A REPORT ON CONSULTATION CER/09/093

A report to CER and NIAUR
November 2009
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We acknowledge the substantial contribution from Associate David Tolley in this work.

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## TABLE OF CONTENTS

1. INTRODUCTION 1

2. CONSULTATION RESPONSES 3
   2.1 CfD Liquidity and EFA style CfDs (Question 4) 3
   2.2 Global aggregation (Question 5) 4
   2.3 Common Metering Code of Practice (Question 6) 4
   2.4 Settlement Profiles (Question 7) 5
   2.5 SME segmentation and profiling (Question 8) 5
   2.6 Harmonisation of distribution network charges (Question 9) 6
   2.7 Separation of energy and network charges (Question 10) 6
   2.8 Choice in contract term and indexation (Question 11) 7
   2.9 Supply cost allocation (Question 12) 7
   2.10 PES multi-rate tariffs (Question 13) 8
   2.11 A common tariff methodology statement (Question 14) 8
   2.12 General considerations of respondents 9

3. SUGGESTED WAY FORWARD 11
   3.1 Introduction 11
   3.2 Cost reflectivity 12
   3.3 Review proposals 12
   3.4 All island market structure 13
   3.5 All island regulatory proposals 14
   3.6 PES regulatory proposals 17
   3.7 The way forward in summary 19
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1. INTRODUCTION

A total of 13 parties responded to consultation CER/09/093, including both Public Electricity Suppliers (PESs), 5 independent suppliers, two network companies, the Consumers Council of Northern Ireland (CCNI) and 3 other organisations. Most respondents addressed directly the questions posed in the consultation paper although some also raised a number of other issues.

We have summarised the key points in the responses under the specific questions and also included a synopsis of the more general points that were made. The question numbers start at question 4 which concerned the first specific proposal in the paper.

Our own views on the way forward comprise the final section of this paper.
2. CONSULTATION RESPONSES

2.1 CfD Liquidity and EFA style CfDs (Question 4)

*In the context of the all island market structure do you think the introduction of an EFA style CfD would assist in bringing liquidity to the CfD market? What other arrangements would help in this respect? (Section 3.2.1)*

Virtually all respondents agreed with the need for improved liquidity in the CfD (Contract for Differences) market. It was noted that a better hedge for wholesale price exposure was a pre-requisite for suppliers to offer more sophisticated energy products. Two respondents observed that the annual round of CfD auctions had successfully used the Tullett Prebon electronic platform for conducting the auction of directed contracts, non-directed contracts and PSOs (Public Service Obligation) contracts in the summer of this year.

The EFA (Electricity Forward Agreement) contract is a standard form that could presumably make use of the same trading platform. Most, but not all, independent suppliers and one PES thought that the use of a standard EFA contract where the contract term can be formulated in 4 hour strips over a business or calendar week might assist in improving liquidity in the CfD market, although not all respondents were convinced that the EFA would achieve this. The Consumers Council of Northern Ireland expressed concern that brokerage fees could add substantially to wholesale costs.

The prohibition on PES vertical integration with generation was cited as a reason why the wholesale electricity market would never become liquid. One PES argued that the participation of vertically integrated companies in a traded CfD market provided an impetus for improved liquidity since vertically integrated companies had an incentive in both their generation and supply businesses to create a balance between their contract and physical positions.

The uncertainty that surrounds the durability of the SEM (Single Electricity Market) trading rules was instanced as a further barrier to liquidity emerging. In this case it was suggested that the regulatory uncertainty of prospective and potential changes to the SEM would frustrate the trading of CfD cover.

Notwithstanding these concerns the general sentiment was that a liquid wholesale electricity contracts market was a desirable development in furthering retail competition. The view was expressed that the market must move away from an annual auction to one where trading was a continuous process.
2.2 Global aggregation (Question 5)

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

The current regulatory policy concerning global aggregation is that ‘in the intermediate to long term, global aggregation will need to be employed in order for there to be a level playing field for all suppliers in both jurisdictions’. Most suppliers are in favour of global aggregation as creating a level playing field that treats the PES and independent suppliers on a common basis. One PES emphasised the unreasonableness of its customers being exposed to the financial consequences of the profiling errors of its competitors.

However, two independent suppliers, whilst supporting the principle of common treatment, point out that in the present market conditions global aggregation would impact smaller players differentially. The size of a supply business helps in averaging out the errors in individual customer profiles and load factors but this benefit would be enjoyed to a much lesser extent by smaller companies for whom global aggregation would increase the forecasting volatility. It was further suggested that the different meter reading practices in both jurisdictions would exacerbate the risks associated with global aggregation.

Those companies based in Northern Ireland pointed out that global aggregation should be implemented on a jurisdictional basis. It was argued that this will ring fence the errors in the forecasting of losses, profile errors, and metering inaccuracies within each jurisdiction, especially whilst different metering practices abound. It was also noted that the precise design requirements for global aggregation have not yet been settled and could have implications for individual players. Universal support for the settlement rules would be a necessary prerequisite to implementation.

2.3 Common Metering Code of Practice (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?

This proposal was supported by all respondents to the consultation who agreed that a common code of practice would reduce costs and facilitate market entry by new parties. It was also agreed that it would create a useful framework for ensuring the commonality in the implementation of a smart metering programme. It was emphasised that the costs and benefits of any new metering proposals should be carefully assessed before any programme was instigated.

One respondent noted that in addition to a common metering code of practice it would be helpful for there to be a common metering policy. This might cover the boundary between interval and non-interval metering, and the roll out of smart meters to non-interval metered customers. It could also contemplate time of use metering either as an alternative to smart meters or as an interim arrangement.
2.4 Settlement Profiles (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?*

All respondents supported the idea of common profiles that could apply across the island of Ireland. A number of respondents thought that the established programme of research in the RoI (Republic of Ireland) could readily be extended to cover customers in the North, although a word of caution was raised concerning the implications for profiles of different heating fuels in each jurisdiction. This may produce different patterns of consumption for apparently similar customers and the research should test whether this was the case.

It was noted that utilising the same profiles would simplify the forecasting and administrative burdens for new suppliers and thus help facilitate competition. Publication of the profiles was seen as crucial in improving the transparency of the settlement process. It was thought that this might be a relatively “quick win” from the various proposals made in the paper.

The interaction between profiling and global aggregation was also commented upon by a number of respondents. It was suggested that a common set of profiles would need to be derived before global aggregation could be implemented. The possibility of using data gathered from the smart metering trials to develop the profiles was also mentioned as a possibility. The CCNI thought there may be a risk that the expense in developing profiles would prove abortive if smart meters made their use unnecessary.

2.5 SME segmentation and profiling (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?*

Independent suppliers were warily supportive of this idea but some considered the proliferation and complexity of dealing with the subsequent data flows might outweigh the competitive benefits. Some thought that the lack of proper cost reflectivity for certain customer categories positively inhibited competition but it was also observed that creating more diverse profiles would result in some customers paying significantly more for their supplies (and others significantly less!). It was suggested that the problems of price disruption may require changes to be implemented over a period.

Both PESs pointed out that the SME (Small and Medium Enterprise) market is already subject to a significant degree of competition and felt that further regulatory intervention was unnecessary. They both emphasised the view that the market should decide the most appropriate tariff structures for these customers.

Both network operators agreed that more SME profiles would improve the degree of cost reflectivity but they did not support the creation of additional profiles in advance of the introduction of smart meters, where the additional data would provide the opportunity for suppliers to better frame their tariff structures to reflect costs. It was also pointed out that advanced (interval) meters could be extended to larger SME customers thus making redundant any additional profiles. If the SME market segmentation was to be pursued on a load factor basis (as is the case in the GB market) then it was noted that metering in the North does not record maximum demands so profiles could not be allocated to premises on the basis of load factor.
2.6 Harmonisation of distribution network charges (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?

A few respondents saw merit in a common methodology for distribution network charges, in that it would treat the same customer in a similar manner in both jurisdictions. However, with two exceptions none thought this proposal would further competition in that the distribution network charge was borne by all suppliers and thus was akin to a “tax” on suppliers. One of the network owners noted that harmonising distribution charges would make the registration of a customer in either jurisdiction easier and the validation of charges simpler. This would reduce entry costs for new suppliers and thus aid competition. This respondent also noted the need for similar charging methodologies in order to facilitate the alignment of parts of the retail tariff structures. The CCNI thought that the proposal would improve retail competition but would like to see an assessment of the benefits it would produce for customers.

None of the respondents supported the idea of introducing locational signals into distribution charges. In particular the issue of past investment decisions by distributed generation owners were raised, and the fear that the regulatory uncertainty associated with charges would undermine these returns. The effectiveness of connection charges in attracting new load and generation to parts of the network best able to accommodate it was also noted.

One respondent thought a consideration of distribution use of system charges was outside the scope of the review.

2.7 Separation of energy and network charges (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?

Most independent suppliers supported the principle of unbundling the energy and network charges on the bill to make transparent the costs over which the supplier had influence. Some thought this an essential change if smart or time of use metering was to influence customer behaviour in the manner intended. One independent supplier thought that the separation was likely to be of most use to larger customers. Another, whilst supporting the principle, thought that increased information on the bill might be confusing for smaller customers.

The two PESs were less enamoured with the prospect. One claimed that its customer research demonstrated that residential and smaller SME customers wanted to see simple bills and that disaggregating charges on the bill would add to its complexity. Larger customers that had a load management capability may see merit in having their energy charges separated but this prospect was not expected to appeal to smaller customers. They were also concerned at the high cost of modifying their billing systems, and the problems that would arise with the loss of any ability to express the standing charge in the DUoS (Distribution Use of System) tariff as a class average kWh rate.
In contrast network owners are attracted to the idea of showing their charges separately. It was further suggested that separation of PSO and System Support Services (SSS) levies would be appropriate. One expressed concern that separating the kWh charges in its tariff from the energy kWh charge would dilute the overall cost signal in the retail tariff.

The CCNI was supportive of the proposal believing it to be a step towards improving the transparency of the charges on bills and creating a consistent layout for bills. They were also of the view that it would encourage innovation in product offerings and allow customers to make useful comparisons.

2.8 Choice in contract term and indexation (Question 11)

Should customers be permitted to choose from fixed price energy contract terms that could vary from 6 months to 2 years, and which could also include indexation provisions that would help align retail and wholesale energy price? Should the PES be encouraged to offer such a choice?

There was a general sentiment amongst responding parties that the Regulatory Authorities (RAs) should not dictate the form of tariff that a PES could offer, and PES should be given commercial freedom to promote whatever contract terms and indexation provisions it thought the customer would find appropriate. There were one or two independent suppliers who saw risks in this in that it might enable a PES to “lock-in” a customer and thus frustrate the emergence of supply competition and create confusion in customer switching.

The CNII drew attention to a recent customer survey in Northern Ireland (NI) that indicated that whilst almost one half of residential customers wished to see a fixed price in their tariff, over one third would prefer that prices tracked underlying wholesale costs. This respondent therefore supported the view that customers should be given choice in the product offerings that were made available. This research finding seems somewhat at odds with the PES customer research alluded to in the answer to the previous question.

One network owner was concerned over the added complexity that different energy contract terms would bring if there were also separation of the energy and network charges on the bill. One PES also noted the prospective costs of amending their billing system if price indexation were introduced into terms for smaller customers.

2.9 Supply cost allocation (Question 12)

Would there be merit in adopting a common ‘cost to serve’ model in both jurisdictions for allocating the regulated costs of supply between different customer classes?

Three independent suppliers responded to this question. They thought that the additional transparency of PES cost allocation would be useful but were not convinced that the proposal would assist the emergence of competition. One PES believed that the proposal would help in the harmonisation of tariff structures but warned that the nature of supply costs could be different in the two jurisdictions, citing the cost of serving pre-payment customers as a specific example. These differences would need to be recognised. The other PES felt that determining the allocation of supply costs to different customer classes would represent unwarranted regulatory micro-management.
2.10 PES multi-rate tariffs (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?*

Suppliers were generally divided on whether time of use (ToU) tariffs should be deployed to encourage the efficient use of electricity, or whether their application should await the results of the smart metering trials. One PES again raised the costs of amending their billing systems and implied that action in advance of the smart metering trial results being known could lead to changes and costs that might prove abortive. The other PES noted the comment in the consultation paper that the implementation of ToU tariffs was dependent upon the installation of multi-rate metering.

One independent supplier believed that the PESs should continue to offer their existing tariff structures but ToU tariffs could be available as an option. One network owner emphasised the usefulness of a capacity charge to encourage customers to utilise their supplies at an improved load factor.

2.11 A common tariff methodology statement (Question 14)

*Would the publication of a common Tariff Methodology Statement that would apply to each PES be helpful in bringing a convergence in the practices and cost allocation methodologies used by each PES?*

Most independent suppliers were supportive of a common Tariff Methodology Statement (TMS) but emphasised that this should include a detailed exposition of the methodology used for allocating costs. It was noted that a high level description of the methodology was of little use to those seeking to understand the rationale for PES cost allocation.

Neither PES agreed with this proposal although there was agreement with the use of the TMS to make transparent the method of cost allocation. It was suggested that there would only be logic in a common TMS once tariff structures were harmonised. Imposition of a common method would run the risk of introducing ‘regulatory error’ and run counter to establishing comparative competition between the PES.

One of the network owners indicated it was happy for its methodology for deriving distribution charges to be separately published or incorporated into the retail supply TMS.
2.12 General considerations of respondents

A number of respondents commented on the need for regulatory stability in the retail market with the RAAs stepping back from imposing any direct influence on the appropriate form of charge. It was noted that in Northern Ireland the regulatory framework for the PES is an overarching price control but freedom for the PES to formulate its tariffs within this, subject to requirements of cost reflection and non-discrimination or predation in circumstances where the PES was in a dominant position in the market. In the RoI, the PES is subject to direction by the CER (Commission for Energy Regulation) in the formulation of its tariffs.

Transparency in the charging methodologies and allocation processes was another common theme. This was seen as more important by some than the harmonisation of tariff structures. One suggestion was that there should be alignment in the PES tariff setting timetables in each jurisdiction, but not in the tariff structures. It was also suggested that any revision to the formulation of tariffs should await the production of the proposed ‘Road Map’ for price de-regulation. This thought appears to ignore the fact that many of the ideas consulted upon are more concerned with structural aspects of the market place rather than the de-regulation of the PES.

There appeared a general desire for de-regulation of the supply market and to allow innovation to emerge naturally with competitive expression. One respondent noted that street lighting tariffs were not reviewed and expressed concern at the barriers in properly representing low energy street lighting in the charges for unmetered supplies.

Broadly speaking most respondents found the review satisfactory although some thought it should have been extended to cover offerings made by independent suppliers and tariff structures deployed in other markets. Although the evaluation model was seen as useful the lack of any cost/benefit analysis was viewed as a weakness in the specification of the project. The importance of conducting an appropriate assessment of the costs and benefits of any policy change was also highlighted. One PES thought the views of customers should also have been sought as part of the project, whilst the other was not convinced of the need to harmonise tariff structures across the island of Ireland.
3. SUGGESTED WAY FORWARD

3.1 Introduction

The regulatory framework that governs PES tariffs in each jurisdiction is somewhat different. In the RoI the RA ultimately directs the PES to implement its tariff structures and rates. This direction follows a process of close discussion with the PES on any proposed tariff development, and consultation with customers and other industry parties. In Northern Ireland the PES is subject to a price control formula that permits the pass through of costs approved for other regulated parts of the industry, together with approved supply costs and a permitted margin on sales. There is no direct requirement for the PES to adopt a particular format for its tariffs although it is subject to the overarching requirements for tariffs to reflect underlying costs, and not to discriminate between individual customers or classes of customer. These general requirements also apply in the RoI.

In addition to reviewing and approving the structure and level of PES tariffs the regulatory authorities in both jurisdictions also rely on other regulatory instruments. The PES in each jurisdiction is subject to an economic purchase obligation (EPO) in respect of its purchases of wholesale electricity. PES purchases of wholesale electricity are predominantly from the SEM, but more modest supplies may be procured from smaller producers, typically generators that are less than 10MW and that utilise renewable primary energy sources.

Under its EPO each PES is obliged to publish Procurement Guidelines concerning the manner in which they purchase hedges to cover the wholesale supplies of electricity. These guidelines generally require the PES to hedge the bulk of its Pool purchases by way of CfDs, provided these can be procured economically. Currently hedging contracts are both allocated and auctioned, but the relatively coarse granularity of the contract structures means that it is not possible to hedge fully the exposure to Pool prices.

Each PES is also required to publish and keep under review a Tariff Methodology Statement that explains the basis for its tariffs and the manner in which they are derived. The principal tariff methodology objectives are to:

- secure a level of revenue that is adequate to cover prudently incurred costs and an approved margin;
- achieve cost reflectivity and non-discrimination across all customer tariff groups;
- provide appropriate economic price signals to customers so as to encourage the efficient use of energy; and
- formulate tariffs that are transparent, comprehensible and capable of implementation.

In essence regulated electricity tariffs have the twin objectives of recovering a permitted level of revenue, and providing appropriate price signals. The Regulatory Authorities may also require tariff structures to support wider public policy objectives such as promoting competition in supply, enhancing the security of electricity supplies, and protecting the fuel poor.
3.2 Cost reflectivity

Electricity costs are dominated by the costs of generation and to a lesser extent the network costs for the transmission and distribution of the energy. Supply costs in the SEM, including a margin to cover supply risks are a significantly smaller proportion and account for less than 10% of the overall costs of serving domestic customers.

Tariff stability is often held to be a desirable feature for some groups of customers although the CNII customer research is interesting in that it indicates that over a third of customers would prefer variable price tariffs compared to less than one half whose preference is for fixed prices. Given the slimness of the supply margin in retail prices in comparison with the level and volatility of wholesale prices, cost stability can only be achieved if the underlying costs can be hedged or tracked by indexation. Consequently the ability to provide choice in the products that might be offered to a customer, and which is the basis for supply competition, depends crucially on the degree to which the wholesale electricity price volatility can be hedged. Liquidity in the CfD market is a particular issue in this respect.

Even if wholesale costs are fully hedged, for tariffs to be cost reflective the temporal variation of wholesale electricity prices in the SEM requires that measurement should be capable of distinguishing periods when costs are significantly different. It would be economically inefficient to mask the underlying temporal cost differentials that underpin any hedging arrangements.

Existing metering for smaller SME and residential premises is invariably somewhat limited in its capacity to cope with the movements in wholesale electricity prices that change each half-hour and where there is significant variation and volatility both diurnally and seasonally. The prospects for the development of harmonised tariff structures that will facilitate both competition in supply and economic use is dependent upon the sophistication of the measurement, and the capability of the settlement systems to utilise the data subsequently produced.

The prospects for smart metering in encouraging tariff development receive frequent references in the responses to the consultation. The principal feature of a smart meter is the two way communication it affords between the supplier and the customer. Time of use tariff structures require only a single direction of data transfer from the meter to the supplier. It would be unfortunate if a reliance on the roll-out of smart meters became an excuse for inactivity in improving the cost reflectivity of tariff structures. Clearly the ability for a tariff structure to reflect costs will be dependent upon the number of time periods that can be separately measured economically.

3.3 Review proposals

The tariff review advanced a number of proposals that might assist the harmonisation of PES tariffs. These were grouped in three sections. In making these proposals we were mindful of the RAs objective to promote competition in the supply of electricity by developing a larger ‘retail space’ that might be more attractive to suppliers as opposed to two distinct retail markets, and a desire to see consistency in the treatment of customers throughout the island of Ireland. Our suggested way forward considers the prospects for implementing these proposals in the light of the responses to the consultation.
3.4 All island market structure

As we noted in our previous paper a number of the propositions interact and inevitably progress on some will be dependent on the progress made on others. The three ideas grouped under market structure were to develop the bedrock of measurement, management of wholesale energy risk, and settlement. These are all fundamental to the retail businesses and the pace at which the other harmonising propositions can proceed is likely to be constrained by them. Generally there is support in principle for all three of these ideas, and indeed two of them, enhancement of CfD liquidity and global aggregation are being pursued in some manner at the present time.

3.4.1 Contract market liquidity

Although all respondents were keen to see increased liquidity in the CfD market, the idea of using the EFA was seen as a useful adjunct to the current auctions, although it was not viewed as a panacea to improving contract market liquidity. Clearly for a CfD to be effectively traded it must be generally accepted by the market. The purpose of the EFA contract with its fine granularity was to enable supply businesses to better match the expected demand of their customers to the contract cover procured. The four standard forms of annual/quarterly CfDs that currently prevail cannot possibly do this.

The problem of encouraging more liquidity is one of both volume and granularity. The volume of contracts traded will be a function of the desire of parties to re-optimise their contracted position as their demand or output forecasts change. To properly hedge their positions parties will need to obtain a better match between the anticipated physical position and the contracted position. This requires contract shapes with a finer granularity than are currently available. Thus improving the granularity of the contract cover that is traded should help encourage an increase in contract volume.

The establishment of an electronic platform for the trading of CfDs is a useful step in making the CfD market more liquid. If parties have reservations about the form of the EFA contract then it might be best to establish a trading committee that can describe a standard form of CfD that they would find most useful to hedge their pool price exposure. Granularity of the four standard forms is a concern. As one respondent noted the ability of suppliers to innovate in tariff structures that customers will find useful is dependent upon the ability of the supply business to hedge its pool price exposure. This will be as true for the PES as the independent supplier; perhaps more so because of the predominance of domestic load in its supply portfolio.

3.4.2 Global aggregation

Global aggregation is a methodology that shares the error of translating the imputed half hourly volumes for customers equipped with non-interval metering at a collection of Grid Supply Points (GSPs) between all the suppliers of those customers. Essentially the approach is to convert the volume of non-interval metered energy over a period into half hourly volumes using a profile of consumption for each class of customer. These estimated half hourly volumes are then adjusted back to the GSP level using pre-determined loss factors. The difference between this calculated aggregate figure in each settlement period at the GSP level and the half-hourly GSP metered quantity, less the interval metered consumption similarly loss adjusted at those GSPs, is then applied as a group correction factor to all non-interval metered consumption.
The principle of global aggregation is universally accepted and there is a process underway that will eventually displace the PESs as managers of the settlement errors of all supply businesses. However, the consultation responses have demonstrated that there are a number of aspects that must be must be considered in designing the settlement processes for global aggregation. In the context of this review the policy for the development of settlement profiles has been highlighted as having a significant influence on the design. Profiles are considered further below but agreement on their future evolution is going to be an essential feature of the global aggregation specification.

Respondents based in Northern Ireland have suggested that global aggregation should be ring fenced within each jurisdiction to prevent different meter reading practices and the application of losses distorting liabilities in the other jurisdiction. If the GB model is being contemplated then this should not be an issue. Global aggregation is generally conducted for a group of grid supply points and thus there should be no interaction between adjacent groups of GSPs, and hence no interaction between customers in the two jurisdictions.

3.4.3 Metering Code of Practice

It is axiomatic that the basis of measurement of electricity consumption will dictate the structure of tariffs. The universal support for a common metering code of practice by respondents is to be welcomed. A cross jurisdictional Panel to align the Metering Codes of Practice needs to be instigated if further divergence is to be avoided in the development of smart metering policies, time of use metering, and prepayment arrangements. An aspect that such a panel might address is how advanced time of use meters could be deployed in the event that the smart metering trials demonstrate limitations in the technology or delay in implementation.

The implicit relationship between wholesale costs in the SEM and time dictates that time of use should be a major attribute of any retail tariff structure. Hence it follows that time of use measurement is an essential, albeit not the only requirement for creating an economically efficient tariff structure. Tariff innovation for those customers who are prepared to change their behaviour for their own benefit and that of the system should not be frustrated by the lack of any alternative metering arrangement to those already available or promised when smart metering is eventually introduced. The policy of fitting 4-rate meters in all new and replacement installations in Northern Ireland could be a useful stepping stone to providing an interim arrangement pending the roll-out of a smart metering programme.

3.5 All island regulatory proposals

The second grouping of proposals was concerned with the regulation of the supply businesses and the settlement of their transactions. They are, therefore, likely to be implemented by changes to the licences of all industry parties in both jurisdictions, and the settlement arrangements to which these parties will be subjected. The proposals therefore have implications for both independent suppliers and PES.

3.5.1 Common profiles for class demands

The use of profiles for settling pool energy purchases has proved a necessary feature for the settlement of the costs of supplying non-interval metered customers. However, the weakness of profiles as a settlement device should also be recognised, especially in a market where competition is emerging. Some of these have been raised by respondents who generally support the principle of using common profiles across the island. Profiles will ‘dumb down’ the accuracy of cost reflectivity to individual customers and provide
opportunities for cherry picking of low cost to serve customers by new suppliers. Whilst the errors in applying profiles to domestic customers may not be great given the relatively narrow band of consumption by individual households, and the diversity effect that arises from a significant number, this may not be the case for the SME sector where the size and pattern of individual customer consumptions display considerable variability.

Perhaps the most significant point to emerge from respondents is the need to publish the profile data so suppliers can better estimate their wholesale energy needs. This happens in the RoI but not in NI. GB market profiles do not exist as pre-determined patterns of consumption but as a set of algorithms which are applied to a geographic collection of meter points. A profile expressed as a pre-determined consumption pattern has the merit of making demand forecasting easier but will not be responsive to temperature and other parameters thus increasing the error that must be dealt with through the global aggregation process.

The use of a common set of profiles, or profiling algorithms that can be universally applied is obviously desirable for customer classes that show similar patterns of consumption across the island. The programme of research in the RoI is a valuable starting point but needs to be expanded to demonstrate where there is congruence between jurisdictions. This research is currently undertaken by the network companies, but drawing on the experience of supply businesses in ensuring that class boundaries are appropriately drawn would also seem eminently sensible.

3.5.2 Proliferation of SME profiles

The SME sector is highly diverse both in the size and consumption characteristics of its customers. Additional profiles for groups of customers should make tariff structures more cost reflective, but the cost of handling additional data could be significant.

The weaknesses associated with profiles alluded to above are exacerbated for the larger end of the SME market. Although a carefully selected profile will better reflect costs to segments of this market, respondents are wise to be wary about a proliferation of profiles. Profiles specific to a type of premises may lead to difficult definitional problems which would require regulatory intervention for their resolution. There would also be an issue about cost reflectivity for those types of premises that did not readily fall into a defined category.

Whilst the use of profiles for smaller SME premises seems inevitable for the medium term, a better approach for larger SME premises might be to consider extending the use of interval metering to significantly lower levels of consumption. Historically the criterion for interval metering has aligned with the requirement for metering current transformers. This is probably the origins of the 70kVA and 50kVA thresholds in Northern Ireland and the Republic of Ireland respectively.

A consumption based threshold, say 100MWh per annum, might be a better approach leaving the application of profiles to smaller premises where there is less variability in customer demand. The number of premises that would be impacted by such a change needs to be properly estimated but could be only a few hundred. At this level of consumption the metering cost to the customer would be relatively infinitesimal and more than outweighed by the potential savings that could be made by responding to the price signals in the tariff that could then apply.
3.5.3 Distribution use of system charges

Supply businesses traditionally show little interest in the formulation of DUoS charges. It is therefore not surprising to see little enthusiasm for the proposal to align the DUoS charging methodologies in each jurisdiction, although the merit of treating customers similarly across the island was recognised in the responses. There was no support for the proposal to consider locational signals in the charges which would create additional complexity in billing systems.

Although there is no competitive impact from DUoS charges, the lack of interest is somewhat unfortunate for a cost that constitutes a quarter of the overall domestic electricity price. DUoS charges are also fundamentally different to wholesale electricity costs in that they reflect an allocation of an allowed revenue intended to provide the network owner with a reasonable rate of return. In contrast wholesale electricity costs should reflect the real time movement in the resource costs of marginal production.

The need for harmonisation in distribution charges is demonstrated by the different treatment that the DUoS tariffs receive in the PES charging arrangements. In the RoI the distribution charge is reflected directly in the tariff whereas in Northern Ireland the PES converts the fixed charge to a commodity rate. This does not fit well with the RAs declared intent in section 6 of their Memorandum of Understanding to regulate the retail market so as to give ‘equal treatment to customers regardless of their location’. This is not to imply that either practice is inappropriate or incorrect. However, since the DUoS allocation is regulated it would seem fitting for the correct structure of DUoS charges to be settled in the distribution price control review and for supply businesses then simply to pass through those regulated decisions to their customers.

The prospects for locational signals in distribution charges are not welcomed by suppliers, presumably on the grounds of the administrative burden such a signal would bring. It may be premature to contemplate the consequences for PES retail tariffs of introducing locational signals into distribution pricing, or even if such signals would create economic benefit. However, if there were a significant growth in microgeneration then it may become appropriate to reflect the support local generation could provide to the local distribution network. These benefits should ideally be symmetrical with distribution charges for demand. We would accept that such considerations may be outside the timescales of this review.

The structure of DUoS charges must ultimately be approved by the RA in each jurisdiction. We would suggest that the RAs liaise closely in their price control negotiations with their licensed distribution network owners to ensure consistency in the treatment of specific components of the DUoS tariffs such as the use of standing charges, capacity charges, and the number of kWh rates used to reflect costs. The DUoS charging models in each jurisdiction are broadly similar and the price control negotiations could also encourage convergence of these.
3.6 PES regulatory proposals

We envisaged that the third group of proposals would be implemented directly through the regulation of the PES. They might thus be viewed as being capable of relatively quick implementation although many of the suggestions are dependent on developments in the market framework.

3.6.1 Separation of energy and network charges

The proposal for separating energy and network charges in the customer’s bill is based on the idea that the principal function of a supply business is to manage the energy needs of its customer. In providing for the connection of the customer to a distribution network and for the use of that network the supplier acts in the role of an agent for the distribution business whose charges are price regulated. As has been observed, there is also a distinction in the nature of the energy and network charges in that the former are directly linked to wholesale resource costs whereas the latter are an allocation of the overall revenue that the distributor requires to make a return on past investment. Separating the charges on the bill would enable the supply business to focus on innovations in hedging the energy costs whilst retaining the cost reflectivity of the tariff.

We see this as an important step in liberalising the retail market and facilitating the introduction of more economic tariff structures. It is encouraging that most independent suppliers agree with this view but the PESs have raised concerns over the consequent complexity of the charge to the customer, and the costs of amending the established billing systems. If customer behaviour is to change then it is axiomatic that the customer must be made aware of the changing cost of supply over time, and the basis on which network charges are allocated. Transparency of the charges on the bill would seem to be an important step in achieving this.

The costs of amending established billing systems are a continual brake on tariff innovation. Changes are inevitably evolutionary and this proposal should not be viewed in isolation to other developments suggested here. For this reason it would be helpful if there was a clear regulatory vision as to how tariff structures should develop to better reflect costs whilst meeting wider policy objectives such as fuel poverty, sustainability and security of supplies. It would be unfortunate if the inertia created by extant systems were to frustrate the achievement of these wider policy goals.

3.6.2 Choice of PES contract terms

Generally we support the view that the market framework should encourage suppliers to offer terms that they believe will best serve the needs of their customers on a non-discriminatory basis given the nature of their supply costs. Providing choice to customers in the term and movement of prices would seem an important attribute of a competitive market. As has been noted the regulatory approach is somewhat different between the two jurisdictions. Whilst this freedom technically exists for the PES in Northern Ireland it would require a direction from the CER in the RoI.

Although the emergence of such offerings would depend upon other developments in the market, such as improvements in CfD liquidity, the availability of appropriate metering, and the separation of charges on the bill, we are of the view that providing this freedom to both PESs within the terms of their Licences would support the emergence of tariff structures better suited to the needs of customers. This will be especially the case when time of use tariffs become established either in conjunction with smart meters or through an extension of interval metering.
3.6.3 Common cost to serve model

The level of PES supply costs that can be recovered are regulated in both jurisdictions. Commonality in the treatment of costs in the supply price control, such as the operation of call centres, and the incentives attached to them, would help ensure that these costs were reflected similarly in both jurisdictions. The level of these costs and the margins associated with them are a matter for consideration in conjunction with the future of the PES k-factor, but transparency in the allocation of these costs is desirable and should be described in the Tariff Methodology Statement.

3.6.4 Time of use tariff structures

We are told that the block structures in the ESB CS (Electricity Supply Board Customer Supply) tariffs are to be phased out over three years. This is a welcome move in making tariffs more cost reflective and aligning the structures in both jurisdictions. However, the use of only two kWh rates for the general body of non-interval metered customers provides only a limited price signal given the variability of wholesale prices in the SEM. Two-rate metering still leaves considerable scope for improvements in cost reflection.

Our suggestion was that a more economic tariff structure could be achieved by time of use rates in place of a maximum demand charge. One respondent noted that MD (Maximum Demand) charges were appropriate in encouraging customers to limit peak demands. Provided DUoS charges properly reflect network capacity costs, it is the after diversity demand of all customers that will dictate the need for generation capacity and this might be more effectively assessed through a peak kWh charge than an individual customer MD charge.

The establishment of the SEM as a Pool and the method chosen for the treatment of the capacity credit means that virtually all wholesale electricity costs now vary with time. ToU rates would therefore seem the obvious structure to reflect wholesale costs. Smart metering will naturally lead to ToU tariffs, but a smart metering roll-out may not be implemented for several years. If a Panel were established to align the Metering Codes of Practice then there could be merit in it considering the prospects for multi-rate meters as an interim arrangement when existing meters are replaced or new supplies provided.

The number of meter registers requires careful consideration to ensure systemic changes in cost can be recognised. This consideration might review the adoption on an all island basis of the Northern Ireland policy of using 4-rate meters for new and replacement installations as an intermediate stage. Our thoughts on equipping larger SME customers with interval metering were noted above.

3.6.5 Tariff Methodology Statements

The PES Tariff Methodology Statement became a feature of the regulatory framework at the start of the SEM. Although PESs are keen to retain their individual formats for the Statement there is currently a remarkable similarity between the forms in both jurisdictions. This is unsurprising given the short period of evolution since the start of the SEM and the same starting points in terms of the Licence obligations of cost reflectivity and non-discrimination. Independent suppliers commented that it is the transparency of the pricing methodologies and the associated cost allocation rather than the form of the Statement that is crucial.
Our view is that the TMS is likely to evolve as the SEM develops. Its purpose should be to explain the methodology by which all tariffs are derived and thus give a closer insight into how tariffs are framed. There is certainly scope for its development in this respect. Creating a common template would enable the TMS to evolve in a uniform fashion with similar details being apparent in each jurisdiction. A template could be prescribed by the RAs with this objective in mind.

The offer by one of the network owners to publish their charging methodology is particularly constructive. Placing a similar obligation on the network companies to provide a written description of the methodology they employ to derive use of system charges would be a helpful step in improving the transparency of retail tariffs.

### 3.7 The way forward in summary

In the light of the consultation responses a suggested way forward is therefore:

#### 3.7.1 All island market structure

- Establish a Trading Committee of market participants that would specify a short term CfD form that could be traded on the Tullett Prebon platform for the purpose of improving the granularity of contract cover, and thus encourage higher traded volumes.
- Progress the development of a system of Global Aggregation whilst being cognisant of the need for common profiling across the island of Ireland as an integral part of the specification.
- Establish a cross jurisdictional Panel to develop a common Metering Code of Practice. This Panel might be tasked with considering how metering that can deliver appropriate time of use cost signals might be implemented as an interim to the roll-out of smart metering.

#### 3.7.2 All island regulatory proposals

- Extend the established programme of developing profiles in the RoI to become an all island programme under the oversight of a steering group that included supply businesses. Ensure that all profiles used in the settlement of charges are published.
- Retain a relatively few profiles for the smaller end of the SME sector, but consider extending interval (advanced) metering for supplies to larger premises, with a consumption threshold to complement the capacity threshold that currently governs the installation of interval meters.
- Ensure close liaison between the RAs when setting the distribution price control and approving the DUoS tariff stricture. As part of the price control review the appropriateness of the various tariff features such as standing charges in DUoS tariffs and their purpose in the allocation of costs. Defer consideration of locational signals in distribution use of system tariffs until low carbon policies are better developed.
3.7.3  **PES regulatory proposals**

- Require PES to separate their network and energy charges on bills to customers, possibly in tandem with the implementation of the next distribution price control.

- Permit PES to offer longer and shorter contract terms as an alternative to a one year tariff provided it can be demonstrated that these are hedged to the same degree as the annual offerings. This may be dependent on improvements in CfD liquidity.

- Develop a common template for the allocation to different customer classes of supply costs and the associated margin as part of the supply cost price control.

- Generally promulgate the time of use cost pattern in the SEM so as to encourage customer pressure for ToU metering. If a metering code of practice panel is established then task it with considering the specification for ToU meters for smaller premises as an interim to the roll-out of smart meters.

- Require PES to produce its Tariff Methodology Statement in accordance with a template jointly approved by the RAs. As a parallel exercise obligate the network company in each jurisdiction to produce a similar description of the charging methodologies and cost allocation principles it adopts in constructing DUoS tariffs.
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