Response to the I-SEM Consultation Paper

on

Proposed Locational Capacity Constraints Methodology

from

16th May 2017

BORD NA MÓNA
Naturally Driven

Context, Overview & Recommendations

Bord na Móna welcomes this opportunity to respond the RA's Proposed Locational Capacity Constraints Methodology paper, and its 'parent paper'[1], in that these papers formally recognise that the likely level of transmission constraints and the potential scale of exit creates unintended security of supply issues for the first transitional auctions.

Consequently it takes on board that the scale of risk to security of supply is such that it is appropriate to incorporate locational constraints, involving additional capacity over and above an unconstrained auction, within the CRM.

BnM's position is to urge that the authorities maintain this prudential high level approach until such time as it is demonstrably proven that it is no longer required in whole or in part. In this regard, we note that there are timing issues which would prevent a quick transition towards an unconstrained market approach without extra capacity in the market. In the Locational Issues Decision Paper[2] the SEM Committee acknowledge that it is not clear to what extent it will be possible to complete a full review of locational signals sufficiently prior to the first T-4 auction[3], which is due to take place some 8 months approx. post the first transitional auction. This would create objective concerns about the sensibility of reducing capacity from the 'as-is' especially for the first transitional auctions, given locational constraints. In parallel, we welcome the indication by the RA's, reporting from an I-SEM PMG meeting[4] that 'Decisions on the procurement of capacity mean we will have an enhanced reserve[5] margin for the early (transitional) years of the I-SEM.' We welcome this cautionery provision for the transitional auctions in respect of capacity ROs out to 2021/22 whereby the CRM will procure a level of capacity which reflects the complex topography of the power system. We note that underlying rationale to have an enhanced reserve margin is specifically targeted at avoiding risks attaching to both security of supply risk as well as high prices[6] but does not mention plants which are required for provision of ancillary services and flexibility, as the decarbonisation transition continues. We consider the link between the provision for AS and CRM to be a very important component of the generator product offer, which needs more recognition both in terms of benefits brought to the system as well as ensuring that service providers are remunerated adequately for such services.

Similarly we note that the TSOs proposed methodology for defining constraint areas and their associated minimum requirements in order to satisfy the SEM committee decision around meeting the 8 hour LOLE *focuses on power transfer constraints only and does not address local ancillary*

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[1] Capacity Remuneration Mechanism Locational Issues Decision Paper (SEM-16-081), 8 December 2016

[2] Capacity Remuneration Mechanism Locational Issues Decision Paper (SEM-16-081), 8 December 2016

[3] ie August 2018

[4] Follow Up Actions from Stocktake Report: from UR/CER to I-SEM PMG, 9 May 2017

[5] The scale of this margin is important, and for the purpose of this feedback it is assumed to be at a similar level to the

[6] We note that this reverses the SEM C decision in SEM-16-082, December 2016, I-SEM Capacity Requirement and De-rating Factor Methodology Detailed Design Decision Paper to the effect that Operating Reserve will not initially be included in the Capacity Requirements

services requirements, thereby indicating that the methodology has a restricted and fragmented scope.

However, we are comforted, somewhat, in this regard by the provisions within the Locational Issues decision paper (SEM-16-081 – the 'parent paper'). This indicated that there may be some plant which is required to primarily support local ancillary service requirements, but not local capacity delivery, which does not receive sufficient revenue to cover its Net Going Forward Costs through a combination of all-island ancillary service tariffs, and Reliability Option Fees, and sets out some provisions for such plant.

The indication is that the SEM Committee, in addressing this, will separately review the appropriate compensation arrangement for any such plant outside the CRM, and notes that consistent with DS3 System Services Procurement Design Decision paper (SEM-14-108 December 2014), the option remains as a last resort for bi-lateral contracts where specific localised system security requirements can be demonstrated by the relevant TSO. It is noted that this is not uncommon internationally and that bi-lateral contracts to support localised ancillary service requirements are a feature of a number of electricity markets, and that the TSO's licences oblige them to secure necessary ancillary services on an economic basis. This forms the basis for the recommendations which we make below.

In overall positioning terms we are reminded that, in the end of the day it is the providers which are maintaining local system security and that the shortcoming is with the transmission network. For this reason we believe that until such time as transmission constraints are a thing of the past that providers should be treated in a manner which will ensure that their continuing operation/service provision is economically remunerated.

This comes full circle to the widespread industry concerns about lack of ability for full cost recovery, which is exacerbated with the very considerable risk of lack of compensation for unsuccessful in-merit bidders which can still occur due to lumpiness or inflexibility reasons under current proposals. Lumpiness is discussed further in Recommendation 3 further below.

Recommendations 1

Consequently while we generally welcome the principle of having an enhanced reserve margin we propose a better and more fair solution that could alternatively be deployed by rewarding the following:

a) Plants which did not clear the CRM auction, but which are needed for Operational system security. These should be capable of earning, **at the very least**, their Net Going Forward Costs[7].

b) Inflexible plant which is behind a lumpiness constraint, and which should justifiably not be displaced when it intersects the capacity demand curve at RO auction should too be remunerated. Again, under current provisions such plant does not get paid at all for capacity when it is displaced. Our proposal is that such 'lumpy' plant should receive at least its bid-in price, for its full de-rated capacity. A supporting rationale is in recognition that it is more economically efficient to have excess capacity than a capacity shortfall (due to the difference between VOLL and BNE), and that this remuneration would help secure capacity at a market efficient price while mitigating energy supply security risk, especially important and flagged by the RA's in the transition auctions period.

[7] Recognising that Net Going Forward Costs do not include Sunk Costs

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We set out in Recommendation 3 that Local Capacity Constraints provisions are likely to create more Lumpiness incidences in the marketplace.

Regarding the proposals per-se in Appendix A, and in particular relating to the determination of de-rated Capacity, we would refer to the points which we raised in our earlier response to SEM-16-051 on Capacity Requirement and de-Rating Factor Methodology Detailed Design[8]. Some recommendations around Selected Points mentioned, as well as some new points which are specifically relevant to this response are:

Recommendation 2

a) Our recommendation would be for the RAs to revisit Interconnectors (I/Cs) de-rating levels and to to ensure that the approach in (re)setting these de-rating levels uses the most relevant inputs and errs on the side of caution. Our concern is that the recently revised de-rating for the I/Cs, although a healthy downwards adjustment, may still not fully reflect relevant inputs. BnM has already expressed a number of concerns[9] with the most fundamental being the danger of system tightness in SEM which would likely come about if the Interconnector de-rated capacity was too high and if non-winning plant at auction were subsequently forced to leave the market. This could result in social welfare costs arising from a scarcity event due to suppliers being left short because of imports, for whatever reason not materialising, and the resulting increase in the hole in the hedge. We are concerned that the rationale underpinning the revision from the initial interconnector de-rating factor published in the consultation paper[10] of c75% to c50% indicates (SEM-16-082[11]) is limited; and may only be based on the National Grid's latest Future Energy Scenarios. It may be that the 50% de-rating is still high. There is no apparent account taken of the following:

   i) The calculation effectively assumes 100% coupling; the fact that coupling will not be in place over all timeframes will have a reducing impact on effective interconnector capacity. We understand that the future intra-day market design platform will not facilitate 100% coupling.
   ii) Somewhat related, it is unclear from the consultation if due consideration has been taken into account of the limitation on physical deliveries across the interconnector. Interconnector flows are characterised by finite ramping rates, thereby reducing effective capacity.
   iii) Perhaps the largest assumption within the IC de-rating methodology consultation is that available capacity will be set by 100% of flows from GB to SEM. There is evidence to suggest that this will not be the case:
      - Forecasts suggest that GB is facing scarcity over the coming years which will result in higher local prices which could encourage flows from SEM to GB – reducing the effective capacity potential from GB to SEM

[8] Integrated Single Electricity Market (I-SEM) Capacity Requirement and de-Rating Factor Methodology Detailed Design Consultation Paper SEM-16-051, 23 August 2016

[9] In response to consultation SEM-16-051 Integrated Single Electricity Market (I-SEM) Capacity Requirement and de-Rating Factor Methodology Detailed Design Consultation Paper SEM-16-051, 23 August 2016

[10] Integrated Single Electricity Market (I-SEM) Capacity Requirement and de-Rating Factor Methodology Detailed Design Consultation Paper SEM-16-051, 23 August 2016

[11] SEM-16-082, December 2016, I-SEM Capacity Requirement and De-rating Factor Methodology Detailed Design Decision Paper

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- In determining economic Energy flows across the Interconnector the impact of the Carbon price floor in the UK will be another driver tending to push up prices in the UK potentially encouraging flows from SEM to GB, thereby absorbing effective interconnector capacity

iv) Finally we believe that there has been insufficient scenario analysis of the impact of coincident scarcity in SEM and GB and that there is not yet line of sight as to when interconnector capacity between SEM and GB can be regarded as a reliable contributor towards long term supply. Therefore a very cautious approach is warranted, particularly for the transitional auctions.

Recommendation 3

Given 'magnified' lumpiness at non-meshed level it needs to be considered whether a 3 hour LOLE would provide a better, ie, more secure solution than the current 8 hour calculation basis. Our recommendation is that this is reviewed following each transitional auction, given that this choice of 8 hours vs 3 hours forms the basis for the lower bound MW capacity value estimate in such a locally constrained area. The potential 'magnification of Lumpiness' would arise in a local area with a smaller capacity 'pool' relative to the largest in-feed, ie, which could suggest conditions for a lumpiness 'fail'.
The key consideration here is whether lumpiness constraints will give rise to local supply security issues. These supply security issues would likely be less pronounced with a 3 hour LOLE at non-meshed local level, in comparison to the 8 hour LOLE which is in consideration for non-meshed local level and which is used at an all island scale. So the suggestion is that further work is needed to test if such a 3 hour LOLE may be more appropriate in locally constrained non-meshed areas, so as to ensure security of supply. This might lead to some degree of inequity between areas – but also providing security benefits. We recognise that further work may be needed to evaluate.

Comment:
The locational capacity assessment has a logical approach, balancing the High-Level Network Assessment with the Area LOLE Adequacy Assessment, and this calculated minimum capacity requirement per area representing the lower bound of the area's minimum MW requirement. We support the thinking whereby the Detailed Network capacity Assessment works up from this lower bound value to a higher value.

Recommendation 4 – ref 1.6.3 in response to the SEM Committee also welcoming views on the proposed changes in Appendix B

In relation to the change proposals put forward in Appendix B we note that while they would bring about an improved stability of de-rating factors this benefit would likely come at an expense to the providers given the scale of reduction in de-rating factors. Given the clear indication of the difficulties to providers in recovering fixed and indeed other costs our recommendation would be that any loss in such revenues should be fully recycled so as to restore revenues to providers to the level that they would have been originally.

Addressing the Particulars:

1.6.1 The SEM Committee welcomes views on all aspects of the methodology proposed in Appendix A and the appropriate use of existing tools and standards to develop the proposed framework.

These are as set out above in recommendations 1, 2 & 3 as well as the preceding context and overview.

1.6.2 The Committee would particularly want to receive evidence supporting any alternative to the methodology proposed, where possible supported by quantitative analysis.

This has not been possible within the time allowed for responding, given that the paper was first published on 13th April. We would hope that the Authorities might be able to conduct relevant quantitative analysis.

1.6.3 The SEM Committee also welcomes views on the proposed changes in Appendix B.

Rather than addressing technicalities our first observation is in relation to commercial impact, given the commercial necessity to the industry at large to be commercially viable and to be remunerated accordingly.

We note that while the adjusted methodology is likely to improve stability of de-rating factors from year to year, we understand that it will very likely have the negative effect to providers of reducing their de-rated capacities, and consequently associated revenues, even when offset against the provision within SEM Committee's decision on Parameters and Auction timings[12] that such a change would be reflected by an increase in both existing plant and auction price caps.

We refer to the consultation paper that:
'Test results indicate that the De-rating Factors for the Gas Turbine, Steam Turbine and Hydro classes will be around 3% to 5% lower (depending on size) than the indicative values in SEM-16-051a. '

This exacerbates the material concerns that providers have about not being able to recover their fixed costs, where such concerns have been well expressed across recent consultation responses relating to the Balancing Markets and Capacity markets in particular.
These concerns are reflected in Recommendation 4 above, which focuses on cost recovery.

This concludes our immediate views. Finally, we thank you for this important consultation and are available to discuss the contents of this submission with the TSO & RAs if deemed useful.

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[12] I-SEM Capacity Remuneration Mechanism Parameters and Auction Timings Decision Paper, SEM-17-022, 10 April 2017