prices, and the updated CWD price will then also not apply to existing contracts – rather the existing fixed price of the booking will continue to prevail. Additionally a rule was added in around Reconciliation, so that the historic entitlement at Storage sites will not attract a capacity reconciliation charge. The justification for this, is that uniquely then Storage sites have a 0 commodity charge at present (and it is not considered a variable charge under the current methodology), therefore the reconciliation charge will continue to be 0 for this capacity. It was noted that this 'exempt' capacity at storage sites will naturally fall away to zero with time.

[other modifications have included further special rules for the treatment of Existing/Historic contracts with regards to Reconciliation]

Use of Transition period (relevant to all proposals except UNC0621B)

Transition period for UNC621, A, C, D, F, H, J is between October 2019 and September 2021, inclusive. UNC0621E is the same for Entry with Exit between October 2019 and September 2022 for Exit. UNC0621B does not have a transition period.

Ideally the methodology proposed from 2019 for an FCC would produce reserve prices that will recover most of the transmission services revenue. The main benefit identified in having a transition period is to allow time to see behavioural responses to fundamental changes to the charging framework and to develop a more informed capacity forecast.

Moving from low capacity charges, high commodity charges to a framework with high capacity charges and low, or zero commodity charges is a fundamental shift in the charging methodology.

Moving to a completely new methodology from that currently in place resulting in prices that can be materially different and a transition period allows market participants time to adapt.

Scope and depth of changes is significant and the impact on Users of the NTS, a transition period would provide time to understand the impacts and to provide data to better inform a forecast;

Buying behaviours will change and, with the removal of zero prices, this is unpredictable.

[Refer to some text for 621B which does not have a transition period]

[refer to some text for 621E which has a longer transition for Exit]

Relevant Objectives for the Transition Period

Relevant objective (b). Competition is based on having stable and predictable charges which can only be generated if National Grid has reliable data on which to build a capacity forecast. This data is expected to be generated during the transition period as behavioural responses emerge. E.g. reaction to the removal of zero reserve prices.

Inputs to RPM

The CWD methodology requires three main inputs:

1. FCC
2. A target revenue
3. Distances on the network

[add in simple description of CWD method applied]

Forecasted Contracted Capacity

Linked to the FCC paper that brought the development of an FCC to a point:

https://www.gasgovernance.co.uk/sites/default/files/ggf/Forecasting%20Contracted%20Capacity%20v0%205_0.pdf

The FCC is a required value per Entry and Exit point under CWD. For PS only an aggregate value for Entry and Exit is required. The FCC is required in order to calculate capacity reserve prices.

Transition

All the modifications that have a transition period propose Obligated capacity as the FCC;

- The values are Published/publicly available and understood by stakeholders;

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Deleted: The FCC is the driver behind the transition period. The CWD methodology requires three main inputs: ¶ The capacity over which the target revenue is to be recovered (i.e. net of any capacity that has its price known and that will

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Deleted: If booking patterns were not expected to change then there could be less need for a transition period, during which there are two main goals: ¶ To learn from capacity booking changes that are seen as the new methodology is implemented and time for it to bed in; ¶ To provide a predictable path towards full capacity charging from the end of the transition (2021) and therefore time for those booking capacity to adapt to the changes not just to the firm capacity prices but for interruptible entry and off peak exit too. ¶

Deleted: The transition is focused on two aspects of the methodology. ¶ Setting reserve prices; and ¶ The application of revenue recovery charges should the floating reserve prices not achieve the anticipated target revenue. ¶ In response to the discussions on FCC there were a number of options however the most appropriate, listening to feedback from industry was the use of obligated as per the Licence for a number of reasons

- The values are stable and the process for change is known;
- Objectivity of values is less of a concern as they are fixed as per the Licence.

Relevant Objectives on competition with more stable charges, more predictable outcomes. This also applies to 621B.

The driver behind any under recovery will be the relative difference between the actual bookings and the forecast contracted capacity. Due to obligated levels being generally higher than expected capacity bookings, this will drive an under recovery in the transition period, to be recovered through Transmission Services revenue recovery charges.

To reduce the Transmission Services revenue recovery charges it may be necessary to set the FCC closer to actual bookings which is the purpose of the enduring approach.

Enduring

For the enduring approach the proposals, with the exception of UNCO621B, are to use a National Grid forecast for the FCC. This forecast is to be produced nearer the time. An obligation to produce this will be included into the legal text along with the required explanation and rationale behind the forecast.

Some workgroup members have concerns on the ability of National Grid to produce an accurate Entry and Exit point specific capacity forecast and the potential to compromise the stability / predictability of revenue recovery charges (within year changes) and / or K values (year + 2 under RII). Some workgroup members expressed concerns on the potentially high number of changes to revenue recovery charges and if this would require a Licence change.

Workgroup members do not want revenue recovery charges changing within a gas year any more frequently than under the current charging arrangements (i.e. once per year).

FCC & Historical Contracts

National Grid has not included Existing or Historical contracts (as defined in the modification) in the FCC over which the charges are to be recovered for Entry. This is to follow two principles:

- Capacity charges should be set to recover the target revenue from a target capacity. For any capacity for which the revenue is known (i.e. Historical) the revenue and capacity should be netted off. This retains the focus of the RPM that capacity charges are set to recover the required revenue and maintains the same approach across all capacity. Exit does not have any historical contracts under this definition, however if there were any they would be treated as Entry ones are.
- Historical Contracts (including Existing Contracts) are those that have procured the capacity under the pay-as-bid approach under the current regime where it has not been reasonable to say that prices would change. All other charges change under the current regime except the longer term entry contract. Any procured under this approach, as defined in the Mod, will have the liability preserved.

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Deleted: This will happen more in the enduring, although more capacity will attract a charge in the transition due to the multipliers, interruptible pricing and specific discounts being proposed.

Deleted: The workgroup recognised that obligated may not be the most appropriate method, when considering the potential impacts on revenue recovery options, however any methodology to determine a set of values without doing a bespoke forecast would be challenging. ¶ National Grid recognises this as a downside to using obligated for capacity price setting, and therefore is only proposing this in the transition period. The workgroup recognise this trade-off as regards to the use of obligated and some parties will see this as more or less of an issue in its application. ¶

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Not all in the workgroup agree with this approach. As it stands all the proposals follow the same approach as National Grid's for the specific calculation steps for the FCC in both the transition and enduring and even if the approach is postage stamp (J) over CWD (A,B,C,D,E,F,H).

Multipliers 0621

The Workgroup recognised that the proposal to include provision for capacity product specific multipliers (applied to the Reference Price to determine Reserve Prices) was proposed in order to comply with Article 13 of Regulation 2017/460.

National Grid stated that it has proposed to apply multipliers of one (1.0) for all capacity products on the basis that it had not identified a need to incentivise procurement of one capacity product over another and therefore this aspect of the pricing methodology would not influence Users' capacity procurement strategy. The Workgroup supported the proposed multipliers and noted that they were within the range permitted by Regulation 2017/460 Article 13(1).

[Earlier versions of the Proposal advocated that the post-year 1 multiplier values were directly subject to, and therefore potentially revised, as a consequence an annual consultation process managed by National Grid. As a consequence of concerns expressed by some members of the Workgroup, National Grid revised its Proposal such that the Multiplier value of 1.0 is enduring to the extent that it may be subject to subsequent Modification made pursuant to the UNC Modification Rules. Workgroup members support the revised (latter) approach.]

Interruptible (Discounts) 0621

The Workgroup explored the impacts on pricing stability of historical zero priced interruptible capacity products. It also considered the requirements contained in Regulation 2017/460 (Article 16) in relation to the extent of the future discount which can be applied to determine Reserve Prices for Interruptible Capacity. The discount is a product of the predicted probability of interruption and the economic value, of the interruptible capacity product, can be taken into consideration. National Grid presented analysis (covering the previous ten years) to the workgroup, to support the basis for the proposed discounts and although the probability was found to be very low it was agreed that it was not zero. Workgroup members therefore understood the proposed level of discount.

National Grid recognised the views of some Workgroup participants that attractiveness of the Interruptible capacity product is dependent upon it having a material discount to the equivalent Firm product. On this basis, National Grid put forward a banding approach such that the interruptible discount derived from the calculation prescribed by Regulation 2017/460 Article 16 was rounded up to the nearest 10%. This recognises the "economic value" aspect of Article 16.

Earlier versions of the Proposal advocated that the post-year 1 interruptible discount were directly subject to, and therefore potentially revised, by an annual consultation process managed by National Grid. In response to reservations about this approach expressed by the workgroup, National Grid revised its Proposal such that the interruptible discount of 10% (at Entry Points and at Exit Points) is proposed to be enduring to the extent that it may be subject to subsequent Modification Proposal.

Specific Capacity Discounts:

Storage

The Workgroup recognised that the proposal to include provision for application of a 50% discount to the Reserve Price at Storage Connection Points was proposed in order to comply with Article 9 of Regulation 2017/460.

National Grid stated that it has proposed the minimum level of discount prescribed by Article 9(1) in order to avoid double charging and to deliver compliance with the Regulation. This level of discount was supported by [some members] of the Workgroup however [other members] supported a higher level of discount, principally based on a valuation of Storage Connection Point's contribution to overall supply security. This higher discount level has been incorporated into a number of Alternative Proposals.

LNG

The Workgroup recognised the proposal to include provision for application of discount to the Reserve Price at Storage Connection Points in order to comply with Article 9 of Regulation 2017/460. National Grid outlined that it has proposed a 0% discount, effectively as a placeholder for compliance purposes, as unlike the case of Storage Connection Points there is no minimum level of discount prescribed in the Regulation.

Workgroup members supported the proposed level of discount.

IPs

No discount is proposed under 621 for any Interconnection Points.

Periodic process to determine Parameters and information publication 0621

Whilst in earlier versions of the modification, National Grid has not proposed a periodic consultation process for Multipliers, Interruptible pricing, LNG discounts or Storage Discounts.

There will be an initial consultation that is for the proposals to be implemented. Thereafter any changes to these will be subject to the UNC change process.

Should it be determined at a later date that additional UNC processes are required in order to consider updates beyond 2019, i.e. for the charging year 2020/21 then UNC changes would be proposed once known.

Revenue Recovery Charges:

Revenue Recovery Charges are required in order to manage the collection of National Grids allowed revenue.

For any shortfall from capacity (or any other dedicated charges) the revenue recovery charges are there to be applied and typically adjusted within year with the aim that there is no or little under or over recovery. Changes are only on an ex-ante basis for the revenue recovery charges.

Interim

Due to the uncertainty on the capacity forecast in the interim period as this new methodology comes into place, it was considered helpful to not place too many burdens on the capacity forecast as the risk of under or over recovery could be more significant without gaining more certainty on the capacity values expected.

As a result, given it is an established method and understood, the use of a flow based commodity Transmission Services charge is to be applied at Non Interconnection Points. This is similar to the TO Commodity charges in place currently. This will not be applied to any storage flows (except own use gas).

At interconnection points it is not possible to levy a commodity charge for the purposes of revenue recovery for Transmission Services. However the prospect of not levying a revenue recovery charge is material and would place additional revenue recovery on non interconnection points. National Grid proposes a capacity charge in the interim period for non-interconnection points that will be applied to all capacity except any storage

Enduring

Revenue Recovery charges should be the exception rather than the norm for enduring. It is necessary to have these in order to manage revenue recovery taking note that the capacity reserve prices can only be changed once per year.

All capacity will pay the top up charge in the enduring regime, with the exception of historical storage contracts.

The top up charge will be there to manage the difference between the FCC and the anticipated bookings. Any anticipated under recovery driven by any capacity discounts (e.g. storage, interruptible) will be managed by an ex ante adjustment in the RPM to adjust the reserve prices.

As a result it is expected that the Transmission Services Revenue Recovery charges should be minimal and over the whole capacity demand base (except historical storage) it will be a small charge.

NTS Optional Charge 0621

To be completed.

Non-Transmission Services Charges

National Grid proposes that Non Transmission Services Revenue is recovered through a number of charges. These are:

- (i) St Fergus Compression Charge;
- (ii) NTS Meter Maintenance Charges;
- (iii) DN Pensions Deficit Charges;
- (iv) Shared Supply Meter Point Administration Charge;

- (v) Interconnection Point Allocation Charge;
- (vi) General Non-Transmission Services Charges.

The Calculation and application of all the above charges are to be the same as under the current methodology. The General Non Transmission Services Charges (Entry and Exit) are to be calculated in the same manner as the current SO Commodity Charges in that the other charges are forecasted then deducted from the target Non Transmission Services Revenue to derive the amount to be recovered through the General Non Transmission Services Charges (GNTSC).

National Grid proposes that Non-Transmission Services Revenue is recovered via a similar charge to the System Operator (SO) charges and two additional charges considered as contributing to Transmission Owner (TO) revenue, these being the Distribution Network (DN) Pensions Deficit Charge and NTS Meter Maintenance Charge. These have been included as Non-Transmission Services charges to ensure compliance with Regulation 2017/460 Article 4.

In addition to the specific charges for individual Non-Transmission Services, National Grid has proposed that the residual Non-Transmission Services Revenue is recovered via a flow based 'General Non-Transmission Services Charge' similar in construct to the existing SO commodity charges.

Given the limited change in approach between the current SO charging methodology and the proposed Non-Transmission Services charging principles, Workgroup members supported the proposals including the exemption from the General Non Transmission charges for eligible flows under the NTS Optional Charge.

K Principles 0621

K is the under or over recovery from a previous revenue or formula year (i.e. April to March) that is added to or subtracted from the allowed revenue for the year in which charges are being set. Under the RIIO-T1 price control there is a two year lag, i.e. if K was an under recovery in the formula year 18/19 it would be added to the allowed revenue for the formula year 2020/21. If K was an over recovery it would reduce the allowed revenue. The recovery of any value under 'K' will therefore be added or subtracted to the part of the revenue to be recovered in the relevant year. K will continue to be split between Entry and Exit for Transmission Services, like it is in the current Transmission charges. Therefore an over recovery on Exit will reduce Exit charges in a subsequent year but not impact Entry. Likewise Entry will not influence Exit in the same manner.

Given this is the same approach comparing Transmission under the current regime to Transmission Services and also SO to Non Transmission, Workgroup members supported the proposals as it also reflected comments and feedback through the development of the proposals that Entry K values should only influence Entry charges and Exit K values should only influence Exit charges.

The enduring aim of the methodology proposed by all modifications with the exception of UNCO621B is to recover the majority of Transmission Services Revenue through capacity charges.

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Ideally the methodology proposed from 2019 for an FCC would produce reserve prices that will recover most of the transmission services revenue.

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Moving from low capacity charges, high commodity charges to a framework with high capacity charges and low, or zero commodity charges is a fundamental shift in the charging methodology.

Moving to a completely new methodology from that currently in place resulting in prices that can be materially different and a transition period allows market participants time to adapt.

Scope and depth of changes is significant and the impact on Users of the NTS, a transition period would provide time to understand the impacts and to provide data to better inform a forecast;

Buying behaviours will change and, with the removal of zero prices, this is unpredictable.

[Refer to some text for B which does not have a transition period]

Relevant Objectives for the Transition Period

Relevant objective (b). Competition is based on having stable and predictable charges which can only be generated if National Grid has reliable data on which to build a capacity forecast. This data is expected to be generated during the transition period as behavioural responses emerge. E.g. reaction to the removal of zero reserve prices.

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There is an aspiration to keep the Transmission Services revenue recovery charges as low as possible.

- With the overall changes to the charging framework the industry feedback was to allow aspects of the methodology to bed in for a period;
- Ultimately a move to 100% capacity requires a forecast or methodology to produce a forecast of capacity bookings. This would benefit from having data on behavioural changes to capacity bookings, especially with the removal of zero priced capacity and changes to interruptible pricing. National Grid has proposed a two year period for the transition whereby there is a fixed approach for setting the charges (i.e. obligated capacity), then the transition to an enduring approach that will use a forecast of capacity and will, in addition to developing a strawman and method for creating a forecast, it should also benefit from taking into account the capacity bookings up to that point and the behavioural changes from the new methodology.
- A transition with a specified end point provides certainty of when the changes take effect. Given the aspirations of National Grid's proposal, in line with the EU Tariffs Code to achieve a majority of Transmission revenue via capacity, this provides a short and predictable path to deliver this objective.

SoS and NBP impacts 0621

Workgroup raised some concerns on this but one for the responses / IA.

Unintended (or simply) consequences (Draft)

Outcomes of the methodology all combined for Transmission has some effects that some parties have raised as concerns on aspects of the resulting charges. Some that have been identified are:

- Geographic distribution of prices. Under CWD the geographic distribution plays a part however it creates more of a level playing field with the ranges of charges between points being narrower than under CWD. In some cases this does mean prices rise from current levels and others fall.
- Prices of points, specifically Exit points that are close to Entry points. Similar to above, for some prices do rise from current levels.
- Whilst the size of the band of prices is narrower under CWD than LRMC, there are some prices that are potentially more significantly higher than others, even if in keeping with the methodology applied. Perhaps more noted in the enduring for Entry (St Fergus).
- Comparisons between the Existing or Historical Contract prices and all others generated under the RPM.

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