

Exit Capacity Review for Northern Ireland Gas Transmission

Call for Evidence

Recommendations by TPA Solutions

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1: Introduction

This note has been produced by TPA Solutions Ltd at the request of the Utility Regulator (UR) following industry response to the “Call for Evidence”¹. The “Call for Evidence” document explored the issues associated with the potential reform of the Northern Ireland gas transmission exit arrangements. Its aim was to elicit feedback from the industry as to whether exit reform is appropriate, and if so, what arrangements might be preferred.

This document explores the issues raised and recommends that further consideration is necessary within the anticipated electricity regime development.

2: “Call for Evidence” responses

11 responses were received to the “Call for Evidence”.

7 of the responses, received from a range of industry players, do not advocate reform to introduce gas transmission exit short-term capacity products (STC). The responses typically referenced the “Call for Evidence” as making a fair assessment of the complexity that would be introduced by STC and that this was unwarranted and disproportionate given the size of the NI market. Potential impacts of gas exit regime changes on final electricity prices were noted. The feedback suggested that reform would create uncertain benefits for power generators versus certain costs for others and therefore reform was not justified.

4 of the responses came from the generation sector and argued that reform was essential. These responses state that the annual capacity regime is not fit for purpose and that specifically it may:

- jeopardise the financial viability of generators;
- limit potential for new NI generation; and
- place existing NI generation at a competitive disadvantage compared with RoI generation.

¹ http://www.uregni.gov.uk/publications/exit_capacity_review_call_for_evidence

3: Analysis of key concerns

3.1 Financial viability of generators

Respondents have provided a range of data that is relevant to the assessment of the financial viability of generation². However, determining the financial viability of generators requires more specific data, and indeed such assessment is outside of the remit of TPA.

Generators expressed doubts about their ability to recover their costs. The financial viability of generators needs to take account of all revenues received by generators including those obtained from infra-marginal rents, capacity remuneration mechanisms and any other support mechanisms that contribute towards the recovery of fixed costs. We therefore conclude that insufficient information has been provided in response to the “Call for Evidence” to establish whether the generators have valid concerns about viability.

Nevertheless, the Single Electricity Market Committee (SEMC) in the developments of the I-SEM³ is required by article 9 of the SEM order⁴ to have regard to the need to ensure that authorised persons are able to finance their activities.

TPA observes that the responses of NI generators indicate that it is not the total cost of gas transmission exit to the generators that is the problem. Generators indicate that the current level of gas transmission revenue recovered via gas exit capacity charges from the generation sector is acceptable. We also note that the treatment of gas annual capacity and short-term capacity (STC) differ in SEM; annual capacity payments are treated within SEM as fixed costs for generators doing business, whilst STC costs are allowed as marginal costs of generation.

Therefore it is not the total gas exit charges, but rather an issue of cost classification in the electricity regime, that causes the current generators concern about financial viability. We therefore advocate that this issue should be assessed, and if appropriate addressed, within the I-SEM development.

Our view is that generators should be pursuing their cause more vigorously through electricity channels than via a review of relatively technical gas transportation features which only covers one element of the generators’ cost base.

² For example including public domain information about gas exit capacity charges, potential annualised costs of peaking plant, Northern Ireland Constraint Report information on system stability and North West generation requirements. <http://www.soni.ltd.uk/InformationCentre/Publications>

³ The usual abbreviation is used for the Integrated Single Electricity Market (I-SEM)

⁴ which comprises The Electricity (Single Wholesale Market) (Northern Ireland) Order 2007 and, covering RoI, Electricity Regulation (Amendment) (Single Electricity Market) Act 2007

The consultation process that facilitates the development of I-SEM therefore affords the opportunity to properly consider all aspects of the trading arrangements. Concerns about generators' costs and revenues in the context of ensuring the adequate financing for required generation should therefore be explored within this development activity. Thus in the first instance we consider generators should take their concerns to relevant SEM/I-SEM workstreams for assessment. We note that generator profitability will be considered outside of the I-SEM workstreams but the results will feed into the I-SEM development if issues are discovered. If the SEMC determines that the generators are not financially viable then revisions to I-SEM should be considered.

Consequently following consideration within I-SEM, and if the concerns are proven to be well founded and a necessary resolution cannot be delivered within the I-SEM framework, then the SEMC could consider gas regime changes to be a SEM matter and hence it could request reform in gas regime.

3.2 Limiting potential for new NI generation

Respondents indicated that if any new NI generation is to be gas fired then exit capacity charges may be an impediment to a favourable investment decision⁵.

They referenced the SONI/EirGrid Capacity Statement⁶ which forecasts an NI power deficit from 2021 in all demand scenarios and so, particularly in the context of environmental legislation, new gas fired generation may be desirable.

The current gas exit capacity regime requires annual capacity booking irrespective of utilisation. Generators suggest this may be a material obstacle to new gas fired generation in NI. Currently the I-SEM framework is not sufficiently defined to permit new generators to fully understand potential income streams from the combination of capacity remuneration mechanisms and other generation related cashflows. This, compounded by further uncertainty about what position new gas fired generation might have in the merit order, or about the extent to which such generation might be constrained-on because of electricity network constraints may frustrate decisions about new gas fired generation. The generators argue that the introduction of short-term products could mitigate many of these potential issues.

⁵ Generator feedback provided an illustration based on a peaking plant where I-SEM data indicated an annualised cost of £12.8m (covering return, depreciation and operating costs) whereas current annualised gas exit regime might imply an additional £5m cost.

⁶ http://www.soni.ltd.uk/media/documents/Operations/CapacityStatements/Generation_Capacity_Statement_20162025.PDF

TPA consider it is premature to conclude that gas exit reform is needed to address the concern raised by generators. The generators' concern needs to be considered in the context of the need for new generation in NI and whether the current annual gas capacity regime would provide a barrier to entry in the I-SEM framework. As with the concern of current generators about their current plant's financial viability we conclude that this concern should best be addressed within the I-SEM development.

Similar considerations to the viability of current generators apply and we would urge those currently contemplating new gas fired generation in NI (whether they be conventional CCGT or new technology based) to engage within the I-SEM processes to ensure that the electricity framework, and where necessary the gas framework, might facilitate new generation. The UR is aware of two potential new entrants to the power generation market in Northern Ireland.

3.3 NI generation placed at a competitive disadvantage to Rol generators

Regardless of the absolute viability of NI generators and the prospects for new generation, as explored above, there does appear to be a disconnect between Rol and NI generators that cannot be summarily dismissed. The effect arises from the combination of, and interaction between, electricity regime operation and differences in gas exit capacity regimes.

In essence, we understand that the existence of STC exit products in Rol allows generators to treat exit capacity as a short-run cost. In constrained on situations, this provides an opportunity for Rol generators to "pass through" exit capacity costs whereas the same opportunity does not appear to be available for NI generators.

Generators argue it is both easy and necessary to harmonise NI exit capacity regime with the Rol regime. However, as a matter of principle, we do not support any presumption that the NI exit regime should duplicate that in Rol. TPA remains of the view that the disconnect arises in the cost allocation mechanism within the electricity regime and therefore should, in the first instance, be considered within I-SEM development.

Furthermore it would be perverse to introduce STC in the knowledge that it will increase costs to electricity consumers despite generators arguing that the effects would be small. We contend that this would be problematic from a regulatory perspective unless essential to ensure financial viability of necessary generators.

TPA therefore advocates that the generators concern about competitive disadvantage is considered within the I-SEM development.

TPA notes that Rol and NI generators do not face identical operating environments, e.g. gas transmission tariffs and renewable incentive schemes differ between Rol and NI. Therefore the I-SEM consideration of the effect of any differences arising from gas exit capacity regimes needs to be considered in the context of other factors which differ for NI and Rol generators, possibly in an offsetting manner, and their magnitudes. TPA would only expect the I-SEM

development to recommend changes to explicitly address the alleged competitive disadvantage arising from gas exit capacity definition if its effect was assessed as material in relation to the net effect of other differential factors.

Thus TPA believes that the forum afforded by the I-SEM development is the appropriate place to consider whether generators' concerns about competitive disadvantage are well founded, and if so sufficiently material to warrant addressing. If substantiated, remedies should be considered in the electricity regime although we do not rule out the possibility that there may be complementary approaches other than STC at exit that could be considered. This may be necessary if I-SEM solutions prove impractical, subject to undue delay and/or require complementary gas regime modification.

4: Wider considerations

To support the above a discussion of relevant issues raised in responses to the "Call for Evidence" follows.

4.1 Annual capacity not fit for purpose

Generators argue that the annual capacity product is no longer fit for purpose and that they require a different arrangement based around STC. Other respondents argue that introduction of STC creates risks of redistributions between generation and non-generation sectors, potential requirements to change 1 in 20 booking arrangements and increased volatility of bullet payments.

However, we note that generators are not raising the issue that they need to pay less overall for their gas transmission exit so do not appear to be looking to increase the level of gas exit transmission revenues to be recovered from the non-generation sector. The generators are thus comfortable with the overall level of charges being paid for gas transmission exit.

We note that the exit capacity for the distribution network are subject to 1 in 20 booking levels and that Coolkeeragh power station is subject to annual capacity bookings at both entry and exit to meet its financial commitments for the foreseeable future. It therefore appears that it would only be Ballylumford power station that would have the option to move its gas exit capacity bookings to STC.

TPA notes that no capacity product regime will always be considered perfect from all actors' perspectives particularly in an environment where there is no shortage of capacity. However, from a gas regime perspective we believe that the revenue recovery delivered between generation and non-generation sectors is acceptable. Furthermore we understand this to be the view of some wider industry players as expressed in feedback. We do not anticipate that individual exit booking levels will materially decrease, taking account of initial bookings and

ratchets, from those used when setting the 2015/16 NI transmission prices and therefore there will not be any material and unacceptable redistributions between NI gas consumption sectors.

We therefore conclude that, from a gas perspective annual capacity is acceptable, at least during the period until Coolkeeragh power station's longer term capacity booking expires, and there is currently no imperative to move away from the current annual only booking regime.

However, we believe that the apparent disconnect created by the interaction between the electricity regime and the two different gas exit capacity regimes does need to be explored in the electricity context. Thus we believe that I-SEM needs to consider whether NI generators are potentially significantly disadvantaged compared with Rol generators given the non-availability of STC in NI. This will allow an assessment of whether an annual only capacity regime is fit for purpose from an electricity regime perspective. If it is considered that NI generators are materially disadvantaged then I-SEM participants should explore how it might be addressed in the electricity regime. If adverse consequences cannot be addressed adequately within the electricity framework, then SEMC might request consideration of either alternative or complementary approaches based upon reform in the gas regime.

4.2 I-SEM 16-024 Market Power Mitigation Decision

The above document was published during the "Call for Evidence" period.

Generators have inferred from this decision that the bidding rules will not be significantly affected when compared with the current approach.

However, our understanding is that bidding rules and capacity remuneration mechanisms are still being developed and that it's premature to pre-judge the I-SEM outcome.

Furthermore we note that consultation processes exist to determine I-SEM's final form and the outcomes for all market actors and these should be used if generators wish to raise concerns raised in response to the "Call for Evidence". The SEMC will review the financial viability of generators in the context of the new rules consistent with statutory obligations.

4.3 Integrated thinking across gas and electricity

Regulatory decisions are becoming ever more complex given the complexity and subtlety of interactions between gas and electricity regimes. Regime developments have to be considered from an individual industry perspective and in the context of their interactions.

TPA is surprised that the generators concerns about financial viability and competitive disadvantage have been championed more vigorously in the gas exit regime than they appear to have been within the I-SEM development. I-SEM seems the most appropriate arena to

consider the generators' concerns including both financial viability and potential competitive disadvantage. These can be assessed in the context of both SEMC's statutory responsibility to have regard to ensure the financial viability of required generators, and that I-SEM seems the natural place to discuss cost allocation issues within the bidding rules that are at the heart of generators' concerns.

No material risk of exit capacity revenues from the generation sector being below those expected from initial 15/16 bookings is envisaged within the foreseeable future. Therefore from a gas perspective no requirement for gas exit reform exists because no material redistributions towards non-generation sector are envisaged.

Thus from an electricity perspective the critical issue is about generator financial viability and how electricity rules achieve this. In the first instance, concerns expressed by Generators should be considered, and if necessary addressed via I-SEM development.

Integrated thinking is, however, essential. Therefore if the I-SEM development identifies a need for reforms to address the generators' concerns then gas expertise should be reflected in the I-SEM deliberation. As a minimum a full understanding of the interaction between gas annual capacity and STC and their interaction with electricity rules needs to be established. If the interaction between electricity and annual only gas capacity regimes generates an unacceptable outcome then reform of either or both of electricity or gas regimes needs to be considered.

Since the alleged problem arises from electricity cost allocation rules initial development activity might concentrate on electricity rules. However, this should recognise that gas knowledge could contribute to efficient joined up I-SEM/gas solutions. Therefore gas expertise should feed into the relevant I-SEM processes at an early stage to ensure that, if necessary, the most appropriate solutions are assessed.

4.4 STC is easy to implement

Whilst generators express the view that STC would be simple to introduce other respondents stressed that the introduction of STC would be complicated and disproportionate given the size of the NI gas market. Feedback suggested that reform would create uncertain benefits for power generators versus certain costs for others and therefore reform was not justified.

TPA remains concerned about the practicalities of implementation and the impacts of STC. For example it may be that very extreme, and potentially unacceptable multipliers are necessary to reach desired outcomes. We therefore advocate caution based upon experience and evidence. Many STC regimes have not been implemented for a sufficiently long period to understand all of the practicalities and consequences. NI Entry STC is a case in point and only introduced because of the pressing EU requirement. This regime is only in its first year of operation and the potential effects have not yet been realised. It will take time for network user's behaviours to change creating transitional issues and furthermore unintended consequences may materialise. GB spent several years reforming its exit capacity arrangements which have now been

operative for several years. However the full ramifications are still the subject of much debate and potential development.

If STC, or an alternative, was introduced subsequent decisions would be necessary about whether STC or an alternative would be available and usable by all network users. Whether the products are used, and if so by whom and to what extent, may be difficult to assess.

Should there be a need to reform gas exit arrangements we believe that there are better pragmatic alternatives (perhaps involving daily overrun mechanisms⁷) that could deliver simpler, quicker and more easily implemented approaches. It would, however, be necessary to establish how such alternatives would interact with the proposed electricity regime. Collaborative working between gas and electricity experts would be necessary to ensure that both regimes, when considered in conjunction, function appropriately.

5: Further elements of potential gas exit reform

The “Call for Evidence” paper and responses also considered three other related, although probably subsidiary, issues when compared with reform of the exit capacity product namely: capacity booking responsibilities, capacity booking platforms and ratchets.

Given that we are not recommending reform of the regime at this stage we see no pressing need to reform any of these elements. However we provide some observations below.

5.1 Capacity booking responsibilities

If exit reform was to be contemplated then consideration would have to be given to whether, and if so how, capacity booking responsibilities might change. For example would distribution network 1 in 20 obligations need to be changed to allow them to profile capacity if STC was available in the way that a power station, free of longer term annual booking obligations, might be enabled?

Consistent with feedback to the “Call for Evidence” TPA would not recommend that capacity booking responsibility at exits into the distribution zones is devolved to shippers. TPA believes that the distribution operator booking in an aggregated manner on behalf of the shippers and recovering the costs as part of the delivered distribution service using proven processes is more efficient than burdening individual network users with new and costly procedures and booking arrangements.

⁷ To meet the generators’ aspirations the treatment of daily overruns might need to be considered within electricity regime developments.

5.2 Capacity booking platforms

TPA concurs with views expressed that there is little merit in using PRISMA as the capacity booking platform for gas exit capacity. It appears to us to be more economical and efficient to keep all necessary systems for gas transmission exit within the system to be used by the NI transmission system operators.

5.3 Ratchets

TPA notes the concerns of generators that it may be problematic to assess the peak daily gas offtake at power stations. Pending decisions about the generators' concerns about financial viability and competitive disadvantage within I-SEM we advocate no change in the current ratchet mechanism.

However NI gas tariffs do need to be set based on an expectation of capacity bookings. Accurate assessments therefore reduce end of year bullet reconciliations and therefore generators should be encouraged to provide their best unbiased estimate of peak daily gas consumption so that this can be reflected in the tariff price determination.

6: Conclusions and recommendations

Consistent with the majority view of “Call for Evidence” responses TPA concludes that exit reform, and specifically STC, should not be implemented at this stage.

TPA note that the generators have raised concerns about

- the future viability of existing NI generation
- impediments to new NI gas generation
- the potential for competitive disadvantage of NI generators arising from the interaction of electricity regime and different gas exit regimes in RoI and NI.

Substantiating these claims would require far more data than has been provided in “Call for Evidence” feedback and likely further analysis will be required. Such assessment is outside of the remit of TPA.

TPA notes that the generators’ concerns arise from cost classification issues in the electricity regime. TPA recommends, therefore, that these issues are explored in the I-SEM arena. TPA encourages both current and potential NI generators to participate in the I-SEM development to ensure that their concerns are properly heard, explored and decided upon. TPA considers that consideration within the I-SEM development is more appropriate than trying to address generators concerns in a review of relatively technical gas transportation regime features.

TPA advocate that the I-SEM development should identify the scope for (and timing of) potential changes within the future I-SEM regime that could address any substantiated concerns, consistent with the overarching duty to finance necessary generator functions in the interests of electricity consumers.

TPA does not rule out that there might be merit in gas exit reform. However this is not assessed as necessary from a gas industry perspective although gas reform may have a role in achieving preferred outcomes from an electricity perspective.

Thus, if reform is needed to address generators’ concerns, and I-SEM solutions prove impractical, subject to delay, and/or require complementary gas regime modification then gas regime option(s) as an alternative to introducing STC at exit should be considered. TPA therefore advocates close collaboration between gas and electricity experts in the I-SEM development to ensure that, if necessary, joined-up and holistic reform across both electricity and gas regimes are considered and assessed for implementation.