



Energy for
generations

Generation & Wholesale Markets

ESB GWM Response to TPA Exit Capacity Review Call
for Evidence

ESB Generations and Wholesales Market (ESB GWM) welcomes the Call for Evidence from TPA Solutions at the request of the Utility Regulator. We believe that gas transmission exit reform is urgently required to ensure a secure and sustainable power market in NI.

TPA indicates that the Call for Evidence should not be considered as indicative of UR’s opinion and that the UR will make its own decision based on its own assessment. ESB GWM requests more information on this process – will there be a further consultation and stakeholder engagement from the UR before a decision is made? We believe that given the significance of this issue to gas generators, there should be an opportunity for interested parties to engage further with the UR before any final decision is made.

Before responding to the questions posed in the Call for Evidence, ESB GWM would like to address a number of important points. We believe that the Call for Evidence does not give sufficient consideration to the strong linkage between the electricity and gas markets. As per the Utility Regulator’s “NI Gas Capacity Statement 2015/16 – 2024/25”, power stations account for circa 50% of all forecasted gas demand based in NI throughout this period (see Figure 1 below).

NI forecast demand for 2015/16 to 2024/25

Year	1	2	3	4	5	6	7	8	9	10
(mscm/y)	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
Powerstations	769	613	586	581	590	602	599	554	585	570
Distribution	541	565	632	664	686	699	709	720	730	739
TOTAL (Base Case)	1310	1178	1218	1245	1276	1300	1308	1274	1315	1309

Figure 1

Figure 1 demonstrate that the annual power gas demand is decreasing and reflects the same decreasing gas demand trend in ROI. This decrease in gas demand for power stations reflects less baseload running by gas generators and more intermittent running to support an increasing amount of renewable energy generation. As gas fired power plants are the largest sectorial customer of the gas transmission network,

it is vital that developments in the electricity market are considered when making decisions regarding the gas transmission network.

Gas fired power plants in NI operate within a Single Energy Market (SEM) on all-island basis. Gas plants in NI and ROI have experienced a significant shift in running patterns due to a changing generation fuel mix and are continually seeking ways to operate efficiently and sustainably in this new generation landscape. Short term products are available both at entry and exit in ROI. The absence of short term products in NI means that NI gas plants cannot access the same suite of regulated gas capacity products as those available to a gas plant in ROI. We believe that this amounts to a discriminatory locational signal for NI generators and competitively disadvantages NI in terms of attracting new gas fired generation.

TPA states that advocates of the traditional approach “*counter that the TSO should keep the primary capacity product (and pricing) simple (i.e. annual) whilst allowing secondary markets to emerge as the best way to procure (and price) a greater flexibility for those that need this*”¹. This argument demonstrates a lack of understanding of the changing demand patterns of NI’s gas transmission network’s largest users. The traditional approach is no longer fit for purpose. Gas generators in NI no longer generate on a baseload basis and instead operate intermittently to support system requirements. Gas capacity products must be available to support this type of running. In addition to this, without short term exit products, an active secondary market in NI cannot exist as participants lack the products required. ESB GWM have participated in NI’s secondary market and from our experience, believe that the absence of short term gas capacity products inhibits the development of an active secondary market in NI. ESB fully supports the presence of a liquid secondary market and believe the presence of STC at exit and the ability to transfer STC at exit would encourage the development of a liquid secondary market.

At a European level, the recent EurElectric paper published in April 2016 “Gas Flexible Exit Capacity Products” states

¹ Page 9, Paragraph 2, TPA Call for Evidence

Due to this new environment, the approach according to which gas system operators allocate exit capacity to power stations looks increasingly outdated. EURELECTRIC is keen to see all system operators across Europe provide flexibility to power station operators in profiling their exit capacity bookings and suggests that it could be optionally booked on an annual, monthly, daily and within-the-day basis, up to the level of peak-load consumption.

The Call for Evidence states that TPA “*is not aware of any published analysis that supports the recent setting of relative STCs prices despite their widespread prevalence in European gas regimes*”. It should be noted that Article 23 of the current Tariff Network code provides limits for the level of multipliers on STC. As mentioned in TPA’s Call for Evidence, this only applies to IP points but there is no restriction on any Member State applying the same level of multipliers at exit. For example, in ROI, the same multipliers apply for both entry and exit STC products.

The introduction of short term gas capacity products at entry on 1 October 2015 was necessitated for compliance with the EU Capacity Allocation Mechanism (CAM) Code. These products have been utilised by industry in NI since their introduction and have given shippers in NI options when determining their entry gas capacity purchasing strategy. We believe that the introduction of these products assists in a more straight forward introduction of short term exit products as the TSOs have gained experience with daily products..

Chapter 3: Assessment Framework

Q. Is the basis for assessment appropriate?

ESB broadly supports the basis for assessment. We believe that TPA should ensure that generator requirements are considered when assessing effective competition. For example, the omission of short term capacity (STC) products at exit in NI comparatively disadvantages NI generators in SEM.

Chapter 4: Short-term Products

Q. Are the 4 key arguments and the 5th consideration captured appropriately?

We feel that the five arguments considered are reflective of power generators' concerns regarding the need for STC at exit.

Q. Is the analysis appropriate? If not, please explain what is missing and how such argument and analysis should be reflected in any recommendation?

ESB GWM does not feel that the analysis within the TPA Call for Evidence sufficiently identifies the synergies between the gas-electricity market and the need for gas capacity product availability that aligns with generator running patterns. Power generators are the largest customer of NI's gas transmission network and the availability of STC is a pre-requisite for ensuring an efficient, functioning power market in NI.

Further feedback on some the arguments considered in TPA's analysis is listed below.

Allows matching of bookings with utilisation

ESB GWM supports full revenue recovery for the transmission system owners in NI and do not believe that the introduction of STC products at exit jeopardises revenue recovery. Annual products should continue to be in place however, STC products at exit accommodates the operating patterns of the networks largest users. Short term capacity products can be priced so that the same amount of revenue is recovered from any individual sector using STC as opposed to annual bookings, thus negating the fear of revenue redistribution across all user sectors.

Allow level playing field with ROI generators

Generators in NI are currently denied access to a regulated product that is available in ROI. This has established a discriminatory signal for generators in NI as an unintended consequence of regulatory decisions. We do not concur with TPA's analysis that products must be priced the same in ROI and NI to deliver a level playing field. Gas network costs differ in ROI and NI and so gas capacity products in both jurisdictions will be priced differently (as is the case with annual products currently). It is the absence of the availability of STC's that has created an unequal playing field for NI generators.

For reference, it should be noted that the UK Carbon Price Floor does not apply to generators in NI and this provides a clear example of policy alignment between both jurisdictions in SEM. This alignment of policy ensured that locational discriminatory signals were avoided.

Better enables new generation

Given the security of supply issues in NI, it is imperative that existing thermal generators can operate competitively in SEM and ISEM and continue to form part of NI's generation mix. SONI/EirGrid's Generation Capacity Statement 2015-2025 shows an NI power deficit from 2021 in all demand scenarios. The absence of STC products would be a factor in considering any new gas generation in NI.

Since the publication of TPA's paper, the I-SEM Market Power Mitigation Decision Paper (SEM-16-024) has been published. Within this paper, the RAs describe prescriptive ex-ante bidding controls based on unit SRMCs for system balancing actions in the Balancing Mechanism, which is similar to the existing BCOP in SEM. This decision further reinforces the need for STC. Generators who are called on for non-energy actions in the balancing mechanism (i.e. for system security & reliability) will need a mechanism to recover all of the costs incurred, as these actions are subject to prescriptive bidding controls. The ability to recoup the costs of gas capacity products is vital if plants that are significantly contributing to system security are to remain in operation.

As STC products are required both in SEM and ISEM, we feel that STC products should be introduced immediately. ISEM will not fix this problem on behalf of gas and therefore this issue needs to be fixed in the gas market. It is important to note that neither the ISEM energy markets or CRM will be zonal – so these do not directly drive location of plant or give signals for the need for generation in NI.

Q. Are there any other critical considerations that have been missed? If so, please respond by stating the argument, providing supporting analysis and evidence, and suggesting how it should be reflected in the recommendation

We believe further consideration should be given to the security that gas generators give to the electricity system due to their ability to provide a fast response when wind generation is no longer available. This increased flexibility is required to support the achievement of the 2020 renewable energy target. DS3 (Delivering a Secure, Sustainable Power System) is a SONI/EirGrid initiative to ensure this system flexibility is in place. Short term gas capacity products are a necessary product to facilitate this flexibility in a cost efficient manner.

In addition, as per SONI’s Northern Ireland Constraint Report 2016², Coolkeeragh is required for voltage stability and must be run once NI system load exceeds 1000MW (an extract is given in Table 1 below). Distortions in the STC products available in NI should not prevent a generator from recovering its costs, particularly when the generator is providing operational support to the NI power network.

Limit	Operational Constraint rule	NI Constraint/Curtailment report
<u>System Stability</u> C30, B31, B32, B10, BPS4, BPS5, BPS6, K1, K2	There is a minimum number of high-inertia machines that must be on-load at all times in Northern Ireland. Required for dynamic stability. Relaxes once NS2 in commission.	The requirement vary across the years of the report: 3 units (2016-2019) 2 units (2020-2024)
<u>North West Generation</u> C30	C30 must be on load when the NI system demand exceeds 1,000MW to ensure voltage stability	The requirement remains the same across all years of the report

Table 1

² <http://www.soni.ltd.uk/InformationCentre/Publications/>

Q. Are the assessments of the case for short-term products appropriate with regard to the specific criteria? If not please explain in your response.

The 3 criteria considered in the assessment are examined below.

Is it appropriate to solve an electricity problem with a gas regime change?

Given the scale of the interdependence of the gas-electricity market, issues in the electricity market must be considered when making decisions in the gas transmission area and vice-versa. It is not sufficient for gas and electricity decisions to be considered in separate silos as this magnifies the risk of unintended consequence in each sector.

We believe that this is not an issue that needs to be dealt with in the electricity market. The presence/absence of STC products is a gas issue which impacts gas generators and corrective action should be taken within the gas network.

As stated above, Decision Paper SEM-16-024, reinforces the need for STC products at exit in NI.

Is there a material risk of losing generators as gas customers in NI?

The SEM Committee publication *Generator Financial Performance in the SEM (2013)*³ looks at generators revenues and costs by fuel types. Gas generators are shown to have a net margin of minus 12%. Any regulated actions that impact a generator's ability to recover costs must be fully considered as gas generators are operating in a challenging operating environment.

Is the introduction of STC a no regrets initiative?

We agree that any decision to implement STC products at exit requires consideration however, the presence of entry STC considerably simplifies the analysis. We do not believe that any perceived concerns about the complexity of product introduction and pricing is sufficient reason to stop the introduction of STC exit products. Shippers, the UR and the gas TSOs have had an opportunity to become familiar with STC entry products and can utilise this experience in future decision making. As revenue

³ <https://www.semcommittee.com/news-centre/generator-financial-performance-sem> (Page

recovery is guaranteed, there is no risk to the network owners of revenue under-recovery.

Power generators in NI have requested the introduction of STC products at exit over a considerable period of time, therefore we do not agree with TPA's assertion that their introduction would provide a "quick-fix" for generators via gas regime rules. In comparison, generator's in ROI have had access to these products since 2008. TPA's assertion that the fundamental issue arises in the electricity regime and should be solved there is questionable. Gas capacity products are required that enable generators to function as per the electricity system requirements. This change must be implemented by the gas network not the electricity network. This change is required for efficient functioning in both SEM and ISEM.

Gas generators in NI are typically not running in merit and therefore do not have a material impact on the wholesale price in SEM (as they rarely set price). For example, in the period since the introduction of STC products at entry in NI, Coolkeeragh has set price on approximately 1% of trading periods. Considering the small percentage of in merit running in addition to any allowable constraint costs experienced if generators are providing system security, the potential price impact of the introduction of STC products at exit is forecast to be low.

Chapter 5: Capacity Booking Responsibilities

Q. Are the arguments captured appropriately?

ESB GWM agree that there is no merit in considering a change to the capacity booking responsibilities for distribution users.

Chapter 6: Capacity booking Platforms

Q. Are the arguments captured appropriately?

The arguments are clear.

Q. Is the analysis appropriate? If not, please explain what is missing and how such argument and analysis should be reflected in any recommendation?

Short term entry and exit products do not necessarily have to be accommodated on the same booking platform. Depending on a review, it may be simpler to maintain PRISMA at entry points and have a separate local NI system for booking STC at exit. Systems such as GTMS may be appropriate. GTMS is currently used in ROI and if NI makes use of this existing system, costs associated with system changes would be minimised.

Chapter 7: Ratchets

Q. Is the analysis appropriate? If not, please explain what is missing and how such argument and analysis should be reflected in any recommendation?

It should be noted that generators are dispatched by the NCC. Generators are not in control of their scheduled running and in many instances have been called on at short notice periods due to power system incidents such as a plant trip, if wind levels are lower than forecasted etc. Therefore, ratchets must be considered in this context and should not severely penalise generators for actions outside of their control. We feel the current ratchet system is fit for purpose and suggest that it is maintained.

Chapter 8: Commentary and Initial Recommendations

ESB GWM feel that STC products at exit are a necessity for gas fired generators in NI. Gas generators provide security of supply to the electricity system and the flexibility required to support the achievement of the 2020 renewable energy target. Short term gas capacity products at exit are a necessary tool to facilitate this flexibility. We believe that this issue must be solved within the gas market and that as the products are required in both SEM and ISEM that a timely introduction is appropriate. We understand that there may be concerns about revenue recovery but feel that the ROI market provides supporting evidence that STC products can exist whilst supporting full revenue recovery. We feel that the introduction of STC assists competitive, sustainable gas generation in NI.

We are happy to discuss any aspects of this response in further detail.

Kind regards,

Karol O'Kane