

**NIE Energy Limited
Power Procurement Business (PPB)**

**Proposed RAs option for all-island
harmonised Transmission Loss
Adjustment Factors (TLAFs)**

Consultation Paper

SEM-10-039

Response by NIE Energy (PPB)

12 August 2010.



Introduction

NIE Energy – Power Procurement Business (“PPB”) welcomes the opportunity to respond to the consultation paper on the Proposed RAs option for harmonised Transmission Loss Adjustment Factors (TLAFs).

General Comments

The process does not reflect good regulatory practice

PPB has a major concern with the fundamental basis of the consultation process. The consultation paper purports to be a consultation on the “proposed / minded” decision to adopt uniform TLAFs from 1 October 2010. However this conflicts with the minutes of the SEM Committee meeting number 27, held on 29 April 2010, that were approved at the SEM committee meeting number 28, held on 27 May 2010 (and published on 1 June 2010), which clearly state that the proposal to adopt uniform losses was approved by the SEMC. This raises concerns over the veracity of the regulatory process, which, as a consequence, increases the perception of regulatory risk, that is an unwelcome development in the market, and which is likely to be disadvantageous to customers in the longer term.

Furthermore, regulatory uncertainty is increased by the decision to adopt uniform TLAFs, given that (as per para 1 of the proposed decision paper) the stated objective in the SEM High Level Design was for harmonised transmission arrangements to provide locational signals to users that reflect the costs that they impose on the transmission system. To date the RAs have insisted upon the sanctity of the SEM High Level Design yet in this instance, seek to amend it with limited consultation and through a whimsical decision to adopt uniform TLAFs.

It is difficult to identify how the decision complies with the Statutory Duties of the SEM Committee.

The principal objective of the SEMC, as set out in Article 9 of the Electricity (Single Electricity Market) (Northern Ireland) Order 2007 (the “Order”) is to “*protect the interests of consumers of electricity in Northern Ireland and Ireland ...*”. The primary objective is generally interpreted to mean seeking to secure the lowest possible prices for customers within the bounds of ensuring security of supply, promoting efficiency and economy, and with further considerations in relation to delivering sustainable long-term supplies and having regard to the effect on the environment.

It is clear from the consultation paper (and from more general discussion with the RAs) that there was little or no analysis conducted to determine the impact of adopting uniform TLAFs prior to the SEMC’s “approval” while the consultation paper emphasises (in section 2.6) that the implementation of the longer term proposal is contingent upon a satisfactory outcome to the impact assessment. The duties and objectives of the SEMC require that this rigour is applied to each decision, yet given the paucity of information available to the SEMC, it is impossible to comprehend how it could have made the decision to adopt uniform TLAFs from October 2010.

The SEMC must also, pursuant to Article 9(6) of the Order, not discriminate unfairly between authorised persons. The adoption of uniform TLAFs unfairly discriminates in favour of certain generators in poor locations to the detriment of other generators in good locations and in our assessment, this clearly represents unfair discrimination.

High level impact assessment

As we note above, the main objective of the SEMC is to protect the interests of customers. As price is generally the primary interest of customers, one would have expected the impact of the decision on customer prices to have been the key consideration.

Impact on prices to consumers

Our analysis shows that the impact of adopting a uniform TLAF of 0.98 is to increase SMP by up to 3%. Analysis was also presented at the RAs TLAF Workshop on 26 July 2010 (the "TLAF Workshop") by BGE and Energia (both Energia's own internal analysis and independent analysis procured from Redpoint) that supported and confirmed PPB's modelling conclusion that SMPs will be higher in 2010/11 if uniform TLAFs are adopted. This will have a direct impact on customers' prices.

As the decision will affect the market schedule, it is likely to increase the level (in MW) of constrained despatch and is also likely to increase the compensation amounts payable (i.e. the bid prices of generators who currently have low TLAFs will reduce when its TLAF is increased to 0.98 and hence the compensation payment, which is the difference between SMP and their bid price, will increase). Hence conceptually, the overall cost of imperfections is almost certain to increase which in turn will further increase costs for customers. This was confirmed by the TSOs at the TLAF Workshop who stated the increase for 2010/11 was forecast as 2-3%.

In conclusion, the overall cost impact for customers is higher energy prices and higher imperfections charges.

The overall impact

The statutory requirements on the SEMC also require that it shall carry out its principal objective in a manner which promotes efficiency and economy and which has regard to the effect on the environment. However, the consequence of uniform TLAFs is that efficient despatch cannot be achieved and network losses will be higher, both of which will have a negative impact on the environment.

Given the negative impact on prices, on efficiency and on the environment, we do not see how the adoption of Uniform TLAFs could be determined by the SEMC to be in accordance with its objectives.

Specific Impact on Northern Ireland Customers

In addition to the general increases to wholesale electricity prices and the cost of imperfections, Northern Ireland customers face a further burden as a consequence of the decision to adopt Uniform TLAFs from October 2010 as it will result in a significant reduction in revenue for all of the generating units PPB bids into the SEM.

As energy payments for generating units are determined using the “Loss-Adjusted Market Schedule Quantity” (as per paragraph 4.93 of the T&SC), a lower TLAF results in lower revenues for PPB’s generating units. Setting aside the potential for Market Schedule Quantities (MSQs) to reduce as a result of adopting uniform TLAFs, the impact of simply substituting a TLAF of 0.98 into the revenue calculation is to reduce PPB’s revenues by £4-5m in the 2010/11 tariff year (based on current commodity prices – the loss increases as commodity prices and SMPs increase).

Similarly capacity payments are determined using the “Loss-Adjusted Eligible Availability” (as per paragraph 4.111 of the T&SC) where again a lower TLAF results in lower capacity revenues for PPB. Substituting a TLAF of 0.98 into the Capacity payments calculation shows that PPB’s capacity revenues would be reduced by c£1.5m.

In aggregate, the adoption of Uniform TLAFs will reduce PPB’s SEM revenues by c£6m in 2010/11 which will be recovered through an equivalent increase to PSO charges for NI customers. It does not appear to us that such an outcome is consistent with the SEMC’s objective of “*protecting the interests of consumers of electricity in Northern Ireland ...*”, nor is it consistent with the SEMC’s duties to have regard to “*the need to avoid unfair discrimination between consumers in Northern Ireland and consumers in Ireland*”.

Timing of the Decision

The timing of the decision is also extremely poor in relation to the contract market that operates in parallel and over a much longer time horizon than the SEM. At the date of the consultation paper being issued, the Directed Contracts process for the 2010/11 tariff year was complete and PPB had already sold c55% of the Non-Directed Contract (NDC) volume it had planned to sell. Both PPB and ESBPG suspended auctions in early June following the publication of the SEMC meeting minutes that referenced the decision to adopt uniform TLAFs to enable re-modelling of the market to be completed. While auctions subsequently recommenced, PPB had to reduce the volume of CfDs it offered for 2010/11 in order to reflect the impact of uniform TLAFs. Furthermore, those CfD sales that had been transacted prior to the decision have effectively been under-priced and hence the lateness of the decision has had a significant commercial impact on the CfD market and increases the regulatory risk of operating in the SEM, which will ultimately be to the disadvantage of customers.

Given the significance of the impact of TLAFs on the contract market, which operates over a much longer horizon than the SEM, good regulatory practice would be for much greater notice of any such fundamental change to be given, to facilitate the efficient functioning of that market.

The timing of the consultation is also unhelpful in respect of the general tariff timetable that is co-ordinated by NIAUR and which required PPB to submit detailed cost and revenue forecasts at the end of June 2010, with tariff approval in the first week of August. As we noted above, the impact of uniform TLAFs for PPB is lower market revenues for both energy and capacity which results in higher PSO charges to Northern Ireland consumers. As a consequence, tariffs for NI customers have been approved based on revenue estimates that reflect the RAs “minded” decision to adopt uniform TLAFs and therefore incorporate the additional costs for the 2010/11 tariff year (although this could still be corrected if the proposal was abandoned) to the detriment of customers.

Specific Comments

Section 2.1 states that the RA’s view of the principal objective of transmission losses arrangements is to deliver efficient generation despatch in an optimised close to real-time fashion. In PPB’s view the objective of any individual aspect of the market must be aligned with and support the SEMC’s principal objective of protecting the interests of consumers.

We also agree that there will inevitably be trade-offs between the delivery of efficient despatch and the costs involved in achieving that. However, this should be captured through any cost/benefit analysis of the cost of delivery compared to the efficiency gain.

It is also unclear why concerns over the TLAF arrangements have suddenly become more “pressing” now than they have been since the commencement of the market and why that necessitates a short term solution rather than concentrating on the identification of an enduring solution that addresses the concerns with the current arrangements (e.g. volatility), and which also operates in customers’ interests.

RA’s views on the TSOs proposed models

The RAs stress their opinion that, where possible, the short-term solution should be as close as possible to the long term solution. However, in the absence of knowing what the long term solution is amongst a diverse range of as yet unquantified options, it is impossible to identify a short-term arrangement that would be a step in the direction of the enduring solution, never mind one that is close to it.

RA’s views on the long term options

In its views on the long-term options, the RAs state that “*it is apparent that the existing methodology is not promoting efficient despatch*” yet no substantive evidence is provided to support the statement. During the TSOs’ various consultations and workshops, PPB and others asked the TSOs to provide an ex-post assessment of the materiality of the unreliability of the TLAFs but no such analysis has been completed and hence there is no basis to the RA’s statement.

The RAs rely upon this assertion to then pledge their support to exploring an approach that divorces the treatment of losses in the market and in despatch. Again there is no analysis or evidence to support this view and it is clear from other

statements in the paper that detailed analysis of this option has yet to be undertaken. Indeed the RAs state later in the section that it would not be worthwhile pursuing the option if the costs outweighed the benefits.

RAs views on the short term options

In the assessment of the short term options, the RAs state the importance of the objectives of the workstream, namely increased predictability, and transparency and reduced volatility for market participants. However, these are narrow objectives and we consider that while they are desirable objectives for generator participants, any assessment of the proposals by the SEMC must be made on the basis of its much wider primary objective and statutory duties.

The RAs state that the maintenance of the status quo would not be in keeping with the RAs workstream objectives but this fails to recognise the primary objective of the SEMC.

The RAs state that initial modelling of an iterative approach to the current methodology made little difference to the final TLAFs. This would therefore imply that the current methodology, although volatile, is relatively robust and as we noted earlier, there has been no ex-post validation to aid consideration of the validity and integrity of the TLAFs used in any year.

The RAs state that a critical principle they are adhering to is that reform will only be progressed if it offers progress towards a preferred long term solution or is an improvement on existing TLAFs. It is clear that while “splitting” is to be explored further, the long term solution remains uncertain and hence there is no basis to assume that the adoption of uniform TLAFs for 2010/11 is a step in the right direction and neither is there any evidence that uniform TLAFs represent an improvement on the existing methodology, particularly when considered from the perspective of the impact on prices to consumers and the discrimination it introduces between generators.

In the context of this “critical principle”, the RAs assessment of the TSO’s proposal to adopt the “Compression Factor option” notes that cost reflectivity and short term despatch efficiency would be reduced and the RAs express their view that while helping to dampen volatility, the “*approach is arbitrary and does not address the underlying sources of sensitivity within the methodology*”. At the TLAF Workshop the RAs also stated that uniform TLAFs are the most extreme variant of Compression. It is therefore impossible to reconcile why, when Compression is determined by the RAs as arbitrary and not addressing the issues, that in their words, the most extreme form of compression, namely uniform TLAFs, is then proposed.

RAs considerations regarding Uniform TLAFs

Locational Loss factors and economic despatch

The paper states that “*It is possible that these (current TLAFs) are not much more representative of real-time losses than a uniform loss factor would be especially in future scenarios with large quantities of wind generation*”. The uncertainty, highlighted by this statement, confirms that there is no evidence or analysis to

identify whether uniform TLAFs would represent an improvement over the existing methodology.

The consideration of “future scenarios with high quantities of wind” is also irrelevant to the matter being considered, namely TLAFs for 2010/11, and we would expect this will be considered in relation to the enduring solution as part of the investigation and analysis.

Uncertainty also remains over the uniform TLAF figure being proposed. The consultation paper, which originally sought replies by 16 July 2010, indicates the average system losses have been estimated by the TSOs to be approximately 2% but indicate this analysis would be published separately during the consultation phase (i.e. presumably before 16 July). However no such analysis has been published and the indication given at the TLAF Workshop was that the figure lies somewhere in the range 0.975 to 0.98. The TSO analysis was finally published on the evening of 11 August 2010 and shows average losses of 2.14% (i.e. a uniform TLAF of 0.9786) although it also notes that analysis is continuing. It is not satisfactory that the precise proposal remains uncertain and it is unhelpful that the TSO analysis was published so late. This again raises major concerns around the “minded” decision process as it is impossible to accurately assess the impact on consumers (and individual market participants) in the absence of knowing the uniform TLAF that is to be applied.

The statement that “*Generator’s flows contribute to losses on the transmission network*” is a factual one and it is therefore correct that generators located at a poor location should bear this cost rather than to seek to re-allocate that cost to generators who are generating adjacent to demand, thereby discriminating between generators. TLAFs should be considered as part of any capital investment decision and a poor decision by a generator in relation to location should not be effectively subsidised by other participants via a change to the current regime. On the matter of trading point, there are likely to be other factors to consider, including the impact on the error supplier unit.

The suggestion that Generators receive individual loss factors that are grandfathered for some period should be considered further as part of the process to determine an appropriate enduring solution as one possible mechanism to effectively hedge the risk.

Locational Loss factors and Signals to Generators

The consultation paper notes that there is a concern that in responding to a “good locational signal” the presence of a generator impacts upon the calculation of losses to such an extent that they get a poor loss factor. However, this is surely a factor any rational investor would consider as part of their analysis and it would be expected that “over-build” beyond the optimum will depress the signal, whether that be a locational signal or a general signal (e.g. capacity payments). The ESB presentation at the TLAF Workshop shows that the optimum level of generation in Cork is 385MW and therefore it is not surprising that the construction of c850MW has a detrimental impact on the TLAF for Cork generators.

It is interesting to note the comments that the RAs should only be concerned (on behalf of consumers) where network or wholesale costs are higher with one portfolio compared to another. This is in contradiction to the decision to adopt uniform TLAFs that will increase costs to consumers in 2010/11 which is the only year it is planned the regime will apply. Furthermore, on the matter of the overall minimisation of costs, PPB has repeatedly stated that a Shallow Connection policy is not conducive to least cost development of the network. However, when we have raised this matter the RAs have stated that this is a principle of the SEM High Level Design and is therefore not up for re-consideration. However, the High Level Design also states (in Section 3.8) that there will be locational TLAFs yet this is contravened by the decision to adopt uniform TLAFs.

The paper notes that the long term system development plan has already largely been set. However, while we understand this to be the case in RoI, the development plan for Northern Ireland is still being considered.

The paper states that *“in responses to SEM-09-107 and feedback in industry forums held as part of the consultation, Generators almost unanimously supported the move to uniform loss factors”*. This statement is incorrect as it is clear from a review of the responses that only 10 of the 21 respondents support uniform TLAFs (noting that the majority of these are wind generators or representatives thereof) and some of those are only supportive to a degree. In our review, 5 of the remaining respondents are vehemently opposed to uniform TLAFs and the remaining 6 respondents express no particular view on uniform TLAFs. This could not in any sense be described as a “unanimous” view and to describe it as such is misleading.

RAs’ proposed decision

TLAFs to apply from October 2010

The RAs indicate that moving to a uniform TLAF of 0.98 (subject to the final TSO analysis) is being proposed on the basis that it meets the RAs objectives for predictability, stability and transparency. As a generator participant in the SEM who is exposed to varying TLAFs, we acknowledge the need to address these matters. However, the SEMC’s primary objective is to protect the interests of consumers and given the distinct lack of the analysis by the RAs/SEMC into the impact of the decision on consumers, it is difficult to understand how the SEMC decided to adopt the proposal in the absence of such analysis.

Furthermore, it is clear from our analysis that uniform TLAFs will result in an increase in SMPs of up to 3% in 2010/11 and it was stated by both BGE and Energia at the TLAF Workshop that their modelling (and in the case of Energia, additional independent modelling procured from Redpoint) also shows increased SMPs in 2010/11. Similarly, the TSOs reported at the TLAF Workshop that their analysis shows an increase in the cost of constraints and hence imperfections charges for 2010/11 of 2-3%. Both of these mean costs to all consumers will be higher if uniform TLAFs are implemented.

Separately, the costs to Northern Ireland consumers will be further increased as a result of reductions to the Capacity and Energy revenues earned in the SEM by PPB and which will be recovered from all Northern Ireland consumers through higher

PSO charges. This is relevant in respect of the SEMC's objectives to protect the interests of consumers and to have regard to the need to avoid unfair discrimination between consumers in Northern Ireland and consumers in Ireland.

TLAFs from October 2011

The plan to fully analyse and assess the impact of the splitting proposal is welcome but PPB considers that a number of options should be assessed to ensure a viable enduring option can be identified. Again we would expect the appraisal to consider the effect on consumers as its primary focus with a thorough cost/benefit appraisal.

On further consideration of the splitting proposal, PPB has concerns that while notionally the use of close to real-time losses would deliver efficient actual despatch, consumers will effectively continue to pay for inefficient despatch as a consequence of the imperfections costs that will capture the constraint costs arising from the use of uniform TLAFs in the market schedule as they deviate from those derived for use in the actual despatch. The IT costs for systems to determine close to real-time losses could also be prohibitive and it is not clear if the arrangements would impact on market participants' systems. It could also negatively affect market transparency by making real-time TSO decisions even more opaque than they are currently.

As noted in Section 2.5.1, the list of matters to be considered is not exhaustive and two further matters that should be considered are (i) the impact on CPM revenues, and (ii) any impact on the Error Supplier Unit (also relevant given the Global Settlement project).

We would also stress the need to recognise the impact of the TLAF decision on the contract market and the need to provide adequate notice of change to minimise the risks for participants in that market.

Conclusions

The regulatory process surrounding the decision to adopt uniform TLAFs has been very poor and the decision appears to have been taken in the absence of any material analysis of the impact and consequences. The decision is completely at odds with the SEM High Level Design, the stability of which is critical to building confidence in the market. The decision is also untimely given that the majority of CfDs for 2010/11 are now sold and tariffs are in the process of being finalised. Such unexpected and inexpedient over-turning of key market design principles, without appropriate consultation and due consideration combined with the disregard for proper regulatory process, can only increase the regulatory risk in the market that will ultimately disadvantage consumers.

It is impossible to fathom how the decision has been made in accordance with the statutory duties of the SEMC. A cursory conceptual consideration of the impact indicated to us that prices for all consumers would increase and this is borne out by the actual analysis we have concluded and as others have confirmed from their modelling. Furthermore, as the intent is to determine and implement an enduring solution from October 2011, such short-term cost cannot be offset by some longer-term benefit since one would expect that will be a benefit of the enduring solution, and it is impossible to perceive how the regulatory uncertainty generated by such a whimsical decision would do anything other than increase the cost of capital.

The decision is also discriminatory and results in a cross-subsidy from generators in good network locations to those in poor locations. The SEMC, in carrying out its functions, has an obligation not to discriminate unfairly between authorised persons and it is impossible to identify how this is satisfied with uniform TLAFs. In this context, while initially it is PPB as a generator participant in the market who will be subsidising generators in poor locations, the actual cost, estimated at c£6m for 2010/11, is borne by Northern Ireland consumers through higher PSO charges as a consequence of reduced market revenues.

A key principle of the RAs in terms of the operation of the wholesale market has been to ensure efficient despatch and this principle is again stated in the consultation paper. However, it is clear that despatch efficiency is impossible with uniform TLAFs. The desire to further assess the splitting proposal further emphasises that despatch efficiency remains an important criteria yet it is being abandoned for 2010/11.

In terms of the limited assessment of options in the consultation paper, many of the statements are contradictory. For example, the "Compression Factor option" is stated to be arbitrary, failing to address the underlying issues, yet the SEMC propose to adopt uniform TLAFs even though they admit that uniform TLAFs are really just the most extreme form of compression. It is also clear that while there are concerns about the volatility of TLAFs, there is no demonstrable benefit for consumers from adopting uniform TLAFs and while the RAs appear to hope it is a "step in the right direction", there is nothing to provide any confidence that this may be the case.

The Way Forward

Uniform TLAFs are totally unacceptable for the reasons outlined above. In particular, they increase costs to consumers, are discriminatory and result in generators in good network locations subsidising generators in poor locations. Northern Ireland consumers effectively provide this subsidy through higher PSO charges which offsets the lower SEM revenues earned by PPB, who manage the PPAs on behalf of customers.

There were a number of comments at the TLAF Workshop stating that the current methodology is “broken”, yet there is no real substance to support the claim. It is commonly acknowledged that volatility is an issue and this needs to be addressed. However, there is no evidence to suggest that uniform TLAFs is the best or even an effective means of doing so.

There are many ways in which TLAF volatility could be dampened or grandfathered for a period (e.g. rolling averages over a period, hedged for discreet periods through Connection/Use of System Agreements or perhaps in the case of renewables locating in Rol through an adjustment factor to the feed-in tariff (note this may also address concerns with consumers in one member state contributing to costs of meeting different environmental policies in the other member state), and these options need to be urgently assessed.

PPB believes that the best solution in the short term (i.e. until October 2011) is to retain the existing TLAF methodology, which clearly was previously determined to be the most appropriate option, and to fully focus on investigating and analysing the best enduring solution that addresses the concerns about volatility and predictability while simultaneously providing the best value for consumers in the market.

The responses to TSO’s consultation on compression demonstrate little support for it as a short term option and as the RAs indicate, it is arbitrary and has no rational economic basis other than as a compromise to reduce the pain felt by those generators situated at poor network locations. In the same manner as for uniform TLAFs, any degree of compression still results in a cross-subsidy with wealth transfer from generators (including Northern Ireland consumers) in good network locations to those generators in poor locations.