Charges to Suppliers for Use of the Electricity Transmission System

Decision

22 April 2011

Background

Following the introduction of the SEM, the responsibility for calculating and collecting the Transmission Use of System tariff (TUoS) transferred to SONI from NIE. SONI used the NIE cost allocation model to calculate the tariffs. The Utility Regulator approves the form of the charging statement that contains these tariffs, and the total amount of revenue to be recovered by them. The transmission system is the electrical assets that are operated at 110 kV and above.

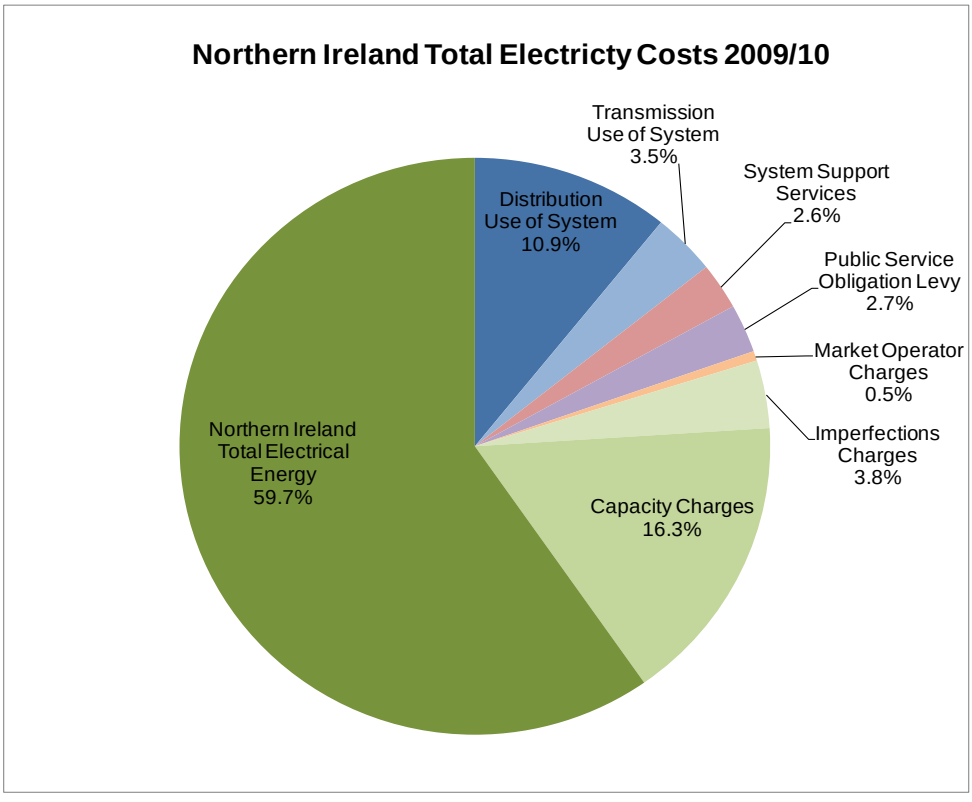
In 2009, annual variations in the input parameters to the NIE tariff model resulted in a significant increase in the off-peak charges and a reduction in the peak charges. The Utility Regulator considered this to be counterintuitive, due to the overall system benefits provided by customers switching consumption to off-peak times. Consequently, the Utility Regulator wrote to SONI to request a full review of the TUoS tariff model to ensure that the charges accurately reflect the costs that users impose on the transmission system.

SONI undertook a full stakeholder consultation exercise. This included meetings with suppliers, detailed analysis of each issue, full peer review of the findings of the analysis and public consultation.

In January 2011, SONI delivered a report to the Utility Regulator, summarising the responses received from its consultation and making recommendations for an updated tariff model. This paper is published on the Utility Regulator website. The Utility Regulator has consulted upon these proposals. This consultation closed on 16 March 2011.

The Utility Regulator is publishing this decision paper to summarise the responses received to the consultation and to document the subsequent decision.

In the 2009/10 tariff year, the TUoS charges made up 3.5% of the total cost to NI electricity consumers. The amount paid by individual consumers depended on their connection voltage and consumption profile.



Consultation Responses

The Utility Regulator received six responses to this consultation. These were from:

- NI Water
- NIE T&D
- NIE Energy
- The Consumer Council
- Airtricity
- iPower

It should be noted that the Utility Regulator contacted a total of 39 large users and consumer groups to draw their attention to this consultation, but there was a limited number of responses from the parties contacted.

The Decisions

SONI made four proposals to the Utility Regulator. Each is considered separately below, along with the responses received and the associated decision by the Utility Regulator:

1) Tariff Bands

SONI Proposals

The current charging method differentiates between customer groups based on connection voltage. Currently customers connected at high (33kV) voltage pay a lower amount for use of the transmission system than those connected at lower voltages (11kV, 400V etc.).

TUoS covers the costs of assets at 110kV and 275kV, while demand customers are connected at 33kV and below. Therefore every unit of electricity consumed in NI affects flows on the transmission system. The distribution voltage that customers are connected at does not affect the amount of investment required on the transmission system, with one exception:

- Customers connected at a lower voltages cause more losses on the distribution system and therefore require a slightly higher amount of electricity to be injected onto the distribution system per unit consumed than those connected at 33kV.

SONI can correct for these losses in two ways. They can either use loss adjusted demands (from the SEM systems) to invoice suppliers or publish tariffs that are multiplied by the distribution loss adjustment factors. The use of the SEM data allows NIE to improve the accuracy of the loss adjustment factors (e.g. day/night or time of year factors) without triggering a re-design of the TUoS billing systems. These improvements are being considered under other work streams.

Currently, higher charges paid by low voltage customers subsidise the lower charges levied to higher voltage customers. SONI do not consider this to be cost-reflective and propose to remove this cross-subsidy from the TUoS charges. SONI propose

that the 2011 Charging Statement will contain only one tariff band. They will reflect the differences in distribution losses by using SEM settlement volumes (which are adjusted by distribution loss factors) to calculate the volumes billed to each supplier.

Responses

Only one concern was raised in response to this aspect of the proposals. This highlighted the fact that customers connected to the 33kV system would be paying higher charges and the respondent was concerned that this was a financial penalty. The other responses were supportive of the improved cost reflectivity.

The Utility Regulator Decision

The Transmission system is defined as assets that operate at 110kV or above. Currently there are no customers in NI connected directly to the transmission system, and the current method of charging is considered to be a form of cross-subsidy between customer groups.

The Utility Regulator agrees that the only impact that distribution connection voltage has on flows on the transmission system is that caused by losses. Using SEM data, which has been adjusted for these losses, when calculating the supplier invoices will resolve this issue. The Utility Regulator therefore approves SONI's proposal to use one tariff band and to calculate the invoices to suppliers based on SEM settlement data.

2) Time Bands

Currently SONI levy the TUoS charges at seven different rates depending on time of day and time of year. SONI has undertaken network modelling to investigate if there is sufficient difference between the demands on the transmission system to justify this amount of complexity.

Based on these analyses, SONI proposes to reduce the number of time-bands to four. These are a simplification of the current time-bands used for DUoS & TUoS. Full details are contained within SONI's recommendation paper.

Responses

The responses broadly welcomed the simplification of the time bands used for charging, however one respondent was concerned that this might be used to disguise increases in the amount of revenue recovered.

The Utility Regulator Decision

The amount of money that NIE are allowed to charge SONI for use of the transmission system is determined by their price control and is defined in their licence. The Utility Regulator verifies this amount annually. As part of the annual tariff process, the Utility Regulator publishes an information note explaining any variations from previous years tariffs and any increases are made in as open and transparent manner as possible.

The Utility Regulator approves SONI's proposal to reduce the number of time bands.

3) Cost Allocation Model

The current cost-allocation model results in tariffs that are not compatible with SONI's proposed method of charging. SONI has built a new cost-allocation model, which it proposes to use to calculate the tariffs for the new charging structure. The model is discussed in detail in SONI's paper.

The model allows for an annual review of the percentage of load related costs and the allocation of those to each time-band. This should result in tariffs that reflect the costs that customers impose on the transmission system in each period and should result in more accurate cost signals than the current model provides.

Responses

Only one response commented on the annual review of the cost allocation model, highlighting the potential that this has to introduce unnecessary volatility and uncertainty.

The Utility Regulator Decision

Based on analyses of historical data, the split between load related and other costs does not change significantly from one year to another. However, if SONI do not reflect thee small changes in the annual tariff calculation, there might need to be a one-off correction that would have a more significant impact on customers than a gradual shift.

The Utility Regulator approves the cost allocation model proposed by SONI and agrees that SONI should review the split of costs annually. The Utility Regulator will consider mitigation measures if this results in volatile tariffs.

4) Transmission Rebates

Currently suppliers with a contract to purchase electricity from generators connected to the distribution system receive a rebate from the TUoS charges. SONI have reviewed the impact that these generators currently have on the transmission system. This review has shown that the majority of the distribution connected generation is located in remote locations and requires use of the transmission system to reach the main load centres. They do not offset flows on the transmission system, removing the justification for the rebate. Generation that is not participating in SEM (i.e. less than 10MW capacity) are not included in the settlement data that SONI propose to use for invoicing under the new methodology.

SONI propose to discontinue these rebates. This should not have an impact on de-minimus generation that is not participating in SEM.

Responses

One respondent raised the possibility that not all distribution connected generation affects flows on the transmission system and suggested that the rebate should be phased out over a three to four year period, with consideration given to retaining the

payment on a site-specific basis. This objection has subsequently been withdrawn following clarification of the impact of the move to invoicing based on SEM settlement data.

Another respondent highlighted the fact that, if the SEM data are used for settlement, then TUoS will only be charged for electricity that has been paid for by suppliers via the market and any electricity purchased from de-minimus generation outside the market would be exempt from TUoS.

The Utility Regulator Decision

The Utility Regulator agrees that if TUoS is billed to suppliers using SEM settlement data, a rebate would be a duplicate payment. The Utility Regulator therefore approves the discontinuation of the rebate from 1 October 2011, in conjunction with the move to TUoS invoices based on SEM data.

5) Other Issues Raised in Responses

One respondent raised concerns about the transition from the current to future charging methodology, including the removal of the rebate, and proposed that a smoothing mechanism be used to minimise the impact on customers and small generators.

As shown in the figure above, TUoS accounts for about 3.5% of the total cost of electricity in Northern Ireland. The Utility Regulator believes that transitional arrangements would increase complexity, and considers these changes to be of low materiality to end consumers.

Next Steps

The Utility Regulator approves SONI's proposals for the changes to the charging of suppliers for use of the transmission system from 1 October 2011.

The annual process of calculating the allowed revenue and associated electricity tariffs is now underway for 2011/12. SONI will use this cost allocation model to calculate the supplier TUoS tariffs.

The Utility Regulator will hold a briefing session at the end of June to inform customers about the likely changes to all regulated electricity tariffs and will publish an information note, along with the relevant charging statements on its website during August 2011.

The new tariffs will come into force on 1 October 2011.