CONSULTATION ON MIC CHARGING METHODOLOGY

Consultation Report

10/01/2020

Contents

1. EXECUTIVE SUMMARY

This document follows on from NIE Networks' Call for Evidence (CfE) relating to proposed changes to NIE Networks' capacity charging methodology which closed on the 7 September 2018. It is intended that this document should be read in conjunction with the CfE[1].

In 2016 the Utility Regulator for Northern Ireland (UR) hosted a public consultation on the Electricity Distribution and Transmission Connection Policy. In their subsequent publication on the Next Steps, April 2017[2], the UR placed an action on NIE Networks to consider appropriate and proportionate measures to release capacity if it is being persistently underused. NIE Networks launched a CfE with the intention of addressing this request and to specifically consider how we can encourage the release of unused capacity to facilitate better utilisation of the networks and lower connection charges for existing and new customers.

There are approximately 5,300 customers connected to the distribution network with a contracted Maximum Import Capacity (MIC) capacity greater than 70kVA and are therefore on a demand tariff that currently includes a capacity charge which is based on their actual maximum demand. However, the MIC for these customers was established at the time of connecting their new electrical load and therefore the MIC must be reserved by NIE networks when designing the network for existing and new capacity. Of the total number of >70kVA demand customers connected, approximately 4,750 have an aggregated demand circa 600MVA lower that the contracted MIC figure. This is a substantial level of unused capacity on the distribution network which results in expensive and in many cases, unnecessary reinforcement to facilitate the connection of new load.

Currently, existing customers have no incentive to reduce their MIC to a value that closer reflects their usage. Therefore, to address this issue of underused capacity, NIE Networks propose a complete review of how capacity charges are applied by moving to a charge based on the contracted MIC value. This does not arbitrarily remove unused MIC, but offers a choice to customers, i.e. if they believe that they will need the capacity they can retain it but will pay for it, otherwise reduce the MIC to an agreed value in line with their consumption. This provides a fair approach to delivering a strong incentive to more efficiently utilise the available network capacity.

Changing to capacity charging based on MIC has a knock on effect on how overutilization of the network is managed. Customers who exceed their agreed MIC limit may create thermal overload and unacceptable voltage variations on the network, and in extremes, create dangerous situations. Before getting to the point of disconnection, NIE Networks attempt to address the MIC excursions through tariff signals by applying exception charges. NIE Networks believes that the present system is ineffective and the impact will be further diminished if MIC capacity charging is introduced. Therefore, under the same consultation NIE Networks proposes the introduction of a fairer but more effective exception charge methodology.

In answer to our 2018 CfE, NIE Networks received three responses which have provided a helpful insight on stakeholder views and have helped influence how we have taken forward the next stage of the consultation on the Maximum Import Capacity (MIC). We have listened to and taken into account the feedback received which has led us to take additional time to undertake the further analysis required to address points raised by responders. In response to the stakeholder feedback we have specifically modified the proposed methodology for both MIC and exception charging and in particular, how we are to keep affected customers informed throughout the process. We welcome such responses and would encourage continued engagement throughout this process. NIE Networks are keen to ensure that all stakeholders have the greatest possible opportunity to input into and shape the consultation.

Within this consultation document a number of specific questions are raised for respondents to consider. The response to these questions and any general points raised by respondents will be used by NIE Networks to produce a Decision Paper which will be submitted to the Utility Regulator (UR) in early 2020.

[1] Call for Evidence, August 2018: https://www.nienetworks.co.uk/documents/cfe-mic-charging-consultation-(1).aspx
[2] https://www.uregni.gov.uk/consultations/electricity-connections-consultation

2. INTRODUCTION

2.1 Summary of Responses to the CfE

This document follows on from NIE Networks' Call for Evidence (CfE) relating to a review of Maximum Import Capacity (MIC) charging methodology which closed on the 7 September 2018.

NIE Networks received three responses to the CfE from Manufacturing NI, Power NI and Action Renewables. Following a review of the responses NIE Networks held a subsequent meeting with Manufacturing NI to get a better understanding of the points being made.

These responses provided a helpful insight into stakeholder views and have helped influence our proposal to introduce the Maximum Import Capacity (MIC) charging methodology. We welcome such responses and would encourage continued engagement throughout this process. NIE Networks is keen to ensure that all stakeholders have the greatest possible opportunity to input into and shape the consultation.

Respondents were generally supportive of NIE Networks' desire to utilise the existing networks as efficiently as possible in order to drive down the cost and timescales associated with connecting to the networks and to drive down overall network costs which are being met by existing consumers. However, respondents believed that it was incumbent upon NIE Networks to endeavour to connect customers as economically as possible, treat those connected fairly and to provide proactive expert advice to new and existing customers. Further detail on the responses is covered in sections 3 and 4 of this paper.

Based on these responses, we have amended our proposals for the potential introduction of MIC capacity charging and changes to MIC exception charges. These proposals are detailed in sections 3 and 4 of this consultation paper and section 5 of this paper sets out the proposals in relation to the timelines for implementing any changes.

2.2 Background

In 2016 the Utility Regulator for Northern Ireland (UR) held a public consultation of Electricity Distribution and Transmission Connection Policy. It was recognised that a connections market which works well for Northern Ireland consumers is essential for a developing economy. Getting connected easily and at a fair price is important for both demand and generation customers and it is important that other network consumers only pay what is necessary for their energy. It was believed that the lack of capacity in parts of the network is presenting challenges for new customers getting access to the distribution electricity network.

The 2016 consultation asked what should be done to improve the connection process without the need to build additional network which is not always economically justifiable.

In their Consultation on Next Steps, published in April 2017, the UR set out a list of actions on the issues which stakeholders felt important with the expectation that NIE Networks consider what steps they need to take, and to begin delivering on these actions.

One of the key actions identified through the process was the recovery of unused network capacity. In section 1.25 of the Next Steps paper, UR requested that NIE Networks considers the incidence of underutilisation and considers appropriate and proportionate measures to release capacity if it is being persistently underused.

This consultation process addresses demand customers who are restricting access for other users through their underutilisation of their contracted capacity or by utilising more than their contracted capacity without NIE Networks' approval.

There are approximately 5,300 medium and large business customers connected to NIE Networks' distribution network. These customers have a contracted MIC greater than 70kVA which is established at the time of connection of new electrical load and therefore must be reserved by NIE networks when designing the network

for existing and new load connections. They are currently charged a capacity charge based on their actual maximum demand in kVA and an analysis of their consumption patterns since October 2017 show:

- Approximately 4,750 customers have an aggregated total of actual customer maximum demand of circa 616MVA lower than their total contracted MIC;
- Nearly three quarters of the medium and large business customers (approximately 3,800 customers) have an actual capacity demand below 80% of their contracted MIC; and
- 540 customers are exceeding their MIC, using a total of 32MVA of unauthorised capacity.
- Approximately 2,150 customers have actual maximum demands lower than 70 kVA. Many of these customers could benefit from lower Distribution Use of System (DUoS) bills if they reduced their MIC below 70kVA and changed tariff.

Figures 1 and 2 below summarise this information showing the number of customers and the under/over used capacity.

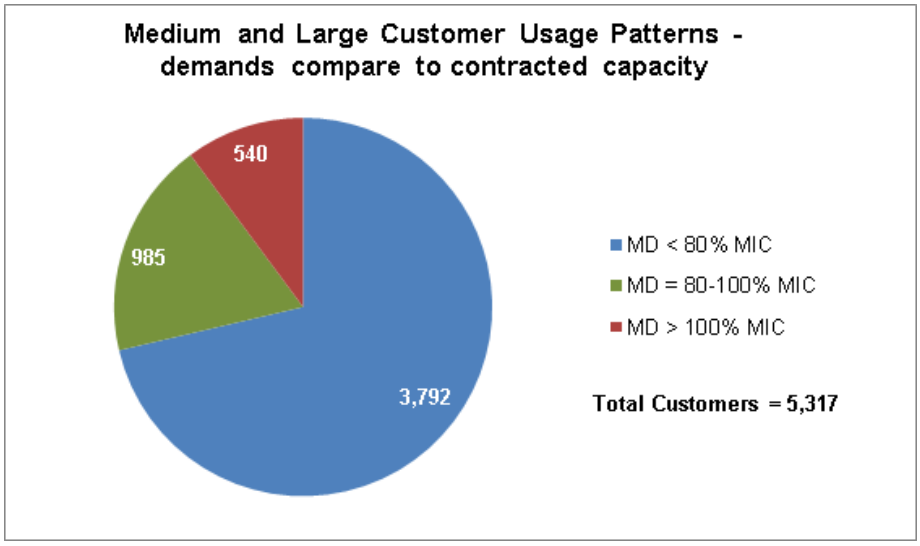

FIGURE 1

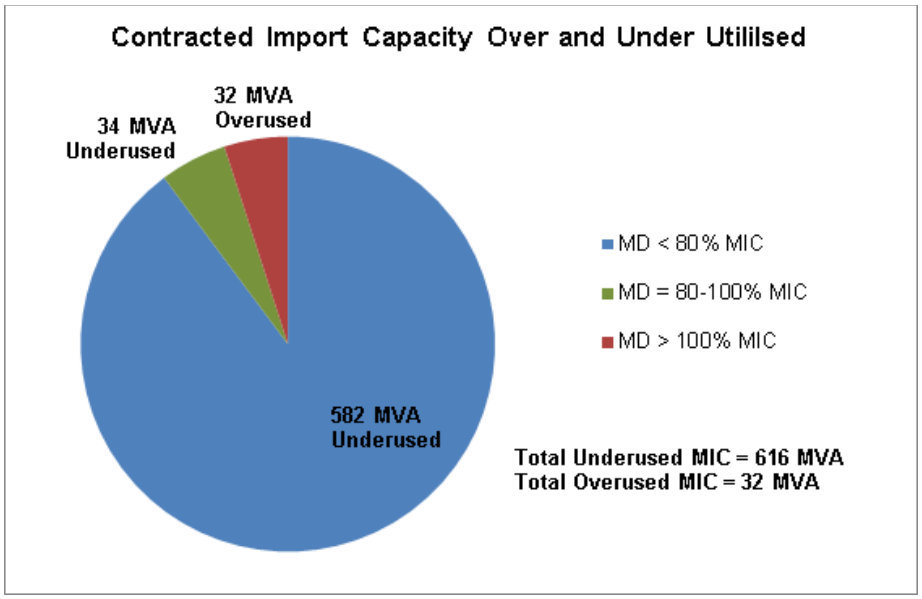

FIGURE 2

2.3 The Impact of Capacity Hoarding

The effect of underutilisation of the MIC is to hoard available capacity thereby denying it to new customers applying to be connected to the network. When customers apply for new connections, the contracted MIC of existing customers connected to the same section of the network is taken into account as part of a network design for the new load. This is to ensure that NIE Networks' contracted obligation to existing customers is maintained while safeguarding the performance of the network following the connection of the new load. NIE Networks has both a licence and statutory obligation to maintain standards of safety and performance through the appropriate design and operation of the network. To manage the new load while maintaining contracted obligations to existing customers potentially requires additional network reinforcement resulting in higher cost for the connecting party. NIE Networks cannot ignore contracted obligations to existing customers to facilitate lower cost connections. In the scenario that NIE Networks were to base a connection charge for new customer on the usage of existing customers rather than their MIC, the new customer may receive a lower cost for connection but the liability for future network reinforcement should existing customers realise their MIC would rest with the Northern Ireland customer base through the existing regulatory funding mechanism.

Similarly, a customer exceeding their MIC restricts available network capacity for other potential users. Customers exceeding their MIC create a potential safety issue through overloading network assets and also impact on the quality and security of supply for other customers. They are also hoarding capacity that they have not paid for at the expense of new applicants who are willing to pay for access to the same capacity.

2.4 Purpose of this Paper

Following on from the Call for Evidence which closed on the 7 September 2018, this paper forms the second step in the consultation process. The aim is to introduce a charging mechanism which will provide cost recovery from those customers not fully utilising their contracted MIC and to one that will send a strong signal to customers to encourage more closely aligning their actual demand to their contracted MIC. The process should be such that it will encourage and enable customers to reduce the MIC value, thereby releasing potential capacity and reducing costs for future connectees. This will also reduce future costs for the general customer body with the avoidance of unnecessary network reinforcement.

This consultation paper considers the responses received through the CfE in determining the rationale and justification for changes to capacity charging to free up distribution network capacity. The original CfE paper proposed addressing the following points which are again to be considered within this paper;

- Capacity charges based on customer MIC – Section 3 of this consultation paper will review the potential to change the basis of our capacity charges from customer maximum demand (MD) to the customer contracted MIC. Capacity charges based on customers' MIC would provide a strong incentive for medium and large business customers to reduce their MIC to align with their actual demand needs.

- The impact on customers – Section 3 of this consultation will consider the impact on customers' DUoS bills if we move to MIC based capacity charges. In general it is anticipated that customers with MICs which reflect their actual demands will benefit from a reduction in their capacity charges while customers who choose to retain significant unused network capacity in their MIC will face higher capacity charges.

- Opportunity to review individual charges – Section 3.6 of this consultation will also consider how customers will be notified of the changes and how they will have an opportunity to review their contracted MIC.

- Review of Penalties for over-utilisation – Section 4 of the consultation will also review the effectiveness of charging signals to prevent customers putting the network at risk by exceeding their contracted MIC.

- The timing of the introduction of the new structure – Section 5 reconsiders, and sets out proposed options for the timelines of implementing proposed changes to the tariff structure for capacity charging and for changes to MIC exception charging.

Based on the responses received and subsequent engagement with one key respondent, this consultation paper now recognises necessary amendments to a number of the above points and seeks to scope and shape the output of this consultation into a potential new approach to the application of future MIC charges.

3. CAPACITY CHARGING

3.1 Current Charging Structure

Customers' electricity bills are made up of different elements, such as Wholesale Energy Costs, Suppliers Costs, Levies and Network Charges. The distribution network charges are set out in NIE Networks' Distribution Use of System (DUoS) charges and are set annually to recover the cost of building, operating and maintaining the distribution network in Northern Ireland. For domestic customers the DUoS charge represents approximately 23% of the total electricity bill but this drops to approximately 17% on average for medium commercial/industrial customers and 7% on average for larger energy users (ie demands >1MW). DUoS charges look to provide users with signals about how their behaviours can increase or reduce costs on the network such as investment and operational costs.

The price signals should incentivise network users to make decisions on how and when they use the network to achieve the most economically efficient outcome. If customers change their behaviours in response to the price signals, this will ultimately reduce future network costs for all users.

NIE Networks' DUoS tariffs for customers with MICs greater than 70kVA are made up of standing charges (per charging period), unit charges (per kWh & kVarh) and capacity charges (per kVA). In general standing charges are set to recover fixed costs per user such as the cost of meters and meter reading, while unit and capacity charges are set to recover the cost of network development, maintenance and operation.

This paper looks at the use of capacity charges as a means to encourage efficient use of network capacity.

3.2 Capacity Charging Mechanisms

Capacity charges are charged on a site basis. The most common types of capacity charging arrangements used by various DNOs are:

- Capacity Charges based on customer MD – a charge is applied in relation to the highest maximum demand (MD) recorded in kVA by the customer over a defined period of time. The price signal intended by this type of DUoS charge is to encourage customers to improve their load factor and reduce demand on the network which could lead to network reinforcement.

- Capacity Charges based on customer MIC – a charge is applied in relation to the customer's agreed maximum import capacity (MIC). The MIC will be agreed at the time the customer is connected or when an increase is approved. The price signal intended by this type of DUoS charge is to encourage efficient use of available network capacity by incentivising customers to reduce their unused MIC.

NIE Networks currently apply capacity charges to customers with a connected capacity greater than 70kVA based on the customer's MD. The customer's MD in kVA is recorded between 0800 and 2230. The highest MD recorded in the current or last tariff year is referred to as the customers' chargeable service capacity (CSC). A monthly charge is applied for each kVA of CSC.

Under NIE Networks' current capacity charging arrangements, if a customer's active or reactive demand spikes in a single half hour, they can be charged the CSC charge based on that peak for a maximum period of two years, i.e. to the end of the following tariff year.

NIE Networks' capacity charges for medium and large business customers account for on average 39% of their DUoS bill. In 2019/20 tariff year these capacity charges were anticipated to recover approximately £24m in DUoS revenue from their suppliers. The capacity charge is equivalent to between approximately 7% and 2% respectively of medium and large customers' total electricity bill.

3.3 Connections Design Process

As part of the connections process new applications are received with all demand details outlined by the customer or their appointed consultant. In the initial design phase discussions will take place regarding potential options with the applicant and a high level review of the requested MIC to ensure they have not under or over estimated their power requirements.

In completing a design NIE Networks studies the new requested MIC against the system actual load and the larger contracted MICs already allocated on that section of network. As NIE Networks are contractually obliged to provide the MIC all new designs must be completed with this fully connected.

Sites may initially use the majority of the requested MIC however as time progresses and the nature of the business changes or the premise is sold to another party these MICs may not reflect the new requirements of the business.

As there is no incentive for MICs to be reduced generally customers retain the higher MIC than is required for their site. Therefore NIE Networks may need to charge additional works to the connecting customer which may not be required if other customers reduced their MIC in line with their requirements.

3.4 Analysis of MIC Utilisation

DUoS charges for network capacity currently apply to customers with a contracted MIC greater than 70kVA. There are 5,317 customers in this category. The analysis of network capacity utilisation for the purpose of this consultation is based on customer metered data for these customers from October 2017 to July 2019. This compared the MIC figure recorded for each customer in this category with their individual highest actual usage figure recorded since October 2017.

We recognise that customers do not continually operate at exactly their contracted MIC level and also that a new business may take a period of time between the dates of connection to full operational output. Consequently, in order to demonstrate the extent of continuous underutilisation, our analysis looked at identifying where there is significant underutilisation of capacity and where this underutilisation has been sustained continuously.

Figure 3 below shows the results of this analysis and from this we can see that there are 3,357 customers with MICs greater than 70kVA who have been operational for more than five years and who are still using less than 80% of their contracted capacity. The unused capacity associated with these customers is 503MVA. Figure 2 in the Introduction section of this paper showed the unused contracted capacity for all medium and large business customers who are using less than 80% of their MIC to be 582MVA. This includes the unused MIC capacity associated with customers who have been operational for less than five years.

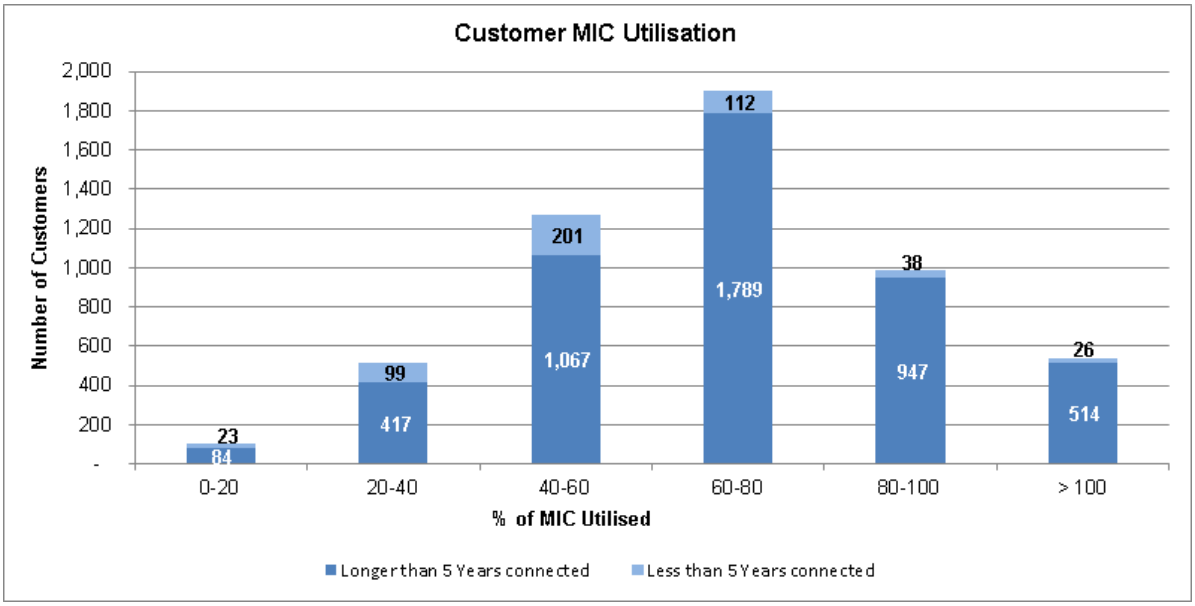

FIGURE 3

As mentioned in section 2.2, 40% of customers with MIC greater than 70kVA (approximately 2,150 customers), have actual maximum demands lower than 70kVA. 1,775 of these customers have been operational for more than five years and are using less than 80% of their contracted MIC. The unused capacity for these customers equates to 99MVA. Figure 4 below shows the breakdown of unused capacity from these customers. Many of these customers could benefit in lower DUoS charges by reducing their contracted MIC below 70kVA (the minimum capacity for medium business tariffs) and changing to a below 70kVA tariff.

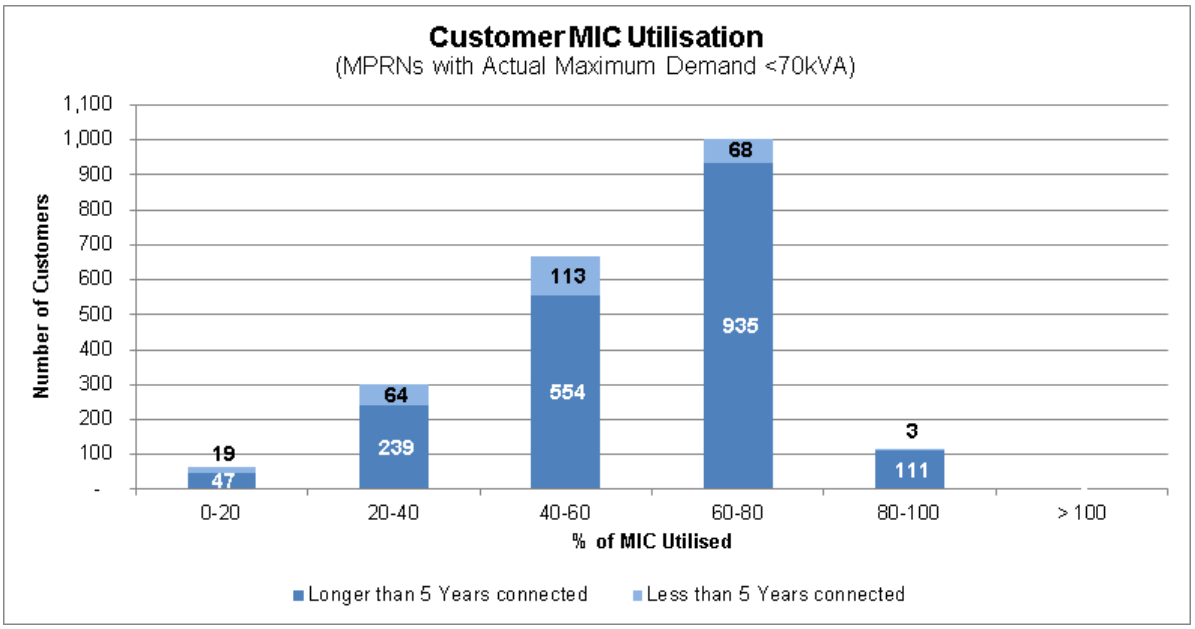

FIGURE 4

As detailed in the CfE, there is an obligation on NIE Networks to address the underutilisation of the network and the potential for unnecessary reinforcement being charged to new connectees. The Consultation on Next Steps, published by the UR in April 2017, requested that NIE Networks considers the incidence of underutilisation and considers appropriate and proportionate measures to release capacity if it is being persistently underused.

For this reason NIE Networks need to consider what actions need to be taken to free up capacity on the existing network infrastructure to allow future customers to connect without incurring high and sometimes unnecessary reinforcement charges.

3.5 Proposed Capacity Charging based on Customer MIC

In Great Britain and the Republic of Ireland, the distribution companies apply capacity charges to business customers based on their contracted MIC to encourage efficient use of available network capacity. NIE Networks are proposing to adopt a similar approach of basing capacity charges on customer MIC rather than customer MD, to introduce a price signal to encourage efficient use of capacity on the distribution network.

In 2019/20 tariff year NIE Networks' capacity charges are anticipated to recover approximately £24m in DUoS revenue from medium and large business customers. Changing the basis upon which capacity charges are applied would provide a strong incentive to customers to reduce their MIC to align with their actual demands. This would release the unused MIC capacity for other customers to connect or increase their existing supply capacity, and thereby avoid unnecessary network reinforcement which is either funded by individual customers in their connection charge or by the wider customer base if the cost of the reinforcement has to be socialised.

Total customer MIC capacity is naturally higher than their aggregated MD in kVA. As NIE Networks' regulated distribution allowances are fixed, changing the basis of capacity charges to the customer's MIC would be facilitated by a reduction in our price per kVA. This would ensure the same total DUoS revenues are recovered from charges based on higher capacity volumes (MIC versus MD).

The impact on individual customer electricity bills would depend on the relativity between (i) the amount the customer's chargeable capacity increases, i.e. their MIC versus MD, compared to (ii) the reduction applied in the capacity price for their tariff group. The potential step change in customer capacity charges is summarised as:

- Customers with MICs which closely reflect the network capacity that they actually use will be rewarded with reduced capacity charges (due to the reduction in capacity price); and
- Customers who retain significant unused network capacity in their contracted MIC will receive higher capacity bills because the increase in the kVA to which the capacity charge applies will be greater than the reduction in the DUoS tariff capacity price.

NIE Networks' proposals for MIC charging are:

- Customers with MIC greater than 70kVA will be charged for network capacity based on their contracted MIC in kVA multiplied by the MIC price.
- If a customer applies for a reduction to their contracted MIC, their MIC charge will reflect this reduction from the first day in the next billing period (generally calendar month) following NIE Networks' confirmation of the MIC reduction.
- Before NIE Networks' would implement a change to capacity charging, we would propose contacting all impacted customers to give them the opportunity to confirm their MIC or to agree a lower MIC, or to change tariff, where applicable. Customers wishing to increase their MIC will be required to make application through the normal connection process. Further details of the proposed customer engagement are described in section 3.6 below.

3.6 Proposed customer engagement

NIE Networks' are proposing a two stage customer engagement process prior to the implementation of the proposed MIC charging. This engagement process would encourage all impacted customers to review their

existing MIC and, where relevant, allow the customers an opportunity to agree a lower MIC to reduce their future capacity charges. Customers with actual maximum demand less than 70kVA could also opt to change tariff by reducing their MIC below 70kVA.

The proposed two stage customer engagement process is:

- **Stage 1** – Write to each customer advising them of the changes to capacity charging arrangements and stating the MIC value that NIE Networks' holds on record for their site. The process will provide the customer with the opportunity to review the MIC held on record and agree an alternative value if desired. Where the customer's actual maximum demand is less than 70kVA, the customer would have the option to change tariff by reducing their MIC below 70kVA and potentially reduce their DUoS bill.

  We also propose to inform individual customer's supply companies to facilitate further customer/supplier engagement and the opportunity for the supplier to offer assistance to their customers. We would highlight the importance of supplier involvement in this process as NIE Networks issue DUoS bills to suppliers, and therefore changes to DUoS bills resulting from the introduction of MIC charging will be incurred by the suppliers in the first instance.

- **Stage 2** – Following a review of all affected customers and any associated amendment to individual MIC values or tariff changes, a second engagement will be undertaken. This will provide a second review of the impact the changes will have on individual customers. This engagement will offer customers a second opportunity to review and agree MIC values ahead of the introduction of the new charging methodology.

  This second engagement will also make it clear that subsequent to the introduction of the new charging methodology, customers will continue to have the right to agree a revised MIC value.

  Registered supply companies will be notified when this second stage of engagement commences. We would urge these suppliers to assist in engaging with customers to encourage the affected customers to review and amend their contracted MIC where appropriate.

3.7 Response to CfE Questions on Underutilisation of MIC

In general, respondents were supportive of NIE Networks' desire to utilise the existing networks as efficiently as possible in order to drive down the cost and timescales associated with connecting to the networks and to drive down overall network costs which are being met by existing consumers. However, respondents believed that it was incumbent upon NIE Networks to endeavour to connect customers as economically as possible, treat those connected fairly and to provide proactive expert advice to new and existing customers.

Within the CfE NIE Networks asked stakeholders to respond to six specific questions, three in this section dealing with underutilisation and three in the second section dealing with over utilisation. This paper now summarises the responses to each of the questions on underutilisation from the CfE and how we intend addressing the points being made.

3.7.1 CfE Question 1

Should demand metered customers be required to pay for requested capacity rather than the associated network costs being met through higher unit costs or higher reinforcement costs for those applying to be connected?

3.7.2 Respondent's View

Instinctively, respondents believed this to be a reasonable proposition but that the devil will be in the detail and therefore urged caution. The figures showing that after five years only 15% of new connections had taken up their applied for capacity was concerning and required further consideration by NIE Networks. They queried if

this was simply down to an over request for capacity at design stage and therefore should be addressed by NIE Networks providing more expert advice to developers for example, by sharing the actual recorded demand from existing similar installations.

3.7.3 Proposed Approach

It is NIE Networks' position that we will always advise customers during the connection process but ultimately the onus is on the customer to tell us what they require. This is a condition of the Distribution Code and is based on the premise that the customer has best knowledge of their processes and where necessary, should engage qualified consultants to provide independent expert advice. While NIE Networks will always help customers through the process, we have to be mindful of potential liability if incorrect decisions are made based on advice offered. NIE Networks also must adhere to data protection law associated with the provision of other customer's information. It has always been assumed that cost signals from increased connection charge resulting from over specification of demand requirement should help to limit over estimation at the application stage and therefore underutilisation of the provided network capacity. But this becomes ineffective where the connection design is primarily delivered utilising existing already funded network assets and no charge is applied for apportioning capacity. This situation is further compounded where, once connected, there is no penalty for not actually taking up the requested demand.

NIE Networks will continue to help new connectees through the application process but we still believe that the proposal for introducing capacity charging based on applied for MIC and not on what is ultimately used, will introduce an enduring cost that can be avoided (or at least minimised) at the connection design stage.

3.7.4 CfE Question 2

Should NIE Networks consider reviewing the additional capacity charging structure to encourage connected customers to reduce their contracted MIC to a level closer to their typical usage pattern?

3.7.5 Respondent's View

One respondent's view was that NIE Networks should consider financial incentives to encourage customers to reduce contracted MIC for example, buy-back scheme which reflects cost saving/benefits of freeing up capacity. A second respondent asked how will NIE Networks approach the cost recovery of customers carrying a high MIC relative to their measured maximum demand and will there be any dead zone between the two before any additional charge would be applied?

3.7.6 Proposed Approach

In order to address the point being made by one respondent on potential 'buy-back' schemes, it is helpful to understand the difference between pure 'connection assets' and existing 'shared assets' and that all connection arrangements are made up of both. The connection asset is the equipment installed specifically to connect the new customer to the existing network. As this generally services one customer only, there is no value to other customers by freeing up capacity in the connection asset. The shared asset is the existing network and transformers to which the new connection asset is connected, the capacity of which is shared by other customers. The value is in freeing up capacity in existing shared assets. In the majority of cases the shared assets have been pre-funded and therefore the capacity being requested was not included in the original connection charge. Consequently, it would not be appropriate to introduce a 'buy-back' scheme in such circumstances.

Regarding the second response, it is precisely the type of customer being referred to that this policy is designed to target. We have already described how this is an inefficient use of existing network assets and can in many cases be an impediment to new load connecting to the network. This proposal is not designed to force customers to relinquish their MIC. Customers can choose to retain their present MIC, for example if their future business plan anticipates expansion. But in doing so they would be required to pay for this facility. This will allow customers to realise the financial benefit of releasing all, or part of their unused capacity if further expansion of their business at the site is unlikely.

NIE Networks must also advise that existing customer Connection Agreements include the right for NIE Networks to recover unused capacity[3].

It is NIE Networks' view that the proposal should be seen more as a means of discouraging inefficient usage of the network by the application of avoidable penalties.

3.7.7 CfE Question 3

Options being considered are the replacement of the actual demand usage charging mechanism to one where the capacity charge is based on the MIC similar to GB & ROI. Do you consider these as appropriate mechanisms for NIE Networks to deploy to encourage more efficient use of the available capacity from existing assets?

3.7.8 Respondent's View

The response was generally in agreement with NIE Networks proposal for using capacity charges based on MIC rather than usage as a mechanism for encouraging efficient utilisation of the limited capacity on the distribution network. However, responses were caveated that such changes would need to be accompanied by a programme of engaging directly with affected customers, offering suitable advice at the connection stage and only introduced following further investigation into the effectiveness of the proposal.

One respondent noted that consideration needs to be given to customers with a high overnight demand relative to their day demand as the current charging regime only considers actual demand between 08:00 and 22:30. They also queried how customers with MIC less than 70kVA would be treated going forward as these customers do not have any capacity charges at present.

It was also pointed out that this proposal will add to the cost of electricity for a number of customers, in particular those with the highest variance between peak usage and contracted MIC. Customers in such a position should be offered time and every opportunity to address this issue before the additional charges are applied. There was a suggestion that a probationary period would be required, ideally over the winter peak (November to February) to ensure the MIC is suitable for the future needs of a business.

3.7.9 Proposed Approach

We would wish to emphasise that throughout this process it is not NIE Networks' intention to force any individual company to reduce their contracted MIC. Reduction of contracted MIC will be on an agreed voluntary basis and will be based on the customer wishing to minimise future electricity costs. Customers wishing to retain MIC even though not fully utilising the capacity, e.g. to meet future expansion plans, may still do so. This will be based on the customer's individual business case that the additional charge is justifiable for retaining capacity. However, the customer's business plan will need to take account of the increased cost of retaining the unused capacity under the MIC charging proposal, for the period until the future expansion is in place. While we are not explicitly proposing a probationary period as suggested by one respondent, we believe that the iterative engagement process outlined in Section 3.6, which will run over the 2020/21 and 2021/22 tariff years, provides the opportunity for individual customers to understand the impact the changes will have on their businesses prior to the implementation of the new charging methodology.

In the CfE we suggested that changes to the charging MIC would be implemented from 1 October 2019 in the 2019/20 tariffs; however, on the basis of the response received to this question NIE Networks now propose deferring the introduction of the MIC Capacity Charge to either October 2022 or a phased introduction of October 2021 and October 2022 (additional information on the proposed implementation timelines is included in section 5 of this paper). This will provide time to engage more effectively with customers to explain what the impact of the changes will be on their business and what measures they can take to reduce any potentially

[3] See Section A12.5 of the NIE Networks High Voltage Customer Connection Agreement and Section 4(i) of the Standard Connection Terms and Conditions for LV Connections.

detrimental impact. Customers can then implement the appropriate changes before the new MIC charges and MIC exception charges take affect.

In relation to the respondent's comment about the proposal increasing costs for some customers, the graph below in Figure 5 provides a representation of the potential impact on customer capacity charges if the current CSC charges are replaced with MIC charges. This graph is based on a weighted average MIC price for all customers who pay capacity charges. The MIC price was set using the assumption that some customers will reduce their contracted MIC releasing 100MVA of capacity in total. This reduction in MIC will increase the proportion of contracted capacity utilised to 69% on average (i.e. CSC:MIC ratio is 69%).

The graph shows on average, customers who use less than 69% of their MIC (ie the average capacity utilised) may receive a step increase in their capacity charge while customers who use more than 69% of their MIC could benefit from a reduction in their capacity charge following the introduction of the proposed MIC charges (to replace CSC charges). However, what the graph does emphasise is that the greatest impact will be on customers who are significantly underutilising their MIC and demonstrates the strong signal this tariff structure change will send out to encourage better utilisation of the network.

The graph represents the estimated average impact for all medium and large business customers assuming a weighted average MIC price set after 100MVA of contracted MIC has been released. In practice, the proportion of MIC capacity utilised will be different for each tariff group hence the step change in capacity price will also differ. The impact on individual customers will be dependent on the amount of MIC released by customers, i.e. customers deciding to reduce their MIC, as this will affect the final MIC price.

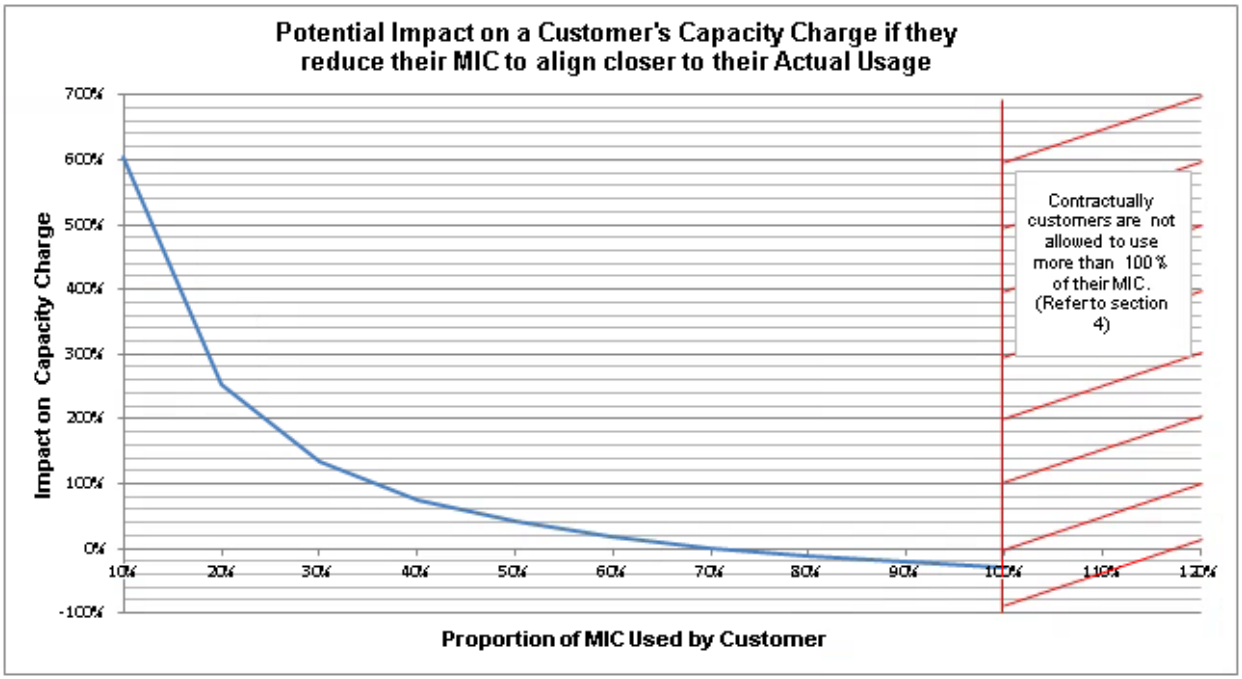

FIGURE 5

Under the proposed MIC charges customers have the ability to reduce their capacity charge if they voluntarily reduce their contracted MIC to align more closely to the demand they use.

Figure 6 below shows an extract from the Figure 5 graph to depict an example for a customer who is currently using 50% of their MIC. In this example the customer reduces their contracted MIC to a position where their actual maximum demand is 90% of their MIC to change the financial impact from a negative impact to a benefit. Once again for this example, a weighted average MIC price was set using the assumption that a low number of customers will reduce their contracted MIC. In practice, the MIC price will be different for each DUoS tariff and

the impact on individual customers will be dependent on the amount of MIC released by customers as this will affect the final MIC price.

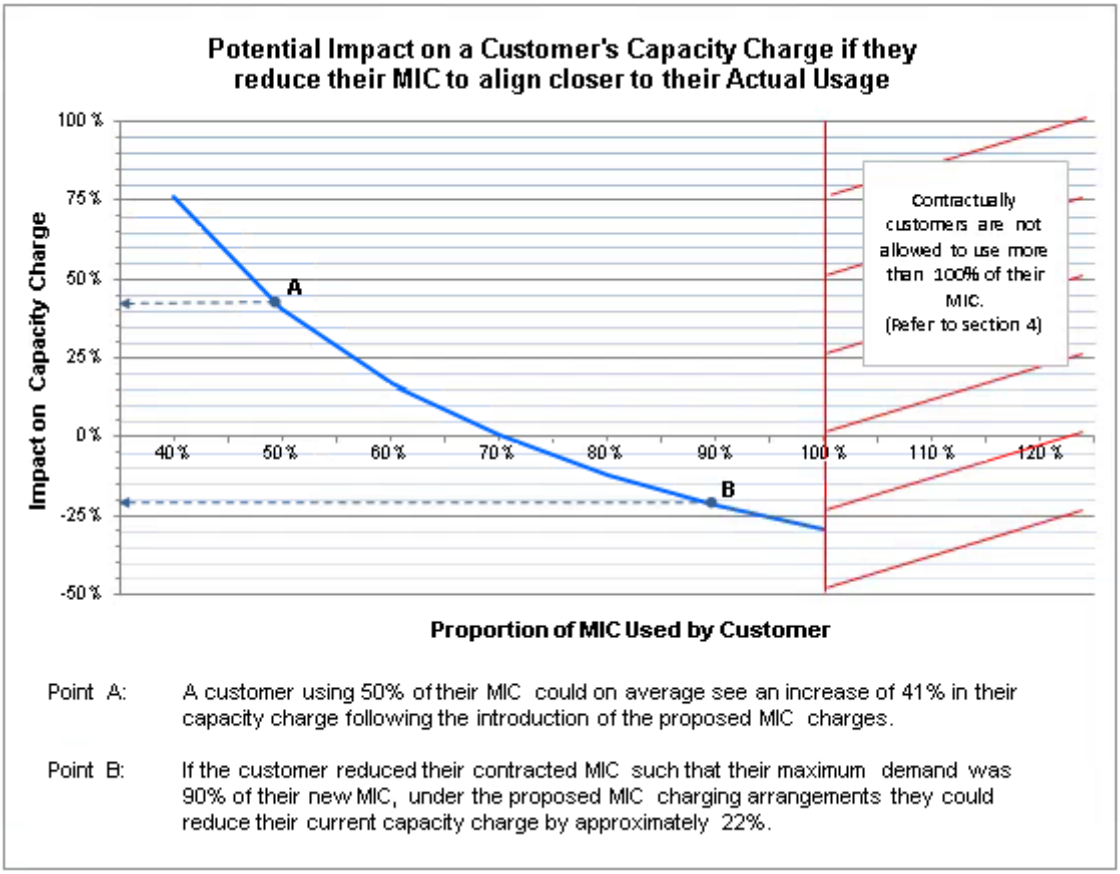

FIGURE 6

At this point we must refer back to the beginning of Section 3 where we described the make-up of the customer's electricity bill as consisting of multiple elements of which the DUoS was only a portion. We would also wish to point out that the capacity charge is only on average between 7% and 2% of the overall electricity bill for medium business customers and large energy users respectively. Therefore, a 41% increase in the capacity charge as shown in Figure 6 will be approximately equivalent to 3% and 1% increase in the overall electricity bill for medium and large energy users respectively. We therefore believe that it will not have a severe detrimental impact on individual businesses, but should be sufficient to elicit the appropriate response on efficient capacity utilisation.

The graphs also illustrate the unintended consequence of this change in capacity charging methodology, i.e. customers who are currently exceeding their MIC could benefit from lower capacity charges if MIC charges are introduced. This effect is considered in our proposed revisions to the MIC exception charges as described in section 4 of this consultation paper.

In relation to customers with a high overnight demand relative to their day demand, NIE Networks recognise that a small number of customers fall into this category. There are currently 12 customers with a minimum of 60kVA difference between their peak demand at night relative to their peak demand in day hours. However, as the capacity charge only represents between 7% and 2% of the customers electricity bill, it is highly unlikely that the capacity charge is the main driver for these customers to shift their electricity consumption to night hours. SEMO's charges and NIE Networks' DUoS unit charges provide a stronger incentive for customers to adjust their load profiles to favour considerably lower unit prices during the night period.

In relation to customers with MIC less than 70kVA, who do not have any capacity charges within their tariff at present, this consultation is not proposing any changes to the tariff structures for these customers and therefore going forward they would not have any capacity charges applied. All customer tariffs, including those associated with customers below 70kVA will be subject to the tariff review which is part of NI Utility Regulators future work plan.

3.8 Consultation Questions regarding MIC Charging Policy

Q1 – Do you believe that new and existing customers would benefit from releasing underutilised capacity on the distribution network?

Q2 –Do you agree with NIE Networks' proposed approach for recovering underused network capacity by moving to a MIC charge as outlined in Section 3.5 of this consultation?

Q3 – Do you believe the proposed two stage engagement process as set out in Section 3.6 and the planned timeline for the introduction of the proposed changes as set out in Section 5, provides affected customers sufficient time and information to understand how the changes will impact their business and to be able to take the appropriate actions?

Where stakeholders disagree with any of the above proposed approach, please provide a full explanation for doing so and provide an alternative approach that would be worth considering further and one that would comply with NIE Networks statutory and licence obligations.

4. EXCEPTION CHARGES FOR EXCEEDING MIC

In the Call for Evidence issued in August 2018 which considered inefficient underutilisation of network capacity, NIE Networks also addressed the issue of over utilisation of the customer's agreed MIC. Such circumstances not only creates a potential safety issue by operating network equipment beyond its rated limit and can adversely affect the quality of supply experienced by other users, but it also increases costs for other customers who follow the correct process when applying for the connection of new load.

The following section revisits the issues associated with over utilisation that were set out in the CfE and reviews the responses received.

4.1 Current Arrangements for MIC Exception Charges

A customer's MIC is established at the time of connection and is based on the information provided at the time by the customer to NIE Networks. This information includes the type and size of electrical equipment the customer will be using and the likelihood of its simultaneous usage. This establishes the load profile for the site and the potential peak demand which is used by NIE Networks to size the equipment required to connect the customer and to ensure that there is capacity in the deeper network for the additional load. This peak demand requirement is then agreed as the site's MIC.

Should a customer subsequently connect additional equipment resulting in the exceedance of the agreed MIC, there is the real risk of one or all of the following;

- Thermally overloading network assets resulting in a reduced asset life and potential for failure, potentially catastrophic.
- Low network voltages and voltage fluctuations resulting in damage to equipment connected at the customer's site and to other customers connected to the same section of the network.
- Using up additional network capacity for which they have not paid and effectively blocking access to the same capacity for new applicants who would be willing to pay.

Based on the July 2019 metered data, there were 540 customers exceeding their MIC with a combined total of 32MVA of additional capacity above their MIC limit.

Ultimately, NIE Networks have the right to disconnect customers who are putting the network at risk through such actions, particularly where there is a potential health & safety risk. However, this is considered an option of last resort. To avoid such action NIE Networks, in compliance with its MIC Management Policy, try at an earlier stage to discourage customers from exceeding the agreed MIC by applying exception charges. These are additional capacity charges which are applied to each kVA above the MIC and are applied on a monthly basis until the customer reduces their demand back to the MIC or makes application to NIE Networks for the increased capacity. At present NIE Networks puts the exception charges on hold if the customer makes an application to NIE Networks for the additional capacity. During this period the risks outlined above are potentially impacting on the operation and performance of the network. NIE Networks experience further problems where some customers who continue to exceed their MIC make successive applications to avoid the exception charges being applied.

4.2 Impact of MIC Charging Proposal on MIC Exception Charges

The proposal for basing NIE Networks' capacity charging on customer MIC rather than their MD will reduce the impact of capacity charges on customers who exceed their MIC. Under the current charging arrangements customers pay a capacity charge on the kVA they use, including the amount above their MIC. This charge is in addition to NIE Networks' charge for excess capacity i.e. capacity used by a customer above their MIC allowance.

Under the proposed MIC capacity charging mechanism, customers who are exceeding their MIC will benefit from lower capacity charges because their MIC is lower than the capacity they are actually using. The annual reduction in capacity charges is estimated at £2.1m for the 540 customers exceeding their MIC, with individual bills reducing by £1,000 to £38,000. In contrast, the maximum total MIC exception charges NIE Networks could apply to these customers under the current arrangements at £1.5m[4], is lower than the savings these customers could receive following the introduction of MIC charges. To counteract this, and to ensure customers do not receive financial benefit when over-using their network capacity, NIE Networks' excess capacity charges need to change to ensure a strong signal is issued to discourage the practice.

If the proposed change in MIC policy is implemented, resulting in a reduction in the penalty for exceedance, the current mechanism to discourage customers from such action will be diminished. This raises the real possibility that we may see more customers exceeding their MIC and for longer periods with a fairly weak tariff signal to encourage them back to the agreed capacity limit. Such a position will push NIE Networks into having to resolve the situation with the threat of, and ultimate, disconnection. This is not a position NIE Networks wishes to be in.

Consequently, if NIE Networks are to change the capacity charging policy, additional measures need to be put in place to continue to discourage customers from exceeding their MIC. As detailed in section 4.3, below, this consultation proposes to apply exception charges to all customers even where they have entered the process for increasing the existing supply capacity. In such circumstances the charges will continue to be applied while the customer continues to exceed their MIC and will only be removed once the new increased capacity terms have been accepted and the full works completed or where the customer reduces their peak demand back below the agreed MIC.

Secondly, NIE Networks propose to review the value of the exception charge to ensure that there is a sufficient penalty to customers who do exceed their MIC. It is proposed to apply an escalating charge which is based on the number of instances of exceedance within the month (i.e. the number of Half Hour periods exceeded within the month) and the frequency of exceedance within a 12 month period. This proposal will ensure that those

[4] MIC exception charge of £1.5m assumes the MIC exception charge of £4 /kVA is applied to the total exceeded capacity of 32MVA (reference Fig 2) for 12 months.

customers who exceed their MIC as a 'one off' will face a minimum charge but those who continually exceed and for long periods will face more onerous charges.

4.3 Proposed MIC Exception Charging

NIE Networks' proposals for MIC Exception Charging are:

- MIC exception charges will be calculated on a monthly basis and charges will be applied per kVA above the MIC value.
- The MIC exception charge will be calculated based on the number of instances (i.e. number of Half Hour periods) where the MIC has been exceeded during the course of the month, for example, a customer may exceed their MIC during one half hour period in the month or consistently exceed their MIC in several half hour periods on a daily basis (i.e. up to 1,440 instances in a 30 day month).
- The MIC exception charge will also be calculated based on the number of months in which the MIC has been exceeded in a rolling 12 month period.
- MIC exception charges will be applied from the first month in which the MIC has been exceeded. There will be no lead in period.
- MIC exception charges will be applied to all applicable customers even where they have entered the process for increasing their existing MIC. In such circumstances the charges will continue to be applied if the customer continues to exceed their MIC and will only be removed once the new increased capacity terms have been accepted and the full works completed or where the customer reduces their peak demand back below the agreed MIC.

At present NIE Networks puts the exception charges on hold if the customer makes an application to NIE Networks for the additional capacity. It is proposed that this will no longer be the case under the changes to MIC exception charges. MIC exception charges will be applied from the first month in which the MIC has been exceeded.

To remove exception charges, customers are required to reduce their peak demand to a level at or below their contracted MIC or alternatively, they should make an application to NIE Networks to increase their MIC to the recorded higher MD and should submit all the relevant information within their application. NIE Networks will assess the application and the outcome will be either:

- If the supply is deemed to be adequate, NIE Networks will issue terms and a revised Connection Agreement for increasing the MIC and the MIC exception charges will cease with the customer's acceptance of terms.
- If it is determined that the supply is not adequate, the application will progress to determine the level of reinforcement works required and their associated costs. MIC exception charges will be applied until the load has been reduced or the terms for the reinforcement work has been accepted by the customer and the associated Connection Agreement and reinforcement works completed.

4.4 How the proposed MIC exception charges would be applied

This section provides examples of how the proposed MIC exception charges would be applied and the potential impact that these charges could have on a customer who exceeds their MIC.

Table 1 below provides example MIC exception prices for this proposal. The prices provided in Table 1 are for illustration only and the charges submitted to the UR for approval may be different. The table shows that the MIC exception prices increase based on the number of instances where the MIC has been exceeded in the

month, and the prices also increase based on the number of months that the customer has exceeded their MIC. The MIC exception prices will be applied on a per kVA basis.

MIC Charge Category	Number of Instances in Month	MIC Exception Price (£/kVA)											
		Mth 1	Mth 2	Mth 3	Mth 4	Mth 5	Mth 6	Mth 7	Mth 8	Mth 9	Mth 10	Mth 11	Mth 12
Category A	1-20	4.00	4.80	5.76	6.91	8.29	9.95	11.94	14.33	17.20	20.64	24.77	29.72
Category B	21-100	4.80	5.76	6.91	8.29	9.95	11.94	14.33	17.20	20.64	24.77	29.72	35.66
Category C	101-200	5.76	6.91	8.29	9.95	11.94	14.33	17.20	20.64	24.77	29.72	35.66	42.79
Category D	201+	6.91	8.29	9.95	11.94	14.33	17.20	20.64	24.77	29.72	35.66	42.79	51.35

TABLE 1

An example is set out below to demonstrate the potential charges that could be incurred by customers exceeding their MIC under the proposed changes to MIC exception charging.

Example of implementing escalating MIC exception charges

The customer in this example has a contracted MIC of 400kVA. The customer's actual maximum demand has exceeded their MIC during several months within a rolling year, but by different numbers of instances each month. The MIC exception charges that would be applied under the proposals and based on the example prices set out in Table 1 are shown in the table below.

Customer has a contracted MIC of 400kVA					
Month	Number of instances MIC Exceeded in Month	Actual Maximum Demand in Month (kVA)	Maximum Exceeded in Month (kVA)	MIC Charge Category	MIC exception charge
October	220	700	300	Category D, Mth 1	£2,073.00 (£6.91 x 300kVA)
November	15	600	200	Category A, Mth 2	£960.00 (£4.80 x 200kVA)
December	50	750	350	Category B, Mth 3	£2,418.50 (£6.91 x 350kVA)
January	-	390	-	-	£0
February	150	680	280	Category C, Mth 4	£2,786.00 (£9.95 x 280kVA)
March	201	600	200	Category D, Mth 5	£2,866.00 (£14.33 x 200kVA)
April	-	400	-	-	£0
May	190	750	350	Category C, Mth 6	£5,015.50 (£14.33 x 350kVA)
June	210	700	300	Category D, Mth 7	£6,192.00 (£20.64 x 300kVA)
July	80	650	250	Category B, Mth 8	£4,300.00 (£17.20 x 250kVA)
August	-	380	-	-	£0
September	201	700	300	Category D, Mth 9	£8,916.00 (£29.72 x 300kVA)
				Total Charge after 12 months:	**£35,527.00**

TABLE 2

4.5 Response to CfE Questions on Over Utilisation of MIC

The CfE asked stakeholders to respond to three questions about dealing with over utilisation. In this section, the responses to each of these questions are summarised, along with detail on how NIE Networks intends to address the points being made.

4.5.1 CfE Question 4

Should NIE Networks continue to discourage customers from exceeding their MIC through the application of appropriate tariff signals to avoid reaching the point where they are forced to disconnect to protect the network?

4.5.2 Respondent's View

In general the view from respondents was that NIE Networks should proactively continue to discourage customers from exceeding their MIC by the use of tariff signals. However, one respondent did raise concern that there was no evidence that excess demand charges had a positive impact on customer behaviour and that such charges should not be punitive for an occasional demand overshoot.

4.5.3 Proposed Approach

If we consider the fact that customers who exceed their MIC are potentially putting the network at risk in terms of public safety, creating unacceptable voltage performance which may critically impact on other customer's connected equipment and will also add avoidable costs to new connectees, it is therefore incumbent on NIE Networks to take appropriate action to remedy the situation as quickly as possible.

Potentially applying the exceedance charge to a customer following a one-off overshoot was the concern of one respondent. NIE Networks recognise this is a concern but also note that under the proposed MIC charge policy being proposed, the financial impact on the customer will be reduced as an increasing CSC will no longer be applied. To counter the immediate benefit from the CSC no longer being applied to demand peaks above the MIC, this consultation recommends the application of exceedance charges from the first month in which the exceedance applies. However, the proposal for an escalating scale of charges means that a minimum charge will be applied to a customer for that period. The scale of this charge will be such that it will be seen as more of a warning and should not result in any immediate financial concern for the customer particularly as it will be off-set by the customer not incurring the increased CSC charge which would be applicable in the current process.

However, where there is a consistent pattern of exceedance, NIE Networks will apply escalating charges as outlined in section 4.4. Customers will be notified of any exceedance each month and advised to reduce their load or to make an application for increased capacity. The application of exception charges is a tool that is used in the process to remedy the situation before the point of threatening to disconnect is reached. We believe that having such a step is in both NIE Networks' and the customer's interest.

Regarding the respondent's comment on there being no evidence that excess demand charges do have a positive impact on customer behaviour, NIE Networks would concur with this point. If the excess charges are insufficiently punitive, customers will not respond which will result in this stage being ineffective therefore moving the customer directly to the threat of disconnection. Again, this is not a position NIE Networks or the customer wish to reach. Consequently, NIE Networks do believe that effective excess charging is required.

4.5.4 CfE Question 5

Should NIE Networks consider removing the concession on the application of exception charges for customers currently in the application process?

4.5.5 Respondent's View

One respondent was happy with NIE Networks' proposed approach to the removal of the concession. One response was against the removal of the concession unless it was evident that the customer was misusing the application process to avoid investment in an increased supply arrangement. The third respondent while not directly addressing this question did emphasise the difficulty that new customers in the application process have in striking the balance between requested MIC and their actual demand and therefore proposed a twelve month bedding in period where no exception charges are levied.

4.5.6 Proposed Approach

The primary concern here is NIE Networks' responsibility for the safety of the public, the protection of networks assets and the voltage quality affecting other customer's installations. NIE Networks has a statutory obligation to design the network to avoid such incidences occurring so cannot agree to a policy which knowingly permits customers to potentially breach network limits even for relatively short periods, e.g. 12 months.

Where an existing customer makes an application for increased capacity, and where the capacity is already available from the network, the process can be expedited relatively quickly. Where it is shown that the proposed increase is beyond the rating of the network, NIE Networks must ensure that the necessary reinforcement work is completed before allowing the increased load to be connected.

On this basis, NIE Networks believe that statutory regulations prevent agreeing a policy that condones a concession to potential network overload.

4.5.7 CfE Question 6

Should NIE Networks consider increasing the exception charges to ensure an appropriate penalty is being applied for a more effective deterrent? This can be achieved by either;

a) Applying a flat rate until the customer's usage is reduced back to the MIC or a new MIC is agreed, or

b) Applying an escalating rate, i.e. if the customer fails to reduce following each notification point, a higher charge is applied.

In your response to this question you should indicate a preference and the reasons why.

4.5.8 Respondent's View

Responses were generally in favour of increasing exception charges with one respondent clearly supporting option b), an escalating rate. However one respondent could not support an escalating charging mechanism as they believed this option would require additional billing development costs by suppliers which would be passed on to customers. Their view was that customer groups, or their representatives, could only provide qualified support for option a).

4.5.9 Proposed Approach

With limited responses to the CfE and where there are diametrically opposed views, NIE Networks believe that we need to introduce an exception charge methodology which not only protects the network but gives the customer every opportunity to correct the issue before it has a detrimental impact on the individual's business. Consequently, exception charges need to be targeted at a level which induces the appropriate response from the customer. To go with the flat rate proposed in option a) would mean that the customer would immediately face a higher exception charge once they are applied. Option b) allows initial exception charges to be applied which compensate for the removal of the CSC charge and will be targeted to encourage a response but not to the extent that they would detrimentally affect the business. It will only be through the customer's failure to respond and correct the exceedance of the MIC, that the charges escalate to a level that becomes financially unsustainable to the business. NIE Networks would hope that affected customers would respond positively before such circumstances arise.

NIE Networks also do not believe that there would be additional system costs for Suppliers in implementing the proposed changes to the application on exception changes.

4.6 Consultation Questions regarding Exception Charging

Q4 - Do you agree that the application of exception charges to customers who exceed their assigned MIC rather than resorting to potential disconnection, is an acceptable tool to ensure the continued safe operation and security of the distribution network?

Q5 - Do you agree with NIE Networks proposed approach of applying an escalator methodology based on frequency and persistence of occurrences rather than a flat rate is a fairer approach for managing customers who exceed their agreed MIC?

Q6 - At present NIE Networks puts the exception charges on hold if the customer makes an application to NIE Networks for the additional capacity. It is proposed that this will no longer be the case under the changes to MIC exception charges. MIC exception charges will be applied from the first month in which the MIC has been exceeded.

To remove exception charges, customers are required to reduce their peak demand to a level at or below their contracted MIC or alternatively, they should make an application to NIE Networks to increase their MIC to the recorded higher MD and should submit all the relevant information within their application. NIE Networks will assess the application and the outcome will be either:

- **If the supply is deemed to be adequate, NIE Networks will issue terms and a revised Connection Agreement for increasing the MIC and the MIC exception charges will cease with the customer's acceptance of terms.**
- **If it is determined that the supply is not adequate, the application will progress to determine the level of reinforcement works required and their associated costs. MIC exception charges will be applied until the load has been reduced or the terms for the reinforcement work has been accepted by the customer and the associated Connection Agreement and reinforcement works completed.**

Do you agree that this process is a fair approach to manage customers whose exceeding of their agreed MIC is putting the network at potential risk?

Where stakeholders disagree with any of the above proposed approach, please provide a full explanation for doing so and provide an alternative approach that would be worth considering further and one that would comply with NIE Networks statutory and licence obligations.

5. TIMELINES

Section 3 of this paper sets out our proposals for moving to MIC charging and section 4 details our proposals for changes to the way in which we charge customers for exceeding their contracted MIC. Within this section of the consultation we set out our proposals for the timelines in which these changes would be implemented.

In the CfE we suggested that MIC charging could be introduced into the tariffs one year after the date that the CfE was published. However, in response to the feedback from the CfE we recognise the need for a more comprehensive plan of engagement with customers and suppliers prior to making any changes to the capacity charging arrangements and therefore we are now proposing to defer the implementation to allow for this engagement. This will provide customers with more time to instigate appropriate changes to their contracted MIC or site demand to facilitate reductions in their capacity charges. For customers to maximise the benefit of changes to their MIC, they should complete the change to their contracted capacity, including network reinforcement and connection agreements where appropriate, prior to the introduction of the new MIC and MIC exception charges.

This should also allow for a more accurate forecast of MIC for the production of the new MIC charges and improve the stability of the MIC charge for the following years.

5.1 Proposed timeline options for implementing changes

We are considering two options in relation to the timelines for implementing the proposed changes to MIC charges and MIC exceptions:

- Single Step Transition: All changes implemented from 1 October 2022 (tariff year 2022/23)

- Phased Approach: Phased implementation where all changes for EHV and HV customers are implemented from 1 October 2021 (tariff year 2021/22) and all changes for LV customers are implemented from 1 October 2022 (tariff year 2022/23).

5.1.1 Single Step Transition: All changes implemented from 1 October 2022

Under this proposal MIC charging would be introduced for all customers with MIC greater than 70kVA from 1 October 2022 in the 2022/23 DUoS tariffs. The proposed changes to MIC exception charging would also be introduced for all relevant customers on the same date.

This proposal provides a single changeover date for all medium and large business customers where the existing CSC charging and exception charging processes cease and the new MIC charging and new MIC exception charging process will commence. A comprehensive engagement with around 5,300 customers and their suppliers can then take place prior to the implementation of the new MIC and MIC exception charging arrangements. This should allow sufficient time for customers to review their connected capacity requirements and make the appropriate changes to their contracted MIC, where relevant, to reduce their capacity charges under the new charging arrangements.

5.1.2 Phased Approach: Phased implementation from 1 October 2021 and 1 October 2022

The alternative is for a Phased Approach which would be in two stages:

- Stage 1: MIC charging would be introduced for all EHV and HV customers from 1 October 2021, in the 2021/22 DUoS tariffs. The proposed changes to MIC exception charging would also be introduced for all EHV and HV customers on the same date. The current capacity charging arrangements would be retained for LV customers.

- Stage 2: MIC charging would be introduced for all LV customers with MIC greater than 70kVA from 1 October 2022, in the 2022/23 DUoS tariffs. MIC exception charges would also be introduced for these customers on this date.

The key advantage of this option is that it will allow a more focused approach to the engagement with customers and suppliers.

Despite smaller numbers of EHV and HV customers (around 450 customers), these customers make up nearly 50% of the total under used capacity where maximum demand is less than 80% of contracted MIC (282MVA). In addition, nearly half of the aggregated exceeded capacity can be attributed to EHV and HV customers (15MVA).

As EHV and HV customers are in general the largest customers in Northern Ireland, the financial impact of introducing MIC charges to these customers may be greater than for LV customers depending on their MIC usage.

This offers a phased approach which allows for potentially greater engagement with smaller numbers of customers at stage 1 and also provides an opportunity for learning before engaging with a larger number of customers in stage 2. It also allows NIE Networks to better predict the reaction of customers to the changing MIC methodology and therefore reduces the risk of potential volatility in the capacity charge element of future tariffs.

5.2 Consultation Questions regarding Timelines

Q7 – What are your views and preference on the proposed options for the timelines to implement MIC charging and the changes to MIC exception charging?

Q8 – Do you believe that a phased implementation approach would benefit customers more by allowing for a more focused customer engagement and reducing the potential risk of volatility in future capacity charges?

Q9 – Do you have alternative suggestions on how NIE Networks should introduce the changes to MIC charging and application of exception charges, should that be the ultimate recommendation following the outcome of this consultation process? If yes please outline in detail your proposal.

Where stakeholders have a preference for one of the options, please provide full explanation for this preference, or where stakeholders disagree with any of the proposed options, please provide a full explanation.

6. NEXT STEPS AND HOW TO RESPOND

6.1 Next Steps

This consultation is the second step in collaborating with key industry stakeholders on a new MIC Charging methodology in Northern Ireland. This new methodology considers how NIE Networks may release unused capacity to facilitate better utilisation of the network and lower connection charges for existing and new customers. NIE Networks are keen to ensure that all stakeholders have every possible opportunity to input into this change in charging methodology. Responses to this consultation paper will provide industry views which in turn will help shape the forthcoming decision paper that NIE Networks will issue to the Utility regulator for discussion and ultimate approval on future tariffs.

Under NIE Networks' distribution licence, the UR is not required to approve NIE Networks charging methodologies; however the UR does approve the actual DUoS tariffs that are produced from the methodology and published in NIE Networks' Statement of Charges.

After discussing the decision with the UR, NIE Networks will publish a copy of the decision paper on its website.

An indicative timeframe for the consultation process is provided below in Table 3. Please note that these timescales will be kept under review and are subject to change as the scope of the decision paper will be largely dependent on the responses and input of stakeholders.

Key Milestones	Proposed Dates
Publication of Consultation Paper	10 January 2020
Consultation Paper Close	28 February 2020
Decision Paper	Q2 2020
Customer Engagement Process	Commences Q3 2020
Implementation of Proposals on MIC Charging and MIC Exceptions	To be fully implemented for Tariff year 2022/23.

TABLE 3

6.2 How to Respond

NIE Networks invite interested parties to respond to this Consultation Paper. Whilst NIE Networks welcome all comments they particularly welcome comments on the questions that are embedded within this document. A summary of these questions is included in section 6.3 below. Responses should be sent electronically to Carl.Hashim@nienetworks.co.uk by **4pm on Friday 28 February 2020.**

NIE Networks will handle all information in accordance with the NIE Networks Privacy Statement. (http://www.nienetworks.co.uk/privacy)

Please note that it is intended to publish all responses to this paper on the NIE Networks website (www.nienetworks.co.uk). Respondents who wish that their response remains confidential should highlight this when submitting the response.

NIE Networks may share responses with UR. Respondents should be aware that as UR is a public body and non-ministerial government department, the UR is required to comply with the Freedom of Information Act (FOIA)[5].

6.3 Summary of Consultation Paper Questions

NIE Networks wish to encourage successful engagement by opening this second phase of the consultation process to allow all stakeholders to formally submit responses and evidence to influence how we might address the issue of freeing up network capacity.

We have outlined the following three key areas that we encourage stakeholders to consider and provide written response including supporting evidence for the suggested approach:

Section 3 - Solutions for effective capacity charging

Section 4 - Exception charges for exceeding your MIC

Section 5 - Timelines for implementation

We have included questions and points for consideration throughout this consultation paper. For convenience these questions are listed below. Please feel free to expand on and include information on other points outside of these suggestions.

Solutions for effective capacity charging

Q1 – Do you believe that new and existing customers would benefit from releasing underutilised capacity on the distribution network?

Q2 –Do you agree with NIE Networks' proposed approach for recovering underused network capacity by moving to a MIC charge as outlined in Section 3.5 of this consultation?

Q3 – Do you believe the proposed two stage engagement process as set out in Section 3.6 and the planned timeline for the introduction of the proposed changes as set out in Section 5, provides affected customers sufficient time and information to understand how the changes will impact their business and to be able to take the appropriate actions?

[5] The effect of FOIA may be that information contained in consultation responses that is shared with UR is required to be put into the public domain. Hence it is possible that all responses made to this consultation that may be shared with UR will be discoverable under FOIA, even if respondents ask for the responses to be treated as confidential. It is therefore important that respondents take account of this and in particular, if asking that the responses are treated as confidential.

Where stakeholders disagree with any of the above proposed approach, please provide a full explanation for doing so and provide an alternative approach that would be worth considering further and one that would comply with NIE Networks statutory and licence obligations.

Exception charges for exceeding your MIC

Q4 – Do you agree that the application of exception charges to customers who exceed their assigned MIC rather than resorting to potential disconnection, is an acceptable tool to ensure the continued safe operation and security of the distribution network?

Q5 - Do you agree with NIE Networks proposed approach of applying an escalator methodology based on frequency and persistence of occurrences rather than a flat rate is a fairer approach for managing customers who exceed their agreed MIC?

Q6 - At present NIE Networks puts the exception charges on hold if the customer makes an application to NIE Networks for the additional capacity. It is proposed that this will no longer be the case under the changes to MIC exception charges. MIC exception charges will be applied from the first month in which the MIC has been exceeded.

To remove exception charges, customers are required to reduce their peak demand to a level at or below their contracted MIC or alternatively, they should make an application to NIE Networks to increase their MIC to the recorded higher MD and should submit all the relevant information within their application. NIE Networks will assess the application and the outcome will be either:

- If the supply is deemed to be adequate, NIE Networks will issue terms and a revised Connection Agreement for increasing the MIC and the MIC exception charges will cease with the customer's acceptance of terms.
- If it is determined that the supply is not adequate, the application will progress to determine the level of reinforcement works required and their associated costs. MIC exception charges will be applied until the load has been reduced or the terms for the reinforcement work has been accepted by the customer and the associated Connection Agreement and reinforcement works completed.

Do you agree that this process is a fair approach to manage customers whose exceeding of their agreed MIC is putting the network at potential risk?

Where stakeholders disagree with any of the above proposed approach, please provide a full explanation for doing so and provide an alternative approach that would be worth considering further and one that would comply with NIE Networks statutory and licence obligations.

Timelines for implementation

Q7 – What are your views and preference on the proposed options for the timelines to implement MIC charging and the changes to MIC exception charging?

Q8 – Do you believe that a phased implementation approach would benefit customers more by allowing for a more focused customer engagement and reducing the potential risk of volatility in future capacity charges?

Q9 – Do you have alternative suggestions on how NIE Networks should introduce the changes to MIC charging and application of exception charges, should that be the ultimate recommendation following the outcome of this consultation process? If yes please outline in detail your proposal.

Where stakeholders have a preference for one of the options, please provide full explanation for this preference, or where stakeholders disagree with any of the proposed options, please provide a full explanation.