# nationalgrid

## Stage 02: Workgroup Consultation

Connection and Use of System Code (CUSC)

# **CMP266**

# 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

CMP266 seeks to prevent double charging of TNUoS for a meter electing to be HH settled, all demand within Measurement Class F & G will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers.

This Workgroup Report contains the discussion and conclusions of the Workgroup which formed in July 2016 to develop and assess the proposal.

Published on: 20 October 2016



The Workgroup concludes that they have met their Terms of Reference. Six Workgroup members voted and overall, WACM1, WACM2, WACM3 and WACM6 had one vote each as better facilitating the applicable CUSC objectives. WACM5 received two votes as better facilitating the applicable CUSC objectives.



High Impact: Suppliers

What stage is this document at?

01 Initial Written Assessment

02 Workgroup Consultation

Workgroup Report

04 Code Administrator Consultation

Draft CUSC
Modification Report

06 Final CUSC Modification Report

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This is the final Workgroup Report, which includes the deliberations of the Workgroup, responses from the Workgroup Consultation and the final conclusions of the Workgroup. An electronic version of this document and all other CMP266 related documentation can be found on the National Grid website via the following link:

http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP266/

#### **Document Control**

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Any Questions?

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#### 1 Summary

- 1.1 This document describes the Original CMP266 CUSC Modification Proposal (the Proposal), summarises the deliberations of the Workgroup and sets out the options for potential Workgroup Alternative CUSC Modifications (WACMs).
- 1.2 CMP266 was proposed by National Grid and was submitted to the CUSC Modifications Panel for its consideration on 16 June 2016. A copy of this Proposal is provided within Annex 1. The Panel decided to send the Proposal to a Workgroup to be developed and assessed against the CUSC Applicable Objectives. The Workgroup have consulted and gained views with the wider industry on the Proposal and considered these responses. They have also agreed the WACMs and voted on the best solution to the defect to report back to the Panel at the October 2016 CUSC Panel meeting.
- 1.3 CMP266 aims to remove demand TNUoS charging as a barrier to future elective half hourly settlement.

#### **Workgroup Conclusions**

- 1.4 Eight responses were received to the Workgroup Consultation
- 1.5 The Workgroup met on 6 October 2016 to review the Workgroup Consultation responses and voted on the Original Proposal and the eight Workgroup Alternative CUSC Modifications.
- 1.6 Six Workgroup members voted and overall, WACM1, WACM2, WACM3 and WACM6 had one vote each as better facilitating the applicable CUSC objectives. WACM5 received two votes as better facilitating the applicable CUSC objectives.
- 1.7 An electronic version of this document and all other CMP266 related documentation can be found on the National Grid website via the following link:

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#### 2 Background

#### Defect

- 2.1 When a meter within Profile Classes 1-4 moves from being Non Half Hourly (NHH) settled to Half Hourly (HH) settled within the same TNUoS charging year, the Supplier and ultimately the end consumer is liable for both a NHH TNUoS liability and HH TNUoS liability for that charging year. Ofgem's stated aim is to remove barriers to allow Elective Half Hourly settlement from early 2017. This defect therefore needs to be removed.
- 2.2 Demand taken from NHH and HH meters is charged differently. For NHH settled meters, Suppliers are charged based on cumulative demand taken between the hours of 4pm-7pm every day throughout the charging year. For HH settled meters, a Supplier's annual liability is based on average half hourly demand taken over the three highest System peaks from the start of November to the end of February. These are commonly known as Triads. Suppliers then pass on the TNUoS liability to end consumer, but how this happens in practice is the responsibility of the Supplier.
- 2.3 Potential overcharging occurs due to the differences in how demand is charged. If a meter moves to HH settlement on for example 1 August, it will have been charged under the NHH Methodology for four months i.e. 4pm-7pm every day. Demand for this consumer will now be charged under the HH Methodology for the remaining months in the year. As HH demand is based on demand over the winter months, the consumer will definitely take demand over the three Triads. The Supplier will therefore be charged four months of NHH and a full year's worth of HH liability.
- 2.4 The amount of overcharging is dependent on when the consumer moves from being NHH settled to HH settled, with movement around the start of November historically picking up the largest amount of 'overcharging'. However if a consumer moves at the end of the Triad season they can achieve a saving by avoiding a month's worth of NHH as well as avoiding the Triad season. If a consumer moves within the Triad season the Supplier will not know the effect on its TNUoS liability until Triads are confirmed and announced.

#### **Initial Proposal**

- 2.5 With reference to Ofgem's recent "Elective half-hourly settlement conclusions paper issued on 27 May 2016, there are two main solutions to the defect which the proposer has considered.
- 2.6 **Solution one:** To prevent double charging in a given charging year a consumer migrating from NHH settled to HH settled will be charged under the NHH methodology for the year in which they migrate and then will be charged under the HH methodology for future full charging years up until HH settlement is mandatory for all consumers.
- 2.7 **Solution two:** To prevent double charging of TNUoS for a meter electing to be HH settled, all demand within Measurement Classes F & G will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers. Other solutions such as treating all demand sub100kW as NHH up until all consumers are HH settled have been discussed at the Transmission Charging Methodology Forum (TCMF). In its conclusions paper, Ofgem said that it thought a Modification should be raised to extend the NHH transmission charging structure to Measurement Classes F and

<sup>&</sup>lt;sup>1</sup> https://www.ofgem.gov.uk/system/files/docs/2016/05/elective\_hhs\_conclusions\_paper.pdf)

G. The Initial proposed solution to address the defect for this modification was the following:

To prevent double charging of TNUoS for a meter electing to be HH settled, all demand within Measurement Class F & G will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers.

#### In detail

2.8 For the purposes of settlement, customers are assigned to a Profile Class according to their consumption pattern and meter type. Domestic and smaller non-domestic customers are assigned to Profile Classes 1-4 and are within Measurement Class A.

| Measurement Class | Description  |
|-------------------|--|
| Α                 | Non Half Hourly Metered  |
| В                 | Non Half Hourly Un-Metered   |
| С                 | HH metered in 100kW Premises   |
| D                 | Half Hourly Unmetered  |
| E                 | Half Hourly Metering Equipment at below 100kW Premises with current transformer  |
| F                 | Half Hourly Metering Equipment at below 100kW Premises with current transformer or whole current, and at Domestic Premises |
| G                 | Half Hourly Metering Equipment at below 100kW Premises with whole current and not at Domestic Premises                     |

Table 1

- 2.9 When meters currently in Measurement Class A elect to be HH settled the majority move into either Measurement Class F or G. Measurement Class F is used for Half Hourly domestic Metering Systems and Measurement Class G for sub-100kW non-domestic Metering Systems with whole-current Meters.
- 2.10 National Grid receives aggregated demand data from ELEXON in a file called P210. This file is used to calculate and invoice the TNUoS Demand liability. The P210 file splits up the total demand for a BMU into either HH or NHH demand. All Half Hourly settled demand is aggregated together. When a meter moves from being NHH settled to HH settled the demand for this meter automatically moves from the NHH to HH in the P210 file. The movement of this demand within a charging year causes 'overcharging' as the Supplier and ultimately the end consumer is liable for NHH charges for part of the year for demand between the hours of 4pm-7pm each day, plus HH charges which are an annual charge based on winter use over the Triad half hours.
- 2.11 To prevent double charging all demand within Measurement Class F & G will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers.
- 2.12 As National Grid does not receive individual meter demand or aggregated demand per Measurement Class to continue to charge Measurement Classes F & G under the NHH methodology, will require ELEXON to send National Grid the demand for Measurement

Class F for the Settlement Periods relating to 4-7pm. This allows National Grid to amend the P210 file and original demand. The alternative would be for the amendments necessary to the P210 file to be carried out by other Industry parties and National Grid receives the 'correct' amended demand data on which to calculate TNUoS charges. The overriding proposal is the same for either approach.

### Options identified prior to the Workgroup Consultation taking place to resolve the defect

- 2.13 The Workgroup identified and discussed a number of different options to resolve the defect. These can be found in Section 3.16 to 3.27.
- 2.14 Prior to the Workgroup Consultation and based on these original set of options (Section 3.17 to 3.28 of this report), National Grid were currently minded to go with Option 1 at this stage following Workgroup discussions, with the potential to use Option 3 for Charging Year 2018/19. If however there becomes increased certainty over the implementation of BSC Modification P339² for 1 April 2017 then Option 3 would become National Grid's preferred proposal.
- 2.15 Following the Workgroup Consultation, these options were reviewed again and updated. Table 5 within Section 4 of this report clarifies these updated options. National Grid now confirms that their preferred solution to this defect would be Option 7 (WACM 5) within this Table 5.
- 2.16 BSC Modification P339 has been raised to introduce new Consumption Component Classes (CCCs) for Measurement Classes 'E', 'F' and 'G' to enable aggregated consumption volumes for both Active Import (AI) and Active Export (AE) to be identified separately.
- 2.17 Without the approval and implementation of BSC Modification P339 it is not possible to treat demand for Measurement Classes differently as National Grid receives aggregated demand data for sub100kW. P339 could be implemented during the Charging Year 2017/18, although the Workgroup is currently proposing implementation on 1 April 2017. This creates a potential gap where National Grid would not be able to receive separate demand data for that class between the time a meter migrates to HH settlement from NHH settlement and the timing of the implementation of P339. It is also currently not possible to split users up within the same Measurement Class based on the year they move to being HH settled, as this data is not currently provided to ELEXON so cannot be passed onto National Grid. Therefore for 2017/18 National Grid believe that the systems will not be in place and may preclude some of the options.
- 2.18 Regardless of the system changes there was discussion within the Workgroup, whether the HH methodology is the most appropriate Methodology for smaller domestic customers, and whether or not Suppliers systems could be designed to manage consumers bills based on Triad demand.
- 2.19 For the Charging Year 2018/19 it will be possible to separate demand for each Measurement Class. National Grid is therefore open to Option 3 for the charging year 2018/19, which splits up demand for Measurement Class E, F and G, therefore allowing Measurement Class E to move to the HH methodology. These consumers are arguably larger and therefore more suited to the HH methodology which works better for consumers on fixed year-long contracts.

2.20 Outside of this Modification there has been discussion over the future role of Triads. Although the HH methodology is currently part of baseline and that is what the defect is compared too is there merit in moving consumers across to a HH methodology which may alter? National Grid therefore do not support the need for any large scale system changes which will allow demand within a Measurement Class to be separated therefore aiding any option which allowed users to move across to the HH methodology.

#### 3 Workgroup Discussions

3.1 This section provides information regarding what the Workgroup have discussed in relation to this proposal. The points discussed concerned a number of different areas as presented below.

#### **National Grid Charging**

- 3.2 Suppliers are invoiced based on aggregated demand at the GSP. The aggregated demand is a combination of demand from Non Half Hourly (NHH) meters and Half Hourly (HH) meters of which the Suppliers are responsible for. Total demand for each BMU is shown in the SAA-IO14 file.
- 3.3 HH and NHH meters are charged under different methodologies. Therefore it is necessary to split up the demand for each Half Hour settlement period. National Grid receives from ELEXON a bespoke file called the P210 or TUOS file. This splits up the demand for each BMU into NHH and HH demand. Figure 1 illustrates this below.

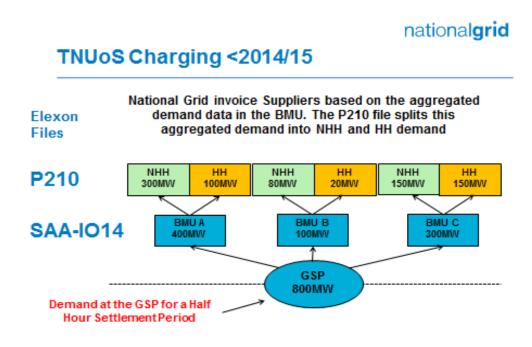


Figure 1

- 3.4 As described in the defect when a consumer moves from being NHH settled to HH settled the Supplier and ultimately the end consumer may see an increased TNUoS liability for that charging year purely through changing settlement rather than a change in demand use. BSC Modification P272<sup>3</sup> made HH settlement mandatory for all meters in Profile Class 5-8 with Advanced Meters (AMR). CMP241<sup>4</sup> introduced a further process to prevent 'overcharging' for meters migrating as part of P272 by treating the meter as NHH for the whole charging year.
- 3.5 When a meter migrates from NHH settlement to HH settlement it moves from Measurement Class A to Measurement Class E, F or G. Figure 2 shows the effect of the migration on the P210 file. Demand moves from NHH to HH. The P210 file does not show individual meter demand. Therefore the change seen is the aggregated effect of all meters migrating.

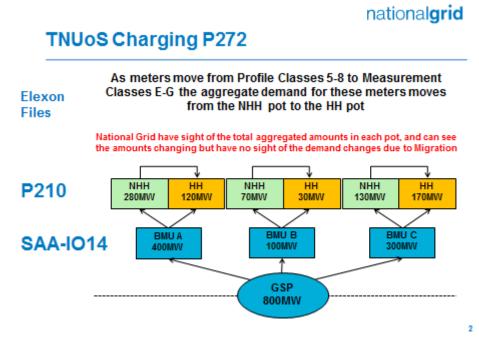


Figure 2

<sup>3</sup> https://www.elexon.co.uk/mod-proposal/p272-mandatory-half-hourly-settlement-for-profile-classes-5-8/

<sup>&</sup>lt;sup>4</sup> http://www2.nationalgrid.com/UK/Industry-information/Electricity-Codes/CUSC/Modifications/CMP241/

3.6 To separate out the demand for those meters migrating as part of P272 a further file was created which showed aggregated demand for Measurement Classes E-G (sub 100kW (Figure 3). This file allows the demand for these meters to be moved from the HH demand to the NHH demand (figure 4). Demand over the Triad half hours for these meters will therefore be 0 removing the 'overcharging' issue.

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#### **TNUoS Charging P272**

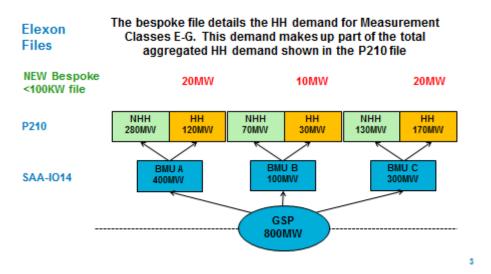


Figure 3

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#### **TNUoS Charging P272**

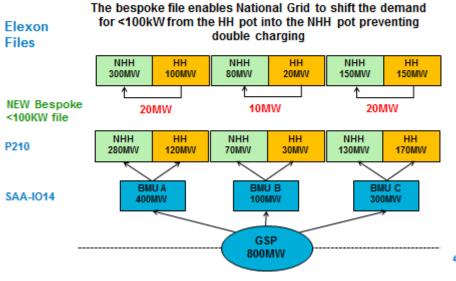


Figure 4

- 3.7 When meters migrate from profile Classes 1-4 the majority move into either Measurement Class F or G dependent on the meter type and whether the meter is classed as domestic. A few meters in these profiles are classes such as Current Transformers (CT) and therefore would move into Measurement Class E
- 3.8 To prevent overcharging, a similar process undertaken as part of CMP241 is proposed. However, if all sub 100kW demand was treated as NHH for the charging years or years, then meters which had migrated as part of P272 and had prepared or were expecting to be charged under the HH methodology would now not be charged under the HH methodology. This may or may not be a good thing from the perspective of the end consumer, dependent on their individual demand usage and how flexible they are prepared to be. A BSC Modification (P339) is running in parallel with this Modification, which will split up demand for each Measurement Class (E, F and G).

#### P339

- 3.9 This BSC modification seeks to introduce new Consumption Component Classes (CCC). This modification allows the demand data for sub 100kW meters to be split up into individual Measurement Classes E, F and G and introduces new CCCs for microgeneration.
- 3.10 BSC Modification P339 was raised in advance of CMP266 and is a mechanism to provide the data required for CMP266 to be implemented for the majority of the WACMs.
- 3.11 It does not allow demand to be separated out on the basis of Profile Class 5-8 or Profile Class 1-4, or time a meter migrated into the Measurement Class i.e.
  - Measurement Class F 2015/16
  - Measurement Class F 2016/17
- 3.12 Although the Industry is aiming to have P339 accepted by the Authority around December 2016, it must be noted that this does not mean it will be implemented at the same time as it is approved (the Workgroup are making the assumption that it is accepted for the purposes of this report).
- 3.13 Discussions with ELEXON note that implementation may be carried out at different periods of the year, depending on existing planned work amongst other things.
- 3.14 The implications of a delay in implementation is discussed in the timings section

#### **Options (Pre Workgroup Consultation)**

- 3.15 The defect for this modification has already been discussed earlier in 2016 at an Industry Workgroup which was set up, with the aim of removing barriers to elective HH Settlement. From these discussions, two initial options were derived which would remove the defect of Demand TNUoS as a barrier to a consumer who wished to move to HH settlement. For reference, Options 2 and 3 in the list of options below, are the same as those that are listed in paragraph 4.29 in Ofgem's conclusion paper on HH Elective Settlement<sup>5</sup>. Option 3 was initially chosen as preferable.
- 3.16 As the Workgroup discussions progressed, and further information was gathered with regards to BSC Modification P339, a number of other options were created and

https://www.ofgem.gov.uk/system/fil<u>es/docs/2016/05/elective\_hhs\_conclusions\_paper.pdf</u>

discussed. The list of options below describes how the option would work in practice and what the Workgroup saw as the main strengths and weaknesses and any issues from a system perspective of this approach to addressing the defect. These are detailed in Table 2.

- 3.17 Option 1 (Original): Continue treating all meters in Measurement Class E-G (sub100kW) as NHH up until all meters become HH settled by 1 April 2020. This is the continuation of the workaround which was put in place to avoid overcharging as meters migrated as part of P272.
- Not reliant on P339.
- Maintains status quo, so minimal changes needed.
- Prevents meters migrating as part of P272 being charged under the HH methodology which consumers would have been expecting and may have invested for.
- 3.18 Option 2: When a meter migrates to Measurement Class F-G they are charged under the NHH methodology for the charging year it migrates to avoid double charging then as HH for the remaining charging years.
- Reliant on P339 to split F-G from E.
- Central System not able to split data based on migration date, and no modification in place
  to change the system to allow this to happen, meaning not able to charge meters within the
  same Measurement Class differently.
- Whole Current meters (Measurement Class G) migrating as part of P272 (over 50% of P272 meters); will be charged differently to Current Transformer meters (Measurement Class E).
- Being charged under the HH methodology may not be appropriate for domestic customers.
- 3.19 Option 3: All meters in Measurement Class F-G charged under the NHH methodology until 2020.
- Reliant on P339 to split F-G from E.
- Whole Current meters (Measurement Class G) migrating as part of P272 (over 50% of P272 meters); will be charged differently to Current Transformer meters (Measurement Class E).
- Part of P272 meters charged as expected under the HH methodology.
- 3.20 Option 4: All meters in Measurement Class F are charged under the NHH methodology for the year it migrates then HH for all other charging years. Under this option only Measurement Class F is treated as NHH for the full year in which it migrates to prevent 'overcharging'. Measurement Class G is charged under existing methodology.
- Reliant on P339.
- Central System not able to split data based on migration date, and no modification in place
  to change the system to allow this to happen, meaning not able to charge meters within the
  same Measurement Class differently.
- Defect for Measurement Class G meters not resolved >2 million meters.
- P272 meters charged under the HH methodology as expected.
- 3.21 Option 5: All meters in Measurement Class F charged under the NHH methodology until 2020. Under this option only Measurement Class F is treated as NHH for the full year in which it migrates to prevent 'overcharging'. Measurement Class G is charged under existing methodology.
- Reliant on P339.
- Defect for Measurement Class G meters not resolved >2 million meters.

P272 meters charged under the HH methodology as expected.

# 3.22 Option 5b: All meters in Measurement Class F treated as NHH enduring. G treated as NHH for first year it migrates then HH for all years onwards.

- Reliant on P339.
- Central System not able to split data based on migration date, and no modification in place
  to change the system to allow this to happen, meaning not able to charge meters within the
  same Measurement Class differently.
- P272 meters charged under the HH methodology as expected.
- Workgroup believes NHH methodology more suited to domestic customers (F) and HH to Measurement Class G.
- 3.23 **Option 5c:** All meters in Measurement Class F treated as NHH enduring. G treated as NHH up until 2020 then on HH.
- Reliant on P339.
- Central System not able to split data based on migration date, and no modification in place
  to change the system to allow this to happen, meaning not able to charge meters within the
  same Measurement Class differently. However time to make this change as not needed
  until 2020.
- P272 meters not charged under the HH methodology as expected.
- Whole Current meters (Measurement Class G) migrating as part of P272 (over 50% of P272 meters); will be charged differently to Current Transformer meters (Measurement Class E).
- 3.24 Option 6: Meters migrating into Measurement Class G charged under the NHH methodology for the year it migrates then HH for all other charging years.
- Does not deal with Measurement Class F which makes up the vast majority of the defect. Therefore this option was not seen as appropriate by the Workgroup.
- 3.25 Option 7: All meters in Measurement Class G charged under the NHH methodology until 2020.
- Does not deal with Measurement Class F which makes up the vast majority of the defect. Therefore this option was not seen as appropriate by the Workgroup.
- 3.26 Option 8: Suppliers confirm which methodology they want a meter to be charged under.
- The Workgroup felt that the complexity involved putting the systems in place to allow this option to work, as well as the ability of National Grid to forecast demand bases necessary to set cost reflective tariffs and then collect allowed revenues made this option unworkable.
- 3.27 Option 9: Charge all meters under the HH methodology, using profiled data for the NHH meters. To prevent overcharging a user must be charged under either the NHH or HH methodology for the full year. All the options above repeat previous fixes by treating the migrating meter as NHH for the full year. This option removes the defect by treating the meter as HH by using profiled data.
- Not reliant on P339.
- Simple to introduce.
- Reverses the rationale behind the introduction of the NHH methodology.
- ~85% of TNUoS revenue based on demand over 3 half hours

- 3.28 **Option 10: Charge all meters year round, removing Triad.** Instead of just charging E, F and G as NHH this option goes one step further and charges all demand users based on usage between 4-7pm
- Fundamental change to the methodology for demand users who will have being charged under the HH methodology since conception. These end consumers will be unaware of this change, and at short notice.

#### **Discrimination**

- 3.29 The Workgroup is aware that the methodology states that when a meter is Half Hourly settled then it is charged using the HH methodology. A number of the proposals do not follow this, i.e. they maintain the NHH methodology whilst being settled HH. The Workgroup needs to make it clear why different sets of consumers are being treated differently and the rationale behind it.
- 3.30 Workgroup members suggested that it was unfair to discriminate against customers purely based on the type of meter installed. This will happen by treating customers with whole current meters (Measurement Class G) differently to customers with Current Transformer meters (Measurement Class E).
- 3.31 It was noted by a Workgroup member that sites with Current Transformer meters are likely to be installed on larger sites. Discussions within the Workgroup noted that the HH methodology is more suited to and was originally designed for larger sites so although this discrimination will exist for Whole Current (WC) and CT meters, it may be appropriate to discriminate based on size.
- 3.32 As demand for Measurement Class G cannot currently be split up by ELEXON, based on the time the meter moved into the class, the result of meters are charged under different methodologies.
- 3.33 Being charged under the HH methodology can benefit some customers who can move their demand away from the traditional Triad periods, or if their peaks are already at different periods of the day. However, by contrast, being charged under the HH methodology will not benefit consumers who take demand over the traditional Triad periods and are unable to reduce their demand.

Introduction of NHH methodology

- 3.34 The NHH methodology was introduced at the same time competition was introduced into the Supply market 2000/2001.
- 3.35 Previous to this, all meters were charged under the HH methodology with profiled data used for the NHH meters to determine the Triad values.
- 3.36 It was argued that being charged under the HH and then current methodology for all users was not conducive to switching and therefore new competition.
- 3.37 The rationale was as the charging year progresses a Supplier is incentivised not to take on new customers as they will be subject to a full year's worth of TNUoS liability based on Triad demand over the winter but do not have a full charging year to collect this liability from the consumer. As it was the customer's own choice when they would switch, either the new Supplier would have to take on a loss leading tariff for the first year or have an uncompetitive tariff.
- 3.38 The Workgroup agreed that they would like to gain specific industry views on HH methodology and when they consulted with the Industry. All responses were reviewed by the Workgroup and are discussed in more in detail in Post Workgroup Consultation Workgroup Discussions within this section of the document.

#### Movement to the HH Methodology

- 3.39 Some of the options propose moving to the HH methodology the first full charging year after migrating.
- 3.40 As highlighted in previous CUSC Modification (CMP260<sup>6</sup>) there is the desire for certain consumers to be charged under the HH methodology as soon as possible and this is an expectation post April 2017.
- 3.41 For some consumers this gives them the opportunity to reduce their TNUoS liability to £zero, so some Suppliers will see this as a new innovative product which would be welcomed by certain consumers. By not allowing the movement to the HH methodology, this could be classed as stifling innovation.
- 3.42 It was noted that over the past few years, due to the increase in Triad avoidance, and lack of obvious Triad days over the winter, Triad periods have been harder to predict. It is no guarantee therefore that liability will be reduced to zero. It just gives consumers that opportunity, which is understandably attractive. As NHH is charged 4pm-7pm every day throughout the year then it is not feasible to achieve a similar zero TNUoS liability as under the HH methodology. A Workgroup member stated that there is uncertainty with the Triads, whereas there is certainty with the NHH methodology. If they demand manage 4pm-7pm then they will receive a reduction.
- 3.43 In fact due to the differences in average Peak assumed in the NHH methodology, and maximum Peak being charged under the HH methodology may result in an increased TNUoS liability.
- 3.44 Some Workgroup members noted that although Triad avoidance may result in a reduction in the end consumers' energy bill, it may not be clear to the consumer that the reduction was due to the avoidance of Transmission costs. This is because of how network costs

<sup>&</sup>lt;sup>6</sup> http://www2.nationalgrid<u>.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP260/</u>

are shown in the end consumer bill and wrapped up in the energy cost. Distribution and Transmission costs would need to be separated and explained to the consumer. As DUoS charges are similar to the NHH methodology then this split in network costs may not be necessary if the NHH methodology is maintained.

- 3.45 It was mentioned that the Triad avoidance benefit may not be commensurate with the change and effort necessary to avoid Triads. I.e. for domestic customers the TNUoS liability for the end consumer is estimated at £20-30.
- 3.46 For some consumers they may see this as an added level of complexity and are not yet ready to demand manage to the level necessary to achieve savings under the HH methodology.
- 3.47 A Workgroup member added that movement to the HH methodology may not be wanted by Suppliers. Not all Suppliers will want the added complexity of having to explain to the end consumer how Triads work, then have the systems in place to be able to forecast variable demand levels and liability as well as send out Triad warnings.
- 3.48 As part of the TNUoS billing process, Suppliers are invoiced based on their own forecast of HH and NHH demand, then at the end of the charging year they are invoiced based on actual demand. The use of actual demand is carried out through a process called the Initial demand reconciliation. If forecasts are incorrect then this can lead to the need to provide more credit, and large payments/credits at the demand reconciliations. For smaller Suppliers this can be problematic.
- 3.49 As Triads are not announced until the end of the charging year, Suppliers will not be able to calculate the actual liability for the end consumer until after the date of actual demand usage over the Triad period. Therefore a key question is, will Suppliers then invoice the end consumer based on actual usage, similar to pass through contracts, or will the Supplier absorb the risk of forecast usage being different to what is charged? If it's the latter, then although actual demand data will be used to charge the Supplier, the end consumers TNUoS charge will be based on an average forecast similar to the NHH profiling.
- 3.50 As mentioned above, there is the potential for increased risk to the Supplier of there being a divergence between costs passed through to the end consumer and what the Supplier is charged from National Grid. Will this then lead to an increase in Risk premia charged to the end consumer to cover this divergence?
- 3.51 As well as the risks and potential costs mentioned above, incorrect forecasts of demand and Triad avoidance may also lead to increased imbalance payments through the BSC<sup>7</sup>.
- 3.52 At the same time it is important to give a balanced perspective of moving to the HH methodology. The premise of the HH methodology is that it reduces the need to reinforce the System at Peak. Any increased Triad avoidance therefore reduces the need to invest in the System at Peak. There are also Security of Supply benefits. Reduced demand results in there being less Generation needed at Peak. However it must be noted that from a cost point of view this will only be a benefit if Triad avoidance is fairly predictable.

#### **Timings**

<sup>&</sup>lt;sup>7</sup> https://www.elexon.co.uk/reference/credit-pricing/trading-charges/

- 3.53 National Grid set draft TNUoS tariffs in December 2016 for the charging year 2017/18 charging year then finalise tariffs at the end of January 2017 for the same charging year.
- 3.54 Nearly all proposals suggest maintaining the NHH methodology for the year in which a meter migrates. Ordinarily this will therefore not affect National Grid's forecasted charging bases used for TNUoS charges as shown in the analysis section. However current forecasts for 2017/18 assume all P272 migrated meters are charged under the HH methodology.
- 3.55 If Measurement Class G meters are charged based on the NHH methodology then this will may have an impact on the charging bases with a reduction in ~2GW's of HH chargeable demand and an increase in NHH demand. It is estimated that the actual impact of tariffs will be limited as due to the linkage between Peaks and NHH demand.
- 3.56 A more significant issue is the Implementation of P339.

#### Implementation of P339

- 3.57 P339 is currently proposed as being implemented at the start of April 2017. P339 is critical, if demand is required to be split up into separate Measurement Classes and therefore allow demand to be treated differently for sub100 KW.
- 3.58 If P339 is implemented in June 2017 what will this mean in practice? All sub 100kW demand before June will be grouped up as sub 100kW (i.e. Measurement Class E-G together). This is because the collation and splitting of Measurement Classes cannot be made retrospective to the implementation date of P339.
- 3.59 To prevent overcharging of HH on top of NHH, all HH demand for the relevant Measurement Classes is moved from the 4pm-7pm half hours and added to the equivalent NHH half hours.
- 3.60 This adjustment results in there being zero demand at Triad relating to that Measurement Class, but also ensures at the same time by moving it into the NHH half hour, they are correctly charged the NHH liability. If the HH was just removed but not added to the NHH half hour then this would, incorrectly result in no charge.
- 3.61 If a meter for example migrates in June to HH settlement, the demand for this meter moves to the HH pot. Up until then they would be charged as NHH. Under this scenario there is no issue for that meter, but still does not solve the issues with regards to meters which move to being HH settled before this date.
- 3.62 At the moment there are currently 3.6 million smart and advanced meters installed<sup>8</sup>. Some of these meters, will be Gas meters, some will already be settled HH, and some may not be capable of being read and therefore settled HH. Regardless of exact numbers of meters affected by this modification it does highlight the risk that a number of meters may wish to be settled HH before P339 is implemented but the demand data for these meters cannot be separated out to allow this to happen.
- 3.63 As the implementation of P339 moves further into the charging year the issue regarding 3.62 increases. For example an implementation in November for a meter moving in June results in for July, August, September and October National Grid would not be able to

<sup>8</sup> 

separate out the demand for this Measurement Class from any other demand in the sub100kW demand which is contained in the HH pot. This is illustrated in figure 5 below.

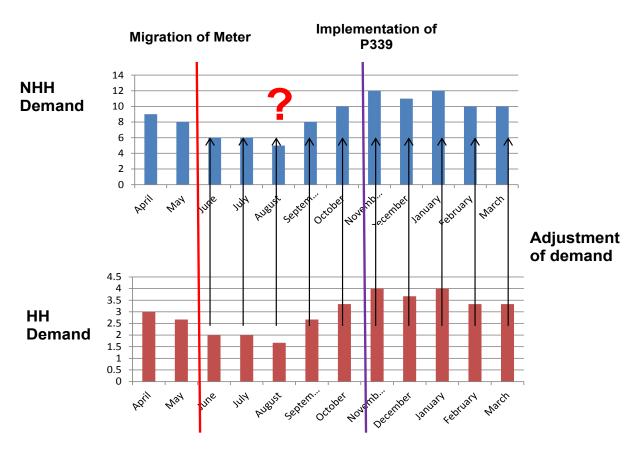


Figure 5

- 3.64 For the period June to October National Grid would not be able to move demand associated with Measurement Class F or G from the HH pot as it cannot be separated out.
- 3.65 Therefore either National Grid move all sub100kW demand and treat it as NHH or accept for those months between migration and implementation, the Supplier will not be charged NHH liability for those meters migrating. It should be noted that the HH pot will also be higher. However as Triads are charged November to end of February this 'extra' demand in the HH pot will not result in an increased liability or overcharge.
- 3.66 The implementation timing of P339 may therefore cause issues in terms of TNUoS recovery. This is of course making the assumption that P339 and this proposal is accepted.
- 3.67 The under recovery for the period noted in figure 5 can be taken into account in charge setting, but to be able to do so, National Grid will need the following information;
  - An estimation of the numbers of meters migrating to HH settlement in profile
     Classes 1-4, the demand associated with these meters, and the month in which they will move
  - A firm implementation date for P339. As the decision date for P339 is not until
     December at the earliest then this leaves little time for analysis for charge setting

- 3.68 With this data an adjustment can then be made to the NHH charging base to take into account that it will be lower for that gap between migration to HH settlement and the implementation of P339.
- 3.69 However if an adjustment is made to the charging base those meters not migrating (NHH), will in effect be paying for those meters migrating to HH settlement through an increase in their NHH tariff.
- 3.70 Please note that National Grid charge Suppliers TNUoS. Suppliers, then pass on the TNUoS liability to the end consumer through their own tariffs. Suppliers could therefore manage these 'missing months' themselves to ensure remaining NHH customers do not pay.

**Cost Reflectivity and Potential Volatility of Tariffs** 

- 3.71 To be able to set cost reflective tariffs it is necessary to be able to accurately forecast the demand on which the tariff will be levied. If this is done incorrectly tariffs may not be cost reflective. A follow on from this is increased risk of over and under recovering. National Grid SO is incentivised through penal interest rates not to recover more and less revenue than our allowed revenues. As well as penal interest rates there is also a cash-flow risk on Industry parties and opportunity cost.
- 3.72 Over and under recovery from one year is recovered in later years through a term called 'K' which increases or decreases allowed revenues for future years. Options which move meters to the HH methodology need to balance any advantages with the potential increased risk of over and under recovery due to the uncertainty over exactly how these meters will behave over Triads with no historic demand data other than profiles to use to estimate demand bases.
- 3.73 Any movement of meters to the HH methodology requires being able to accurately forecast the NHH demand associated with these meters so as to reduce the NHH demand bases appropriately. There are no industry plans detailing which Profile Classes will be migrating and when they will migrate, unlike P272 which was a mandatory requirement and therefore had migration plans, as requested by the Performance Assurance Board<sup>9</sup>.
- 3.74 This current lack of information causes significant issues with regards to the timing of the implementation of P339 and when a meter moves to being HH settled (please see section 3.57, Implementation of P339)
- 3.75 A further task would be to forecast demand which will be subject to the HH methodology. Peak demand will be based on average Peak demand for Profiles 1-4. However there are significant differences in terms of peak for the different profiles and the numbers of meters and demand associated with each profile.
- 3.76 The change in Peak changes the HH tariff. If the Peak reduces then the HH residual goes up and vice versa.

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<sup>&</sup>lt;sup>9</sup> Further information on the Performance Assurance Board: https://www.elexon.co.uk/group/performance-assurance-board-pab/

3.77 The following table (Table 2) shows a matrix of options discussed by the Workgroup prior to the Workgroup Consultation. This table was reviewed again after the Workgroup Consultation by the Workgroup and an updated agreed Options table can be found in Section 4 of this report. Those options greyed out were considered by the Workgroup were not considered to be a practical option for this proposal.

| Option<br>No. | NHH<br>Methodology  | HH<br>Methodology  | End<br>date | National Grid<br>System change   | BSC Changes  | CUSC<br>Objective A -<br>competition  | CUSC Objective B - cost reflectively   | Discriminatory  | Rationale<br>why could be<br>best option   | Considerations   | impacts on<br>'vulnerable'<br>customers   | Impacts on discouraging move to HH Settlement                             |
|---------------|---|--|-------------|--|--|---|--|---|--|--|---|---|
| Option 1      | EFG Will 'be<br>charged as<br>NHH until all<br>meters move<br>to HH | Only start<br>once all<br>meters have<br>moved to HH<br>settlement | ?           | Extends<br>workaround for HH<br>meters <april 2015<br="">as per CMP241</april>   | Continue sending<br>sub<100kW file<br>workaround needed<br>for P272. Not<br>dependent on<br>implementation of<br>P339.   | Treats all SVA meters the same. Doesn't push costs from NHH to HH. Limits innovation on Triads. Customers already promised HH | Consumers<br>are charged<br>on the same<br>basis as<br>current.  | Will be treating<br>different sizes<br>of HH settled<br>customers<br>differently i.e<br>sub 100kw and<br>greater 100kw                                    | No system<br>changes.<br>Simplest in<br>terms of tariff<br>setting. Not<br>dependent on<br>P339.<br>Maintains<br>status quo                                | P272 customers expecting to be charged under the Triad methodology will now not be. They will continue to be charged as they currently are | Demand<br>management<br>does increase<br>tariffs but<br>arguably<br>potentially not<br>as much as if<br>charged HH    | Yes   |
| Option 2      | Charged as<br>NHH for<br>whole year in<br>which they<br>migrate     | Move after<br>first full<br>charging year<br>they migrated         | 2020        | Manually adjust P210 data similar to P272 workaround but data does not now include E. Extra process needs to be created to treat meters within a Measurement Class differently depending on year they migrated | P339 allows demand for F/G from E to be split up. However would need to split up a MC based on COMC process to show i.e. demand for <2017 demand, >2017 which would require a further BSC modification to be implemented by April 2018 (potentially with associated Data Transfer Catalogue changes) | Allows innovative tariffs linked to Triad Avoidance. HH methodology potentially prevents or disincentivises switching         | Requirement to accurately forecast numbers of meters in the HH category for that year, the HH demand associated with them and how they may react over Triad. More difficult to set cost reflective tariffs | Customers<br>treated<br>differently<br>dependent on<br>meter type for<br>the first year as<br>all G will be<br>treated as NHH<br>including P272<br>meters | Removes<br>discrimination<br>regarding<br>different HH<br>settled meters<br>being charged<br>under<br>separate<br>methodologies<br>(after the 1st<br>year) | Can the system change in the BSC mod actually be done? This Workgroup cannot make that decision.   | Increased Triad avoidance pushes costs onto NHH. Any forecasting error is borne by customers who cannot demand manage | Consumers may<br>not want to be<br>charged under<br>the HH<br>methodology |
| Option 3      | NHH until <b>all</b><br>PC 1-4<br>becomes HH<br>(2020??)            | Only until <b>all</b><br>PC 1-4<br>moved                           | 2020        | Manually adjust<br>P210 data similar to<br>P272 workaround<br>but data does not<br>now include E.  | P339 allows demand<br>for F/G from E to be<br>split up. Problems<br>with mistiming of<br>Implementation of<br>P339 if not April 2017   | Some P272 meters in G want to be charged under HH but now cannot be. Stops innovation Triad Avoidance. HH stops switching     | No<br>requirement<br>to forecast<br>HH volumes<br>or Triad<br>behaviour  | Customers<br>treated<br>differently<br>dependent on<br>meter type. HH<br>settled meters<br>treated<br>differently   | Allows E to be<br>charged as<br>HH   | How to handle implementation date of P339  |   | None  |

| Option<br>No. | NHH<br>Methodology   | HH<br>Methodology  | End<br>date | National Grid<br>System change  | BSC Changes   | CUSC<br>Objective A -<br>competition   | CUSC<br>Objective B<br>- cost<br>reflectively  | Discriminatory  | Rationale<br>why could be<br>best option  | Considerations   | impacts on<br>'vulnerable'<br>customers  | Impacts on discouraging move to HH Settlement                             |
|---------------|--|--|-------------|---|---|--|--|---|---|--|--|---|
| Option 4      | F for first year   | F move after<br>first full<br>charging year<br>they migrated |             | Manually adjust P210 data similar to P272 workaround but does not now include <b>E&amp;G</b> . Extra process to treat meters within MC F differently depending on year they migrated                            | P339 allows demand<br>for F from E/G to be<br>split up. However<br>would need to split<br>up a MC based on<br>COMC process to<br>show i.e. demand for<br><2017 demand,<br>>2017 | Allows innovative tariffs Triad Avoidance. HH methodology potentially prevents or disincentivises switching  | Requirement to accurately forecast numbers of meters in the HH category for that year, the HH demand associated with them and how they may react over Triad. More difficult to set cost reflective tariffs | Treats classes  | Majority of<br>meters in<br>terms of<br>numbers and<br>demand<br>moving will be<br>F                            | Doesn't stop<br>overcharging for<br>meters moving<br>as part of G                                | Costs from<br>Triad<br>avoidance<br>pushed on<br>consumers<br>who do not or<br>cannot Triad<br>avoid | Consumers may<br>not want to be<br>charged under<br>the HH<br>methodology |
| Option 5      | MC F NHH<br>until <b>all</b> PC 1-<br>4 becomes<br>HH (2020??) | For MC F -<br>After <b>all</b> PC<br>1-4 moved               |             | Manually adjust P210 data similar to P272 workaround but does not now include <b>E&amp;G</b> .  | P339 allows demand<br>for F from E/G to be<br>split up.   | Doesn't allow<br>innovative<br>tariffs Triad<br>Avoidance  | No<br>requirement<br>to forecast<br>HH volumes<br>or Triad<br>behaviour.<br>Will need to<br>for G  | Treats classes  | Majority of meters in terms of numbers and demand moving will be F. Doesn't move these meters to HH methodology | Doesn't stop<br>overcharging for<br>meters moving<br>as part of G                                | None   |   |
| Option<br>5b) | F remains<br>NHH<br>enduring and<br>G for year it<br>migrates  | MC G after<br>first year                                     |             | Manually adjust P210 data similar to P272 workaround but does not now include E&G. Extra process to treat meters within MC F differently depending on year they migrated. Adds complication in terms of billing | P339 allows demand<br>for F from E/G to be<br>split up. However<br>would need to split<br>up a MC based on<br>COMC process to<br>show i.e. demand for<br><2017 demand,<br>>2017 | Doesn't allow<br>innovative<br>tariffs Triad<br>Avoidance for<br>domestic.   | No<br>requirement<br>to forecast<br>HH volumes<br>or Triad<br>behaviour<br>for domestic<br>consumers   | Treats classes  | G more likely<br>to want to be<br>charged under<br>HH<br>methodology.<br>Stops<br>overcharging                  | Can the system change in the BSC mod actually be done? This Workgroup cannot make that decision. | Less impact<br>due to<br>domestic<br>consumers<br>not being<br>charged Traid                         |   |
| Option<br>5c  | F remains<br>enduring and<br>G subject to<br>Triads in<br>2020 | After 2020<br>but only MC<br>G                               |             | Manually adjust<br>P210 data similar to<br>P272 workaround<br>but data does not<br>now include <b>E</b> .   | P339 allows demand<br>for F/G from E to be<br>split up. Problems<br>with mistiming of<br>Implementation of<br>P339 if not April 2017  | P272 meters<br>in G want to<br>be charged<br>under HH but<br>now cannot<br>be. Stops<br>innovation<br>linked to Triad<br>avoidance.<br>HH stops<br>switching | No<br>requirement<br>to forecast<br>HH volumes<br>or Triad<br>behaviour  | Customers<br>treated<br>differently<br>dependent on<br>meter type. HH<br>settled meters<br>treated<br>differently | Allows E to be<br>charged as<br>HH  | How to handle implementation date of P339  |  | None  |

| Option<br>No. | NHH<br>Methodology   | HH<br>Methodology                       | End<br>date  | National Grid<br>System change   | BSC Changes   | CUSC<br>Objective A -<br>competition  | CUSC<br>Objective B<br>- cost<br>reflectively  | Discriminatory             | Rationale<br>why could be<br>best option  | Considerations  | impacts on<br>'vulnerable'<br>customers  | Impacts on discouraging move to HH Settlement                             |
|---------------|--|---|--------------|--|---|---|--|----------------------------|---|---|--|---|
| Option 6      | first year   | Move after first year                   |              | Manually adjust P210 data similar to P272 workaround but does not now include <b>E&amp;G</b> . Extra process to treat meters within MC F differently depending on year they migrated | P339 allows demand<br>for G from E/G to be<br>split up. However<br>would need to split<br>up a MC based on<br>COMC process to<br>show i.e. demand for<br><2017 demand,<br>>2017 | Allows innovative tariffs linked to Triad avoidance. HH methodology potentially prevents or disincentivises switching | Requirement to accurately forecast numbers of meters in the HH category for that year, the HH demand associated with them and how they may react over Triad. More difficult to set cost reflective tariffs | Treats classes             | Majority of meters in terms of numbers and demand moving will be  | Doesn't stop<br>overcharging for<br>meters moving<br>as part of F<br>which will be the<br>majority              | Costs from<br>Triad<br>avoidance<br>pushed on<br>consumers<br>who do not or<br>cannot Triad<br>avoid | Consumers may<br>not want to be<br>charged under<br>the HH<br>methodology |
| Option 7      | MC G NHH<br>until <b>all</b> PC 1-<br>4 becomes<br>HH (2020) | For MC G -<br>After all PC<br>1-4 moved |              | Manually adjust P210 data similar to P272 workaround but does not now include <b>E&amp;G</b> .   | P339 allows demand<br>for G from E/G to be<br>split up.   | Doesn't allow<br>innovative<br>tariffs linked to<br>Triad<br>avoidance  | No<br>requirement<br>to forecast<br>HH volumes<br>or Triad<br>behaviour.<br>Will need to<br>for G  | Treats classes differently | Majority of meters in terms of numbers and demand moving will be F. Doesn't move these meters to HH methodology | Doesn't stop<br>overcharging for<br>meters moving<br>as part of F<br>which will be the<br>majority<br>Workgroup | None   |   |
| Option 8      | first year   | Move after first year                   |              | Numerous   | Numerous  |   |  |                            |   | decided that<br>system changes<br>and complexity<br>ruled out this<br>option                                    |  |   |
| Option 9      | Outside the sco  | pe of this Workgro                      | oup. I.e. we | would be changing the  | how demand is aggregate   | ed  |  |                            |   |   |  |   |
| Option        |  |   |              |  |   |   |  |                            |   |   |  |   |
| 10            | Outside the sco  | pe of this Workgro                      | oup. I.e. we | would be changing the  | demand methodology  |   |  |                            |   |   |  |   |

#### **Analysis**

- 3.78 National Grid were asked to analyse the effect of 25% of remaining NHH settled meters moving across to HH settlement each year and therefore changing the methodology on which they are charged. (It was noted within the Workgroup that 25% was an optimistic number for migration based on P272).
- 3.79 To do this National Grid calculated the NHH demand at Peak from forecast June 2017/18 tariffs.
- 3.80 This amount was then reduced by 25% as NHH demand would be moving to HH demand from as part of the migration from the previous year.
- 3.81 Because migrating meters would be treated as NHH for the full year in which they migrate the timing of when they migrate in the year is immaterial for the purpose of this analysis.
- 3.82 Therefore for 2018/19 NHH demand for 2017/18 was reduced by 25%. This demand was further reduced by 10% to take into account that they are now incentivised to Triad avoid. A Workgroup member stated that this assumes that Suppliers are able to incentivise consumers to avoid Triads through their tariffs. If not, then there would be no TNUoS incentive to avoid demand at Peak. It may be the case that early movers, Triad avoid more than 10-25%, but the late movers do not Triad avoid at all.
- 3.83 This adjusted amount was then added to the amount of demand which is charged the HH tariff over Triad (HH Chargeable). This process was then repeated for each subsequent year. The change in the tariffs and residual is shown in Table 3 below.
- 3.84 As HH and NHH tariffs increase, the Peak reduces and the amount of revenue to be recovered from NHH increases.
- 3.85 National Grid has used a conservative Triad avoidance figure of 10%. If National Grid were to use a figure of 25% avoidance then the change in tariffs is more pronounced as shown in Table 4
- 3.86 The increase in Triad avoidance will have a major effect on the timing of the Triads.
- 3.87 The proportion of NHH demand compared to HH demand at Triad has historically been 70-30%. However on recent Triads, this has ranged from 74-26% to 79-21%. By incentivising existing NHH demand (which makes up the larger amount of Triad demand) to Triad avoid, this will have an effect on the timings of the Triad. The actual effect is impossible to predict.
- 3.88 This uncertainty and increased risk over the amount of demand at Peak, or when the Triads may occur, will potentially increase Industry costs. At the same time it will reduce Peaks, potentially reducing future investment, and increase security of Supply due to the need for less Generation.

#### Changes in Peak and TNUoS liability

- 3.89 A question was asked within the Workgroup about the effect on the TNUoS liability from moving from the NHH methodology to the HH methodology, with one liability based on usage between 4pm-7pm, with the other based on winter peaks. The argument being that they are one is a capacity charge whereas one is an energy charge. The difference may lead to liabilities changing simply due to moving methodologies.
- 3.90 Figure 5 illustrates how HH and NHH tariffs are calculated from a TNUoS perspective. First of System demand is forecasted at Triad. System demand includes both NHH settled and HH settled.
- 3.91 The revenue to be recovered from each zone equals the locational charge for that zone multiplied by System zonal Demand, plus revenue collected through the residual.
- 3.92 Only HH settled consumers who are charged for taking demand over the Triads (or paid if generating) affect the revenue recovered based on Triad demand. The remaining revenue to be recovered from the zone is charged on NHH consumers within that zone.
- 3.93 To calculate the NHH tariff National Grid forecast chargeable NHH demand throughout the year for each zone. The remaining revenue to be recovered for that zone is then divided by the NHH demand to give a tariff.
- 3.94 NHH tariffs are therefore indirectly calculated based on NHH demand at Peak. If actual Peak usage for a consumer is close to the average Profile at Peak, and actual use throughout the year is close to average use then the Supplier will see no change in TNUoS liability from changing from NHH to HH settlement for that consumer.
- 3.95 However as average Profiles are used it is likely that actual use will differ from averages. Therefore the effect on end consumers is very individualistic. Some consumers will benefit simply by changing methodologies as their demand over the Triads is lower than average but they have higher than average use at different periods between 4pm-7pm, whereas some users may have a higher than average use at Triad and will therefore be charged more simply by changing methodologies.
- 3.96 As stated earlier within the report, those consumers affected most will be those who cannot demand shift from Peak or those who are NHH settled. The choice to be NHH settled may be due to factors outside the control of the consumer themselves i.e. delay in smart meters being installed.
- 3.97 If HH settled consumers actually reduce demand at Peak, then this pushes up the HH tariff (Revenue / Peak = Tariff). If the HH tariff increases the effect on NHH consumers is minimal.
- 3.98 Suppliers are best placed to calculate the effect on individual portfolios and consumers.

|      | 2017/18     |           |          | 2018/19     |           |          | 2019/20   |          |          | 2020/21     |          |          | 2021/22     |          |          |
|------|-------------|-----------|----------|-------------|-----------|----------|-----------|----------|----------|-------------|----------|----------|-------------|----------|----------|
| Zone | NHH (p/kwh) | HH (£/kW) | Residual | NHH (p/kwh) | HH (£/kW) | Residual | NHH (p/kv | HH (£/kW | Residual | NHH (p/kwh) | HH (£/kW | Residual | NHH (p/kwh) | HH (£/kW | Residual |
| 1    | 5.17        | 30.34     | 47.95    | 5.30        | 31.13     | 48.75    | 5.44      | 31.95    | 49.57    | 5.59        | 32.80    | 50.42    | . 0         | 33.68    | 51.30    |
| 2    | 4.85        | 30.26     |          | 4.98        | 31.06     |          | 5.11      | 31.88    |          | 5.25        | 32.73    |          | 0           | 33.61    |          |
| 3    | 5.71        | 38.78     |          | 5.83        | 39.58     |          | 5.95      | 40.40    |          | 6.07        | 41.25    |          | 0           | 42.13    |          |
| 4    | 6.12        | 44.85     |          | 6.22        | 45.65     |          | 6.34      | 46.47    |          | 6.45        | 47.32    |          | 0           | 48.20    |          |
| 5    | 6.00        | 44.71     |          | 6.11        | 45.51     |          | 6.22      | 46.33    |          | 6.33        | 47.18    |          | 0           | 48.06    |          |
| 6    | 7.03        | 46.58     |          | 7.15        | 47.38     |          | 7.27      | 48.20    |          | 7.40        | 49.05    |          | 0           | 49.93    |          |
| 7    | 6.64        | 47.96     |          | 6.75        | 48.75     |          | 6.86      | 49.57    |          | 6.98        | 50.42    |          | 0           | 51.30    |          |
| 8    | 6.58        | 49.42     |          | 6.69        | 50.21     |          | 6.80      | 51.03    |          | 6.91        | 51.88    |          | 0           | 52.76    |          |
| 9    | 7.02        | 49.89     |          | 7.13        | 50.68     |          | 7.25      | 51.50    |          | 7.37        | 52.35    |          | 0           | 53.23    |          |
| 10   | 6.14        | 46.55     |          | 6.25        | 47.34     |          | 6.35      | 48.16    |          | 6.47        | 49.01    |          | 0           | 49.89    |          |
| 11   | 6.90        | 52.86     |          | 7.01        | 53.65     |          | 7.11      | 54.47    |          | 7.22        | 55.32    |          | 0           | 56.20    |          |
| 12   | 7.09        | 55.34     |          | 7.20        | 56.13     |          | 7.30      | 56.95    |          | 7.41        | 57.80    |          | 0           | 58.68    |          |
| 13   | 6.95        | 53.84     |          | 7.06        | 54.63     |          | 7.16      | 55.45    |          | 7.27        | 56.30    |          | 0           | 57.18    |          |
| 14   | 6.97        | 52.43     |          | 7.08        | 53.22     |          | 7.19      | 54.04    |          | 7.30        | 54.89    |          | 0           | 55.77    |          |

#### Table 2

|      |             |           |          |             |           |          |          | Ιαυ      | IC Z     |             |          |          |             |          |          |
|------|-------------|-----------|----------|-------------|-----------|----------|----------|----------|----------|-------------|----------|----------|-------------|----------|----------|
|      | 2017/18     |           |          | 2018/19     |           |          | 2019/20  |          |          | 2020/21     |          |          | 2021/22     |          |          |
| Zone | NHH (p/kwh) | HH (£/kW) | Residual | NHH (p/kwh) | HH (£/kW) | Residual | NHH (p/k | HH (£/kW | Residual | NHH (p/kwh) | HH (£/kW | Residual | NHH (p/kwh) | HH (£/kW | Residual |
| 1    | 5.17        | 30.34     | 47.95    | 5.51        | 32.37     | 49.99    | 5.89     | 34.59    | 52.21    | 6.31        | 37.03    | 54.64    |             | 39.70    | 57.32    |
| 2    | 4.85        | 30.26     |          | 5.18        | 32.30     |          | 5.54     | 34.52    |          | 5.93        | 36.95    |          | C           | 39.63    |          |
| 3    | 5.71        | 38.78     |          | 6.01        | 40.82     |          | 6.33     | 43.04    |          | 6.69        | 45.47    |          | C           | 48.15    |          |
| 4    | 6.12        | 44.85     |          | 6.39        | 46.89     |          | 6.70     | 49.11    |          | 7.03        | 51.54    |          | C           | 54.22    |          |
| 5    | 6.00        | 44.71     |          | 6.27        | 46.75     |          | 6.57     | 48.97    |          | 6.90        | 51.40    |          | C           | 54.08    |          |
| 6    | 7.03        | 46.58     |          | 7.33        | 48.62     |          | 7.67     | 50.84    |          | 8.03        | 53.27    |          | C           | 55.95    |          |
| 7    | 6.64        | 47.96     |          | 6.92        | 49.99     |          | 7.23     | 52.21    |          | 7.57        | 54.65    |          | C           | 57.32    |          |
| 8    | 6.58        | 49.42     |          | 6.85        | 51.46     |          | 7.15     | 53.68    |          | 7.47        | 56.11    |          | C           | 58.78    |          |
| 9    | 7.02        | 49.89     |          | 7.31        | 51.92     |          | 7.62     | 54.14    |          | 7.96        | 56.57    |          | C           | 59.25    |          |
| 10   | 6.14        | 46.55     |          | 6.41        | 48.58     |          | 6.70     | 50.81    |          | 7.02        | 53.24    |          | C           | 55.91    |          |
| 11   | 6.90        | 52.86     |          | 7.17        | 54.89     |          | 7.46     | 57.11    |          | 7.77        | 59.55    |          | C           | 62.22    |          |
| 12   | 7.09        | 55.34     |          | 7.36        | 57.37     |          | 7.64     | 59.59    |          | 7.95        | 62.02    |          | C           | 64.70    |          |
| 13   | 6.95        | 53.84     |          | 7.22        | 55.87     |          | 7.50     | 58.09    |          | 7.82        | 60.53    |          | C           | 63.20    |          |
| 14   | 6.97        | 52.43     |          | 7.24        | 54.47     |          | 7.54     | 56.69    |          | 7.86        | 59.12    |          | C           | 61.79    |          |

Table 3

|   | 2017/10 accuming [   | 2272 matara ara ak  | saraadadar tha UU w   | othodology  |  |  |   |   |  |              |
|---|--|---|---|---|--|--|---|---|--|--------------|
| u   | 2017/18 assuming i   | 2/2 meters are cr   | narged under the HH m   | lethodology   |  |  |   |   |  |              |
|   |  |   | FIXED   |   | FIXED  |  |   |   |  |              |
|   |  | A   | В   | A*B   | C  | A*C  | =P6   | D   | B+C  | F            |
| erivatio  | n of Zonal Demand  |   |   | Α υ   | C  | A C  | -1 0  |   | Final HH Dema  | _            |
| zen vano  | r or zonar bemana  | Total Demand  | Peak Security   | Peak Security   | Year Round   | Year Round   |   |   | r mar riir Bema  | Final        |
|   |  | Charge Base:  | Transport   | Transport   | Transport  | Transport  | Residual  | Residual  | Final  | Zonal        |
|   |  | Triad Demand  | Zonal   | Zonal   | Zonal  | Zonal  | Tariff  | Zonal   | Zonal  | Revenue      |
| Zone  | Zone Name  | (GW)  | Tariff (£/kW)   | Revenue (£m)  | Tariff (£/kW)  | Revenue (£m)   | (£/kW)  | (£m)  | Tariff (£/kW)  | Recovery (£m |
| 1   | Northern Scotland  | 0.675   | 2.41  | 1.62  | -20.02   | -13.52   | 47.95   | 32.37   | 30.34  | 20.4         |
| 2   | Southern Scotland  | 3.339   | 0.13  | 0.43  | -17.82   | -59.51   | 47.95   | 160.14  | 30.26  | 101.0        |
| 3   | Northern   | 2.272   | -2.93   | -6.65   | -6.24  | -14.18   | 47.95   | 108.93  | 38.78  | 88.          |
| 4   | North West   | 4.030   | -1.17   | -4.71   | -1.93  | -7.78  | 47.95   | 193.24  | 44.85  | 180.7        |
| 5   | Yorkshire  | 3.688   | -3.07   | -11.32  |  | -0.63  | 47.95   | 176.84  | 44.71  | 164.8        |
| 6   | N Wales & Mersey   | 2.457   | -1.55   | -3.80   | 0.18   | 0.43   | 47.95   | 117.85  | 46.58  | 114.4        |
| 7   | East Midlands  | 4.574   | -2.11   | -9.67   | 2.12   | 9.68   | 47.95   | 219.35  | 47.96  | 219.:        |
| 8   | Midlands   | 4.314   | -1.47   | -6.33   | 2.93   | 12.65  | 47.95   | 206.86  | 49.42  | 213.1        |
| 9   | Eastern  | 6.093   | 1.26  | 7.67  | 0.67   | 4.10   | 47.95   | 292.20  | 49.89  | 303.9        |
| 10  | South Wales  | 1.725   | -5.69   | -9.82   | 4.29   | 7.39   | 47.95   | 82.70   | 46.55  | 80.2         |
| 11  | South East   | 3.487   | 3.88  | 13.53   | 1.02   | 3.57   | 47.95   | 167.22  | 52.86  | 184.3        |
| 12  | London   | 4.779   | 5.11  | 24.42   | 2.27   | 10.85  | 47.95   | 229.17  | 55.34  | 264.4        |
| 13  | Southern   | 5.335   | 1.80  | 9.62  | 4.08   | 21.76  | 47.95   | 255.83  | 53.84  | 287.2        |
| 14  | South Western  | 2.334   | -0.76   | -1.78   |  | 12.23  | 47.95   | 111.93  | 52.43  | 122.3        |
|   |  | 49.101  |   | 3.23  | <u></u> .  | -12.97   |   | 2.354.62  |  | 2.344.8      |
|   |  |   |   |   |  |  |   | , , ,   |  | ,            |
| erivatio  | n of Capped Zonal I  | Demand NHH Tar  |   | F   |  | =E-F   | G   |   | =(E-F)/G   |              |
|   |  | Total Demand  |   | HH Zonal  |  | Required   |   |   | =(E-F)/G   |              |
|   |  |   |   |   |  | Required   |   |   |  |              |
|   |  | Charge Base:  | Chargeable  | Triad Demand  | Residual   | NHH Zonal  | NHH Zonal   | NHH Zonal   |  |              |
|   |  | Charge Base:<br>Triad Demand  | Chargeable<br>HH Zonal  |   | Residual<br>NHH Zonal Triad  | •  | NHH Zonal<br>1600-1900  | NHH Zonal<br>1600-1900  | NHH Zonal  |              |
| Zone  | Zone Name  | _   | _   | Triad Demand  |  | NHH Zonal  | 1600-1900   |   |  |              |
| <b>Zone</b>   | Zone Name  Northern Scotland   | Triad Demand  | HH Zonal  | Triad Demand<br>Revenue   | NHH Zonal Triad  | NHH Zonal<br>Revenue   | 1600-1900   | 1600-1900   |  |              |
|   |  | Triad Demand<br>(MW)  | HH Zonal<br>Triad Demand (MW)   | Triad Demand<br>Revenue<br>Recovery (£m)  | NHH Zonal Triad<br>Demand (MW)   | NHH Zonal<br>Revenue<br>Recovery (£m)  | 1600-1900<br>Demand (TWh)   | 1600-1900<br>Demand Share (%  | Tariff (p/kWh)   |              |
| 1   | Northern Scotland  | Triad Demand<br>(MW)<br>674.92  | HH Zonal Triad Demand (MW) - 501.281  | Triad Demand<br>Revenue<br>Recovery (£m)<br>-15.21  | NHH Zonal Triad<br>Demand (MW)<br>1,176.20   | NHH Zonal<br>Revenue<br>Recovery (£m)<br>35.68   | 1600-1900<br>Demand (TWh)<br>0.690656   | 1600-1900<br>Demand Share (%<br>3%  | Tariff (p/kWh)<br>5.17   |              |
| 1 2   | Northern Scotland<br>Southern Scotland   | Triad Demand<br>(MW)<br>674.92<br>3,339.47  | HH Zonal Triad Demand (MW) - 501.281 713.999  | Triad Demand<br>Revenue<br>Recovery (£m)<br>-15.21<br>21.61   | NHH Zonal Triad<br>Demand (MW)<br>1,176.20<br>2,625.47   | NHH Zonal<br>Revenue<br>Recovery (£m)<br>35.68<br>79.45  | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004   | 1600-1900<br>Demand Share (%<br>3%<br>7%  | Tariff (p/kWh)<br>5.17<br>4.85   |              |
| 1 2 3   | Northern Scotland<br>Southern Scotland<br>Northern   | Triad Demand<br>(MW)<br>674.92<br>3,339.47<br>2,271.58  | HH Zonal Triad Demand (MW) - 501.281 713.999 616.820  | Triad Demand Revenue Recovery (£m) -15.21 21.61   | NHH Zonal Triad<br>Demand (MW)<br>1,176.20<br>2,625.47<br>1,654.76   | NHH Zonal<br>Revenue<br>Recovery (£m)<br>35.68<br>79.45<br>64.18   | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312   | 1600-1900<br>Demand Share (%<br>3%<br>7%<br>5%                                      | 5.17<br>4.85<br>5.71   |              |
| 1<br>2<br>3<br>4<br>5                                 | Northern Scotland<br>Southern Scotland<br>Northern<br>North West<br>Yorkshire<br>N Wales & Mersey  | Triad Demand (MW)  674.92  3,339.47  2,271.58  4,029.55  3,687.66  2,457.44   | HH Zonal Triad Demand (MW) - 501.281 713.999 616.820 1,421.969 1,334.079 623.385  | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65                                     | NHH Zonal Triad<br>Demand (MW)<br>1,176.20<br>2,625.47<br>1,654.76<br>2,607.58<br>2,353.58<br>1,834.06   | NHH Zonal<br>Revenue<br>Recovery (£m)<br>35.68<br>79.45<br>64.18<br>116.96<br>105.24                     | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.912312<br>1.754188<br>1.216042   | 1600-1900<br>Demand Share (%<br>3%<br>7%<br>5%<br>8%<br>7%<br>5%                    | 5.17<br>4.85<br>5.71<br>6.12<br>6.00<br>7.03                               |              |
| 1<br>2<br>3<br>4<br>5<br>6<br>7                       | Northern Scotland<br>Southern Scotland<br>Northern<br>North West<br>Yorkshire<br>N Wales & Mersey<br>East Midlands   | Triad Demand (MW) 674.92 3,339.47 2,271.58 4,029.55 3,687.66 2,457.44 4,574.14  | HH Zonal Triad Demand (MW) - 501.281 713.999 616.820 1,421.969 1,334.079 623.385 1,596.876  | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65 29.04 76.58                         | NHH Zonal Triad<br>Demand (MW)<br>1,176.20<br>2,625.47<br>1,654.76<br>2,607.58<br>2,353.58<br>1,834.06<br>2,977.26                                     | NHH Zonal Revenue Recovery (£m)  35.68 79.45 64.18 116.96 105.24 85.43 142.78                            | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.912312<br>1.754188<br>1.216042<br>2.149957   | 1600-1900<br>Demand Share (%<br>3%<br>7%<br>5%<br>8%<br>7%<br>5%<br>9%              | 5.17<br>4.85<br>5.71<br>6.12<br>6.00<br>7.03<br>6.64                       |              |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8                  | Northern Scotland<br>Southern Scotland<br>Northern<br>North West<br>Yorkshire<br>N Wales & Mersey<br>East Midlands<br>Midlands   | Triad Demand (MW) 674.92 3,339.47 2,271.58 4,029.55 3,687.66 2,457.44 4,574.14 4,313.67                                     | HH Zonal Triad Demand (MW)  501.281 713.999 616.820 1,421.969 1,334.079 623.385 1,596.876 1,754.313   | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65 29.04 76.58                         | NHH Zonal Triad<br>Demand (MW)<br>1,176.20<br>2,625.47<br>1,654.76<br>2,607.58<br>2,353.58<br>1,834.06<br>2,977.26<br>2,559.36                         | NHH Zonal Revenue Recovery (£m)  35.68 79.45 64.18 116.96 105.24 85.43 142.78 126.48                     | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.912312<br>1.754188<br>1.216042<br>2.149957<br>1.921899                                     | 1600-1900<br>Demand Share (%<br>3%<br>7%<br>5%<br>8%<br>7%<br>5%<br>9%              | Tariff (p/kWh) 5.17 4.85 5.71 6.12 6.00 7.03 6.64 6.58                     |              |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9             | Northern Scotland<br>Southern Scotland<br>Northern<br>North West<br>Yorkshire<br>N Wales & Mersey<br>East Midlands<br>Midlands<br>Eastern                              | Triad Demand (MW) 674.92 3,339.47 2,271.58 4,029.55 3,687.66 2,457.44 4,313.67 6,093.15                                     | HH Zonal Triad Demand (MW)  - 501.281     713.999     616.820     1,421.969     1,334.079     623.385     1,596.876     1,754.313     1,818.441   | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65 29.04 76.58 86.70 90.71             | NHH Zonal Triad<br>Demand (MW)<br>1,176.20<br>2,625.47<br>1,654.76<br>2,607.58<br>2,353.58<br>1,834.06<br>2,977.26<br>2,559.36<br>4,274.71             | NHH Zonal Revenue Recovery (£m)  35.68 79.45 64.18 116.96 105.24 85.43 142.78 126.48 213.25              | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.754188<br>1.216042<br>2.149957<br>1.921899<br>3.037684                                     | 1600-1900<br>Demand Share (%<br>3%<br>7%<br>5%<br>8%<br>7%<br>5%<br>9%<br>8%        | Tariff (p/kWh) 5.17 4.85 5.71 6.12 6.00 7.03 6.64 6.58 7.02                |              |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9             | Northern Scotland<br>Southern Scotland<br>Northern<br>North West<br>Yorkshire<br>N Wales & Mersey<br>East Midlands<br>Midlands<br>Eastern<br>South Wales               | Triad Demand (MW) 674.92 3,339.47 2,271.58 4,029.55 3,687.66 2,457.44 4,574.14 4,313.67 6,093.15 1,724.64                   | HH Zonal Triad Demand (MW)  501.281 713.999 616.820 1,421.969 1,334.079 623.385 1,596.876 1,754.313 1,818.441 653.004   | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65 29.04 76.58 86.70 90.71             | NHH Zonal Triad<br>Demand (MW)<br>1,176.20<br>2,625.47<br>1,654.76<br>2,607.58<br>2,353.58<br>1,834.06<br>2,977.26<br>2,559.36<br>4,274.71<br>1,071.64 | NHH Zonal Revenue Recovery (£m)  35.68 79.45 64.18 116.96 105.24 85.43 142.78 126.48 213.25              | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.912312<br>1.754188<br>1.216042<br>2.149957<br>1.921899<br>3.037684<br>0.812283             | 1600-1900<br>Demand Share (%<br>3%<br>7%<br>5%<br>8%<br>7%<br>5%<br>9%<br>8%<br>13% | Tariff (p/kWh) 5.17 4.85 5.71 6.12 6.00 7.03 6.64 6.58 7.02 6.14           |              |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10       | Northern Scotland<br>Southern Scotland<br>Northern<br>North West<br>Yorkshire<br>N Wales & Mersey<br>East Midlands<br>Midlands<br>Eastern<br>South Wales<br>South East | Triad Demand (MW) 674.92 3,339.47 2,271.58 4,029.55 3,687.66 2,457.44 4,574.14 4,313.67 6,093.15 1,724.64 3,486.96          | HH Zonal Triad Demand (MW)  501.281 713.999 616.820 1,421.969 1,334.079 623.385 1,596.876 1,754.313 1,818.441 653.004 1,107.568   | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65 29.04 76.58 86.70 90.71 30.40 58.54 | NHH Zonal Triad Demand (MW)  1,176.20 2,625.47 1,654.76 2,607.58 2,353.58 1,834.06 2,977.26 2,559.36 4,274.71 1,071.64 2,379.39                        | NHH Zonal Revenue Recovery (£m)  35.68 79.45 64.18 116.96 105.24 85.43 142.78 126.48 213.25 49.88 125.77 | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.912312<br>1.754188<br>1.216042<br>2.149957<br>1.921899<br>3.037684<br>0.812283             | 1600-1900 Demand Share (% 3% 7% 5% 8% 7% 5% 8% 4% 3% 3% 3% 8%                       | Tariff (p/kWh) 5.17 4.85 5.71 6.12 6.00 7.03 6.64 6.58 7.02 6.14 6.90      |              |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11 | Northern Scotland Southern Scotland Northern North West Yorkshire N Wales & Mersey East Midlands Midlands Eastern South Wales South East London                        | Triad Demand (MW) 674.92 3,339.47 2,271.58 4,029.55 3,687.66 2,457.44 4,574.14 4,313.67 6,093.15 1,724.64 3,486.96 4,778.78 | HH Zonal Triad Demand (MW)  - 501.281     713.999     616.820     1,421.969     1,334.079     623.385     1,596.876     1,754.313     1,818.441     653.004     1,107.568     2,470.281 | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65 29.04 76.58 86.70 90.71 30.40 58.54 | NHH Zonal Triad Demand (MW)  1,176.20 2,625.47 1,654.76 2,607.58 2,353.58 1,834.06 2,977.26 2,559.36 4,274.71 1,071.64 2,379.39 2,308.50               | NHH Zonal Revenue Recovery (£m)  35.68 79.45 64.18 116.96 105.24 85.43 142.78 126.48 213.25 49.88 125.77 | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.912312<br>1.754188<br>1.216042<br>2.149957<br>1.921899<br>3.037684<br>0.812283<br>1.822334 | 1600-1900 Demand Share (% 3% 7% 5% 8% 7% 5% 8% 4% 3% 3% 8% 8%                       | Tariff (p/kWh) 5.17 4.85 5.71 6.12 6.00 7.03 6.64 6.58 7.02 6.14 6.90 7.09 |              |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10       | Northern Scotland<br>Southern Scotland<br>Northern<br>North West<br>Yorkshire<br>N Wales & Mersey<br>East Midlands<br>Midlands<br>Eastern<br>South Wales<br>South East | Triad Demand (MW) 674.92 3,339.47 2,271.58 4,029.55 3,687.66 2,457.44 4,574.14 4,313.67 6,093.15 1,724.64 3,486.96          | HH Zonal Triad Demand (MW)  501.281 713.999 616.820 1,421.969 1,334.079 623.385 1,596.876 1,754.313 1,818.441 653.004 1,107.568   | Triad Demand Revenue Recovery (£m) -15.21 21.61 23.92 63.78 59.65 29.04 76.58 86.70 90.71 30.40 58.54 | NHH Zonal Triad Demand (MW)  1,176.20 2,625.47 1,654.76 2,607.58 2,353.58 1,834.06 2,977.26 2,559.36 4,274.71 1,071.64 2,379.39                        | NHH Zonal Revenue Recovery (£m)  35.68 79.45 64.18 116.96 105.24 85.43 142.78 126.48 213.25 49.88 125.77 | 1600-1900<br>Demand (TWh)<br>0.690656<br>1.637004<br>1.124312<br>1.912312<br>1.754188<br>1.216042<br>2.149957<br>1.921899<br>3.037684<br>0.812283             | 1600-1900 Demand Share (% 3% 7% 5% 8% 7% 5% 8% 4% 3% 3% 3% 8%                       | Tariff (p/kWh) 5.17 4.85 5.71 6.12 6.00 7.03 6.64 6.58 7.02 6.14 6.90      |              |

Table 4

#### 4 Post Workgroup Consultation Discussions

- 4.1 The Workgroup met on 4 October 2016 and 6 October 2016 following the Workgroup Consultation to review the responses, develop the proposal further and vote. This section in particular focuses on;
  - Workgroup consultation responses summary;
  - Updated Options table;
  - Risk of double charging if a consumer chooses to revert back to being NHH settled:
  - Risk of double charging when changing Supplier;
  - Discussions with ELEXON and any requirements for a consequential modification.

#### **Workgroup consultation responses summary**

4.2 The Workgroup Consultation received eight responses. As well as the standard Workgroup Consultation questions, the Workgroup agreed to ask two CMP266 specific questions. These were:

**Question 5:** Is the HH methodology therefore more appropriate to customers with long term fixed price contracts rather than the traditional domestic tariffs?

Question 6: Will the HH methodology discourage switching?

- 4.3 The Workgroup reviewed all responses to the Workgroup consultation and noted that the majority of responses supported Options 1 and 3, a summary of these responses can be found in Section 7 with full responses included within Annex 4 of this report.
- 4.4 The Workgroup also noted that in relation to the Workgroup Specific questions asked within the consultation, that some of respondents believed that HH methodology was more relevant to those customers that had the ability to load shift. The respondents had mixed view in relation to whether they believed the HH methodology would discourage switching.
- 4.5 The Workgroup also noted that one respondent who also a Workgroup member had raised a WACM for this proposal. This was discussed by the Workgroup and developed within the Workgroups option table (Table 5)
- 4.6 Whilst reviewing the Workgroup Consultation responses, one Workgroup member raised the possibility of implementing a process to provide a rebate or a refund for customers where double charging occurred, to be managed by National Grid. Another Workgroup member confirmed that this had been raised during discussions for the development of CMP244 and at the time had been seen as unfair to customers whilst another considered that this could be open to gaming. The National Grid representative noted that this also went against the principle of K.

#### **Updated Options table;**

4.7 Following the Workgroup Consultation the Workgroup review their original options table and updated their scope of options. This table (Table 5) also clarifies the options that were supported as WACMs. The options where the row has been coloured in grey have been discounted by the Workgroup as being unfeasible and were not be supported as a Workgroup. The Workgroup vote against these options can be seen in Section 8 of this document.

| WACMs    | Ref to   | Ref to   | Description  | Which  | Which CY  | What system changes                           |
|----------|----------|----------|--|--------|-----------|---|
|          | Options  | WG rpt.  |  | МС     | affective |   |
|          | voted on |          |  |        | to        |   |
| Original | n/a      | Option 1 | Measurement Classes E,F & G will be charged under the NHH methodology (using actual HH data) up until to 31/3/2020. Any meters         | E,F,G  | 31/03/202 | None  |
|          |          |          | migrating under the current methodology may be double charged in that charging year in which they migrate                              |        | 0         |   |
| WACM1    | Option 1 | Option 3 | Measurement Classes F & G will continue to be charged under the NHH methodology up until to 31/3/2020. Measurement Class E will be     | F&G    | 31/03/202 | Reliant on P339 being in place by 01/04/2017  |
|          |          | & 5C     | unaffected by this modification (i.e. treated as HH). Any meters in Measurement Classes F & G migrating after 31/03/20 may be double   |        | 0         |   |
|          |          |          | charged in the charging year in which they migrate   |        |           |   |
| WACM2    | Option 2 | new      | Meters migrating into Measurement Classes E,F & G will be charged under the NHH methodology for the full charging year in which they   | E, F & |           | Reliant on another Modification not yet known |
|          |          |          | migrate. Then for the following full charging year they will be charged under the HH methodology. Meters in Measurement Classes E,F &  | G      |           | being in place for 1/4/2017                   |
|          |          |          | G before 1st April 17 will be treated as HH.   |        |           |   |
| WACM3    | Option 3 | Option 2 | Measurement Classes F and G will be charged under the NHH methodology for the full charging year in which they migrate. Then for the   | F&G    |           | Reliant on P339 being in place by 01/04/2017, |
|          |          |          | following full charging year they will be charged under the HH methodology. Measurement Classes E will be charged under existing       |        |           | as well as another Modification not yet known |
|          |          |          | methodology with no new changes i.e. will be charged as HH. Meters in Measurement Classes F & G before 1st April 17 will be treated as |        |           | being in place for 1/4/2017                   |
|          |          |          | HH.  |        |           |   |
| n/a      | Option 4 | Option 4 | Meters in Measurement Class F only, will be charged under the NHH methodology for the whole charging year in which they migrate.       | F      |           | Reliant on P339 being in place by 01/04/2017, |
|          |          |          | Then for the following full charging year they will be charged under the HH methodology. Measurement Classes E and G will be charged   |        |           | as well as another Modification not yet known |
|          |          |          | under existing methodology with no new changes i.e. status quo   |        |           | being in place for 1/4/2017                   |
| n/a      | Option 5 | Option 5 | Meters in Measurement Class F only will be charged under the NHH methodology up until 31/03/20. Measurement Classes E and G will       | F      | 31/03/202 | Reliant on P339 being in place by 01/04/2017  |
|          |          |          | be charged under existing methodology with no new changes i.e. status quo  |        | 0         |   |
| WACM4    | Option 6 | Option   | All meters in Measurement Class F only will be charged under the NHH methodology up until 31/03/2020. Meters moving to Measurement     | F&G    | 31/03/202 | Reliant on P339 being in place by 01/04/2017, |
|          |          | 5B       | Class G will be charged under the NHH methodology for the full charging year in which they migrate then under the HH methodology for   |        | 0         | as well as another Modification not yet known |
|          |          |          | the following full charging year. Meters in Measurement Class G before 1st April 2017 will be treated as HH. Meters in Measurement     |        |           | being in place for 1/4/2017                   |
|          |          |          | Class E will be unaffected by this modification (i.e. treated as HH)   |        |           |   |

| WACM5     | Option 7 | WACM 1 | Measurement Classes E,F & G will be charged under the NHH methodology for the charging year 2017/18. This is to allow for any delay        | E, F & | 31/03/202 | Reliant on P339 being in place by 01/04/2018           |
|-----------|----------|--------|--|--------|-----------|--|
| 117101110 | Option 7 | with   | in the implementation of P339 and is effectively a continuation of P272 process (without 14.17.29.3). Meters in Measurement Class E will   | G      | 0         | Troilant of the doc boning in place by 6 1/6 1/26 1/26 |
|           |          | delay  | then be charged under the HH methodology from 1/4/2018. Measurement Classes F & G will continue to be charged under the NHH                |        | Ŭ         |  |
|           |          | 40.49  | methodology up until 31/03/2020. This is effectively the same as WACM1 but allowing for a delay in P339 which is needed to split up the    |        |           |  |
|           |          |        | demand for Measurement Classes E, F & G from each other  |        |           |  |
| WACM6     | Option 8 | WACM 2 | 'Measurement Classes E, F & G will be charged under the NHH methodology to allow for any delay in the implementation of P339 for the       | E, F & |           | Reliant on P339 being in place by 01/04/2018,          |
|           |          | with   | charging year 2017/18. Continuation of P272 process (without 14.17.29.3). After this, meters migrating to Measurement Classes E.F & G      | G      |           | as well as another Modification not yet known          |
|           |          | delay  | will be charged under the NHH methodology for the full charging year in which they migrate. Then for the following full charging year they |        |           | being in place for 1/4/2018                            |
|           |          | 40.49  | will be charged under the HH methodology'. Meters in Measurement Classes E, F & G before 1st April 2018 will be charged HH for the         |        |           | 56g p. 656 16 1, 1, 20.10                              |
|           |          |        | 18/19 charging year onwards  |        |           |  |
| WACM7     | Option 9 | WACM 3 | Measurement Classes E, F & G will be charged under the NHH methodology to allow for any delay in the implementation of P339 for the        | E, F & |           | Reliant on P339 being in place by 01/04/2018           |
|           |          | with   | charging year 2017/18. Continuation of P272 process (without 14.17.29.3). After this, all meters in measurement class E will be charged    | G      |           | 3  |
|           |          | delay  | under the HH methodology. Meters migrating to Measurement Classes F & G will be charged under the NHH methodology for the full             |        |           |  |
|           |          | 40.49  | charging year in which they migrate. Then for the following full charging year they will be charged under the HH methodology. Meters in    |        |           |  |
|           |          |        | Measurement Classes F & G before 1st April 2018 will be charged HH for the 18/19 charging year onwards.                                    |        |           |  |
| n/a       | Option   | WACM   | Measurement Classes E, F & G will be charged under the NHH methodology to allow for any delay in the implementation of P339 for the        | E. F & |           | Reliant on P339 being in place by 01/04/2018,          |
|           | 10       | with   | charging year 2017/18. Continuation of P272 process. After this, all meters in Measurement Classes E and G will be charged under the       | G      |           | as well as another Modification not vet known          |
|           |          | delay  | HH methodology. Meters migrating to Measurement Class F will be charged under the NHH methodology for the full charging year in            |        |           | being in place for 1/4/2018                            |
|           |          | ,      | which they migrate. Then for the following full charging year they will be charged under the HH methodology'                               |        |           |  |
| WACM8     | Option   | WACM 4 | Measurement Classes E, F & G will be charged under the NHH methodology to allow for any delay in the implementation of P339 for the        | E, F & | 31/03/202 | Reliant on P339 being in place by 01/04/2018,          |
|           | 11       | with   | charging year 2017/18. Continuation of P272 process (not including 14.17.29.3). After this, all meters in Measurement Class E will be      | G      | 0         | as well as another Modification not yet known          |
|           |          | delay  | charged under the HH methodology. Meters in Measurement Class F only will be charged under the NHH methodology up until                    |        |           | being in place for 1/4/2018                            |
|           |          |        | 31/03/2020. Meters migrating to Measurement Class G will be charged under the NHH methodology for the full charging year in which          |        |           |  |
|           |          |        | they migrate. Then for the following full charging year they will be charged under the HH methodology.' Meters in Measurement Class G      |        |           |  |
|           |          |        | before 1st April 2018 will be charged HH for the 18/19 charging year onwards.  |        |           |  |

Table 5

## Risk of double charging if a consumer chooses to revert back to being NHH settled

- 4.8 There is an unavoidable risk of when change of suppliers occurs that a consumer can be charged HH for 11 months of the year, i.e. the full Triad season, and then moved to back to NHH. Therefore under these circumstances consumers will pick up NHH charges on top of HH charges.
- 4.9 There could also be circumstances where suppliers could move between NHH and HH charges within the same year thus reducing TNUoS liability through gaming

#### Risk of double charging when changing Supplier

- 4.10 The Workgroup member highlighted a potential issue with the Workgroup relating to the potential to double charge consumers under a Change of Supplier (CoS) event.
- 4.11 When reviewing the proposed WACMs, the Workgroup member identified an issue with options favouring a 'stepped' approach to charging (revert to HH charging after the year of the switch to HH settlement). This was not raised in their consultation response and they asked the Workgroup to consider this issue prior to voting.
- 4.12 They noted that in essence, double-charging will still apply in all cases where a switch from HH back to NHH settlement occurs.
- 4.13 For any MPAN with a SMETS-1 smart meter installed, a change of settlement status from HH to NHH (e.g. Measurement Class F to Measurement Class A) will occur concurrently with a change of supplier. This MPAN will be subject to Triad charges for the entire year (incurred by the old supplier), and non-half hourly charges for the months between the change of supplier date and the end of the charging this year (incurred by the new supplier). As such, the old supplier will be overcharged for transmission costs. This issue will only face smart metered sites and not AMRs, for which a different Change of Measurement Class process may apply and referred the Workgroup to <a href="www.elexon.co.uk/group/change-measurement-class-comc-smart-meters">www.elexon.co.uk/group/change-measurement-class-comc-smart-meters</a>
- 4.14 They highlighted the following case which the asked the Workgroup to consider:
  - 1. MPAN 'xxxx' is switched from Measurement class A to Measurement class F on 1st March 2017 by supplier 'A'
  - 2. Supplier 'A' maintains responsibility for the supply until 1st March 2019, when the customer chooses to switch to supplier 'B'
  - 3. This change of supplier event triggers a change from Measurement Class F back to A.
- 4.15 This Workgroup member concluded that in the case that a WACM which maintains non-half hourly charging until 2020, there is no issue, as MPAN 'xxxx' is charge NHH TNUoS for the duration.
- 4.16 They also concluded that in the case where a WACM proposing a stepped change to HH Triad charging is chosen, MPAN 'xxxx' is charged NHH TNUoS until 31 March 2018. From 1 April 2018, HH Triad charging is used, with charges

- applied to supplier 'A' for the entire charging year. Between 1 March and 31 March, NHH charging is levied on supplier 'B'.xxx.
- 4.17 The Workgroup agreed that anything that created an option for consumers to flip back could cause issues.
- 4.18 The Workgroup also recognised that they would need to identify the customers that had migrated prior to P272 in order to understand how these could be treated in the future. One Workgroup member confirmed that these customers were supported by a manual process that they would be keen to preserve. The National Grid representative replied that the workaround as described in 14.17.29.3 of the CUSC was time limited, and was provided to allow meters which were HH settled before 1 April 2015 to continue to be settled as HH during the Implementation of P272. After 1 April 2017 all meters affected by P272 should be HH settled so therefore there is no need for a workaround to be continued. Any meters that have not migrated will be double charged under the current baseline. It is worth noting that the Workgroup have not considered the existing manual process in any of the options in Table 5.
- 4.19 This workaround therefore will not be in place the charging year 2017/18. However the workaround will continue for reconciliations relating to charging years before 1 April 2017, i.e. for the Charging Year 2016/17 the reconciliation takes place in June 2017.

# Discussions with ELEXON and any requirements for a consequential modification.

- 4.20 National Grid contacted ELEXON to identify the requirements for a potential consequential modification that could be required to implement some of the CMP266 options (WACMs 2-4 and 6-8).
- 4.21 It was noted that if the changes were extensive, it would require cost benefit analysis to be carried to understand if this is beneficial to consumers.
- 4.22 The purpose of this discussions was to identify if National Grid would be able to charge for TNUoS in different ways within a given Measurement Class, based on whether customers underwent a Change of Measurement Class (CoMC) in the current charging year or not.
- 4.23 To do this, National Grid would need a bespoke file with half-hourly consumption data for meters in [applicable combination of Measurement Classes E/F/G] that have undergone a CoMC in the current charging year.
  - The purpose of this bespoke file would be the same as the current P272 one – for National Grid to subtract this demand from the HH total and to add it to the NHH total, so that suppliers could be charged under the NHH methodology for these meter points.
  - No information required for customers in Measurement Class E, F and G who have undergone CoMC in previous charging years, as their information is already in the HH category in the P210 file. (Exceptions are WACM4 and WACM8, which would charge all customers in Measurement Class F using the NHH methodology up to 2020, while only charging customers in Measurement Class G using the NHH methodology for the first charging year in this Measurement Class. In these cases the bespoke file would also need to include the demand from all customers in Measurement Class F).
  - This file wouldn't need to provide information on consumption for meters before they moved into Measurement Class E, F, and G]. (I.e. – if a meter moved to Measurement Class F on 1 July, its consumption would be counted within in the bespoke file from that date. Its consumption up to 30

June would not be included, because it wouldn't have been in Measurement Class F then).

- 4.24 National Grid would also need ELEXON to provide the relevant data (rather than National Grid obtaining it directly from suppliers)
- 4.25 Additionally National Grid would require aggregated data (rather than information on individual meter points)
- 4.26 For ELEXON to be in a position to provide this data there would need to be a suitable indicator to identify whether a meter underwent a CoMC in the current charging year. Three possible options would be:
  - A data item for whether there had been a CoMC in the current charging year or not. (Yes/No). However, this would need to be 'reset' in some way at the start of a new charging year – do any existing data items work in a similar way?
  - A data item showing the charging year of the last CoMC.
  - Potentially use the J0094 data item (Effective from Settlement Date {MSMCDC}) on the D0289. However, this is a specific date – is this level of detail required, and could excessive detail lead to more unwieldy consumption data flows?
- 4.27 Consumption data would need to be passed to ELEXON that was aggregated by one of the above. (I.e. for a given consumption component class, the consumption would be subdivided by [whether CoMC in current charging year/charging year of last CoMC/J0094]).
  - This would potentially only need to happen for relevant CCCs (i.e. ones relating to the applicable Measurement Classes), rather than for all CCCs.
- 4.28 In order to do this, one option would be:
  - Assume that the HHDC has the date of the last CoMC from the D0289.
    This would mean that there wouldn't need to be any changes to the
    consumption data flows from the supplier to the HHDC for smart meters (as
    introduced through DTC CP3496).
  - The HHDC would need to add the indicator (as discussed above) when sending consumption data to the HHDA. This would require a change to the D0036. (Is it possible to clone the D0036 instead and edit this??)
  - When aggregating, the HHDA would need to split consumption data by the indicator for the relevant CCCs. It would then need to send this aggregated information to SVAA. This would require a change to the D0040/D0298. (Is it possible to clone the D0040/D0298 instead and edit this??)
  - To send/receive this information would require systems changes for HHDCs, HHDAs and SVAA. If there are changes to existing data flows, there would also be potential systems changes for others who receive them (suppliers and DNOs).
  - ELEXON would need to make systems changes to develop the new bespoke file.
- 4.29 Information provided in this section has been provided to aid Ofgem in any decision making. However this was not discussed in great detail by the Workgroup as this would need to be carried out under a different modification process and fell outside the scope of CMP266.

#### 5 Impact and Assessment

#### Impact on the CUSC

5.1 New paragraphs will need to be created in section 14 of the CUSC. These new paragraphs will be similar in nature to current paragraphs under the title Implementation of P272 (14.17.29.1-14.17.29.6)

#### **Impact on Greenhouse Gas Emissions**

5.2 None identified.

#### **Impact on Core Industry Documents**

5.3 None identified.

#### **Impact on other Industry Documents**

5.4 None identified.

#### 6 Proposed Implementation and Transition

- 6.1 Details of discussions carried out by the Workgroup regarding implementation are captured within Section 3 of this report.
- 6.2 A straw man model was produced, Figure 6 below, following discussions with ELEXON to show changes required to split Measurement Class Demand data up based on the CoMC date. This discussion took place after the Workgroup vote.
- 6.3 The changes proposed would require a Data Transfer Catalogue (DTC) Change with Gemserve as opposed to ELEXON. The estimated lead time for this would be 6 months to undertake the proposal and design, and 6 months for implementation. Half Hourly Data Aggregators may then require 6 months to undertake changes to their systems.
- 6.4 No estimation of costs has been made at this stage.

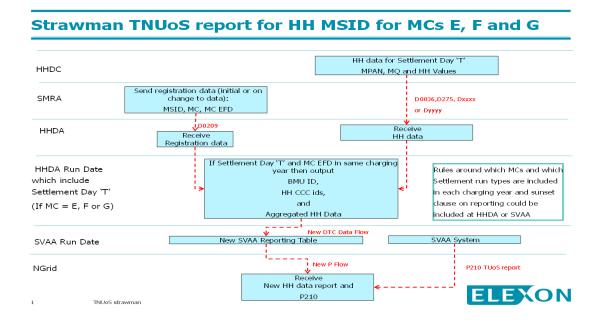


Figure 6

#### 7 Workgroup Consultation Responses

- 7.1 Eight responses were received to the Workgroup Consultation. These responses are contained within Annex 4 of this report. The Workgroup reviewed all responses to the Workgroup consultation and noted that the majority of responses supported Options 1 and 3. The Workgroup also noted that in relation to the Workgroup Specific questions asked within the consultation, that some of respondents believed that HH methodology was more relevant to those customers that had the ability to load shift. The respondents had mixed views in relation to whether they believed the HH methodology would discourage switching.
- 7.2 The Workgroup also noted that one respondent who also a Workgroup member had raised a WACM for this proposal. This was discussed by the Workgroup and developed within the Workgroups option table (Table 5)
- 7.3 The following table provides an overview of the Standard Workgroup question responses received.

|            | 1 Do you believe that the CMP266 Original Proposal better facilitates the Applicable CUSC Objectives?  | 2 Do you support the proposed implementation approach? Or are there any further implementation implications that need to be considered?   | 3 Do you have any other comments? | 4 Do you wish to raise a WG Consultation Alternative Request for the Workgroup to consider? |
|------------|--|---|-----------------------------------|---|
| EDF energy | Note that National Grid is currently minded to go with what the workgroup calls Option 1.  Option 2 is effectively described in paragraph 4.29 in Ofgem's conclusion paper ( <a href="https://www.ofgem.gov.uk/system/files/docs/2016/05/elective_hhs_conclusions_paper.pdf">https://www.ofgem.gov.uk/system/files/docs/2016/05/elective_hhs_conclusions_paper.pdf</a> ) on HH Elective Settlement.  Option 2 is the most desirable and obvious option; moving to HH TNUoS settlement once other settlement for that site is on a HH basis, yet avoiding double-charging in the transition year.  We do not favour Option 3 (charge them under the NHH TNUoS methodology until 2020).  | Preference is for option 2, not option 1. Workgroup's concerns noted that option 1 becomes increasingly infeasible for April 2017 delivery, if P339 is delayed beyond April 2017; however, Option 3, where they are settled as NHH in TNUoS terms until 2020, seems a disproportionate response compared to option 2. | No                                | No  |
| E.ON       | Option 9 strikes a reasonable balance between mitigating the defect and being a practicable longer-term solution, assuming that industry moves quickly in electively settling sites as HH.  Option 1 could be an appropriate near-term solution to the defect.  Given that there are currently several modifications progressing which affect demand TNUoS charging methodologies, we believe it would be beneficial to conduct a thorough and independent review given the scope of changes to the system.  We feel progression of options under CMP266 should be reserved until industry has greater clarity on the outcome of P339.  Treating Measurement Class E differently to F and G seems problematic.  Options 2-7 inclusive do not resolve the defect noted for any CT-metered sites and whilst WC meters constitute >50% of the overall P272 meter points, there is a sizable number of CT-metered sites which will not be covered by these options. We consider that it effectively penalises Suppliers and potentially customers for the metering configuration at a premises by not resolving the defect.  Option 10 should not be considered further as it effectively removes any attribution of costs to peak network usage, which does not appear consistent with other industry policy aims.  Option 1 is not reliant on P339 and extends the existing arrangement which was put in place to support P272. Whilst we appreciate and value the simplicity of this solution we are not convinced that it is a viable longer-term solution. However, if there is a significant delay in sites transitioning from NHH to HH, then this option is preferable to Option 9 as it retains the NHH structure for NHH sites. Option 9 would require, to | No commentary offered.  | No                                | No  |

|                |   |  |  | 1                  |
|----------------|---|--|--|--------------------|
|                | ensure cost-reflectivity, sites to be transferred to HH in the near-term.   |  |  |                    |
|                | Option 9 removes much of the uncertainty around forecasting costs for demand users, and will not need to  |  |  |                    |
|                | change again once industry has transitioned to a fully HH market.   |  | 1  |                    |
| Haven<br>Power | We believe Option 1 and 3 better facilitates the applicable CUSC objectives. There is a clear need to remove demand TNUoS charging as a barrier to future elective half hourly settlement and the approach favoured by National Grid is the fairest and least complicated way of addressing the defect.   | We support the proposed implementation approach. Option 1 is the simplest option to address the defect and we believe the benefits of simplicity and tariff predictability outweigh the expectations of those customers who were expecting to be able to benefit from the HH TNUoS methodology once they moved to HH Settlement.  Option 3 is also supported by us if the  | We believe this approach is the fairest and least disruptive approach for consumers. The resulting simplicity and tariff predictability benefits all | No                 |
| Opus Energy    | We believe that option 1, which would continue to treat all meters in Measurement Class E-G as NHH until all meters become HH settled best facilitates the Applicable CUSC Objectives. In summary this is because   | progression of P339 allows it to be implemented.  We support the implementation of option 1 for 1st April 2017.  | consumers.   | No                 |
|                | Practical issues with alternative options make them unsuitable  | We agree that a solution needs to be   |  |                    |
|                | We believe the NHH methodology is in principle more appropriate for these customers   | implemented by 1st April 2017 to avoid potential overcharging on migrating sites. Since P339   |  |                    |
|                | It reduces uncertainty about which method will apply to which sites in any given year   | would be required for all other options and this   |  |                    |
|                | • This is the fourth different recent modification to the transitional TNUoS charging arrangements for migrating sites. Attempting to address this issue in isolation for migrating 5-8s has missed out a lot of complexity which this modification now has the difficult job of resolving. The regulatory uncertainty over charging arrangements will also contribute to increased pricing risk for suppliers. We are concerned that rushing a decision about the enduring charging arrangements into a modification which is time constrained by immediate transitional issues risks repeating this mistake. We feel that the recently raised CMP271 represents an opportunity for the enduring arrangements to be more thoroughly considered so that further modifications on the same subject can be avoided. | cannot be guaranteed to be implemented by April 2017, option 1 is the only one that works for this timetable.  |  |                    |
|                | We therefore suggest a modification to Option 1 so that these meters would be charged TNUoS using the NHH methodology until the implementation date of CMP271 rather than 1st April 2020 or until all meters are mandatory HH settled.  We agree with the workgroup that certain options are not workable and have therefore not considered these further in our response.  |  |  |                    |
|                | We do not consider options 4 or 5 to be appropriate as they do not solve the problem of possible overcharging in the year of migration for Measurement Class G.   |  |  |                    |
|                | We do not consider options 2 or 5b to be workable, as these require the additional information of the year of migration.  |  |  |                    |
| OVO Francis    | This leaves options 1, 3 (the original proposal), and 5c as the only feasible options.  | OVO guanante implementation articles 2 5th an  | No   | No                 |
| OVO Energy     | Objectives (a) and (b) are facilitated by options 3, 5b and 5c. In each case, NHH is the correct charging methodology for Measurement Class F and Measurement Class G premises (1.3.1 to 1.3.6), while triad is applicable to Measurement Class E premises (1.5). Option 5c is the solution recommended by OVO (1.4). Option 1 meets Applicable CUSC Objectives (a) and (b) for premises in Measurement Classes F and G, but not E (see 1.5).  Option 2 resolves the double charging issue but fails to meet CUSC objectives (a) as triad methodology leaves a barrier to elective HH settlement (1.3 -1.13) or (b) as it will impact charge attribution.   | OVO supports implementation options 3, 5b or 5c. 5c is the preferred approach, as OVO believes it provides the greatest longevity. Option 2 is not considered acceptable due to the application of unsuitable triad charging methodology to Measurement Class F premises. Option 1 is considered acceptable for smaller sites, but may raise concerns around AMR premises. | No   | No                 |
| RWE npower     | We do not believe CMP266 original proposal better facilitates the applicable CUSC objectives as outlined below.  (a) CMP266 will not facilitate effective competition as the proposed change will result certain customers  | We do not support the proposed implementation approach for CMP266 as it will introduce disparity between how HH customers are  | No   | Yes – see attached |

| Scottish<br>Power  | being adversely impacted due to not being able to demand manage to reduce Triad costs. CMP266 limits the options for how customers can be managed for TNUoS charging. Customers who have moved to HH metering in order to demand manage will be disadvantaged as they will not be able to influence the reduction of their transmission liability.  (b) Cost reflectivity will not be improved through CMP266. Customers who have a desire to demand manage during the Triad season will not be able to benefit for reducing their transmission liability.  (c) For relevant objective (c) demand side management to increase system margin and defer network reinforcement is an increasing feature of network operators businesses. Allowing more customers to be settled under the HH methodology for TNUoS will allow those customers to fully realise the benefit of demand management activity at peak. It is also consistent with the original intentions and benefits of P272. CMP266 does not enable customers to realise the benefits of demand managing.  CMP266 Original proposal contained 2 potential solutions.  With the end customer in mind Scottish Power have designed and delivered an end to end communications lifecycle and pricing strategy, based on the agreement that their charges will reflect TNUoS HH from April 2017.  Whilst Scottish Power agree that a solution is required to address the issue of double charging customers for the year they migrate from NHH onto HH settlement, we are strongly opposed to the subset of options based upon Original proposal Solution 2, which provides a minimal cost solution for National Grid and more importantly erodes the benefit of cost reflective pricing to the end customer.  Scottish Power reacted quickly to instruction from OFGEM to work with customers in moving towards HH charging and has encouraged our customers to develop plans for 2017 onwards that are driven towards demand management, cost reduction, and the potential to de risk demand around Triad periods. We have written out to all of our customers and inf | No. The P272 Programme has 6 months remaining before all applicable customers have been successfully migrated. Scottish Power strongly believe that a shift in direction in prices and charging this late in the Programme, which includes the peak renewal round of October 2016, is not feasible and puts customers that are undertaking peak management at risk   | Scottish Power believe that a sensible approach to charging was contained in the Original Proposal, Solution One, and would encourage further discussion and development of this approach, which would resolve the issue associated with double charging customers during their migration year, as well as providing a stable and consistent platform for charging thereafter. | We wish for Original Proposal, Solution One to be considered in more detail. |
|--------------------|--|--|--|--|
| Smartest<br>Energy | At a high level, and without going into any of the options at this stage, the proposal to prevent double charging is clearly better for competition compared with the baseline and something needs to be done. It is important to ensure that a 'status quo' mentality does not undermine the development of new consumer products, allows consumers to fully benefit from Smart Meters and reduces the need for excess generation capacity solely to manage the system peak. Most of the changes proposed delay the benefits listed.  | Implementing Option 3 (if feasible) or Option 3 (if Option 3 not feasible) seems like the most pragmatic approach.  Option 2/Option 8 would be the best way of ensuring that sites are not discriminated against (i.e. not being denied access to HH charging), although we wonder whether option 2 is appropriate as it is silent on what would happen to any sites transferring to Measurement Class E.  However, we also feel that something needs to be done about the Triad charging methodology sooner or later anyway and developing something around option 10 may be the means to do this.  We have a general preference for Triad to move to a winter peak charge like the capacity market It would be better to align the charging hours with the Capacity Mechanism. | If Option 1 prevails we assume that the arrangements for Measurement Class E sites which have already given notice that they wish to remain on the HH tariff will continue under the process put in place by CMP241/CMP247. This needs to be made clear in the next round of documentation.  | No   |

| If the scheme can be reformed now more customers would be able to load manage and take part in the capacity market for winter 2018 because of the aligned incentives. See full |  |
|--|--|
| response in Annex.   |  |

## 7.4 The following table provides an overview of the CMP266 Specific Workgroup question responses received;

|                 | Q5: Is the HH methodology therefore more appropriate to customers with long term fixed price contracts rather than the traditional domestic tariffs?  | Q6: Will the HH methodology discourage switching?  |
|-----------------|---|--|
| EDF energy      | Not clear why there should be any difference. See response to question 6.   | No, it should not do so. New Supplier may not know, when quoting to prospective customer during period Nov-Feb, whether customer had consumption during a Triad that might have already occurred, this will not be important for a customer of such a small size, as there will be many customers on account with that Supplier, and the particular consumption of one at time of Triad, will be irrelevant due to diversity of small customer base. |
| E.ON            | We do not necessarily consider one or the other methodology to be more appropriate for any specific customer group.  In the Non-Domestic market, there is a wide range of risk appetites, with some customers wanting to 'fix' their costs for a defined period of time and others willing to have them passed through at the actual outturn. We don't believe therefore that the issue is one of how Suppliers are charged, but of how Suppliers manage those costs through their contracts and product offerings.   | Each Supplier may adopt a different approach when it comes to their own pricing and recharging methodology. It is hard to envisage any significant detriment to switching as a result of a change in the structure of TNUoS. (this is predicated on an assumption that all Suppliers will be broadly consistent in their treatment of TNUoS charges.)  |
| Haven Power     | No comment  | No comment   |
| Opus Energy     | HH TNUoS charging arrangements is not determined by whether a customer is on a long term fixed tariff or a traditional domestic tariff but by how large the site is, how practical it is to load shift, and how frequently there are change of tenancies.  No clear advantage has been demonstrated for charging customers migrating from Profile Classes 1-8 using the HH methodology, but that there are numerous disadvantages.  On other hand, an incentive to reduce winter / year round 4-7pm demand may prove actionable through energy efficiency measures when combined with the DUoS and Capacity Market charges also levied at these times.  Question whether there are vulnerability issues if domestic customers are encouraged to reduce their demand specifically on the cold days when Triads are likely to occur.  Do not believe that the HH methodology is likely to discourage a customer from wanting to switch, as this is still within their control, we do believe it would add unnecessary risk to suppliers, which could result in higher risk premiums being applied to all customers and less competition for certain business at certain times of the year. We therefore believe than the NHH charging would better facilitate applicable objective a) – effective competition in supply. Forecasting accuracy | See response to question 5   |
| OVO Energy      | See comments in section 1. HH Triad charging methodology is appropriate only for sites where load shifting is possible is inappropriate for domestic sites.   | For domestic sites, Triad risk would be absorbed by the supplier. As such it should not affect customers' decision to switch. Indirectly, use of the HH methodology will serve as a barrier to HH settlement, which OVO believes is to the detriment of competition.   |
| RWE npower      | The HH methodology is more appropriate for business customers who have the capability and appetite to demand manage during the Triad season to reduce system peak and their transmission liability.   | No the HH methodology will not discourage switching – it will offer customers the choice to demand manage in order to reduce their transmission liability (where possible).  |
| Scottish Power  | No response   | No response  |
| Smartest Energy | Yes   | Yes  |

### **Workgroup View**

8.1 The Workgroup believes that the Terms of Reference have been fulfilled and CMP266 has been fully considered. The following table highlights the scope of the Workgroup and evidences where the Workgroup believe this has been met.

| Issue to be addressed by the Workgroup        | Evidence  |
|---|---|
| a) Carry out an impact assessment on          | This has been reviewed by the Workgroup but recognised          |
| consumers.                                    | that it if difficult to provide a full assessment. See Sections |
|   | 2, 3 and 4.   |
| b) Be mindful of the 2 options highlighted in | Section 2, 3 and 4.   |
| the paper published by Ofgem on 27 May        |   |
| 2016 in particular paragraph 4.29 as part of  |   |
| the development of the modification           |   |
| c) The capability and speed of how quickly    | Table 5 clearly demonstrates the requirement for BSC            |
| National Grid and ELEXON can update their     | changes.  |
| systems and BSC agents if impacted            |   |
| d) Identify the impact on Supplier Billing    | Sections 3 and 4  |
| systems                                       |   |
| e) Smart meter roll out and SMETs 1           | Sections 2, 3 & 4   |
| adoption.                                     |   |
| f) Consider the timing impacts on when        | Sections 2, 3 & 4   |
| TNUoS forecasting                             |   |

- 8.2 For reference the Use of System Charging Methodology Objectives are;
- (a) That compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;
- (b) That compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard licence condition C26 requirements of a connect and manage connection);
- (c) That, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses\*;
- (d) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1; and
- (e) Promoting efficiency in the implementation and administration of the CUSC arrangements.
- \*Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

### **WACM Vote**

Ahead of the Workgroup Vote the Workgroup voted on which options they would support as WACMS. The criteria of these options can be seen in Table 5 in Section 4 of this document. Out of eleven options, seven were supported by majority the Workgroup and one option was saved by the Workgroup Chair. The Chair chose to support this option as it would allow the CUSC Panel and ultimately the Authority to be provided with a wide range of alternatives that reflects the views of the Workgroup to meet the defects described.

| Ref to previous   Ref to pre   | Member        | Option | Option  | Option | Option   | Option   | Option | Option | Option  | Option | Option   | Option            |
|--|---------------|--------|---------|--------|----------|----------|--------|--------|---------|--------|----------|-------------------|
| previous options identified in 3 & 5   | wember        | 1      | 2       | 3      | 4        | 5        | 6      | 7      | 8       | 9      | 10       | 11                |
| options identified in Section 3, Table 2 of this document  Supported by:  Damian Clough  | Ref to        |        |         |        |          |          |        |        |         |        |          |                   |
| identified in Section 3, Table 2 of this document  Supported by:  Damia Clough Clough Phatianal Clough Phatianal Dosanj h  Damian Clough Phatianal Dosanj h  Clough Phatianal Dosanj h  Clough Phatianal Dosanj h  Damia n Clough Phatianal Dosanj h  Clough Phatianal Phat | previous      |        |         |        |          |          |        |        |         |        |          |                   |
| Section 3, Table 2 of this document  Supported by:  Damia Clough Richard Clough Richard Dosanj h  Damian Clough National Grid Personal Richard Posanj h  Damian Clough National Richard Posanj h  Damia na clough National Posanj h  Damia na clough National Richard Posanj h  Damia na clough National Posanj h  Damia na clough National Richard Posanj h  Damia national  | options       |        |         |        |          |          |        |        |         |        |          |                   |
| Table 2 of this document  Supported by:  Damia n Clough  | identified in | 3 & 5  | n/a     | 2      | 4        | 5        | 5b     | n/a    | n/a     | n/a    | n/a      | n/a               |
| this document    Damian   Clough   Damian   Clough   Damian   Clough   Damian   Clough   Damian   Clough   Damian   Damian   Clough   Damian   Dami | Section 3,    |        |         |        |          |          |        |        |         |        |          |                   |
| Supported by:    Damian   Clough   Damis   Damis   Clough   Damis   Clough | Table 2 of    |        |         |        |          |          |        |        |         |        |          |                   |
| Supported by:    Damia   Clough   Cloug | this          |        |         |        |          |          |        |        |         |        |          |                   |
| Supported by:  Clough Clough Clough National Clough Herdial Dosanjh (Daniel Hickman) RWE npower  Garth Graham Pose Power  Garth Graham National  New Nes   | document      |        |         |        |          |          |        |        |         |        |          |                   |
| Supported by: Clough Graham h h   m   Clough m   h   h    Damian Clough – National Grid  |               |        | Garth   |        |          |          |        |        |         |        |          | Herdial<br>Dosanj |
| Damian Clough - National Grid Herdial Dosanjh (Daniel Hickman) - RWE npower Karl Maryon - Haven Power  Garth Graham - SSE  SSE  Yes  yes  yes  yes  yes  no  no  no  no  no  no  no  no  no  n   |               |        |         | -      |          |          |        |        |         | -      |          | h                 |
| Clough — National Grid   | by:           | Clough |         |        |          |          |        |        |         |        |          |                   |
| Clough — National Grid   | Damian        |        |         |        |          |          |        |        |         |        |          |                   |
| National Grid  Herdial Dosanjh (Daniel Hickman) - RWE npower  Karl Maryon - Haven Power  Garth Graham - SSE  Yes  yes yes yes yes yes yes yes no   |               |        |         |        |          |          |        |        |         |        |          |                   |
| Herdial Dosanjh (Daniel Hickman) – RWE npower  Karl Maryon – Haven Power  Garth Graham – SSE  yes yes yes yes yes yes yes no   | _             | yes    | yes     | yes    | no       | no       | yes    | yes    | yes     | yes    | no       | yes               |
| Herdial Dosanjh (Daniel Hickman) – RWE npower  Karl Maryon – Haven Power  Garth Graham – SSE  yes yes yes yes no   |               |        |         |        |          |          |        |        |         |        |          |                   |
| Dosanjh (Daniel Hickman) – RWE npower  Karl Maryon – Haven Power  Garth Graham – SSE  yes yes yes yes yes no   |               |        |         |        |          |          |        |        |         |        |          |                   |
| CDaniel   Hickman) - RWE   No   No   No   No   No   No   No   N  |               |        |         |        |          |          |        |        |         |        |          |                   |
| Hickman) – RWE npower  Karl Maryon – Haven Power  Garth Graham – SSE  yes yes yes no   |               |        |         |        |          |          |        |        |         |        |          |                   |
| RWE npower  Karl Maryon – Haven Power  Garth Graham – SSE  yes yes yes yes yes yes yes yes yes ye  |               | no     | yes     | yes    | no       | no       | no     | yes    | yes     | yes    | no       | yes               |
| Naryon – Haven Power  Garth Graham – SSE  yes yes yes yes yes yes yes yes yes ye   |               |        |         |        |          |          |        |        |         |        |          |                   |
| Karl Maryon – Haven Power  Garth Graham – SSE  yes yes yes yes yes yes no  |               |        |         |        |          |          |        |        |         |        |          |                   |
| Maryon – Haven Power  Sarth Graham – SSE  Yes  yes  yes  yes  yes  yes  yes  yes   |               |        |         |        |          |          |        |        |         |        |          |                   |
| Haven Power    Power   |               |        |         |        |          |          |        |        |         |        |          |                   |
| Power  Garth Graham - SSE  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye   | -             | yes    | yes     | yes    | no       | no       | no     | no     | no      | no     | no       | no                |
| Garth Graham – SSE  yes yes yes yes yes yes yes yes yes ye   |               |        |         |        |          |          |        |        |         |        |          |                   |
| Garth Graham – SSE  yes yes yes yes yes yes yes yes yes ye   | 1 OWCI        |        |         |        | no - not | no - not |        |        |         |        | no - not |                   |
| Garth Graham – SSE  yes yes yes yes yes yes yes yes yes ye   |               |        |         |        |          |          |        |        |         |        |          |                   |
| Graham – yes yes yes e and competi competi tion tion yes yes yes yes e and competi tion  Gregory  Edwards – no yes no no no no no no yes no no no no specification to the competi tion the competition t | Garth         |        |         |        |          |          |        |        |         |        |          |                   |
| Gregory Edwards – no yes no no no no no yes no no British Gas  | Graham –      | yes    | yes     | yes    |          |          | yes    | yes    | yes     | yes    |          | yes               |
| Gregory Edwards – no yes no no no no no yes no no British Gas  | SSE           |        |         |        |          |          |        |        |         |        |          |                   |
| Gregory Edwards – no yes no no no no no yes no no British Gas  |               |        |         |        |          | -        |        |        |         |        | -        |                   |
| Edwards – no yes no no no no no yes no no British Gas  | Gregory       |        |         |        |          |          |        |        |         |        |          |                   |
| British Gas  |               | no     | ves     | no     | no       | no       | no     | no     | Ves     | no     | no       | no                |
|  |               |        | , , , , |        |          |          |        | 1.0    | , , , , | 110    |          |                   |
|  | Eric          |        |         |        |          |          |        |        |         |        |          |                   |
| Graham –   |               |        |         |        |          |          |        |        |         |        |          |                   |
| TMA  |               |        |         |        |          |          |        |        |         |        |          |                   |
| Overall 3/5 5/5 4/5 0/5 0/5 2/5 3/5 4/5 3/5 0/5  |               | 3/5    | 5/5     | 4/5    | 0/5      | 0/5      | 2/5    | 3/5    | 4/5     | 3/5    | 0/5      | 3/5               |
| Supported n/a n/a n/a No No Yes n/a n/a No No  | Supported     | n/o    | n/o     | n/o    | No       | No       | Voc    | n/o    | n/o     | n/o    | No       | n/a               |

| by Chair if |      |      |      |  |      |      |      |      |      |
|-------------|------|------|------|--|------|------|------|------|------|
| applicable  |      |      |      |  |      |      |      |      |      |
| (yes / no)  |      |      |      |  |      |      |      |      |      |
| WACM        | WACM | WACM | WACM |  | WACM | WACM | WACM | WACM | WACM |
| Reference   | 1    | 2    | 3    |  | 4    | 5    | 6    | 7    | 8    |

### **Workgroup Vote**

8.3 The Workgroup met on 6 October 2016 and voted on the Original Proposal and eight WACMs (Workgroup Alternative CUSC Modifications). Overall, WACM1, WACM2, WACM3 and WACM6 had one vote each as better facilitating the applicable CUSC objectives. WACM5 had two votes as better facilitating the applicable CUSC objectives. The votes received are as follows;

<u>Vote 1</u> – does the original or WACM facilitate the objectives better than the Baseline?

| Workgroup                     | Better                 | Better               | Better               | Better               | Better                  | Overall |  |  |  |
|-------------------------------|------------------------|----------------------|----------------------|----------------------|-------------------------|---------|--|--|--|
| Member                        | facilitates<br>ACO (a) | facilitates ACO (b)? | facilitates ACO (c)? | facilitates ACO (d)? | facilitates<br>ACO (e)? | (Y/N)   |  |  |  |
|                               |                        | <u> </u>             | ACO (c)?             | ACO (a)?             | ACO (e)?                |         |  |  |  |
| Damian Clough – National Grid |                        |                      |                      |                      |                         |         |  |  |  |
| Original                      | Yes                    | Yes                  | Yes                  | Neutral              | Yes                     | Yes     |  |  |  |
| WACM1                         | Yes                    | Yes                  | Yes                  | Neutral              | Yes                     | Yes     |  |  |  |
| WACM2                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM3                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM4                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM5                         | Yes                    | Yes                  | Yes                  | Neutral              | Yes                     | Yes     |  |  |  |
| WACM6                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM7                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM8                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| Herdial Dosar                 | njh (Daniel Hick       | man) – RWE r         | power                |                      |                         |         |  |  |  |
| Original                      | No                     | No                   | Neutral              | Neutral              | Neutral                 | No      |  |  |  |
| WACM1                         | No                     | No                   | Neutral              | Neutral              | Neutral                 | No      |  |  |  |
| WACM2                         | Yes                    | Yes                  | Neutral              | Neutral              | Neutral                 | Yes     |  |  |  |
| WACM3                         | Yes                    | Yes                  | Neutral              | Neutral              | Neutral                 | Yes     |  |  |  |
| WACM4                         | Yes                    | Yes                  | Neutral              | Neutral              | Neutral                 | Yes     |  |  |  |
| WACM5                         | No                     | No                   | Neutral              | Neutral              | Neutral                 | No      |  |  |  |
| WACM6                         | Yes                    | Yes                  | Neutral              | Neutral              | Neutral                 | Yes     |  |  |  |
| WACM7                         | Yes                    | Yes                  | Neutral              | Neutral              | Neutral                 | Yes     |  |  |  |
| WACM8                         | Yes                    | Yes                  | Neutral              | Neutral              | Neutral                 | Yes     |  |  |  |
| Karl Maryon -                 | - Haven Power          |                      |                      |                      |                         |         |  |  |  |
| Original                      | Yes                    | Yes                  | Yes                  | Neutral              | Yes                     | Yes     |  |  |  |
| WACM1                         | Yes                    | Yes                  | Yes                  | Neutral              | Yes                     | Yes     |  |  |  |
| WACM2                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM3                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM4                         | No                     | No                   | Neutral              | Neutral              | No                      | No      |  |  |  |
| WACM5                         | No                     | No                   | No                   | Neutral              | No                      | No      |  |  |  |

| WACM6              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
|--------------------|------------------|---------|---------|---------|---------|-----|--|--|--|
| WACM7              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
| WACM8              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
| Garth Graham – SSE |                  |         |         |         |         |     |  |  |  |
| Original           | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM1              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM2              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM3              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM4              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM5              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM6              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM7              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| WACM8              | Yes              | Yes     | Neutral | Neutral | Neutral | Yes |  |  |  |
| Gregory Edw        | ards – British ( | Gas     |         |         |         |     |  |  |  |
| Original           | Yes              | Neutral | Neutral | Neutral | Yes     | -   |  |  |  |
| WACM1              | Yes              | Neutral | Neutral | Neutral | Yes     | Yes |  |  |  |
| WACM2              | Yes              | Neutral | Neutral | Neutral | No      | Yes |  |  |  |
| WACM3              | Yes              | Neutral | Neutral | Neutral | No      | Yes |  |  |  |
| WACM4              | No               | Neutral | Neutral | Neutral | No      | No  |  |  |  |
| WACM5              | Yes              | Neutral | Neutral | Neutral | Yes     | Yes |  |  |  |
| WACM6              | Yes              | Neutral | Neutral | Neutral | Yes     | Yes |  |  |  |
| WACM7              | Yes              | Neutral | Neutral | Neutral | Yes     | Yes |  |  |  |
| WACM8              | No               | Neutral | Neutral | Neutral | No      | No  |  |  |  |
| Eric Graham        | – TMA            |         |         |         |         |     |  |  |  |
| Original           | Yes              | Yes     | Yes     | Neutral | Yes     | Yes |  |  |  |
| WACM1              | Yes              | Yes     | Yes     | Neutral | Yes     | Yes |  |  |  |
| WACM2              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
| WACM3              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
| WACM4              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
| WACM5              | No               | No      | No      | Neutral | No      | No  |  |  |  |
| WACM6              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
| WACM7              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |
| WACM8              | No               | No      | Neutral | Neutral | No      | No  |  |  |  |

# <u>Vote 2</u> – does the WACM facilitate the objectives better than the Original?

| Workgroup<br>Member | Better<br>facilitates<br>ACO (a) | Better facilitates ACO (b)? | Better facilitates ACO (c)? | Better facilitates ACO (d)? | Better<br>facilitates<br>ACO (e)? | Overall<br>(Y/N) |
|---------------------|----------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------------|------------------|
| Damian Cloug        | h – National Gr                  | id                          |                             |                             |                                   |                  |
| WACM1               | Yes                              | Yes                         | Yes                         | Neutral                     | Yes                               | Yes              |
| WACM2               | No                               | No                          | No                          | Neutral                     | No                                | No               |
| WACM3               | No                               | No                          | No                          | Neutral                     | No                                | No               |
| WACM4               | No                               | No                          | No                          | Neutral                     | No                                | No               |
| WACM5               | Yes                              | Yes                         | Yes                         | Neutral                     | Yes                               | Yes              |
| WACM6               | No                               | No                          | No                          | Neutral                     | No                                | No               |
| WACM7               | No                               | No                          | No                          | Neutral                     | No                                | No               |

|   |             |         |          |          | 1         |         |  |  |
|---|-------------|---------|----------|----------|-----------|---------|--|--|
| WACM8   | No          | No      | No       | Neutral  | No        | No      |  |  |
| Herdial Dosanjh (Daniel Hickman) – RWE npower |             |         |          |          |           |         |  |  |
| WACM1   | No          | No      | Neutral  | Neutral  | Neutral   | No      |  |  |
| WACM2   | No          | No      | Neutral  | Neutral  | Neutral   | No      |  |  |
| WACM3   | Yes         | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| WACM4   | No          | No      | Neutral  | Neutral  | Neutral   | No      |  |  |
| WACM5   | No          | No      | Neutral  | Neutral  | Neutral   | No      |  |  |
| WACM6   | No          | No      | Neutral  | Neutral  | Neutral   | No      |  |  |
| WACM7   | Yes         | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| WACM8   | No          | No      | Neutral  | Neutral  | Neutral   | No      |  |  |
| Karl Maryon – I                               | Haven Power |         |          |          |           |         |  |  |
| WACM1   | Yes         | Yes     | Yes      | Neutral  | Yes       | Yes     |  |  |
| WACM2   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM3   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM4   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM5   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM6   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM7   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM8   | No          | No      | No       | Neutral  | No        | No      |  |  |
| Garth Graham                                  |             |         |          | 11000.0  |           | 1,10    |  |  |
| WACM1   | Neutral     | Neutral | Neutral  | Neutral  | Neutral   | Neutral |  |  |
| WACM2   | Neutral     | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| WACM3   | Neutral     | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| WACM4   | Neutral     | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| WACM5   | Neutral     | Neutral | Neutral  | Neutral  | Neutral   | Neutral |  |  |
| WACM6   | Neutral     | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| WACM7   | Neutral     | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| WACM8   | Neutral     | Yes     | Neutral  | Neutral  | Neutral   | Yes     |  |  |
| Gregory Edwar                                 |             |         | INCUIIAI | INCULIAL | INCULIAL  | 163     |  |  |
|   |             |         | Noutral  | Noutral  | Vac       | Vaa     |  |  |
| WACM1   | Yes         | Neutral | Neutral  | Neutral  | Yes       | Yes     |  |  |
| WACM2   | Yes         | No      | Neutral  | Neutral  | No        | Neutral |  |  |
| WACM3   | Neutral     | Neutral | Neutral  | Neutral  | Yes       | Neutral |  |  |
| WACM4   | No          | Neutral | Neutral  | Neutral  | - Neutral | No      |  |  |
| WACM5   | Yes         | Neutral | Neutral  | Neutral  | Yes       | Yes     |  |  |
| WACM6   | Yes         | Neutral | Neutral  | Neutral  | Yes       | Yes     |  |  |
| WACM7   | Yes         | Neutral | Neutral  | Neutral  | Yes       | Yes     |  |  |
| WACM8   | No          | Neutral | Neutral  | Neutral  | Yes       | Neutral |  |  |
| Eric Graham –                                 |             |         |          |          |           |         |  |  |
| WACM1   | Yes         | Yes     | Yes      | Neutral  | Yes       | Yes     |  |  |
| WACM2   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM3   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM4   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM5   | Yes         | Yes     | Yes      | Neutral  | Yes       | Yes     |  |  |
| WACM6   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM7   | No          | No      | No       | Neutral  | No        | No      |  |  |
| WACM8   | No          | No      | No       | Neutral  | No        | No      |  |  |

### **Vote 3 – Which option is the best?**

| Workgroup Member                              | BEST Option? |
|---|--------------|
| Damian Clough - National Grid                 | WACM5        |
| Herdial Dosanjh (Daniel Hickman) – RWE npower | WACM3        |
| Karl Maryon – Haven Power                     | WACM1        |
| Garth Graham – SSE                            | WACM2        |
| Gregory Edwards – British Gas                 | WACM6        |
| Eric Graham – TMA                             | WACM5        |

8.4 Each Workgroup member provided further justification as to why they voted as they did, this is detailed below;

#### **Damian Clough**

For Vote 1: All options solve the defect which is double charging of NHH and HH within the same charging year. By solving double charging they are more cost reflective than baseline as a consumer should not face double charges purely due to moving to HH settlement and no change in demand use.

This means all are initially better than the baseline apart from d) which is neutral.

However for WACM2,3,4,6,7,8 these propose treating Measurement Classes differently, and then one step further by treating meters within a Measurement Class differently based on when they migrated into the Measurement Class. This then makes these proposals worse than the baseline due to:

- **a)** By treating Measurement Class's differently and having the same size customer charged differently, purely based on how they are settled creates an added level of complexity. This may act as a barrier to entry for new Suppliers, and may favour large Suppliers who are more able to cross subsidise or absorb any errors/mistakes in not forecasting demand and setting tariffs accurately.
- **b)** Whilst there exists a distinct difference between the NHH and HH methodologies and time periods over which NHH and HH liabilities are calculated, there will be the drive for consumers to switch to a methodology purely because it benefits them, rather than it encouraging them to reduce demand Peak. These avoided costs will borne by consumers on the NHH methodology, whilst at the same time providing no new system benefit.

There is nothing stopping consumers moving back to NHH settlement within the same charging year. When forecasting and finalising tariffs there will be the need to forecast numbers switching to HH settlement and their behaviour over the Triad periods. The above factors causes increased difficulty in setting cost reflective tariffs and will more than likely create increased volatility between tariff forecasts leading up to the point when they are finalised. Increased volatility and uncertainty inevitably feeds through to a Suppliers risk premia ultimately paid for by the end consumer as discussed within CMP244. The original maintains an appropriate balance between

cost reflectivity and predictability. Therefore removing one barrier may create a new barrier which will affect all users and not just those migrating therefore worse than baseline **c)** Neutral

**e)** Inefficient to put in place a number of large system changes to move customers temporarily to a methodology which is likely to change.

#### For Vote 2: WACM1

- a) Measurement Class E tend to be larger consumers who are more suited to Triad charging. There is a balance to be made between complexity but these consumers (vast majority) will have migrated to HH settlement as part of P272 so will be expecting to be settled under the HH methodology for charging year 2017/18. The blocker of double charging is not there at all for this class or very minimal when compared to the other classes. As long as National Grid can accurately forecast demand for these users (with the help of Suppliers) then this is very marginally better from an industry point of view, and not necessarily from National Grid's point of view but is a pragmatic solution.
- b) Measurement Class E tend to be larger consumers who are more suited to Triad charging, and Suppliers will be more able and willing to set tariffs and pass through costs, making the whole process more cost reflective. For domestic consumer in Classes F and G this will be a lot more difficult.
- c) Very marginally better due to HH tariffs being partly capacity based, and ACER not recommending that Transmission Costs should be commodity based. However Europe is moving towards tariff harmonisation so this may change.

#### WACM5

Same as above; however for a) and b) the years delay allows the system to be fully tested, and Industry and National Grid to gauge the demand usage of this Measurement Class (E). Previous data only showed <100kW aggregated. This will allow more cost reflective charges and reduce potential tariff volatility flowing through to future years affecting other consumers disproportionately. For e) there is the distinct possibility that consumers will move to a tariff methodology for one year which due to Industry change will revert back to something more similar to the NHH Methodology, i.e. recognising year round costs and the signal not being as sharp as being based on 3 settlement periods (Triads).

Any meters moving into Measurement Class E after 31 March 2017 will be double charged under WACM1 and not WACM5

### Herdial Dosanjh (Daniel Hickman)

The original change proposal for CMP266 limits customers who have moved to HH as part of P272 to receive the benefits of load managing for Triads. This does not support cost reflectivity as there would be 2 methodologies for HH customers; they both can't be cost reflective. The original does not fully utilise HH data that is available from P272 impacted customers. These core themes run through some of the WACMs being proposed. We support the WACMs that achieve the most cost reflective solution to the defect in the shortest time this in turn enables impacted customers to receive the benefits for load managing. We recognise the dependency on the implementation of the P339 BSC mod and an additional mod that had not yet been raised so have also supported variants of earlier WACMs which have factored in potential delays to dependant BSC mods. The rationale for this was to provide Ofgem with pragmatic range of options when making their final decision.

#### **Garth Graham**

For Vote 1: The Original and all the WACMs are neutral with respect to (c) and (d). Original and all WACMs are better in terms of facilitating competition (a) as it removes the double charging impact which allows users to compete better. Original and all the WACMs are better in terms of facilitating cost reflectivity (b) as it removes the double charging. Double charging would not be cost reflective, so removing this is better.

For Vote 2: All the WACMs are neutral with respect to (c) and (d) when compared with the Original. All the WACMs which have classes E, F and G are neutral when compared to the Original in terms of better for competition. All the STEPS WACMs are better than the original in terms of cost reflectivity as they charge the party at the earliest practical opportunity (namely from the next 1st April onwards) the cost reflective HH charge.

### **Gregory Edwards**

All options appear neutral against applicable objectives C and D.

The Original and WACM1 are discounted because both might not solve the defect identified by the Proposer.

WACM4 and WACM8, which involve differential treatment across Measurement Classes F and G within any given charging year to 1 April 2020, are also discounted. No robust evidence was identified during workgroup discussions or in responses to the workgroup consultation which justifies differential treatment. Without sufficient justification, there is a concern there may be a negative impact on competition and on the relevant customers.

WACM 5 and WACM8 (and the Original and WACM1, WACM 4), which involve the 'blanket' delay of HH charging for all meters in at least one of Measurement Classes E, F or G until 1 April 2020, are not preferred. No robust evidence was identified during workgroup discussions or in responses to the workgroup consultation which justifies the 'blanket' delay. HH charging should be implemented as soon as reasonably possible for those customers for which it possible so they can choose HH charging arrangements, which might more closely align which their requirements. Without sufficient justification, there is a concern there may be a negative impact on competition and on the relevant customers.

WACM2, WACM3, WACM6 and WACM7 involve solutions which address the 'overlap' of NHH and HH charging arrangements in any given charging year to 1 April 2020 but without the 'blanket' delay of HH changing for either of Measurement Classes E, F or G and the differential treatment across Measurement Classes in a given charging year. These options involve charging customers in Measurement Classes E, F and G as of 1 April 2017 (or 1 April 2018) according to HH arrangements. WACM2 and WACM3 allow elective HH charging arrangements to be implemented for those customers migrating after 1 April 2017 while WACM6 and WACM7 allow elective arrangements to be implemented for those customers migrating after 1 April 2018.

In isolation, WACM2 or WACM3 appear to represent the better solution for those customers that wish to be charged according to HH arrangements as quickly as possible. However, discussions during workgroup meetings suggest that central system changes needed to facilitate elective HH charging may require a lead time of about six months. This suggests there may be practical constraints on implementing WACM2 or WACM3 for 1 April 2017 and, as such, could render either option infeasible.

WACM6 and WACM7 involve the delay of elective HH charging to 1 April 2018, to accommodate the lead time for system changes mentioned above. WACM6 involves the delay of HH charging for those migrating into Measurement Classes E, F and G while WACM7 involves the delay for just those migrating into Measurement Classes F and G (it assumes all relevant customers will have migrated into Measurement Class E by 1 April 2017). Both options involve solutions that address the defect identified by the Proposer and allow elective HH charging to be implemented as soon as reasonably possible while accommodating the lead time for the necessary system changes. Further, these options appear to mitigate the potential negative impact on competition described above. However, WACM6 is the preferred option because of the additional benefit of the 'backstop' protection for any residual customers that may experience technical delays in migrating into Measurement Class E by 1 April 2017.

### **Eric Graham**

We all agreed that all the WACMs addressed the double charging flaw.

However only two , to my mind, represent acceptable outcomes : the original and five; because these preserve the NHH charging methodology and represent a) the Authority getting what they want, i.e. HH settlement enabled for elective; b) a reasonable prospect this could be available for Aril 2017; c) lowest risk (for consumers and Suppliers (not least to their billing systems) because of least change); and d) do not create a disincentive, for anyone, to having these metering systems settle HH.



# CUSC Modification Proposal Form CMP266

# nationalgrid

# Connection and Use of System Code (CUSC)

### Title of the CUSC Modification Proposal

Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement

### **Submission Date**

16/06/2016

### Description of the Issue or Defect that the CUSC Modification Proposal seeks to address

When a meter within Profile Classes 1-4 moves from being Non Half Hourly (NHH) settled to Half Hourly (HH) settled within the same TNUoS charging year, the Supplier and ultimately the end consumer is liable for both a NHH TNUoS liability and HH TNUoS liability for that charging year. Ofgem's stated aim is to remove barriers to allow Elective Half Hourly settlement from early 2017. This defect therefore needs to be removed.

### **Description of the CUSC Modification Proposal**

With reference to Ofgem's recent "Elective half-hourly settlement conclusions paper" (<a href="https://www.ofgem.gov.uk/system/files/docs/2016/05/elective\_hhs\_conclusions\_paper.pdf">https://www.ofgem.gov.uk/system/files/docs/2016/05/elective\_hhs\_conclusions\_paper.pdf</a>) issued on 27<sup>th</sup> May 2016. There are two main solutions to the defect which the proposer has considered.

- 1) To prevent double charging in a given charging year a consumer migrating from NHH settled to HH settled will be charged under the NHH methodology for the year in which they migrate and then will be charged under the HH methodology for future full charging years up until HH settlement is mandatory for all consumers.
- 2) To prevent double charging of TNUoS for a meter electing to be HH settled, all demand within Measurement Class F & G will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers.

Other solutions such as treating all demand sub100kW as NHH up until all consumers are HH settled have been discussed at TCMF. In its conclusions paper, Ofgem said that it thought a modification should be raised to extend the NHH transmission charging structure to measurement classes F and G. The merits of these other solutions will be discussed at a workgroup level."

The proposed solution to address the defect for this modification is the following;

2) To prevent double charging of TNUoS for a meter electing to be HH settled, all

demand within Measurement Class F & G will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers.

### In detail

For the purposes of settlement, customers are assigned to a Profile Class according to their consumption pattern and meter type. Domestic and smaller non-domestic customers are assigned to Profile Classes 1-4 and are within Measurement Class A.

When meters currently in Measurement Classes A elect to be HH settled the majority move into either Measurement Class F or G. Measurement Class F is used for Half Hourly domestic Metering Systems and Measurement Class G for sub-100kW non-domestic Metering Systems with whole-current Meters.

National Grid receives aggregated demand data from Elexon in a file called P210. This file is used to calculate and invoice the TNUoS Demand liability. The P210 file splits up the total demand for a BMU into either HH or NHH demand. All Half Hourly settled demand is aggregated together. When a meter moves from being NHH settled to HH settled the demand for this meter automatically moves from the NHH to HH in the P210 file. The movement of this demand within a charging year causes 'overcharging' as the Supplier and ultimately the end consumer is liable for NHH charges for part of the year for demand between the hours of 4-7pm each day, plus HH charges which are an annual charge based on winter use over the Triad half hours.

To prevent double charging all demand within Measurement Class F will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers.

As National Grid does not receive individual meter demand or aggregated demand per Measurement Class; to continue to charge Measurement Class F under the NHH methodology, will either require Elexon to send National Grid the demand for Measurement Class F for the Settlement Periods relating to 4-7pm. This allows National Grid to amend the P210 file and original demand. The alternative would be, these amendments necessary to the P210 file are carried out by other Industry parties and National Grid receives the 'correct' amended demand data on which to calculate TNUoS charges. The overriding proposal is the same for either approach.

### Impact on the CUSC

Section 14

Do you believe the CUSC Modification Proposal will have a material impact on Greenhouse Gas Emissions? No

No

| Impact on Core Industry Documentation. Please tick the relevant boxes and provide any supporting information  |
|---|
| BSC 🖂   |
| Grid Code   |
| STC   |
| Other (please specify)  |
| Discussions will need to be had about the most appropriate way for demand data to amended either by National Grid or amended then provided to National Grid. The lead time for any of these changes are significantly longer than the lead time for this modification as thy need to be in place of invoicing and not tariff setting (which is sooner). |
| BSC modification P339 seeks to introduce new Consumption Component Classes (to align with measurement classes E, F and G) – this could help Elexon to provide National Grid with the relevant data.   |
| Urgency Recommended: No   |
| No  |
| Justification for Urgency Recommendation  |
| If you have answered yes above, please describe why this Modification should be treated as Urgent.  |
| An Urgent Modification Proposal should be linked to an imminent issue or a current issue that if not urgently addressed may cause:  |
| <ul> <li>a) A significant commercial impact on parties, consumers or other stakeholder(s); or</li> <li>b) A significant impact on the safety and security of the electricity and/or has systems; or</li> </ul>  |
| c) A party to be in breach of any relevant legal requirements.  |
| You can find the full urgency criteria on the Ofgem's website: <a href="http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=213&amp;refer=Licensing/IndCodes/Governance">http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=213&amp;refer=Licensing/IndCodes/Governance</a>  |

### Self-Governance Recommended: No

No

#### **Justification for Self-Governance Recommendation**

If you have answered yes above, please describe why this Modification should be treated as Self-Governance.

A Modification Proposal may be considered Self-governance where it is unlikely to have a material effect on:

- Existing or future electricity customers;
- Competition in generation or supply;
- The operation of the transmission system;
- Security of Supply;
- Governance of the CUSC
- And it is unlikely to discriminate against different classes of CUSC Parties.

# Should this CUSC Modification Proposal be considered exempt from any ongoing Significant Code Reviews?

Please justify whether this modification should be exempt from any Significant Code Review (SCR) undertaken by Ofgem. You can find guidance on the launch and conduct of SCRs on Ofgem's website, along with details of any current SCRs at:

http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=197&refer=Licensing/IndCodes/Governance.

For further information on whether this Proposal may interact with any ongoing SCRs, please contact the Panel Secretary.

### **Impact on Computer Systems and Processes used by CUSC Parties:**

Not all HH settled customers will be charged under the HH methodology. This; as noted with other modifications, can cause issues with Suppliers billings systems.

### **Details of any Related Modification to Other Industry Codes**

None

# Justification for CUSC Modification Proposal with Reference to Applicable CUSC Objectives:

This section is mandatory. You should detail why this Proposal better facilitates the Applicable CUSC Objectives compared to the current baseline. Please note that one or more Objective

| must be  | e justified.   |
|----------|--|
| Please   | tick the relevant boxes and provide justification:   |
| Use of   | System Charging Methodology  |
| ⊠ (a)    | that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;   |
|          | cessary to remove the blocker of being overcharged from moving from being NHH to HH settled as this will prevent consumers electing to be HH settled.  |
| oppose   | lement allows end users to be charged on their actual energy use over peak periods as d to profiled data. This will aid the potential future creation of innovative tariffs thus competition, and may aid the creation of demand response products.  |
| Compa    | rison against other solutions will be done at a workgroup level  |
|          | that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection); |
| is avera | ners liabilities calculated under the NHH methodology are based on profiled data which age usage for all users within the same Profile. Consumers liabilities are therefore not matched to their actual usage within the time periods on which they are charged. By consumers to be charged on their actual demand matches allows tariffs to better costs  |
| (c)      | that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses.   |
| ☐ (d)    | compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency.  These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.   |
|          | Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).  |

### **Additional details**

| <b>Details of Proposer:</b> (Organisation Name)   | National Grid Electricity Transmission (NGET)  |
|---|--|
| Capacity in which the CUSC Modification Proposal is being proposed: (i.e. CUSC Party, BSC Party or "National Consumer Council") | CUSC Party   |
| Details of Proposer's Representative: Name: Organisation: Telephone Number: Email Address:                                      | Damian Clough National Grid Electricity Transmission (NGET) 01926656416 Damian.Clough@nationalgrid.com |
| Details of Representative's Alternate: Name: Organisation: Telephone Number: Email Address:                                     |  |
| Attachments (Yes/No): If Yes, Title and No. of pages of each At   | tachment:  |

### **Contact Us**

If you have any questions or need any advice on how to fill in this form please contact the Panel Secretary:

E-mail cusc.team@nationalgrid.com

Phone: 01926 653606

For examples of recent CUSC Modifications Proposals that have been raised please visit the National Grid Website at

http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/Current/

### **Submitting the Proposal**

Once you have completed this form, please return to the Panel Secretary, either by email to <a href="mailto:jade.clarke@nationalgrid.com">jade.clarke@nationalgrid.com</a> and copied to <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a>, or by post to:

Jade Clarke
CUSC Modifications Panel Secretary, TNS
National Grid Electricity Transmission plc
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

If no more information is required, we will contact you with a Modification Proposal number and the date the Proposal will be considered by the Panel. If, in the opinion of the Panel Secretary, the form fails to provide the information required in the CUSC, the Proposal can be rejected. You will be informed of the rejection and the Panel will discuss the issue at the next meeting. The Panel can reverse the Panel Secretary's decision and if this happens the Panel Secretary will inform you.

I



# **Workgroup Terms of Reference and Membership TERMS OF REFERENCE FOR CMP 266 WORKSHOP**

CMP266 seeks to prevent double charging of TNUoS for a meter electing to be HH settled, all demand within Measurement Class F & G will be charged under the TNUoS NHH methodology from April 2017 up until HH settlement is mandatory for all consumers.

### Responsibilities

- The Workgroup is responsible for assisting the CUSC Modifications Panel in the evaluation of CUSC Modification Proposal CMP266: Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement tabled by National Grid at the Modifications Panel meeting on 24 June 2016.
- 2. The proposal must be evaluated to consider whether it better facilitates achievement of the Applicable CUSC Objectives. These can be summarised as follows:

### **Use of System Charging Methodology**

- (a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;
- (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection);
- (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses:
- (d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.).

Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

3. It should be noted that additional provisions apply where it is proposed to modify the CUSC Modification provisions, and generally reference should be made to the Transmission Licence for the full definition of the term.

### Scope of work

- 4. The Workgroup must consider the issues raised by the Modification Proposal and consider if the proposal identified better facilitates achievement of the Applicable CUSC Objectives.
- 5. In addition to the overriding requirement of paragraph 4, the Workgroup shall consider and report on the following specific issues:
  - a) Carry out an impact assessment on consumers.
  - b) Be mindful of the 2 options highlighted in the paper published by Ofgem on 27 May 2016 in particular paragraph 4.29 as part of the development of the modification
  - c) The capability and speed of how quickly National Grid and ELEXON can update their systems and BSC agents if impacted
  - d) Identify the impact on Supplier Billing systems
  - e) Smart meter roll out and SMETs 1 adoption.
  - f) Consider the timing impacts on when TNUoS forecasting
- 6. The Workgroup is responsible for the formulation and evaluation of any Workgroup Alternative CUSC Modifications (WACMs) arising from Group discussions which would, as compared with the Modification Proposal or the current version of the CUSC, better facilitate achieving the Applicable CUSC Objectives in relation to the issue or defect identified.
- 7. The Workgroup should become conversant with the definition of Workgroup Alternative CUSC Modification which appears in Section 11 (Interpretation and Definitions) of the CUSC. The definition entitles the Group and/or an individual member of the Workgroup to put forward a WACM if the member(s) genuinely believes the WACM would better facilitate the achievement of the Applicable CUSC Objectives, as compared with the Modification Proposal or the current version of the CUSC. The extent of the support for the Modification Proposal or any WACM arising from the Workgroup's discussions should be clearly described in the final Workgroup Report to the CUSC Modifications Panel.
- 8. Workgroup members should be mindful of efficiency and propose the fewest number of WACMs possible.
- 9. All proposed WACMs should include the Proposer(s)'s details within the final Workgroup report, for the avoidance of doubt this includes WACMs which are proposed by the entire Workgroup or subset of members.
- 10. There is an obligation on the Workgroup to undertake a period of Consultation in accordance with CUSC 8.20. The Workgroup Consultation period shall be for a period of **10 working days** as determined by the Modifications Panel.
- 11. Following the Consultation period the Workgroup is required to consider all responses including any WG Consultation Alternative Requests. In undertaking an assessment of any WG Consultation Alternative Request, the

Workgroup should consider whether it better facilitates the Applicable CUSC Objectives than the current version of the CUSC.

As appropriate, the Workgroup will be required to undertake any further analysis and update the original Modification Proposal and/or WACMs. All responses including any WG Consultation Alternative Requests shall be included within the final report including a summary of the Workgroup's deliberations and conclusions. The report should make it clear where and why the Workgroup chairman has exercised his right under the CUSC to progress a WG Consultation Alternative Request or a WACM against the majority views of Workgroup members. It should also be explicitly stated where, under these circumstances, the Workgroup chairman is employed by the same organisation who submitted the WG Consultation Alternative Request.

12. The Workgroup is to submit its final report to the Modifications Panel Secretary on **22 September 2016** for circulation to Panel Members. The final report conclusions will be presented to the CUSC Modifications Panel meeting on **30 September 2016**.

### **Membership**

13. It is recommended that the Workgroup has the following members:

| Role                | Name                   | Representing  |
|---------------------|------------------------|---------------|
| Chairman            | Caroline Wright        | National Grid |
| National Grid       | Damian Clough          | National Grid |
| Representative      |                        |               |
| Industry            | Karl Maryon            | Haven Power   |
| Representatives     | Daniel Hickman/Herdial | Npower        |
|                     | Dosanjh                |               |
|                     | Gregory Edwards        | British Gas   |
|                     | Eric Graham            | TMA           |
| Authority           | Martin Bell            | OFGEM         |
| Representatives     |                        |               |
| Technical secretary | Heena Chauhan          | National Grid |
| Observers           |                        |               |

NB: A Workgroup must comprise at least 5 members (who may be Panel Members). The roles identified with an asterisk in the table above contribute toward the required quorum, determined in accordance with paragraph 14 below.

- 14. The chairman of the Workgroup and the Modifications Panel Chairman must agree a number that will be quorum for each Workgroup meeting. The agreed figure for CMP266 is that at least 5 Workgroup members must participate in a meeting for quorum to be met.
- 15. A vote is to take place by all eligible Workgroup members on the Modification Proposal and each WACM. The vote shall be decided by simple majority of those present at the meeting at which the vote takes place (whether in person or by teleconference). The Workgroup chairman shall not have a vote, casting or otherwise]. There may be up to three rounds of voting, as follows:

- Vote 1: whether each proposal better facilitates the Applicable CUSC Objectives;
- Vote 2: where one or more WACMs exist, whether each WACM better facilitates the Applicable CUSC Objectives than the original Modification Proposal;
- Vote 3: which option is considered to BEST facilitate achievement of the Applicable CUSC Objectives. For the avoidance of doubt, this vote should include the existing CUSC baseline as an option.

The results from the vote and the reasons for such voting shall be recorded in the Workgroup report in as much detail as practicable.

- 16. It is expected that Workgroup members would only abstain from voting under limited circumstances, for example where a member feels that a proposal has been insufficiently developed. Where a member has such concerns, they should raise these with the Workgroup chairman at the earliest possible opportunity and certainly before the Workgroup vote takes place. Where abstention occurs, the reason should be recorded in the Workgroup report.
- 17. Workgroup members or their appointed alternate are required to attend a minimum of 50% of the Workgroup meetings to be eligible to participate in the Workgroup vote.
- 18. The Technical Secretary shall keep an Attendance Record for the Workgroup meetings and circulate the Attendance Record with the Action Notes after each meeting. This will be attached to the final Workgroup report.
- 19. The Workgroup membership can be amended from time to time by the CUSC Modifications Panel.

### Appendix 1

### Proposed CMP266 Timetable

| 16 June 2016      | CUSC Modification Proposal submitted            |
|-------------------|---|
| 24 June 2016      | CUSC Modification tabled at Panel meeting       |
| 27 June 2016      | Request for Workgroup members (5 Working days)  |
| 20 July 2016      | Workgroup meeting 1                             |
| 3 August 2016     | Workgroup meeting 2                             |
| 17 August 2016    | Workgroup meeting 3                             |
| 14 September 2016 | Workgroup Consultation issued (10 Working days) |
| 28 September 2016 | Deadline for responses                          |
| 4 October 2016    | Workgroup meeting 4                             |
| 6 October 2016    | Workgroup meeting 5 (vote)                      |
| 20 October 2016   | Workgroup report issued to CUSC Panel           |
| 28 October 2016   | CUSC Panel meeting to discuss Workgroup Report  |

| 1 November 2016  | Code Administrator Consultation issued (10 Working days)  |
|------------------|---|
| 15 November 2016 | Deadline for responses                                    |
| 17 November 2016 | Draft FMR published for industry comment (5 Working days) |
| 24 November 2016 | Deadline for comments                                     |
| 17 November 2016 | Draft FMR circulated to Panel (late paper)                |
| 25 November 2016 | CUSC Panel Recommendation vote                            |
| 25 November 2016 | FMR circulated for Panel comment (3 Working days)         |
| 29 November 2016 | Deadline for Panel comment                                |
| 30 November 2016 | Final report sent to Authority for decision               |
| 21 December 2016 | Indicative Authority Decision due (15 Working days)       |
| 23 December 2016 | Implementation date (2 Working days later)                |

# Annex 3 – Workgroup attendance register

- A Attended
- X Absent
- O Alternate
- D Dial-in

| Name  | Organisation  | Role  | 20<br>July<br>2016 | 3<br>August<br>2016 | 17<br>August<br>2016 | 4<br>October<br>2016 | 6<br>October<br>2016 |
|---|---------------|---|--------------------|---------------------|----------------------|----------------------|----------------------|
| Caroline<br>Wright  | National Grid | Chair   | Α                  | A                   | А                    | A                    | А                    |
| Heena Chauhan (alternate is Ellen Bishop)                 | National Grid | Technical<br>Secretary  | А                  | А                   | 0                    | A                    | A                    |
| Damian<br>Clough  | National Grid | Proposer  | Α                  | A                   | А                    | A                    | A                    |
| Karl<br>Maryon  | Haven Power   | Workgroup<br>member   | Α                  | А                   | А                    |                      | А                    |
| Daniel Hickman (alternate is Herdial Dosanjh)             | RWE npower    | Workgroup<br>member   | A                  | 0                   | А                    | 0                    | 0                    |
| Gregory<br>Edwards  | British Gas   | Workgroup<br>member   | А                  | А                   | А                    | А                    | А                    |
| Eric<br>Graham  | TMA           | Workgroup<br>member   | А                  | А                   | Х                    | D                    | А                    |
| Martin Bell<br>(alternate is<br>James Earl)               | Ofgem         | Workgroup<br>observer   | A                  | OD                  | A                    | А                    | А                    |
| Garth<br>Graham   | SSE           | Workgroup<br>member   | Х                  | D                   | D                    | А                    | Х                    |
| Elizabeth<br>Allkins<br>(alternate is<br>Barney<br>Scott) | OVO Energy    | Workgroup alternate? – check with Caroline / Damian if Elizabeth is a WG member | Х                  | A                   | D                    | 0                    | X                    |



### **CUSC Workgroup Consultation Response Proforma**

# CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **28 September 2016** to <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a> Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

Any queries on the content of the consultation should be addressed to Heena Chauhan at heena.chauhan@nationalgrid.com

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:  | Paul Mott  |  |
|--|--|--|
| Company Name:  | EDF Energy   |  |
| Please express your views regarding the Workgroup Consultation, including rationale. | For reference, the Applicable CUSC objectives are:  Use of System Charging Methodology   |  |
| (Please include any issues, suggestions or queries)                                  | (a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;   |  |
|  | (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection); |  |
|  | (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission   |  |

| businesses;   |
|---|
| (d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.). |
| Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).   |

### **Standard Workgroup consultation questions**

| Q Question Response |
|---------------------|
|---------------------|

| Q | Question                  | Response  |
|---|---------------------------|---|
| 1 | Do you believe that       | We note that National Grid is currently minded to go with what  |
|   | CMP266 Original proposal, | the workgroup calls Option 1 at this stage following Workgroup  |
|   | or any potential          | discussions.  |
|   | alternatives for change   | Option 1 entails continuing treating all meters in Measurement  |
|   | that you wish to suggest, | Class E-G (sub100kW) as NHH up until all meters become HH   |
|   | better facilitates the    | settled.  |
|   | Applicable CUSC           | The option referred to by the workgroup as Option 2, which is   |
|   | Objectives?               | not favoured by National Grid as a basis for CMP266 Original  |
|   |                           | at this stage, would be that when a meter migrates to   |
|   |                           | Measurement Class F-G they are charged under the NHH  |
|   |                           | methodology for the charging year it migrates to avoid double   |
|   |                           | charging then charged for TNUoS purposes as HH for the  |
|   |                           | remaining charging years – i.e. once HH settled, charged as   |
|   |                           | per the HH TNUoS method for each following charging year,   |
|   |                           | avoiding double charging in the year of migration. Option 2 is  |
|   |                           | effectively described in paragraph 4.29 in Ofgem's conclusion   |
|   |                           | paper   |
|   |                           | (https://www.ofgem.gov.uk/system/files/docs/2016/05/elective  |
|   |                           | hhs conclusions paper.pdf) on HH Elective Settlement.   |
|   |                           | Option 2 is the most desirable and obvious option; moving to  |
|   |                           | HH TNUoS settlement once other settlement for that site is on   |
|   |                           | a HH basis, yet avoiding double-charging in the transition year.  |
|   |                           | We understand that for Option 2 to work, BSC modification   |
|   |                           | P339 is needed to be in place so as to split measurement  |
|   |                           | classes F-G from E, and central systems need a supporting   |
|   |                           | change so as to be able to split data based on migration date   |
|   |                           | to HH settlement, of each meter. Elexon and the industry aim to have P339 accepted by Ofgem around December of this |
|   |                           | year, if the determination is made within the key performance   |
|   |                           | indicator target; P339 is currently proposed as being   |
|   |                           | implemented at the start of April 2017.   |
|   |                           | We do not favour Option 3 (charge them under the NHH  |
|   |                           | TNUoS methodology until 2020).  |
|   |                           | In the longer run, we would like to see a review/reform of the  |
|   |                           | demand charging base, and hope that this may be taken   |
|   |                           | forward as part of Ofgem's and Grid's charging review, or view  |
|   |                           | Ofgem passing a suitable CUSC mod or variant if one is  |
|   |                           | developed in a fitting form. This could alleviate a possible  |
|   |                           | phenomenon whereby some demand premises formerly in   |
|   |                           | profile classes 1 to 4, once HH-metered, could reduce their   |
|   |                           | TNUoS network charges through "triad avoidance" leaving   |
|   |                           | other premises paying slightly more as a result, as a likely  |
|   |                           | outcome would be a move away from triads to a wider   |
|   |                           | charging time measurement window, perhaps also to some  |
|   |                           | reliance on fixed, perhaps demand capacity, charging for  |
|   |                           | demand TNUoS.   |
|   |                           | demand TNUoS.   |

| Q | Question   | Response   |
|---|--|--|
| 2 | Do you support the proposed implementation approach?   | Our preference is for option 2, not option 1. We note the workgroup's concerns that option 1 becomes increasingly infeasible for April 2017 delivery, if P339 is delayed beyond April 2017; however, jumping to Option 3, where they are settled as NHH in TNUoS terms until 2020, seems a disproportionate response compared to option 2. |
| 3 | Do you have any other comments?  | No   |
| 4 | Do you wish to raise a WG<br>Consultation Alternative<br>Request for the<br>Workgroup to consider? | No   |

### Specific questions for CMP266

| Q | Question  | Response  |
|---|---|---|
| 5 | Is the HH methodology<br>more appropriate to<br>customers with long term<br>fixed price contracts rather<br>than the traditional<br>domestic tariffs? | No comment – it is not clear why there should be any difference. See also response to question 6.   |
| 6 | Will the HH methodology discourage switching?   | No, it should not do so. Insofar as the new Supplier may not know, when quoting to the prospective customer during the period November to February, whether the prospective customer had consumption during a triad that might (which is itself uncertain) have already occurred, this will not be important for a customer of such a small size, as there will be many customers on account with that Supplier, and the particular consumption of one at time of triad, will be irrelevant due to the diversity of the (numerous) small customer base. |

### CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **28 September 2016** to <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a> Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

Any queries on the content of the consultation should be addressed to Heena Chauhan at heena.chauhan@nationalgrid.com

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:  | Laurence Barrett   |
|--|--|
|  | <u>Laurence.Barrett@eon-uk.com</u>   |
| Company Name:  | E.ON   |
| Please express your views regarding the Workgroup Consultation, including rationale. (Please include any issues, suggestions or queries) | For reference, the Applicable CUSC objectives are:  Use of System Charging Methodology  (a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;   |
|  | (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection); |
|  | (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses;   |
|  | (d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid  |

| Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.).   |
|---|
| Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER). |

Do you believe that CMP266
Original proposal, or any
potential alternatives for
change that you wish to
suggest, better facilitates the
Applicable CUSC Objectives?

We are of the view that in principle Option 9 as noted in the consultation document strikes a reasonable balance between mitigating the defect and being a practicable longer-term solution, assuming that industry moves quickly in electively settling sites as HH. We also believe that Option 1 could be an appropriate near-term solution to the defect. We are however conscious that support of any option is subject to the outcome of the requisite commercial analysis and the impacts on customers, especially in the Domestic market are more fully understood. Given that there are currently several modifications progressing which affect demand TNUoS charging methodologies, we believe it would be beneficial to conduct a thorough and independent review given the scope of changes to the system.

We note that most of the other options noted in the consultation paper are dependent on the approval and implementation of BSC change P339; we feel that progression of such options under CMP 266 should be reserved for a time when industry has greater clarity on the outcome of P339 to avoid duplication of effort and to allow for any changes to P339 red line draft.

Treating Measurement Class E differently to F and G seems problematic. Options 2-7 inclusive do not resolve the defect noted for any CT-metered sites and whilst WC meters constitute >50% of the overall P272 meter points, there is a sizable number of CT-metered sites which will not be covered by these options. We consider that this is not conducive to better facilitation of Applicable Objective (a) as it effectively penalises Suppliers and potentially customers for the metering configuration at a premises by not resolving the defect. We are also mindful that each option is reliant on P339 and would need to be revisited again in future, which we don't think is an efficient way of managing changes in TNUoS charging.

We believe Option 10 should not be considered further as it effectively removes any attribution of costs to peak network usage, which does not appear consistent with other industry policy aims. Such a change should only be considered following a thorough and independent review.

Option 1 is not reliant on P339 and extends the existing arrangement which was put in place to support P272. Whilst we appreciate and value the simplicity of this solution we are not convinced that it is a viable longer-term solution as it may require a further CUSC change further down to line to address how to handle TNUoS in a fully HH world. However, if there is a significant delay in sites transitioning from NHH to HH, then this option is preferable to Option 9 as it retains the NHH structure for NHH sites. Option 9 would require, to ensure cost-reflectivity, sites to be transferred to HH in the near-term.

Option 9 does facilitate Applicable Objective (a) as it removes much of the uncertainty around forecasting costs for demand users, and will not need to change again once industry has transitioned to a fully HH market. We aren't necessarily supportive of a triad approach for Domestic or smaller B2B customers but rather value the consistency that a move to one overall structure can provide as we are of the view that any remedy must function appropriately during the transition period.

We are cognisant of the link between Option 9 and the approach proposed for DUoS under DCUSA proposal DCP 268 which seeks to implement a HH methodology to support the transition from NHH to HH. Whilst UoS charges are not inter-dependent, we do believe that as industry it would be prudent to have a general principal about how we want to handle customer charges.

| 2 | Do you support the proposed implementation approach?   | No commentary offered. |
|---|--|------------------------|
| 3 | Do you have any other comments?  | No.                    |
| 4 | Do you wish to raise a WG<br>Consultation Alternative<br>Request for the Workgroup to<br>consider? | No.                    |

### Specific questions for CMP266

| Q | Question   | Response   |
|---|--|--|
| 5 | Is the HH methodology therefore more appropriate to customers with long term fixed price contracts rather than the traditional domestic tariffs? | We do not necessarily consider one or the other methodology to be more appropriate for any specific customer group.  In the Non-Domestic market, there is a wide range of risk appetites, with some customers wanting to 'fix' their costs for a defined period of time and others willing to have them passed through at the actual outturn – the propriety of the charging methodology therefore is more a question of product offerings and customer demand. In the Domestic market DSR facilitated by HH settlement can be of value but again, it's down to the customer's choice. We don't believe therefore that the issue is one of how Suppliers are charged, but of how Suppliers manage those costs through their contracts and product offerings. |
| 6 | Will the HH methodology discourage switching?  | Each Supplier may adopt a different approach when it comes to their own pricing and re-charging methodology. It is hard to envisage any significant detriment to switching as a result of a change in the structure of TNUoS although we are mindful that this is predicated on an assumption that all Suppliers will be broadly consistent in their treatment of TNUoS charges.   |

### **CUSC Workgroup Consultation Response Proforma**

# CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **28 September 2016** to <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a> Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

Any queries on the content of the consultation should be addressed to Heena Chauhan at heena.chauhan@nationalgrid.com

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:   | Karl Maryon  |
|---|--|
|   | 01473 237874   |
| Company Name:   | Haven Power  |
| Please express your views regarding the Workgroup Consultation, including | For reference, the Applicable CUSC objectives are:   |
| rationale.  | Use of System Charging Methodology   |
| (Please include any issues, suggestions or queries)                       | <ul> <li>(a) that compliance with the use of system charging<br/>methodology facilitates effective competition in the<br/>generation and supply of electricity and (so far as is<br/>consistent therewith) facilitates competition in the sale,<br/>distribution and purchase of electricity;</li> </ul>   |
|   | (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection); |
|   | (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of  |

the developments in transmission licensees' transmission businesses;

(d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.).

Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

## **Standard Workgroup consultation questions**

| Q | Question  | Response   |
|---|---|--|
| 1 | Do you believe that CMP266 Original proposal, or any potential alternatives for change that you wish to suggest, better facilitates the Applicable CUSC Objectives? | We believe that CMP266 as favoured by National Grid (Option 1 and 3) better facilitates the applicable CUSC objectives. There is a clear need to remove demand TNUoS charging as a barrier to future elective half hourly settlement and the approach favoured by National Grid is the fairest and least complicated way of addressing the defect.   |
| 2 | Do you support the proposed implementation approach?  | We support the proposed implementation approach. Option 1 is the simplest option to address the defect and we believe the benefits of simplicity and tariff predictability outweigh the expectations of those customers who were expecting to be able to benefit from the HH TNUoS methodology once they moved to HH Settlement.  Option 3 is also supported by us if the progression of P339 allows it to be implemented. |
| 3 | Do you have any other comments?   | We believe this approach is the fairest and least disruptive approach for consumers. The resulting simplicity and tariff predictability benefits all consumers.  |
| 4 | Do you wish to raise a WG<br>Consultation Alternative<br>Request for the<br>Workgroup to consider?  | If yes, please complete a WG Consultation Alternative Request form, available on National Grid's website <sup>1</sup> , and return to the CUSC inbox at cusc.team@nationalgrid.com No  |

### **Specific questions for CMP266**

| Q | Question  | Response   |
|---|---|------------|
| 5 | Is the HH methodology<br>therefore more appropriate<br>to customers with long<br>term fixed price contracts<br>rather than the traditional<br>domestic tariffs? | No comment |
| 6 | Will the HH methodology discourage switching?   | No comment |

<sup>&</sup>lt;sup>1</sup> http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/forms\_guidance/

### **CUSC Workgroup Consultation Response Proforma**

### CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

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Any queries on the content of the consultation should be addressed to Heena Chauhan at <a href="mailto:heena.chauhan@nationalgrid.com">heena.chauhan@nationalgrid.com</a>

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:   | Paul Bedford<br>Tel: 01604 673256<br>Email: Paul.bedford@opusenergy.com  |
|---|--|
| Company Name:   | Opus Energy Ltd  |
| Please express your views regarding the Workgroup Consultation, including | For reference, the Applicable CUSC objectives are:   |
| rationale.  | Use of System Charging Methodology   |
| (Please include any issues, suggestions or queries)                       | (a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, |

distribution and purchase of electricity;

- (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection);
- (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses;
- (d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.).

Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

### **Standard Workgroup consultation questions**

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|     | I Question  | Dochonco |
| ı Q | i wucsiioii | Response |
|     | _,          |          |

| _ |                  |   |
|---|------------------|---|
| Q | Question         | Response  |
| 1 | Do you believe   | We believe that option 1, which would continue to treat all meters in Measurement Class E-G as NHH until all meters become HH settled best facilitates the Applicable CUSC Objectives. We have included more detail below but in summary this is because  |
|   | that CMP266      | □ Practical issues with alternative options make them unsuitable  |
|   | Original         | ☐ We believe the NHH methodology is in principle more appropriate for these customers (see question 5)  |
|   | proposal, or     | □ It reduces uncertainty about which method will apply to which sites in any given year □ This modification follows CMP241, CMP247 and CMP260 as the fourth different recent modification to the transitional TNUoS charging arrangements for   |
|   | 1                | migrating sites. Attempting to address this issue in isolation for migrating 5-8s has missed out a lot of complexity which this modification now has the difficult job  |
|   | any potential    | of resolving. The regulatory uncertainty over charging arrangements will also contribute to increased pricing risk for suppliers. We are concerned that rushing a   |
|   | alternatives for | decision about the enduring charging arrangements into a modification which is time constrained by immediate transitional issues risks repeating this mistake.  We feel that the recently raised CMP271 represents an opportunity for the enduring arrangements to be more thoroughly considered so that further modifications                        |
|   | change that      | on the same subject can be avoided.   |
|   | you wish to      | We therefore suggest a modification to Option 1 so that these meters would be charged TNUoS using the NHH methodology until the implementation date of  |
|   | suggest, better  | CMP271 rather than 1st April 2020 or until all meters are mandatory HH settled. We are aware that the CMP271 implementation date is currently proposed as 1st April 2020 anyway but feel it makes sense to define it in this way in case CMP271 is delayed.   |
|   | facilitates the  | We see little evidence amongst this group of customers of a desire for disaggregated products which would be required for them to benefit from a change in  |
|   | Applicable       | TNUoS calculation. Therefore we do not believe this proposal would be in any way detrimental to these customers, and would likely mean their costs will be lower as the risks of supplying them will be reduced – as discussed in question 5.   |
|   | CUSC             | Practical issues with alternative options - We agree with the workgroup that certain options are not workable and have therefore not considered these further in our response.  |
|   |                  | Options 9 and 10 were considered outside the scope of the workgroup, and option 8 was considered by the workgroup to be unworkable. Options 6 and 7 were not considered   |
|   | Objectives?      | appropriate by the workgroup as they do not solve the problem of possible overcharging in the year of migration for measurement class F.  |
|   |                  | We do not consider options 4 or 5 to be appropriate as they do not solve the problem of possible overcharging in the year of migration for measurement class G.  We do not consider options 2 or 5b to be workable, as these require the additional information of the year of migration. This would require an additional BSC modification for       |
|   |                  | National Grid to be able to charge TNUoS based on this, and it is unknown by the workgroup whether this would be possible. It would also create added complexity for supplier   |
|   |                  | pricing of TNUoS and forecasting of TNUoS demand. In particular, suppliers would need to know the year of migration in order to price the TNUoS using the correct   |
|   |                  | methodology, and in many cases this will not be known at point of pricing, which could create a barrier to switching.   |
|   |                  | This leaves options 1, 3 (the original proposal), and 5c as the only feasible options, which are the only ones we will refer to in the remainder of this response.  Option 1 has the least practical issues and is the only option which does not rely on P339 to treat measurement classes E, F and G differently to each other, so this is the only |
|   |                  | sensible option for 2017/18, since the implementation of P339 cannot be guaranteed by April 2017.   |
|   |                  | We believe the NHH methodology is more suitable- See points under question 5 below.   |
|   |                  | This leads us to prefer Option 1 over options 3 and 5c. However, we acknowledge that the situation is more debatable for Measurement Class E sites and therefore can also   |
|   |                  | see the potential merits of option 5c  It reduces uncertainty- Option 1 comes with a lower uncertainty that options 3 and 5c, it therefore best facilitates CUSC objective (b) because it can be expected to be the best  |
|   |                  | option for accurate TNUoS tariff setting and therefore stability of TNUoS tariffs,  |
|   |                  | If there are different methodologies for 2017/18 and for 2018/19 onwards (as would be the case in National Grid's currently favoured approach of going with option 1, with  |
|   |                  | the potential to undertake option 3 for 2018/19), this will introduce added complexities for supplier pricing. For options 3 and 5c further risk is introduced by uncertainty of  |
|   |                  | P339 being ready for 1st April 2017. In order to set correct TNUoS tariffs, National Grid needs to be able to accurately forecast the NHH and HH demand charging bases, which will be difficult if there  |
|   |                  | is uncertainty whether certain classes of site will be NHH or HH. Triad demand is also significantly more difficult to forecast than NHH TNUoS demand,  |
|   |                  | particularly with little or no historic demand data over Triad for these meters.  |
|   |                  | Therefore, options 3 and 5c are likely to decrease both the accuracy of National Grid's tariff setting and forecasting, increasing tariff volatility and therefore supplier risk premiums. The accuracy of supplier TNUoS demand forecasts would also be reduced. This would lead to an increased likelihood of suppliers                             |
|   |                  | needing to lodge credit cover for TNUoS, and also increased reconciliation invoices at the end of the charging year.  |
|   |                  | g g a said a  |
|   |                  |   |
|   |                  |   |
|   |                  |   |

| Q | Question        | Response   |
|---|-----------------|--|
| 2 | Do you          | We support the implementation of option 1 for 1st April 2017.  We agree that a solution needs to be implemented by 1st April 2017 to avoid potential overcharging on migrating sites. Since P339 would be required for all other |
|   | support the     | options and this cannot be guaranteed to be implemented by April 2017, option 1 is the only one that works for this timetable.   |
|   | proposed        |  |
|   | implementatio   |  |
|   | n approach?     |  |
| 3 | Do you have     | No.  |
|   | any other       |  |
|   | comments?       |  |
|   |                 |  |
| 4 | Do you wish to  | No.  |
|   | raise a WG      |  |
|   | Consultation    |  |
|   | Alternative     |  |
|   | Request for the |  |
|   | Workgroup to    |  |
|   | consider?       |  |
|   |                 |  |
|   |                 |  |

## Specific questions for CMP254

| Q | Question              | Response  |
|---|-----------------------|---|
| 5 |                       | The appropriateness of the HH TNUoS charging arrangements is not determined by whether a customer is on a long term fixed tariff or a traditional   |
| 5 | Is the HH             | domestic tariff but by how large the site is, how practical it is to load shift, and how frequently there are change of tenancies.  |
|   | methodology           | We believe there no clear advantage has been demonstrated for charging customers migrating from Profile Classes 1-8 using the HH methodology, but   |
|   | therefore more        | that there are numerous disadvantages such as:  □ Triad avoidance is a less appropriate incentive than reduction of 4-7pm demand for customers of this size. They are not energy intensive so will see  |
|   | appropriate to        | limited savings compared to the value of their core business.   |
|   | customers with long   | ☐ The nature of customers within this sector (particularly the volume of change of tenancies) makes HH pricing more risky for suppliers   |
|   | term fixed price      | ☐ The HH method is more difficult to forecast, impacting tariff setting and credit cover While we believe our points below are applicable to measurement classes E, F and G we do acknowledge that the argument is far closer for   |
|   | •                     | measurement class E sites.  |
|   | contracts rather than | Triad avoidance is a less appropriate incentive   |
|   | the traditional       | These customers are unlikely to be able to Triad avoid due to their size, so there is no benefit in terms of reducing peaks and therefore future investment, or improving security of supply.   |
|   | domestic tariffs?     | For domestic customers, the Triad cost for the end consumer is estimated at £20-30 for the year, as stated in the consultation. For small non-domestic  |
|   |                       | customers, we estimate the Triad costs to be in the region of £80-100. The extent of the costs involved in forecasting Triad periods (normally through a  |
|   |                       | third party warning service) and of reducing consumption in potential Triad periods is likely to far exceed the potential benefit.  |
|   |                       | On other hand, an incentive to reduce winter / year round 4-7pm demand may prove actionable through energy efficiency measures when combined  |
|   |                       | with the DUoS and Capacity Market charges also levied at these times. These changes are more appropriate for these customers than through trying to pick the TRIAD periods.   |
|   |                       | We would also question whether there are vulnerability issues if domestic customers are encouraged to reduce their demand specifically on the cold  |
|   |                       | days when Triads are likely to occur.   |
|   |                       | The nature of customers within this sector  |
|   |                       | Moving these customers to the HH methodology also goes against the reason the NHH methodology was introduced in the first place. As mentioned in the consultation, the NHH methodology was introduced at the same time competition was introduced into the Supply market, as it was argued that the HH methodology was not conducive to switching and therefore new competition. The customers have not changed just because they have become HH settled, so there is no logic in changing the methodology on which they are charged TNUoS. |
|   |                       | While we do not believe that the HH methodology is likely to discourage a customer from wanting to switch, as this is still within their control, we do   |
|   |                       | believe it would add unnecessary risk to suppliers, which could result in higher risk premiums being applied to all customers and less competition for certain business at certain times of the year. There are various risks in relation to switching that are introduced to the supplier with HH TNUoS  |
|   |                       | charging, such as the possibility of only having the customer over the Triad period before it switches to another supplier. These risks are present in the  |
|   |                       | current HH market but in a much reduced form. This is because the increased change of tenancy rate within the small business and domestic markets   |
|   |                       | make a customer not serving their whole contract much more likely. We therefore believe than the NHH charging would better facilitate applicable  |
|   |                       | objective a) – effective competition in supply.  Forecasting accuracy   |
|   |                       | As explained in our response to question 1, there are several disadvantages to charging customers migrated from profiles 1-8 using the HH   |
|   |                       | methodology, including difficulties for both suppliers and National Grid with forecasting Triad demand, potentially leading to TNUoS tariffs that are   |
|   |                       | volatile and not cost reflective, as well as various additional risks on suppliers which could lead to additional risk premiums being applied and therefore   |
|   |                       | increased costs for end consumers.  |

| Q | Question    | Response                   |
|---|-------------|----------------------------|
| 6 | Will the HH | See response to question 5 |
|   | methodology |                            |
|   | discourage  |                            |
|   | switching?  |                            |
|   |             |                            |

### **CUSC Workgroup Consultation Response Proforma**

# CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **28 September 2016** to <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a> Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

Any queries on the content of the consultation should be addressed to Heena Chauhan at heena.chauhan@nationalgrid.com

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:  | Barney Scott   |
|--|--|
|  | barney.scott@ovoenergy.com   |
| Company Name:  | OVO Energy   |
| Please express your views regarding the Workgroup Consultation, including rationale. | For reference, the Applicable CUSC objectives are:  Use of System Charging Methodology   |
| (Please include any issues, suggestions or queries)                                  | (a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;   |
|  | (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection); |
|  | (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of  |

the developments in transmission licensees' transmission businesses;

(d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.).

Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

## **Standard Workgroup consultation questions**

| Q | Question  | Response  |
|---|---|---|
| 1 | Do you believe that   | YES   |
|   | CMP266 Original proposal, or any potential alternatives for change that you wish to suggest, better facilitates the Applicable CUSC Objectives? | Objectives (a) and (b) are facilitated by options 3, 5b and 5c. In each case, NHH is the correct charging methodology for measurement class F and measurement class G premises, while triad is applicable to measurement class E premises. We do not believe triad is suitable for measurement classes F and G for several reasons; please see question 3 for our detailed rationale. We do believe that half-hourly triad charging is appropriate for measurement class E sites.  Option 5c is the solution recommended by OVO. Option 1 meets Applicable CUSC Objectives (a) and (b) for premises in measurement classes F and G, but not E (see question 3).  Option 2 resolves the double charging issue but fails to meet CUSC objectives (a) as triad methodology leaves a barrier to elective HH settlement or (b) as it will impact charge attribution. |
| 2 | Do you support the proposed implementation approach?  | YES  OVO supports implementation options 3, 5b or 5c. 5c is the prefered approach, as OVO believes it provides the greatest longevity. Option 2 is not considered acceptable due to the application of unsuitable triad charging methodology to measurement class F premises. Option 1 is considered acceptable for smaller sites, but may raise concerns around AMR premises.  |

| 0        | Question                        | Poenoneo   |
|----------|---------------------------------|--|
| <b>Q</b> | Question  Do you have any other | Response   YES   |
| 3        | Do you have any other comments? | OVO is strongly in favour of introducing elective Half-Hourly Settlement (HHS) for both domestic and smaller non-domestic premises. We believe that the ability to settle customers on a half hourly basis will facilitate more effective competition in the energy market and should lead to greater choice and innovation in the market. We are also confident that introducing elective HHS will enable suppliers to provide more cost reflective products, that may encourage more efficient use of the energy system. As well as the identified double-charging barrier to half-hourly settlement, we believe that application of the triad charging methodology to measurement class F and G sites is inappropriate for a number of reasons:   |
|          |                                 | <ul> <li>Domestic customers do not as of yet have sufficient tools and information available to them to engage in load shifting.</li> <li>Domestic customer demand is relatively inelastic and is influenced by seasonal factors such as temperature to a greater extent than industrial and commercial demand. Domestic customers are therefore unlikely to be able to respond to the extreme price signal of the TRIAD mechanism to the same extent as industrial and commercial customers.</li> <li>Retaining the TRIAD mechanism for domestic HHS customers will re-allocate a large proportion of the TRIAD charge from industrial and commercial customers (with load-shifting capabilities) to domestic customers. We think the potential for this reallocation is particularly worrisome considering that the TRIAD periods tend to occur on particularly cold winter periods when many domestic customers may be wholly reliant on their electricity to heat their premises or power essential appliances.</li> <li>Domestic suppliers may not have the ability to both accurately forecast and communicate the potential for a triad period to occur. The complexity associated with trying to design systems to accurately inform and forewarn customers of a potential triad period would therefore require significant operational resources which we would consider inefficient at a time when major operational change is needed elsewhere in the market.</li> <li>The existing supply licence conditions restrict the ability of domestic suppliers to recover the cost of the triad on an individual line item basis. Even if these rules were substantially changed however it is unlikely that carving out industry charges would be an attractive commercial proposition for domestic customers. This could dissuade suppliers engaging in elective half-hourly settlement.</li> </ul> |
|          |                                 | As such, in principle OVO supports modification options which continue to apply non-half hourly TNUoS charging to measurement classes F and G sites, and objects to those preferring half-hourly triad charging.  We do however believe that triad is more applicable to measurement class E sites as these sites are typically larger, and in most cases equipped with an AMR rather than smart mater. Given their size, they have more ability to load shift.  |

| Q | Question   | Response |
|---|--|----------|
| 4 | Do you wish to raise a WG Consultation Alternative | NO       |
|   | Request for the Workgroup to consider?             |          |

# Specific questions for CMP254

| Q | Question   | Response   |
|---|--|--|
| 5 | Is the HH methodology therefore more appropriate to customers with long term fixed price contracts rather than the traditional domestic tariffs? | YES  See comments in answer 3. HH triad charging methodology is appropriate and cost-reflective only for sites where load shifting is possible is inappropriate for domestic sites.  |
| 6 | Will the HH methodology discourage switching?  | For domestic sites, TRIAD risk would be absorbed by the supplier. As such it should not directly affect customers' decision to switch. Indirectly, however, use of the HH methodology will serve as a barrier to HH settlement, which OVO believes is to the detriment of competition. |

### **CUSC Workgroup Consultation Response Proforma**

# CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **28 September 2016** to <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a> Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

Any queries on the content of the consultation should be addressed to Heena Chauhan at heena.chauhan@nationalgrid.com

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:  | Herdial Dosanjh Herdial.Dosanjh@npower.com   |
|--|--|
| Company Name:  | RWE npower   |
| Please express your views regarding the Workgroup Consultation, including rationale. | For reference, the Applicable CUSC objectives are:  Use of System Charging Methodology   |
| (Please include any issues, suggestions or queries)                                  | (a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;   |
|  | (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection); |
|  | (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission   |

| businesses;   |
|---|
| (d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.). |
| Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).   |

## Standard Workgroup consultation questions

| Q | Question  | Response  |
|---|---|---|
| 1 | Do you believe that CMP266 Original proposal, or any potential alternatives for change that you wish to suggest, better facilitates the Applicable CUSC Objectives? | We do not believe CMP266 original proposal better facilitates the applicable CUSC objectives as outlined below.  (a) CMP266 will not facilitate effective competition as the proposed change will result certain customers being adversely impacted due to not being able to demand manage to reduce triad costs. CMP266 limits the options for how customers can be managed for TNUoS charging. Customers who have moved to HH metering in order to demand manage will be disadvantaged as they will not be able to influence the reduction of their transmission liability.  (b) Cost reflectivity will not be improved through CMP266. Customers who have a desire to demand manage during the Triad season will not be able to benefit for reducing their transmission liability.  (c) For relevant objective (c) demand side management to increase system margin and defer network reinforcement is an increasing feature of network operators businesses. Allowing more customers to be settled under the HH methodology for TNUoS will allow those customers to fully realise the benefit of demand management activity at peak. It is also consistent with the original intentions and benefits of P272. CMP266 does not enable customers to realise the benefits of demand managing.  (d) We are neutral on this objective. |
| 2 | Do you support the proposed implementation approach?  | We do not support the proposed implementation approach for CMP266 as it will introduce disparity between how HH customers are managed for TNUoS charging.   |
| 3 | Do you have any other comments?   | No  |
| 4 | Do you wish to raise a WG<br>Consultation Alternative<br>Request for the<br>Workgroup to consider?  | Yes – see attached  |

# Specific questions for CMP254

| Q | Question | Response |
|---|----------|----------|
|---|----------|----------|

| Q | Question   | Response  |
|---|--|---|
| 5 | Is the HH methodology therefore more appropriate to customers with long term fixed price contracts rather than the traditional domestic tariffs? | The HH methodology is more appropriate for business customers who have the capability and appetite to demand manage during the triad season to reduce system peak and their transmission liability. |
| 6 | Will the HH methodology discourage switching?  | No the HH methodology will not discourage switching – it will offer customers the choice to demand manage in order to reduce their transmission liability (where possible).                         |

### **CUSC Workgroup Consultation Response Proforma**

# CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **28 September 2016** to <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a> Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

Any queries on the content of the consultation should be addressed to Heena Chauhan at heena.chauhan@nationalgrid.com

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:  | Paul Carman  |
|--|--|
|  | Paul.Carman@ScottishPower.com  |
|  | 01416145523  |
| Company Name:  | ScottishPower  |
| Please express your views regarding the Workgroup Consultation, including rationale. | For reference, the Applicable CUSC objectives are:  Use of System Charging Methodology   |
| (Please include any issues, suggestions or queries)                                  | <ul> <li>(a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;</li> <li>(b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection);</li> </ul> |
|  | <ul><li>(c) that, so far as is consistent with sub-paragraphs (a)<br/>and (b), the use of system charging methodology, as far</li></ul>  |

as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission businesses;

(d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.).

Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).

# Standard Workgroup consultation questions

| 1 Response | Q | Question | Response |
|------------|---|----------|----------|
|------------|---|----------|----------|

| Q | Question                    | Response  |
|---|-----------------------------|---|
| 1 | Do you believe that         | CMP266 Original proposal contained 2 potential solutions.   |
|   | CMP266 Original proposal,   | Solution One (2.6 in document) provided a feasible solution   |
|   | or any potential            | that would address the defect presented in the modification   |
|   | alternatives for change     | proposal, and was in line with previous direction from OFGEM  |
|   | that you wish to suggest,   | around the treatment of HH customers migrated through the   |
|   | better facilitates the      | P272 Programme, which aims to provide customers with more   |
|   | Applicable CUSC Objectives? | accurate charging based on their consumption, and allows for customers to reduce costs through peak demand management.  |
|   |                             | Solution 2, whilst addressing the defect surrounding double-charging, makes no attempt to address peak demand challenges. This proposal merely delays any solution for HH customers migrated through P272 to manage their demand and associated costs until HH settlement becomes mandatory. ScottishPower believe this is a risk that should be addressed sooner.  |
|   |                             | ScottishPower believe Option 1 (3.16) is a reversal to the approved intentions of CMP260 and the key objectives to the P272 Programme. With the end customer in mind ScottishPower have designed and delivered an end to end communications lifecycle and pricing strategy, based on the agreement that their charges will reflect TNUoS HH from April 2017.  |
|   |                             | Whilst ScottishPower agree that a solution is required to address the issue of double charging customers for the year they migrate from NHH onto HH settlement, we are strongly opposed to the subset of options based upon Original proposal Solution 2, which provides a minimal cost solution for National Grid and more importantly erodes the benefit of cost reflective pricing to the end customer   |
|   |                             | ScottishPower reacted quickly to instruction from OFGEM to work with customers in moving towards HH charging and have encouraged our customers to develop plans for 2017 onwards that are driven towards demand management, cost reduction, and the potential to de risk demand around TRIAD periods. We have written out to all of our customers and informed them of our suggested approach, working closely with customers who are looking to ScottishPower as their energy experts. To reverse these plans will result in costs being incurred to a large number of our customer base, and would move away from any focus on demand management, which provides customers with an incentive to manage load at key times. |

| Q | Question   | Response  |
|---|--|---|
| 1 |  | Objective 'a' is therefore not achieved through the proposed solution(s), as this would not promote effective competition, as customer costs would be impacted by this change, removing customer ability to reduce costs through demand management.   |
|   |  | Objective 'b' is also not achieved, as customers on measurement classes F and G would not incur accurate TRIAD charges during applicable periods, and therefore not incentivise customers to manage this demand.  |
| 2 | Do you support the proposed implementation approach?   | No. The P272 Programme has 6 months remaining before all applicable customers have been successfully migrated. ScottishPower strongly believe that a shift in direction in prices and charging this late in the Programme, which includes the peak renewal round of October 2016, is not feasible and puts customers that are undertaking peak management at risk             |
| 3 | Do you have any other comments?  | ScottishPower believe that a sensible approach to charging was contained in the Original Proposal, Solution One, and would encourage further discussion and development of this approach, which would resolve the issue associated with double charging customers during their migration year, as well as providing a stable and consistent platform for charging thereafter. |
| 4 | Do you wish to raise a WG<br>Consultation Alternative<br>Request for the<br>Workgroup to consider? | If yes, please complete a WG Consultation Alternative Request form, available on National Grid's website <sup>1</sup> , and return to the CUSC inbox at <a href="mailto:cusc.team@nationalgrid.com">cusc.team@nationalgrid.com</a> We wish for Original Proposal, Solution One to be considered in more detail.   |

# Specific questions for CMP254

| Q | Question   | Response |
|---|--|----------|
| 5 | Is the HH methodology therefore more appropriate to customers with long term fixed price contracts rather than the traditional domestic tariffs? |          |
| 6 | Will the HH methodology discourage switching?  |          |

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<sup>&</sup>lt;sup>1</sup> http://www.nationalgrid.com/uk/Electricity/Codes/systemcode/amendments/forms\_guidance/

### **CUSC Workgroup Consultation Response Proforma**

# CMP266 'Removal of Demand TNUoS charging as a barrier to future elective Half Hourly settlement'

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Any queries on the content of the consultation should be addressed to Heena Chauhan at heena.chauhan@nationalgrid.com

These responses will be considered by the Workgroup at their next meeting at which members will also consider any Workgroup Consultation Alternative Requests. Where appropriate, the Workgroup will record your response and its consideration of it within the final Workgroup Report which is submitted to the CUSC Modifications Panel.

| Respondent:  | Colin Prestwich  |
|--|--|
| Company Name:  | SmartestEnergy   |
| Please express your views regarding the Workgroup Consultation, including rationale. | For reference, the Applicable CUSC objectives are:  Use of System Charging Methodology   |
| (Please include any issues, suggestions or queries)                                  | (a) that compliance with the use of system charging methodology facilitates effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitates competition in the sale, distribution and purchase of electricity;   |
|  | (b) that compliance with the use of system charging methodology results in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26 (Requirements of a connect and manage connection); |
|  | (c) that, so far as is consistent with sub-paragraphs (a) and (b), the use of system charging methodology, as far as is reasonably practicable, properly takes account of the developments in transmission licensees' transmission   |

| businesses;   |
|---|
| (d) compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency. These are defined within the National Grid Electricity Transmission plc Licence under Standard Condition C10, paragraph 1.). |
| Objective (c) refers specifically to European Regulation 2009/714/EC. Reference to the Agency is to the Agency for the Cooperation of Energy Regulators (ACER).   |

# Standard Workgroup consultation questions

| Q | Question                  | Response   |
|---|---------------------------|--|
| 1 | Do you believe that       |  |
|   | CMP266 Original proposal, | At a high level, and without going into any of the options at this |
|   | or any potential          | stage, the proposal to prevent double charging is clearly better   |
|   | alternatives for change   | for competition compared with the baseline and something           |
|   | that you wish to suggest, | needs to be done. It is important to ensure that a 'status quo'    |
|   | better facilitates the    | mentality does not undermine the development of new                |
|   | Applicable CUSC           | consumer products, allows consumers to fully benefit from          |
|   | Objectives?               | Smart Meters and reduces the need for excess generation            |
|   |                           | capacity solely to manage the system peak. Most of the             |
|   |                           | changes proposed delay the benefits listed.                        |
|   |                           |  |
|   |                           |  |
|   |                           |  |

| l O        | Question   | Response   |
|------------|--|--|
| 2          | •  |  |
| <b>Q</b> 2 | Do you support the proposed implementation approach? | Implementing Option 3 (if feasible) or Option 3 (if Option 3 not feasible) seems like the most pragmatic approach. Option 2/Option 8 would be the best way of ensuring that sites are not discriminated against (i.e. not being denied access to HH charging), although we wonder whether option 2 is appropriate as it is silent on what would happen to any sites transferring to Measurement Class E. However, we also feel that something needs to be done about the Triad charging methodology sooner or later anyway and developing something around option 10 may be the means to do this.  We have a general preference for Triad to move to a winter peak charge like the capacity market or, if Triad response is seen as essential, then to investigate Triad charging for sites above a certain size, allowing smaller sites to opt in if they wanted.  One problem with the current Triad arrangement is that customers are switching off for a lot of hours unnecessarily. It would be better to align the charging hours with the Capacity Mechanism. If the scheme can be reformed now more customers would be able to load manage and take part in the capacity market for winter 2018 because of the aligned incentives.  We think that there are two ways to prevent the double charging and evolve TNUoS more generally which the Working Group should consider;  Suggestion 1 – reform TNUoS charges in their entirety such that, the consumer charge is levied during the same charging window as the capacity market, i.e. Mon-Fri, Nov-Feb, 16:00-19:00 effective from April 2018. Given the extent to which it is a regulated revenue, there could be scone for a year round. |
|            |  | a regulated revenue, there could be scope for a year round element as well as a peak charge, but aligning with the capacity market charging hours gives consumers a reliable cost signal (as opposed to the hit-and-miss nature of TRIAD) from which they can take demand reduction measures or invest in demand reduction.  |
|            |  | Suggestion 2 – reform TNUoS charges in their entirety as in option 1, with a derogation such that demand side capacity market contracts are still charged as per TRIAD charge, with the aim of ensuring that the incentives are aligned. This would mean that consumers with the most flexibility would be responsive at system stress but would not have to turn down unnecessarily. This could be extended such that all MPANs over 1MW capacity are still charged TRIAD. This would be effective April 2018.  |

| Q | Question   | Response  |
|---|--|---|
| 3 | Do you have any other comments?  | If Option 1 prevails we assume that the arrangements for measurement class E sites which have already given notice that they wish to remain on the HH tariff will continue under the process put in place by CMP241/CMP247. This needs to be made clear in the next round of documentation. |
| 4 | Do you wish to raise a WG<br>Consultation Alternative<br>Request for the<br>Workgroup to consider? | No  |

# Specific questions for CMP266

| Q | Question  | Response |
|---|---|----------|
| 5 | Is the HH methodology<br>therefore more appropriate<br>to customers with long<br>term fixed price contracts<br>rather than the traditional<br>domestic tariffs? | Yes      |
| 6 | Will the HH methodology discourage switching?   | Yes      |

This section shows the legal changes required for the Original and WACMs. For reference existing CUSC paragraphs have been provided so as to compare and contrast the changes required and subtle differences between the WACMs

#### **ORIGINAL CUSC**

#### **Monthly Charges**

- 14.17.1 Throughout the year Users' monthly demand charges will be based on their forecasts of:
  - half-hourly metered demand to be supplied during the Triad for each BM Unit, multiplied by the relevant zonal £/kW tariff; and
  - non-half hourly metered energy to be supplied over the period 16:00 hrs to 19:00 hrs inclusive every day over the Financial Year for each BM Unit, multiplied by the relevant zonal p/kWh tariff

Users' annual TNUoS demand charges are based on these forecasts and are split evenly over the 12 months of the year. Users have the opportunity to vary their demand forecasts on a quarterly basis over the course of the year, with the demand forecast requested in February relating to the next Financial Year. Users will be notified of the timescales and process for each of the quarterly updates. The Company will revise the monthly Transmission Network Use of System demand charges by calculating the annual charge based on the new forecast, subtracting the amount paid to date, and splitting the remainder evenly over the remaining months. For the avoidance of doubt, only positive demand forecasts (i.e. representing an import from the system) will be accepted.

14.17.2 Users should submit reasonable demand forecasts in accordance with the CUSC. The Company shall use the following methodology to derive a forecast to be used in determining whether a User's forecast is reasonable, in accordance with the CUSC, and this will be used as a replacement forecast if the User's total forecast is deemed unreasonable. The Company will, at all times, use the latest available Settlement data.

### For existing Users:

- i) The User's Triad demand for the preceding Financial Year will be used where User settlement data is available and where The Company calculates its forecast before the Financial Year. Otherwise, the User's average weekday settlement period 35 half-hourly metered (HH) demand in the Financial Year to date is compared to the equivalent average demand for the corresponding days in the preceding year. The percentage difference is then applied to the User's HH demand at Triad in the preceding Financial Year to derive a forecast of the User's HH demand at Triad for this Financial Year.
- ii) The User's non half-hourly metered (NHH) energy consumption over the period 16:00 hrs to 19:00 hrs every day in the Financial Year to date is compared to the equivalent energy consumption over the corresponding days in the preceding year. The percentage difference is then applied to the User's total NHH energy consumption in the

preceding Financial Year to derive a forecast of the User's NHH energy consumption for this Financial Year.

For new Users who have completed a Use of System Supply Confirmation Notice in the current Financial Year:

- The User's average weekday settlement period 35 half-hourly metered (HH) demand over the last complete month for which The Company has settlement data is calculated. Total system average HH demand for weekday settlement period 35 for the corresponding month in the previous year is compared to total system HH demand at Triad in that year and a percentage difference is calculated. This percentage is then applied to the User's average HH demand for weekday settlement period 35 over the last month to derive a forecast of the User's HH demand at Triad for this Financial Year.
- iv) The User's non half-hourly metered (NHH) energy consumption over the period 16:00 hrs to 19:00 hrs every day over the last complete month for which The Company has settlement data is noted. Total system NHH energy consumption over the corresponding month in the previous year is compared to total system NHH energy consumption over the remaining months of that Financial Year and a percentage difference is calculated. This percentage is then applied to the User's NHH energy consumption over the month described above, and all NHH energy consumption in previous months is added, in order to derive a forecast of the User's NHH metered energy consumption for this Financial Year.

### Implementation of P272

- 14.17.29.1 BSC modification P272 requires Suppliers to move Profile Classes 5-8 to Measurement Class E G (i.e. moving from NHH to HH settlement) by April 2016. The majority of these meters are expected to transfer during the preceding Charging Years up until the implementation date of P272 and some meters will have been transferred before the start of 1<sup>ST</sup> April 2015. A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation in the transition to P272 implementation for the purposes of TNUoS charging; and the forecasts that Suppliers should provide to the Company.
- 14.17.29.2 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2015 and prior to implementation of BSC Modification P272, all demand associated with meters that are in NHH Profile Classes 5 to 8 at the start of that charging year as well as all meters in Measurement Classes E G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year unless 14.17.29.3 applies.
- 14.17.29.3 Where prior to 1<sup>st</sup> April 2015 a Profile Class meter has already transferred to Measurement Class settlement (HH) the associated Supplier may opt to treat the demand volume as Chargeable Demand Capacity (HH) for the purposes of TNUoS charging up until implementation of P272, subject

to meeting conditions in 14.17.29.6. If the associated Supplier does not opt to treat the demand volume as Demand Capacity (HH) it will be treated by default as Chargeable Energy Capacity (NHH) for each full Charging Year up until implementation of P272.

- 14.17.29.4 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information if they accept this default position.
- 14.17.29.5 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect this position i.e. volumes associated those Metering Systems that have transferred from a Profile Class to a Measurement Class in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity, unless 14.17.29.3 applies.
- 14.17.29.6 Where a Supplier wishes for Metering Systems that have transferred from Profile Class to Measurement Class in the BSC (NHH to HH settlement) prior to 1st April 2015, to be treated as Chargeable Demand Capacity (HH/ Measurement Class settled) it must inform the Company prior to October 2015. The Company will treat these as Chargeable Demand Capacity (HH / Measurement Class settled) for the purposes of calculating the actual annual liability for the Charging Years up until implementation of P272. For these cases only, the Supplier should notify the Company of the Meter Point Administration Number(s) (MPAN). For these notified meters the Supplier shall provide the Company with verified metered demand data for the hours between 4pm and 7pm of each day of each Charging Year up to implementation of P272 and for each Triad half hour as notified by the Company prior to May of the following Charging Year up until two years after the implementation of P272 to allow reconciliation (e.g. May 2017 and May 2018 for the Charging Year 2016/17). Where the Supplier fails to provide the data or the data is incomplete for a Charging Year TNUoS charges for that MPAN will be reconciled as part of the Supplier's NHH BMU (Chargeable Energy Capacity). Where a Supplier opts, if eligible, for TNUoS liability to be calculated on Chargeable Demand Capacity it shall submit the forecasts referred to in 14.17.29.5 taking account of this.
- 14.17.29.7 The Company will maintain a list of all MPANs that Suppliers have elected to be treated as HH. This list will be updated monthly and will be provided to registered Suppliers upon request.

#### **ORIGINAL Proposal**

All the legal text below is new to the CUSC. Therefore this has not been tracked changed to show the differences between existing and new as its all new.

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes E, F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 all demand associated with Measurement Classes E, F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year up until the Charging Year which begins after 31st March 2020.
- 14.17.29.10 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.11 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class E, F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

The legal text below is the original with changes made to the original proposal highlighted in yellow. This format is continued for all WACMs with comparisons to the original highlighted in yellow.

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes E, F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with Measurement Classes F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year up until the Charging Year which begins after 31<sup>st</sup> March 2020. Demand associated with Measurement Class E will continue to be treated as Chargeable Demand Capacity (HH).
- 14.17.29.10 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.11 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes E, F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with meters migrating into Measurement Classes E, F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) in which they migrate.
- 14.17.29.10 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 all demand associated with meters which were in Measurement Classes E, F and G before 1<sup>st</sup> April (t) of the charging year starting after 31<sup>st</sup> March (t) will be treated as Chargeable Demand Capacity (HH) for the purposes of TNUoS charging for the time it was in either Measurement Class E,F or G within that charging year. For example if a meter was in Measurement Class E,F or G before the 1<sup>st</sup> April 2017, it will be treated as Chargeable Demand Capacity (HH) for charging year 2017/18, for the time it was in either Measurement Class E,F or G within that charging year.
- 14.17.29.11 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.12 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class E, F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with meters migrating into Measurement Classes F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) in which they migrate. Demand associated with Measurement Class E will continue to be treated as Chargeable Demand Capacity (HH).
- 14.17.29.10 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 all demand associated with meters which were in Measurement Classes F and G before 1<sup>st</sup> April (t) of the charging year starting after 31<sup>st</sup> March (t) will be treated as Chargeable Demand Capacity (HH) for the purposes of TNUoS charging for the time it was in either Measurement Class F or G within that charging year. For example if a meter was in Measurement Class F or G before the 1<sup>st</sup> April 2017, it will be treated as Chargeable Demand Capacity (HH) for charging year 2017/18, for the time it was in either Measurement Class F or G within that charging year.
- 14.17.29.11 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.12 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with Measurement Classes F will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) up until the Charging Year which begins after 31<sup>st</sup> March 2020. Demand associated with Measurement Class E will continue to be treated as Chargeable Demand Capacity (HH).
- 14.17.29.10 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 all demand associated with meters migrating into Measurement Classes G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) in which they migrate.
- 14.17.29.11 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 all demand associated with meters which were in Measurement Classes G before 1<sup>st</sup> April (t) of the charging year starting after 31<sup>st</sup> March (t) will be treated as Chargeable Demand Capacity (HH) for the purposes of TNUoS charging for the time it was in either Measurement Class G within that charging year. For example if a meter was in Measurement Class G before the 1<sup>st</sup> April 2017, it will be treated as Chargeable Demand Capacity (HH) for charging year 2017/18, for the time it was in Measurement Class G within that charging year.
- 14.17.29.12 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.13 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for

the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

THE FOLLOWING LEGAL TEXTS INTRODUCE A YEARS DELAY TO THE PREVIOUS WACMS TO ALLOW FOR ANY DELAY IN P339 AND TO INTRODUCE A SYSTEM CHANGE WHICH ALLOWS DATA TO BE SPLIUT BASED ON THE YEAR IN WHICH IT MIGRATED.

There is no need to do anything for the Original as all meters will be charged NHH.

#### WACM5 (WACM1 with delay)

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes E, F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with Measurement Classes E, F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year starting after 31<sup>st</sup> March 2017 up until the Charging Year which begins after 31<sup>st</sup> March 2018.
- 14.17.29.10 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2018 demand associated with Measurement Classes F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year up until the Charging Year which begins after 31 March 2020. For each Charging Year which begins after 31 March 2018, demand associated with Measurement Class E, will be treated as Chargeable Demand Capacity (HH).
- 14.17.29.11 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.12 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

#### WACM6 (WACM2 with delay)

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes E, F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with Measurement Classes E, F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year starting after 31<sup>st</sup> March 2017 up until the Charging Year which begins after 31<sup>st</sup> March 2018.
- 14.17.29.10 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2018 demand associated with meters migrating into Measurement Classes E, F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) in which they migrate.
- 14.17.29.11 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with meters which were in Measurement Classes E, F and G before 1<sup>st</sup> April (t) of the charging year starting after 31<sup>st</sup> March (t) will be treated as Chargeable Demand Capacity (HH) for the purposes of TNUoS charging for the time it was in either Measurement Class E,F or G within that charging year. For example if a meter was in Measurement Class E,F or G before the 1<sup>st</sup> April 2018, it will be treated as Chargeable Demand Capacity (HH) for charging year 2018/19, for the time it was in either Measurement Class E,F or G within that charging year.
- 14.17.29.12 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.13 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class E, F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

### WACM7 (WACM3 with delay)

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with Measurement Classes E, F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year starting after 31<sup>st</sup> March 2017 up until the Charging Year which begins after 31<sup>st</sup> March 2018.
- 14.17.29.10 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2018 demand associated with meters migrating into Measurement Classes F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) in which they migrate. For each Charging Year which begins after 31 March 2018, demand associated with Measurement Class E, will be treated as Chargeable Demand Capacity (HH).
- 14.17.29.11 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2018 demand associated with meters which were in Measurement Classes F and G before 1<sup>st</sup> April (t) of the charging year starting after 31<sup>st</sup> March (t) will be treated as Chargeable Demand Capacity (HH) for the purposes of TNUoS charging for the time it was in either Measurement Class F or G within that charging year. For example if a meter was in Measurement Class F or G before the 1<sup>st</sup> April 2018, it will be treated as Chargeable Demand Capacity (HH) for charging year 2018/19, for the time it was in either Measurement Class F or G within that charging year.
- 14.17.29.12 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.
- 14.17.29.13 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class F & G

in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.

#### WACM8 (WACM4 with delay)

- 14.17.29.8 A change from NHH to HH within a Charging Year would normally result in Suppliers being liable for TNUoS for part of the year as NHH and also being subject to HH charging. This section describes how the Company will treat this situation for Non Half Hourly (NHH) meters migrating to Measurement Classes F & G for the charging year which begins after 31 March 2017.
- 14.17.29.9 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2017 demand associated with Measurement Classes E, F and G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year starting after 31<sup>st</sup> March 2017 up until the Charging Year which begins after 31<sup>st</sup> March 2018.
- 14.17.29.10 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2018 demand associated with Measurement Classes F will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) up until the Charging Year which begins after 31 March 2020. For each Charging Year which begins after 31 March 2018, demand associated with Measurement Class E and G, will be treated as Chargeable Demand Capacity (HH).
- 14.17.29.11 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2018 demand associated with meters migrating into Measurement Classes G will be treated as Chargeable Energy Capacity (NHH) for the purposes of TNUoS charging for the full Charging Year (t) in which they migrate.
- 14.17.29.12 Notwithstanding 14.17.9, for each Charging Year which begins after 31 March 2018 demand associated with meters which were in Measurement Classes G before 1<sup>st</sup> April (t) of the charging year starting after 31<sup>st</sup> March (t) will be treated as Chargeable Demand Capacity (HH) for the purposes of TNUoS charging for the time it was in either Measurement Class G within that charging year. For example if a meter was in Measurement Class G before the 1<sup>st</sup> April 2018, it will be treated as Chargeable Demand Capacity (HH) for charging year 2018/19, for the time it was in Measurement Class G within that charging year.
- 14.17.29.13 The Company will calculate the Chargeable Energy Capacity associated with meters that have transferred to HH settlement but are still treated as NHH for the purposes of TNUoS charging from Settlement data provided directly from Elexon i.e. Suppliers need not Supply any additional information.

14.17.29.14 The forecasts that Suppliers submit to the Company under CUSC 3.10, 3.11 and 3.12 for the purpose of TNUoS monthly billing referred to in 14.17.16 and 14.17.17 for both Chargeable Demand Capacity and Chargeable Energy Capacity should reflect the basis on which demand will be charged for TNUoS i.e. volumes associated with those Metering Systems that have transferred to Measurement Class F & G in the BSC (NHH to HH settlement) but are to be treated as NHH for the purposes of TNUoS charging should be included in the forecast of Chargeable Energy Capacity and not Chargeable Demand Capacity.