

**Further Market Opening**

**Management of MIC**  
**(Distribution Network Capacity Management)**



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## Introduction :

NIE Transmission and Distribution (T&D) has reviewed its approach to the management of customer maximum import capacities (MIC). This review has been driven by:

- Further Market Opening which will require increased transparency, consistency and formality around interaction between T&D, suppliers and customers.
- Changes to systems that present the opportunity to re-determine the recording and review of MIC's and actual levels of demand.

As a result this document has been prepared which sets out:

- The definition of MIC and explanation of its role and importance.
- Process to agree and revise MIC
- Process to ensure that customers do not exceed MIC levels.

In addition to the need to formalise NIE's processes for the management of customer MIC's this proposal reflects the requirement placed upon NIE to operate an efficient T&D network. This proposal includes a number of changes to NIE current policies.

## 1) Maximum Import Capacity (MIC)

- What is it? We offer customers a Connection designed around a specified capacity. The capacity of any connection is the total electrical loading for which the connection is designed. Capacity is measured in kilovolt-amps (kVA). A kilovolt-amp is similar to a kilowatt. The capacity level for customers is described as the Maximum Import Capacity (MIC). Industrial/Commercial customers agree a level with NIE T&D according to their specific requirements.
- Why is it important? When applying for a connection, the most important decision for a customer is the capacity level they require. The capacity of their connection (MIC) is an important figure for several reasons:
  - This is the capacity that NIE T&D commits itself to maintain available to any premises at the connection point.
  - The MIC places an upper limit on the total electrical load that can be used

in any premises.

- The MIC is a fundamental component of connection charges and subsequent application of UOS tariff charges.

## **2) Agreement on Initial MIC and Request for Changes to MIC**

A customer will need to agree an initial MIC figure with NIE T&D. He may also wish to change his MIC to reflect a change of in his demand for electricity by his facility.

A request by a customer for an initial or revised MIC will be progressed as follows:

### **2.1 Provision of planning data by customer**

Before NIE will initiate a request for an initial or revised MIC, the customer must provide NIE with data on his demand requirement. NIE require this data to assess whether the network is capable of catering for the level of demand requested. The NIE Grid Code specifies the data (Defined in the Grid Code as “Planning Data”) that a customer should provide.

### **2.2 Confirmation of Initial or Revised Level of MIC**

For a new connection, or where a customer has requested a change to his MIC that will necessitate chargeable work, NIE will confirm in the connection quotation the initial or revised level of MIC. Where no chargeable work is required NIE will confirm the initial or revised MIC in a separate letter.

The MIC quoted should reflect the capacity requested in the planning data provided by the customer.

### **2.3 Guarantee on level of MIC**

After a connection has been energised NIE needs to ensure that it keeps the level of MIC available at the agreed level. Prior to connection, however a maximum time period needs to be applied whereby an agreed level of MIC is kept available.

#### *Prior to acceptance of terms*

- An offer of terms for connection is valid for three months. The MIC set out in a letter of terms will be kept available for that period.

#### *Following acceptance of term and prior to energising of supply*

- To allow time for a customer to construct his facility the MIC will be kept available for 12 months from the date of the letter of terms if the customer

accepts the terms within three months of the offer.

#### **2.4 Reservation of capacity**

All requests for capacity on the network must be progressed as detailed above. NIE will not reserve capacity, other than as is implicit in the above guarantees

#### **2.5 Spare additional capacity created as a result of a new or increased connection**

It is usual, in providing new capacity, that further "spare" capacity will be introduced. This spare capacity will not be included in the capacity offered to the customer.

Where possible NIE will use this to offset further investment in the network as a result of further growth.

#### **2.6 Recording of MIC**

For customers that have a supply that is metered at high voltage (i.e. greater than 400 volts) NIE will prepare a site-specific connection agreement. The MIC will be recorded within that agreement. If an MIC is revised the agreement will need to be altered to reflect this change.

For customers that are metered at low voltage (i.e. less than 400 volts) NIE would not intend to enter into a site-specific connection agreement. The MIC will be recorded in a database that will be maintained by NIE.

#### **2.7 NIE's authority to change MIC**

There will be situations where, for a range of reasons, a customer is not utilising his agreed level of MIC. NIE has, however, a licence obligation to develop and operate an efficient network. NIE needs to be able to seek to recover that element of a customer's MIC that is no longer being utilised. This may occur as a result of an anticipated growth in demand on the network either from an individual customer or the aggregated impact of a number of customers. NIE requires the authority therefore to modify customers MIC. The application of that authority needs however to be sensitive and fair to customers.

##### **2.7(1) Authority to review MIC after five years**

NIE accepts that a customer requires certainty over the capacity of his supply for an initial period. Against this requirement NIE will hold the MIC at its initial level for a period of 5 years from the date on which the supply is energised. Where an increased MIC has been agreed, this will also be kept available for a period of five years.

Following the fifth anniversary of the date of energising a new supply or agreeing an increased MIC, if a customer's peak demand in the previous year has been less than 90% of his agreed MIC, NIE has the authority to reduce the MIC to 110% of the peak half hour demand during the previous twelve months.

The customer has the right to challenge this if he considers that the proposed

new MIC is not representative of his site demand. Where agreement cannot be reached the Ofreg will consider the case and will make a determination.

### **2.7(2) Compensation for a reduction in MIC**

NIE will consider compensating a customer for a reduction in his MIC. This will however be subject to negotiation with the customer and will be ultimately, for each case, be open to determination by the Ofreg. Generally, a purchase value will be based upon the capacity released, costed at the availability charge detailed in the Use of System charges for a period of five years. The level of compensation will however need to be considered against the actual value implied by the released capacity. For NIE to be incentivised to seek to buy back capacity there also needs to be a mechanism to recover this cost. This could be achieved by a pass-through of the cost to a customer who would benefit from the released capacity or by charging the cost to the RAB where the benefit was against general load growth.

### **2.8 Treatment of customers with existing connection agreements**

The above approach to dealing with MIC will be formalised by a revision to the standard terms detailed in connection agreements. There are customers at present however who have connection agreements that do not make provision for this approach. NIE is obligated to honour these existing agreements.

If a customer with an existing agreement however seeks to increase his MIC then this will be progressed on the basis of the above arrangements i.e. he will be offered a connection agreement on the new terms.

## **3) MIC Management Charges (Distribution Network Capacity Management)**

Proposed Processes: Incentives for Managing MIC and consequences for Non-Managed MIC Increase.

### **3.1 Month of first recorded agreed MIC surpass:**

Letter sent out by T&D to inform Supplier and the customer that agreed MIC has been exceeded and that the customer will be faced with either a surpass penalty and/or de-energisation unless they confirm in writing within one month either:

- MIC increase was unintentional, under exceptional circumstances and agreed MIC would not be exceeded again.
- Customer makes a formal application for additional capacity (increased supply).

### **3.2 Month of second consecutive recorded agreed MIC surpass and no customer response:**

- I. Supplier billed for difference between agreed MIC and additional Capacity recorded. Rate for MIC surpass difference to be £4:00 per kVA (plus actual CSC rate current if applicable e.g. surpass recorded in peak demand periods).
- II. Letter sent out by T&D to inform Supplier and customer that agreed MIC is still being exceeded and that the customer has been charged surpass penalty and de-energisation will follow unless they confirm in writing within one month either:
  - MIC increase was unintentional, under exceptional circumstances and agreed MIC would not be exceeded again.
  - Customer makes a formal application for additional capacity (increased supply).

### **3.3 Month of third consecutive recorded agreed MIC surpass and no customer response:**

- I. Supplier continues to be billed for difference between agreed MIC and additional Capacity recorded. Rate for MIC surpass difference to be £4:00 per kVA (plus actual CSC rate current if applicable e.g. surpass recorded in peak demand periods).
- II. Letter sent out by T&D to inform Supplier and customer once again that agreed MIC has been exceeded for three months and that NIE are giving notice that the connection will be de-energised within one month. Letter would also provide one last opportunity for the customer to confirm in writing, within one month either:
  - MIC increase was unintentional, under exceptional circumstances and agreed MIC would not be exceeded again.
  - Customer makes a formal application for additional capacity (increased supply).

### **3.4 Annual MIC Surpass Review:**

In addition NIE T&D will undertake an Annual review of MIC in order to establish that customers are not continually encroaching MIC rules. Customers identified would have to complete a formal application for additional capacity.