NIE’s Response to the Regulatory Authorities’ Consultation on Review of K Factors & Supply Margins and Tariff Structure Review

11 September 2009
Introduction

This paper sets out Northern Ireland Electricity’s (NIE) response to the consultation by the Regulatory Authorities (RAs) - the Northern Ireland Authority for Utility Regulation (NIAUR) and the Commission for Energy Regulation (CER) - on their Review of K Factors and Supply Margins and Tariff Structure Review, published in June 2009.

NIE has no comments to make on the aspects of the consultation relating to the review of K Factors which is a matter directly relating to suppliers. However, as the licensed provider of support services to all retail market participants in Northern Ireland, NIE considers that it has an important role in supporting the further development of electricity retail market competition and this response highlights a number of issues that arise under the review of retail tariff structures carried out by the RAs’ consultants, Poyry.

Our comments are set out under the following headings:

1. Comments on network charging methodologies
2. Comments on specific questions raised in the Poyry Report
3. Further comments and clarifications provided by NIE

1. Comments on network charging methodologies

Poyry raises the possibility of aligning the methodologies for the derivation of distribution charges in both Northern Ireland (NI) and the Republic of Ireland (ROI) by the development of a single cost allocation model. The reason put forward by Poyry is that ‘the use of a single model which employed geographic cost signals would provide a uniform locational signal across the island, as well as making it easier for supply businesses to predict under or over recoveries against a target for any year of a price control, and thus the adjustment in subsequent years of the price control.’

NIE recognises that there may be benefits for all suppliers and generators in having greater transparency within the methodologies used for the derivation of distribution charges. Similarly, there may be potential advantages for suppliers and generators to be gained from the harmonisation of aspects of the tariff methodology in both NI and ROI. In this respect, NIE notes with interest Ofgem’s Structure of Charges Project which aims to develop a common electricity distribution charging methodology for the distribution network operators in Great Britain in order to deliver more cost reflective charges and therefore minimise the level of investment required on the network. These changes are being driven primarily from the perspective of ensuring the network charging structure provides for the efficient development of the distribution network.
NIE would therefore caution against pushing the boundaries of harmonisation to the extent that risks the distortion of network price signals for reasons of providing simplicity and transparency in retail tariffs to the detriment of the efficient and sustainable development of the distribution networks in both jurisdictions.

It would appear from its paper that Poyry raises the possibility of going beyond the harmonisation of methodologies to the development of a single distribution network cost model without any clear assessment put forward of the benefits and indeed practical implications of this approach. NIE would have significant reservations about both the principle of introducing a single cost model for what are clearly discrete distribution networks and its practical application. It is our view that providing suppliers and generators with cost reflective distribution charges is best served by recognising the reality of the costs of providing the distribution network which they are using. Otherwise, price signals may become distorted exposing network operators and customers to the risk of inefficient network development. A common cost model would essentially require the development of generic network costs and configurations to arrive at a compromise representation of two discrete distribution networks. It is our view that this would in fact prove detrimental to the desire to improve cost reflectivity and locational signals, as well as the transparency of charges and the tariff development process itself.

Furthermore, it is NIE’s opinion that there would be significant practical difficulties that would prevent the development of a single cost allocation model which could incorporate the different rules applied in the two jurisdictions. Such difficulties would include differences in price control revenue and structure, network configuration and costs, network connection policies, meter reading arrangements, meter configurations, tariff structures and load profiles. While the consultation paper suggests the harmonisation of tariffs and profiles it does not address the other principles and polices which inhibit the development of a single model.

It is possible to develop similar network charging methodologies and/or tariff structures without using a single cost allocation model. Common distribution network tariffs would reduce suppliers’ validation and billing requirements and as such may better facilitate competition in supply. This is further addressed in our response to Question 9 as outlined in section 2 below.

2. Comments on the specific questions raised in the Poyry Report

Question 1: Has this review appropriately described the various features of the structure of retail tariffs and their underlying cost allocation methodologies?

- NIE highlights a few errors/omissions which are described in the section 3 of this response.
- The different treatment of capacity related DUoS charges in NI and ROI has not been addressed.
Question 2: Are there other aspects that should be covered by this review to the extent that it impacts PES retail tariff structures?

- While distribution charges have been reviewed, other components of the retail tariff have not been addressed including transmission charges, PSO and SSS levies.
- Also, there may be value in examining jurisdictional differences in the approach to the application of transmission rebates for supplier direct contracts with distribution connected generators. These are applied in NI (by SONI) and provide a form of locational signal for distribution connected generators in NI.

Question 5: Would ‘global aggregation’ provide a level playing field for the PES to better allocate its costs within its tariff structures?

- Through global aggregation, the consumption estimates for ‘PES’ customers would be calculated in the same manner as for other suppliers hence creating a level playing field. However, it would be appropriate to perform aggregation for the two jurisdictions separately in order to ring-fence metering, loss factors and profile inaccuracies.

Question 6: Would the creation of a common code of metering practice across both regulatory jurisdictions help in providing a basis of measurement that would facilitate harmonising retail tariff structures?

- A common code of practice for metering would facilitate harmonisation of customer classes in NI and ROI however, there may be significant expenditure associated with the replacement of existing metering equipment and also changes required to meter reading and billing systems. The roll out of a common code of practice for metering would require a considerable lead in time.
- There may be little benefit gained from harmonising the quarter-hour (QH) and half-hour (HH) metering in ROI and NI respectively which would require significant changes in billing and settlement systems. The requirement for QH and HH metering could be simply harmonised through the definition of a common threshold. Going forward, the definition of this threshold is likely to be defined by government policy for the rollout of smart/advanced metering in both jurisdictions.
- More generally, NIE agrees that smart metering is an area which could potentially benefit from a common code of practice for both jurisdictions.

Question 7: Do you agree that the use of common profiles for class demands in both jurisdictions would help ensure the same allocation of wholesale costs when deriving retail tariffs, and provide the same incentives for the structures offered?
• NIE agrees that there may be benefits from developing profiles which would be applied on an all-island basis. However, there would need to be representative sampling in NI to reflect different patterns of use across the island e.g. to reflect the geographic differences in usage of gas by domestic customers.

• NIE is presently consulting with NI suppliers on profiling dynamics as part of the development of the Enduring Solution for NI. This is currently considering proposals for the implementation of dynamic temperature correction of profiles. NIE does not envisage the correction of profiles in NI to account for dynamic teleswitching or the implementation of sunrise/sunset adjustments.

**Question 8:** Would the further segmentation of the SME sector of the electricity market and the creation of class profiles for these segments make PES tariffs more reflective of the underlying costs and also encourage competition in supply to these customers?

• The creation of additional profiles for the SME sector may contribute towards improving retail tariff accuracy. However additional profiles will give rise to additional costs associated with profile development and annual maintenance and given that the requirements of the Energy Services Directive is presently leading to advanced metering for business customers, this may prove to be nugatory expenditure.

• Non half-hour (NHH) metering for SME customers in NI collates kWh consumption only and as such it is not possible to define SME customers by load factor. This may present some difficulty in defining the appropriate SME profile groups.

**Question 9:** Would the harmonisation of distribution use of system charges better facilitate competition in supply? Would the introduction of a pricing signal for higher distribution voltages provide a useful signal to encourage the appropriate location of distributed generation?

• Common DUoS tariff structures would allow suppliers to register customers in the same customer classes in the two jurisdictions without requiring additional development in billing and validation processes, presuming similar harmonisation of all other wholesale tariff structures. This would facilitate supplier participation in both jurisdictions.

• Common DUoS tariff structures are possible without the development of a single cost model or methodology, however the DUoS methodologies in both jurisdictions would need to be similar to facilitate agreed common tariff structures.

• Generators connected to the NI distribution network do not pay DUoS charges for export onto the network. Network charges for generator site demand tend to be low, reflecting both relatively low import consumption at these sites and low network tariff rates; the latter because NIE will have recovered 100% of the connection costs at the time of connection. Hence any locational pricing signal NIE may
attribute to the DUoS demand tariff for generators is likely to have little or no impact on the location decision made by a generator. A greater locational pricing signal for generators connected to the distribution network could be facilitated by a DUoS tariff structure providing credit for exports onto the distribution network.

- Locational pricing on the distribution network could lead to volatility in DUoS charges in particular locations. As generators react to the DUoS charges/credits and connect accordingly the network becomes congested and the DUoS prices become less favourable.

- Locational price signals are currently included in NIE’s published DUoS tariffs for customers with demands in excess of 1MW. These tariffs reflect lower network costs for customer connections closer to the source substation. Some 25% of major customers have chosen to connect close to the source substation and avail of the lower distribution network tariff option. NIE’s transmission licence prohibits the extension of locational pricing to connections with demand below 1 MW.

**Question 10:** Do you agree that the separation of charges for the provision of energy, and the use of the transmission and distribution networks would create an opportunity for customers to be offered more choice in the term of the energy component of its contract and the manner in which price levels could be revised? Should the PES simply pass on the network charges it incurs to its customer?

- Separation of wholesale charges should allow greater transparency of different energy products which may be adapted by suppliers.

- It is NIE’s view that a straight pass-through of DUoS charges would better reflect NIE’s cost reflective price signals and demonstrate increased network costs at times of peak demand. However, we recognise that the removal of standing charges within domestic retail tariffs has attractions from a social policy perspective.

- To provide meaningful information, network charges should be further separated from PSO and SSS levy charges.

**Question 13:** Should the PES be encouraged to offer tariff structures with more time of use rates that reflect the underlying movement in wholesale costs and thus provide the customer with the choice of when it would be most economic to take its supplies of electricity? Would you support the replacement of maximum demand charges and block kWh structures in existing tariffs by a time of use tariff structure?

- Subject to our comment on standing charges from domestic retail tariffs it would seem appropriate for the retail tariff structure to in the first instance reflect the DUoS tariff structure.

- Time of Day (TOD) tariff structures are sufficient for customers with demands below 70kVA and with NHH metering. If a seasonal
characteristic is included in the tariff structure, this will need to be supported by monthly meter reading. In NI, seasonal TOD tariffs are not offered to NHH customers with demands below 70kVA as the meter reading is performed quarterly. Meter readings would be required monthly in order to avoid charging inaccuracies across different seasonal charging rates. Instead NIE offers a number of TOD products. In addition to the Economy 7 and Weekend tariffs (available to SME customers), NIE has recently published 4-rate TOD tariffs for domestic and combined customers to be effective from 1 October 2009.

- There is still a requirement for maximum demand charges as this encourages demand customers to present a better load factor; however block kWh structures could be replaced by TOD rates.
- NIE currently offers seasonal TOD DUoS tariffs to all customers with demands exceeding 70kVA. In addition, over recent years, NIE has published a STOD DUoS tariff for SME customers with demands below 70kVA. To date, c. 3,000 customers in NI have purchased HH metering to avail of this DUoS tariff.

3. Further comments and clarifications provided by NIE

**General**

In NI, premises with part domestic usage are charged under combined tariffs. NIE treats these tariffs the same as the domestic equivalents in terms of price and profile application for settlement and DUoS billing.

**Section 2.3 & 3.2.3**

In NI, keypad meters are only employed for domestic and combined residential and small commercial / farm premises. There are also a number of customers with demand below 70kVA with HH seasonal TOD metering and corresponding DUoS tariffs, which is not reflected by a published seasonal TOD retail tariff for customers below 70kVA.

**Section 2.5**

NIE manage the annual provision of NI profiles from GB sourced data, not NIEES as implied in the consultation paper. While these profiles are not published they are made available by NIE to suppliers under certain contractual conditions.

**Section 2.5**

There are six profiles developed for NI, two residential (used for domestic and combined residential/ small commercial or farm), two SME and two for unmetered supplies. These profiles are used for estimating consumption for settlement and DUoS billing. NIE is not aware of any additional farm profiles developed for use in NI.
As mentioned above, some 3,000 SME customers in NI do not require profile estimation as they have elected to install HH metering to take advantage of NIE’s published seasonal TOD DUoS tariff for customers below 70kVA.

Section 2.7

It is not clear from the consultation paper whether the reference to capacity related charges associated with domestic supplies relates to DUoS or energy type charges. In NI, there are no capacity related DUoS charges for domestic customers.

Section 2.7.1

NIAUR has recently approved NIE’s DUoS charges for the next period commencing on 1 October 2009 that are largely based on modelled prices therefore providing greater cost reflectivity in distribution network charges applied in NI.

Section 3.2.2

Errors in distribution loss factors (DLAFs) and customer profiles will be borne by all non-PES suppliers as these are used to estimate consumption values for energy settlement at the trading point. As the difference supplier to balance the market, the PES will bear the equal and opposite of the net errors in DLAFs and profiles attributed to the other suppliers.

Section 3.3.1

Under present NI arrangements for TOU tariffs, the profile is chunked to correspond to the different timebands reflected by the meter registers.