

InterGen Response to Ofgem Call for Input

Executive Summary

InterGen are a UK based, independent generator who have developed and then operated flexible gas assets in the GB market for the last 25 years. Our plants generate enough power to supply 3 million homes, representing around 5% of the UK's electricity demand. InterGen is a world class developer of energy assets with a 3GW pipeline of battery projects at the heart of the company's plan to help decarbonise the GB energy mix and enhance system operability.

Of the options being considered, InterGen agree with the minded to position of Ofgem that the best option is implemented via an updated licence condition. InterGen do not agree that a price cap in the Balancing Mechanism would be an effective intervention.

InterGen believe that the high balancing costs of last winter of £3.1Bn are a reflection of a highly constrained network with insufficient on-demand flexible capacity resulting in tight margins. To summarise that high balancing costs are simply due to higher offer prices is too simplistic, and does not consider constraints across the whole system. Scarcity pricing has a role in a well-functioning market. These balancing costs do impact consumer bills but only to a very small degree (forming 1-2% of consumers' electricity bills)¹ in comparison to commodity prices in the wholesale markets which have seen recent volatility due to geopolitical factors and scarcity across Europe.

Frontier Economics conclude in their review of the balancing market that they found, "no clear evidence of behaviour inconsistent with the market rules" and add that the rules do not place any restriction on the level of bid and offer prices.² Frontier Economics add that, "rational behaviour in a pay as bid market would entail:

- Participants increasing offers up to their expectations of the marginal accepted offer
- In periods of scarcity, participants increasing offers potentially to Value of Lost Load (VoLL)

VoLL is currently set at £6000/MWh to maintain a security standard or Loss of Load Expectation (LOLE) of 3 hours per annum. As Frontier state in their review, it is rational and within the rules to increase prices up to VoLL in periods of scarcity. The top 6 tightest days as measured by De-Rated Margin were also 6 of the top 10 highest cost balancing days across September - December 2021. This illustrates that the market is rationally responding to scarcity. On five of the ten days investigated by Frontier, coal units were dispatched by National Grid ESO at £4000/MWh with cheaper capacity available from other sources. As above, it is rational behaviour for other participants to increase their price up to the level of the marginal accepted offer.

¹ Ofgem Call for Input: <https://www.ofgem.gov.uk/publications/call-input-options-address-high-balancing-costs>

² <https://www.nationalgrideso.com/research-publications/eso-balancing-market-review-2022>

It is important to retain scarcity pricing. Ofgem approved Balancing and Settlement Code modification P305 in 2015 with the stated aim of sharpening price signals in times of scarcity, on the basis that existing market defects,³ “could increase the cost of ensuring security of supply to consumers because it could lead to inefficient balancing and dampen incentives for the market to provide flexibility”. Indeed, Ofgem estimated consumer savings of £200m-300m by 2030 by implementing P305.

The reforms of P305 included moving to single cash out pricing, PAR1 (pricing using the marginal MWh), setting VOLL at £6000 from November 2018 and the Reserve Scarcity Pricing (RSP) function for repricing balancing actions of reserve providers during times of scarcity.

This will ensure that parties’ forward trading and investment decisions more accurately take account of:

- The costs and savings their balancing activities create for consumers
- The value consumers place on flexible capacity to mitigate the risk of interruption

This should have positive impacts on balancing efficiency, investment in flexibility, interconnector flows and ultimately the cost of security of supply in the presence of a CM.⁴ Enhanced, more accurate forecasting of demand and wind generation will help the ESO make more efficient and cost effective balancing decisions. National grid forecasting turned out to be an average of 660MW under forecasting of winds during the 10 tightest days of 2021 (Sept-Dec) and demand forecasts typically out turning 590MW higher than actuals. This combination led to forecasting an artificially tight system forcing up balancing costs as – with hindsight - unnecessary actions were taken. Improving forecasting would reduce balancing costs and help industry participants make better decisions.

In the referenced day of high balancing costs (24th of November 2021) maximum STOR was not procured day ahead as it breached the pricing strategy for the service. This resulted in higher costs, due to procuring reserve via the balancing mechanism the following day due to tight margins.

InterGen support the introduction of the new Day Ahead Balancing Reserve service. This will allow Grid ESO to increase its portion of reserve procured at day ahead, reducing exposure to much higher prices in the Balancing Mechanism on the day should margins tighten.

Inadequate transmission network reinforcement has compounded high balancing costs. Under the Ofgem approved “connect and manage” approach to grid connections, generation projects have been allowed to connect to the transmission system in advance of the completion of the wider transmission reinforcement works.. This means that generation assets are regularly curtailed with replacement capacity having to be procured elsewhere. In times of scarcity, as per 24 November 2021, this replacement capacity can be priced high to reflect the scarcity. Across the peak demand periods on 24 November 2021, National Grid ESO took action to bid down 2.5GW of capacity whilst at the same time was buying 2.5GW of offers to replace this volume. This resulted in high balancing costs.

³ <https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-balancing-significant-code-review>

⁴ Ofgem P305 Decision Notice: <https://www.elexon.co.uk/mod-proposal/p305/>

In conclusion, there are myriad reasons for high balancing costs. InterGen are of the view that meaningful reductions in balancing costs could include: network reinforcement, a functioning day ahead balancing reserve service and improved National Grid ESO forecasting. These should be the focus of any review of balancing costs regardless of any “sharp practises” in the industry addressed in this Call for Input.

1) Do you agree that our preferred option will effectively prevent the behaviour that caused last winter’s high balancing costs?

There are many reason for high balancing costs and the preferred option will not address the wider causes of managing constraints. Of the options being considered, InterGen agree with the Ofgem RAG analysis included in the Call for Input and that the three options not flagged red would all offer enhancements versus the baseline arrangements.

Of the options being considered InterGen believes that the preferred option, option 4, could be effective in preventing the ‘sharp practices’ described as long as ‘excessive benefit’ is defined and provides clarity for market participants.

For the reasons outlined above, an intervention such as a price cap on BM offers is not consistent with the market design and nor in the consumer interest over time. As a price cap will not fully reflect scarcity in the market which has a key role in a well-functioning market.

Scarcity and the VOLL (Value of Loss of Load) go hand in hand, VOLL is currently set at £6000/MWh to maintain a security standard or Loss of Load Expectation (LOLE) of 3 hours per annum. Frontier Economics state in their review of the balancing market,² it is rational and within the rules to increase prices up to VOLL in periods of scarcity. The top 6 tightest days as measured by De-Rated Margin were also 6 of the top 10 highest cost balancing days across September - December 2021. This illustrates that the market is rationally responding to scarcity. On five of the ten days investigated by Frontier, coal units were dispatched by National Grid ESO at £4000/MWh with cheaper capacity available from other sources. As above, it is rational behaviour for other participants to increase their price up to the level of the marginal accepted offer.

The ESO day ahead Balancing Reserve service as proposed should help contain costs incurred on the day in the Balancing market as sufficient headroom and footroom can be procured ahead of any scarcity feeding into prices in the intraday market.

We would add that increased investment and incentivization in the ESO’s forecasting accuracy for wind and demand can result in significant cost savings. Frontier Economics identified that over forecasting of demand and under forecasting of wind outputs consistently resulted in higher costs incurred due to having to dispatch 1-3 additional/unrequired CCGTs in the BM. If the ESO control room had better information it can make better decisions.

The preferred option is described as, “A new license condition preventing excessive benefit after submitting a zero MW PN”. For this to be effective, then precisely what is meant by ‘excessive

benefit' needs to be defined. As outlined in the Introduction above and also in the Frontier Economics BM review, it is rational for prices to move to the marginal MWh, up to VOLL.

National Grid ESO has stated in recent Operational Transparency Forums⁵ that they are willing to pay uncapped prices in their balancing actions (trades with Interconnectors have exceeded £9000/MWh already) to prevent black outs and demand control actions, which conflicts with the concept of VOLL and acting in the consumer interest. By trading at such high prices a significant arbitrage (price differential) between the wholesale market and the balancing market is created as the interconnector actions, as per BM, feed into the cashout calculation that drives intraday pricing. These actions could attract market participants to elect to be available in the Balancing Market rather than sell power in the wholesale market. It is rational behaviour to seek the market with the best price outcome.). The options listed in the Call for Input, particularly the preferred option, do not and should not eliminate this arbitrage and will not prevent this activity i.e. seeking better returns in the Balancing Market than can be achieved in the wholesale market.

The proposed balancing reserve service should act to mitigate balancing costs. InterGen notes that this service is being advanced by ESO and look forward to it coming to market.

2) Is the proposed licence condition drafting in Annex 1 sufficiently clear? Are there any drafting edits or additions that you would encourage us to consider?

InterGen believe that the layout of the license condition is generally clear however there are some important clarifications that would need to be made.

A clear definition for "excessive benefit/amount" is essential so that market participants can set their pricing in accordance with the updated license condition. Any forecasting and benchmarking data referenced should be publicly available and visible to market participants at the point they are making pricing decisions, ahead of gate closure.

As drafted, the license condition would prohibit 'excessive benefit' sought or achieved by any Balancing Mechanism Unit (BMU) dropping a PN to zero on the 'Operational Day' (05:00-05:00). Whilst this is clear and a defined term in the Grid Code, it does not allow sufficient flexibility for assets to adapt to market conditions on the day that can evolve and change due to fundamental factors. Market participants should always be entitled to update their Physical Notification (PN) in accordance with Grid Code timescales, in response to evolving market conditions, and this should not prejudice their ability to price in line with prevailing market levels.

InterGen request that supporting guidance be provided to clarify 'excessive benefit' and the metrics used to make this assessment.

⁵ <https://www.nationalgrideso.com/who-we-are/electricity-national-control-centre/operational-transparency-forum>

3) Do you agree with the initial list of factors to consider when assessing excessive behaviour? Are there any other factors that you would encourage us to consider?

InterGen agrees that the initial list could be used to assess excessive behaviour. It is important that the draft guidance to be published alongside the licence condition (as per paragraph 5 of the draft condition) provides adequate clarity to all market participants so that they are able to assess what is appropriate pricing to reflect scarcity and what is to be deemed excessive and by what measure.

4) Is there any specific information you would like to see in the accompanying guidance related to interpretation and enforcement of the new licence condition?

The draft guidance referred to in paragraph 5 of the draft licence condition is key to providing clarity to market participants as to how they should assess what is to be deemed 'excessive'. InterGen suggest that the following should be provided:

- A fuller definition of excessive benefit/amount and a targeted definition around when submitting zero MW PN triggers the license condition; and
- The data against which excessive benefit will be assessed
- A list of the scenarios and conditions in which it would apply, in line with TCLC guidance

We propose that clarity on the term, 'Good Industry Practice' be included in the scope of the license and code updates. This could in itself be helpful in preventing the 'sharp practices' described if they were identified as not being 'Good industry Practice', thereby constituting a breach of Grid Code.