

Charlotte Ramsay Electricity System Operator National Grid Warwick Technology Park Warwick CV34 6DA Drax Power Limited Drax Power Station Selby North Yorkshire YO8 8PH

5th March 2018

Dear Charlotte,

Electricity System Operator Forward Plan

Drax Group is a UK-based energy company with businesses in both generation and retail. In recent years we have transformed Drax Power Station into the UK's single largest source of renewable power by upgrading its generation units to use compressed wood pellets in place of coal. Alongside our biomass units, we are considering the option to repower up to two of our existing coal fired units using gas, and build a battery storage facility of up to 200MW. In addition to this, our acquisition of open cycle gas turbine (OCGT) development sites is intended to allow us to play an important role in supporting a flexible power system that can reliably support wind and solar power generation.

Our retail businesses, Haven Power and Opus Energy, are actively engaged in helping businesses with their energy needs, improving efficiency and switching to renewable products. This response is submitted on behalf of these businesses.

Whilst we welcome the Electricity System Operator Forward Plan and the clarity it brings on its expected performance, we take this opportunity to raise the following points:

- The ESO needs to continue to present a system that enables stakeholders to operate safely as well as
 giving the opportunity for all stakeholders to comply with Grid Code. As outlined in our response, we would
 welcome metrics that address this issue.
- The limited time period for industry consultation may have restricted the ability of some stakeholders to provide a full and comprehensive response to the ESO forward plan.
- We believe more can be done to enhance the limited measures to develop a whole system approach and ensure that transmission and distribution generation assets are able to compete on a level playing.
- Performance measures outlined in the 'Technical Annex', which use historic data as the baseline, have the
 potential to produce results that are not reflective of actual performance as these may be skewed from a
 previous year's outlying results.
- All performance measures that aim to increase the reliability of forecasts need to adopt accuracy metrics
 as well as those that measure timeliness.

A detailed response, by section, can be found in Appendix 1.

Yours sincerely,

Submitted by email

Andrew McKenna Senior Regulatory Analyst

Appendix 1: Drax Group detailed response to the Electricity System Operator Forward Plan

1.0 Strategic aims

Whilst welcoming the strategic aims outlined in the ESO forward plan, we believe that the top priority under "maintaining a reliable system that allows the transport of energy safely across the network" needs to be addressed more thoroughly. We believe that the ESO should outline in its strategic aims exactly how it intends to maintain system reliability, with particular focus on how it will manage the consequential impacts of the reduction of large synchronous generation assets on the transmission network. As the number of these assets continue to decline on the network, levels of inertia created through transmission located plant decreases, thus increasing the risk of plant not operating safely through a fault ride-through event. We believe that it should be a requirement of the ESO to outline a robust solution in the Forward Plan that will detail how the safe running of the whole system is upheld.

We welcome the ambition to expand on the existing information that is made available on both current and future markets, particularly on system operability. We believe that due to its position in the market, the ESO is ideally positioned to produce forecasts that aid BMU operators to make informed decisions, thus allowing them to commercially optimise operations that will allow them to avoid incurring unnecessary high costs that they may be forced to pass through to end consumers. As it is imperative that these forecasts are produced to both a high level of accuracy and in a timely manner, appropriate metrics need to be implemented that will capture both of these key requirements.

We are encouraged by proposed efforts to increase the transparency of procurement/trading decisions, including the rationale for such decisions, particularly with regard to BM and 7a trades. We encourage the ESO to go further and provide locational forecast system requirements and detail the types of actions it may take in order to maintain system security. Disclosing locational constraint forecasts at the earliest opportunity will better inform market participants and enable them to take more informed decisions on how to operate their assets.

Further to this, it is still not clear, with both the ESO and DSO procuring flexibility or system support services, the distinction between the services each network operator will procure and the interaction of their actions/decisions. We believe that there is a need for standardised flexibility / system support services across all DSOs and the ESO. Whilst there is a mention of improvement of the cross-industry maintenance and system security planning process, an explicit 'Product' relating to this should be included in the ESO Forward Plan to ensure standardisation is prioritised.

Likewise, we welcome the inclusion of the facilitation of fair competition in networks. However, emphasis must be placed on implementing this consistently across both transmission and distribution market arrangements. As an example, the ESO Forward Plan Technical Annex outlines the requirement for the 'ESO to facilitate an increase in the number of proposed non-transmission solutions to transmission issues'. Whilst this seeks to enable competition across the networks, it may allow an uneven playing field to develop as the metric incentivises the ESO to find solutions on the distribution network, rather than in the most efficient and effective location across all networks.

A further example of inconsistency across the system can be seen through the differing requirements placed on generators to submit data, depending on whether they are connected to the transmission or a distribution network. We would welcome the ESO to encourage the DNOs to produce the feed data of generation assets that sit on each of the distribution networks. This approach brings operators on the distribution network in line with those on the transmission network as they would be required to nominate production patterns ahead of gate closure. This approach would result in operators across all networks being exposed to the same imbalance and cash-out risks.

2.0 Technical Annex

The following points refer to specific points raised in the Electricity System Operator Forward Plan: Technical Annex.

2.1. Forecasting accuracy: Drax would welcome further efforts to increase both the granularity and accuracy of forecasts published by the ESO. As unit dispatch decisions are made on a half hourly basis, we believe that the DA demand forecast accuracy metric should reflect this as opposed to the proposed metric of measuring against the four electricity trading blocks. This would provide a more useful metric to market participants and improve market efficiency.

Further to this, the proposed metric outlining forecasting accuracy for DA BMU wind generation requires further clarity as it appears to compare the accuracy of the DA forecast that excludes BOAs, against a baseline of metered data that includes BOAs. As each dataset is made up from different sources, this metric will produce an unreliable comparison that will skew the outcome of the measure. We believe that the baseline metric should exclude BOAs, allowing the forecast data to be measured accurately.

2.2. BSUoS forecast provision: Accuracy of forecast is as important as timeliness of publication. Whilst Drax welcomes the timely publication of BSUoS forecasts, it is essential that the quality of forecast is measured and improved. Due to its market position and depth of resource, the ESO is best placed to produce a robust BSUoS forecast. This ESO forecast would ensure market participants are able to make informed decisions, enabling them to commercially optimise and avoid incurring unnecessary high costs that they may be forced to pass through to end consumers. We are conscious that CMP250 is currently under final review by Ofgem, which, if approved, would go some way to reducing the risks to end consumers. We propose a metric that will encourage consistent improvements throughout the charging year;

Below target: 10%+/- of actual below 60% of time On target: 10%+/- of actual 60-70% of time Above target: 10%+/- of actual above 70% of time

- **2.3. Commercial assessment transparency:** We believe that the current timescales adopted for this metric cause unnecessary risk to stakeholders and can be significantly improved by the ESO without excessive dedication of resource. We believe that the current approach of publishing results two weeks after the initial submission is excessive and introduces an unnecessary level of risk as an alternative we believe that the 'On Target' performance measure should be one week. This alternative approach would enable providers of this service to have greater visibility of how their units are expected to operate in the run up to the delivery period.
- **2.4. Trades data transparency:** Drax welcomes the ESOs proposed measures to increase levels of transparency across the sector through the publication of trades in a timely manner. Due to the growing number of 'non-standard' trades, the ESO should ensure that this measure applies to all trades undertaken by the ESO including ancillary service trades and 7a trades.

Should the ESO wish to take make further inroads into achieving the principle of increased transparency across the industry, we would encourage them to publish forecasts of network constraints by location as well as the services they intend to procure in order to relieve the constraint. In compliance with current licence requirements, it would not be possible for market participants to act in a manner that would distort any forecast constraints that the ESO had published. This would allow market information to be shared on a timely basis, prompting the market to react at the earliest opportunity in order to alleviate the network constraint.

2.5. Information provision innovation: Drax welcomes this provision to increase the amount of information that is available to industry stakeholders, allowing them to make informed decisions on when to use the system. The ESO must improve the scope of the data to include certain types of technology that are currently omitted from the measure. For example, efforts need to be made to ensure the gCO₂/kWh of power produced from diesel reciprocating engines, batteries and other forms of storage is published accurately. Similarly, extra efforts need to be made to ensure that the consistent methodology is applied to obtaining accurate data on Behind the Meter Generation as well as interconnector flows. This will ensure a level playing field and a reliable, consistent approach is taken across the whole system.

Additionally the marginal gCO₂/kWh should be published alongside the current proposed forecast as the current measure assumes that each additional user has 'zero' impact on the gCO₂/kWh. As a user decides to change their system usage based on the gCO₂/kWh provided by the ESO, they will have a consequential impact on the

measure themselves. Publishing the "marginal" measure alongside the current proposed forecast will provide users with a clear depiction of the impact their actions will have on the system.

- 2.6. Balancing cost management: Drax welcomes efforts to increase the level of transparency on the cost of balancing the system. In order for the cost of balancing the system to be managed effectively, we believe that the ESO should look to implement long term hedging of essential system support services, including Black Start, in order to help manage this cost and inevitably reduce the risk to the end consumer.
- 2.7. Reform of balancing services: Drax agrees that reform of the balancing services market is required, although we believe the performance measures proposed by the ESO lack ambition. In order to drive change within the balancing services market at the pace that is required, we believe the ESO should be aiming to deliver an auction trial, therefore this should be set as an 'On Target' metric.
- 2.8. Market diversity: Drax encourages market diversity and the welcomes any tangible efforts that are made to bring new participants into the market providing it done on a fair basis and results in a level playing field. We believe that there is potential for this measure to discriminate against large generators as the ESO may be incentivised to increase the volume of trades with smaller generators without assessing the total efficiency. An alternative to this approach would be to measure liquidity and market diversity through the number of trades that are available to the ESO. This approach would encourage the ESO to trade in the most efficient manner regardless of the size of the entity, which would will go some way to ensuring that there is a level playing field between all providers of services.
- 2.9. BSUoS billing: We are encouraged that BSUoS billing is proposed as a metric in the ESO forward plan. Inaccurate and untimely billing can lead to significant accounting issues. We would, however, encourage the ESO to implement an additional measure that encourages 100% of gueries are resolved over a longer period of time - for example 21 days. This would allow stakeholders to submit accurate VAT returns within industry recognised reporting periods. In addition to this, we would request that the 'initial response' outlined in the metric is tailored to the individual query and it provides an assigned point of contact within the ESO, as without this additional detail an automated response would constitute as the 'initial response', but would provide no support to the query submission itself.
- 2.10. Code administrator stakeholder satisfaction: We welcome the inclusion of a metric that will allow the accurate measurement of customer satisfaction with regard to how the three codes are administered. In the interests of transparency, we would encourage the ESO to confirm that the intention is to publish the split of the overall customer satisfaction by code, i.e. it should be clear how each of the three codes have performed individually.

Whilst supportive of measuring stakeholder satisfaction, we believe that the basis for measurement, i.e. comparison against Ofgem CACoP survey in Q4-2018, is poor metric. This can be illustrated through an example of stakeholder satisfaction scoring that was particularly low during a given period. The following period would only have to outturn marginally higher results to deliver a score of 'Above Target', whereas in reality the satisfaction level may still be very low. Further to this, we believe that the existing performance measure of 3% as an 'On Target' performance lacks ambition.

2.11. Whole system optionality: Drax recognises the need for the co-ordination across the whole system, however it is essential there is a level playing field between both transmission and distribution system users. The proposed metric specifically incentives development of solutions on the distribution level as opposed to the transmission level, thus creating an incentive to the ESO to treat the implementation of solutions on the transmission and distribution level differently.

Further to this, the absence of a 'Below Target' metric creates only upside incentive for the ESO and no penalty should it fail to perform to a sufficient standard. We would therefore suggest introducing the following metric that should apply to those connecting to both the transmission and distribution level;

Below target: Up to 3 solutions On target: 3-5 solutions

Above target: More than 5 solutions

2.12. Connections agreement management: Drax welcomes the efficient and effective management of existing connection contracts, however we don't believe that the proposed metric is appropriate as it relies on the timely completion of actions by other stakeholders which are beyond the ESOs control. As an alternate approach, it would seem sensible for the ESO to adopt an approach of setting a metric that the ESO was not reliant on other stakeholders to successfully achieve. In addition to this, further information is required on what exactly constitutes as 'agreements to be updated' as this term in itself offers little detail.

- **2.13. System access management:** Drax does not believe this is a worthwhile metric. This performance measure may incentivise the ESO to make sub-optimal decisions with regard to managing outage schedules. The ESO is required to make decisions that will result in the most efficient outcome, in which the ESO should make in conjunction with the DSO to obtain the most optimal solution. As the inclusion of this performance measure may lead to inefficient actions taken by the ESO, we would suggest it is removed.
- **2.14. Future GB electricity system security:** Drax is encouraged by the proposed measure to identify the five key areas of system operability up to 2030 as this will go some way in providing a signal to developers as to what plant is required on the system over the next 12 years. We believe that that the ESO should provide greater visibility on existing network constraints as well as where it believes constraints will develop in the future. This additional level of transparency will focus the development of assets at the correct location on the network. The forecast of each of the identified five areas as well as their location should go some way to providing the appropriate signal to the market for the correct type of plant to come on to the system at the correct location.
- **2.15. Customer and stakeholder satisfaction:** Drax welcomes the opportunity to provide feedback on the ESOs performance, however we believe that this should be carried out on a quarterly basis as opposed to the annual occurrence as proposed. This will allow for a more fluid relationship between the ESO and stakeholders and allow the ESO to take action within a single year should they receive feedback that their performance has fallen below a satisfactory level. Further to this, as outlined elsewhere in this response, using past performance as a baseline metric may lead to skewed results that are not reflective of actual performance.