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22 May 2012

Dear Martin,

Open letter: Implementing the European Electricity Target Model in Great Britain

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, combined heat and power plants, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including residential and business users.

We welcome Ofgem's request for views from generators, traders, suppliers, network companies, consumers and other parties on how implementing the European Electricity Target Model could impact on the GB market. We support the drive to create a fully integrated and liberalised EU electricity market and have been working closely with European stakeholders to achieve this in the most efficient and effective way in the interest of consumers, both in the UK and on the Continent. We believe there is scope for market and electricity prices to align further across EU markets. However, in practice this will happen through incremental change– we do not believe there is need for fundamental change to current or future GB regulatory arrangements.

We note that the definition of the target model is incomplete. More detail will need to become available during the development of the codes for us to make a fully informed assessment. We therefore make our comments in the light of our existing knowledge of the target model.

The key points of our response are:

- As far as we can tell, GB market is already broadly consistent with the EU Target Model requirements, and so minimal change will be required to implement these.
- The EU Codes, through which the EU Target Model is achieved, set minimum standards for compliance and flexibility for implementation at a national level. This is particularly relevant for GB, in view of the DC interconnection. The Net Transmission Capacity model may be more efficient than a flow- based model which is designed and effective for synchronous meshed zones.
- Where change is required, the focus should be on developing or aligning mechanisms for cross- border trade, as this is where the benefits of the single electricity market are accrued.
- We encourage Ofgem to ensure that any changes currently in development are aligned with the principles and objectives of the EU Target Model; we see real value of continuity in trading arrangements.

- We believe that DECC's EMR proposals are broadly compatible with the EU Target Model.
- The existing GB intraday arrangements are broadly the equivalent of the required intraday market and have the necessary characteristics required for the target model.
- Regarding congestion, given the level of investment that is currently occurring in the GB system to address existing and future constraints, we believe that the market efficiency principle is applicable to the GB. Price zones will have a negative impact on liquidity and present challenges to supply businesses as we they will have to differentiate customers by location.
- Finally, we note the need for regulatory certainty and request that Ofgem take this into account when deciding if any change is warranted.

We note that the GB market is already a competitive market and so demonstrates most of the attributes that the EU target model is trying to achieve. Although there will be some detailed issues that will need to be resolved to ensure compliance with the detailed Network Codes, we expect these to be limited. Given this low level of change, we do not believe that a holistic approach is required. There are 27 member states at different stages of development, some of which, for example, might not have a within-day market and so implementation of the EU Target Model will have a significant impact. On the other hand the GB system has already been subject to close regulatory scrutiny in the form of multilateral impact assessment and scrutiny of code modifications.

We believe that implementation of the Target Model need not require large scale reform of the GB market. Where change is required, the focus should be on developing or aligning mechanisms for cross-border trade, as this is where the benefits of liberalisation are accrued. In fact, the process should be focused on removing any artificial barriers to GB generators selling power into neighbouring markets. This is in contrast to an approach that favours harmonisation for its own sake, where there is no real value created, but costs of implementing change are incurred.

We would encourage Ofgem to ensure that any changes currently in development are aligned with the principles and objectives of the EU Target Model. We see real value in maintaining continuity in our trading arrangements. This is in terms of confidence in the market and the minimisation of operational costs.

We support Ofgem's conclusion that DECC's EMR proposals are broadly compatible with the Target Model. In particular we note that the Target Model does not prevent the introduction of a capacity mechanism, which is a fundamental component of DECC's reforms. It will be essential that the UK Government is supported by the European Commission in its efforts to decarbonise the UK economy. We believe that it is in the Commission's should support all efforts by Member States to decarbonise power as quickly and affordably as possible, in line with EU's commitment to reduce greenhouse gas emissions to 80-95% below 1990 levels by 2050.

One of the key requirements of the EU Target Model is the introduction of continuous intraday trading. We believe that our existing intraday trading arrangements have the necessary characteristics for the target model. In particular we note that the existing

arrangements enable generators and suppliers to fine tune their positions during the day to take account of outages or changes in demand.

We note that currently the GB system is entering a period of significant investment, as evidenced by the business plans of the Transmission Owners, who are forecasting expenditure in excess of £20bn on the transmission system over the next eight years. In part, some of this expenditure is required to replace an ageing network, whilst also connecting new generation; however, there is also sizeable investment needed to address existing and future constraints in the GB system. We believe that the market efficiency principle is applicable to the GB regarding congestion and so the price zone should be set no smaller than GB.

We note that the European Council has directed completion of the electricity market by 2014. However, we need a top-down approach to remove barriers to trade, it is not clear that this will be sufficient to create one European electricity price. On the other hand the bottom-up approach using regional initiatives could create real value for consumers, as trading will be concentrated across relevant borders such as those between France, United Kingdom, and Ireland. Therefore, there is a need to ensure consistency in the coupling implementation to maximise the social welfare value from an optimal cross-border capacity utilisation. To that extent, having different schemes for Brit-Ned, IFA and Irish links may not be a problem. Ideally, all available capacity should be combined and offered on the same platform.

Our fundamental requirements for market coupling are as follows:

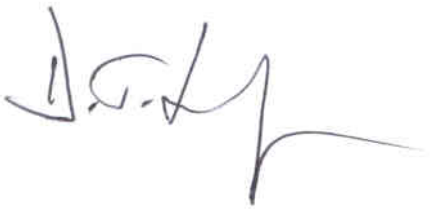
- Consistent governance arrangements across borders to enable two-way flow in accordance with market forces.
- Sufficient capacity of interconnection to meet the physical requirements of the market, delivering benefits of enhanced liquidity and transparency that in turn could lead to the development of financial trading. This should be market and not TSO based.
- Compatible products and trading arrangements.
- Free market price signals should drive investment in interconnection capacity as with any other infrastructure decision.

Finally, the implementation of the target model should have a positive effect on liquidity in the GB market, given the further opportunities it opens up for cross-border trade. We are expecting liquidity to increase for reasons other than the target model, which along with other development will support this. Increased liquidity will help maintain the GB market's integrity and prevent the market splitting into price zones.

Our more detailed responses are set out in the attachment to this letter, including a general assessment of the Target Model and its likely impact for the existing GB codes. Should you wish to discuss any of the issues raised in our response or have any queries, please contact my colleague Nigel Edwards on 020 3126 2506 or myself.

I confirm that this letter and its attachment may be published on Ofgem's website.

Yours sincerely,



Denis Linford
Corporate Policy and Regulation Director

Attachment

Open letter: Implementing the European Electricity Target Model in Great Britain

EDF Energy's response to your questions

Ofgem invite stakeholders to comment on any of the issues raised in this letter, particularly with respect to the following questions:

1. What are the key aspects of the Target Model for GB?

As previously noted, we believe that the GB arrangements are already compliant with the EU Target Model and so the impacts of the target model on GB will be minimal. As such we believe that change should be focused on cross-border trading and co-operation and so the impact on GB should be kept to a minimum. Ofgem may therefore need to create new regulatory structures but these should be *specifically* for cross-border trading in regional markets. If this is the case, then key aspects of the target model in order of importance are:

- **CACM and Price zones**: The introduction of pricing zones within GB is something the GB is not used to and would have significant impacts and consequences. Separate pricing zones would require a fundamental re-design of our trading arrangements and access rights. There would also be implications for EMR if multiple within-day prices existed. It is not clear what benefits this would bring to consumers and so we suggest that the market efficiency principle be applied. There is significant investment forthcoming including HVDC "bootstraps", to relieve congestion on the B6 boundary, coupled with the Transmission Constraint Licence Condition, both of which should make a convincing case for maintaining a single GB price zone.

- **Treatment of the requirement for intraday allocation:** One of the key requirements of the EU Target Model is the introduction of continuous intraday trading. We believe that the existing GB intraday trading arrangements are broadly the equivalent of the required intraday market and have all the necessary characteristics required for the target model. In particular, we note that the existing intraday arrangements exist to enable generators and suppliers to fine tune their positions during the day to take account of outages or changes in demand.

- **Market splitting:** As previously noted, we do not support the introduction of market splitting within the GB arrangements.

- **Long term transmission rights for interconnectors:** These will have the most significant impact on the merchant model.

- **Electricity balancing:** This should require little change for generators as inter-TSO trading requires a robust set of prices and should, if applied properly, decrease balancing costs.

- **Day ahead market coupling**: This is already a reality for the BritNed interconnector and it seems likely that the larger IFA will follow. This being the case, it seems unlikely that this will require major change.

2. What changes will be needed to GB market arrangements?

As previously noted, we believe that required changes to GB market arrangements will be minimal as they are already consistent with the principles of the EU Target Model. Although there will be some detailed issues that will need to be resolved to ensure compliance with the detailed Network Codes, we expect these to be limited. Given that the majority of Framework Guidelines and Network Codes are still being developed it is not possible to identify what detailed changes, if any are required to GB arrangements.

Table 1 Impact of Target Model on the GB

Target Model	Impact on the GB
Day-ahead market coupling	This is already in place for BritNed. We do not expect any significant regulatory changes. This is distinct from the impact on market dynamics and in particular price formation..
Continuous intraday trading	We believe that the existing intraday trading arrangements broadly satisfy the necessary characteristics required for the target model. In particular we note that the existing intraday arrangements exist to enable generators and suppliers to fine tune their positions during the day to take account of outages or changes in demand. This mechanism is open to all Balancing Mechanism participants, including intermittent generators, and enables them to manage their positions until close to real time; at which point it becomes more efficient for National Grid, in its role as Transmission System Operator, to take actions and balance the network through the BM. Additional arrangements may be required at interconnection points.
Electricity balancing	The balancing requirements are focused on inter-TSO cooperation. This is predicated on each TSO's national arrangements providing robust pricing signals. We believe that the GB arrangements provide robust pricing signals for balancing and so do not see an obvious need for change.
Long-term transmission rights	GB market already has long-term access rights to interconnectors and in any case this will be subject to a future EU Code on forward markets. We therefore see no reason why this would automatically have an impact on GB codes.
Price Zones	We believe that the investments identified by the TOs to address the future and existing constraints support the use of a single GB price zone and that the market efficiency principle should be invoked. This would leave our existing arrangements intact.

3. Should we try to minimise change or to consider holistically the best combination of GB and EU requirements?

EDF Energy believes that the benefits for market participants of a stable regulatory framework should not be underestimated. This has a value in itself and should be considered in any Impact Assessment Ofgem conducts. Furthermore, consideration of this should not materially alter or delay the Electricity Market Reform implementation.

We note that the GB market is already a competitive market and so demonstrates most of the attributes that the EU target model is trying to achieve. Although there will be some detailed issues that will need to be resolved to ensure compliance with the detailed Network Codes, we expect these to be limited. Given this low level of change we do not believe that a holistic approach is required. There are 27 Member States at different stages of development, some of which, for example, might not have a within-day market and so implementation of the EU Target Model will have a significant impact. The GB system has already been subject to close regulatory scrutiny in the form of multilateral impact assessment and scrutiny of code modifications.

We believe that the implementation of the Target Model need not require large scale reform of the GB market. Where change is required, the focus should be on developing or aligning mechanisms for cross-border trade where necessary, as this is where the benefits of liberalisation are accrued. In fact, the process should be focused on removing any artificial barriers to GB generation selling into neighbouring markets. This is in contrast to an approach which favours harmonisation for it own sake, where there is no real value created, but costs of implementing change are incurred.

4. How can we deliver the best outcomes?

EDF Energy considers that being involved at an early stage in the policy formation process is critical for generators to make an assessment of the impact of changes on their business. From our experience, the Framework Guidelines and some of the Network Codes have necessarily been generalised to accommodate the diversity of European energy systems and markets. Therefore, we need Ofgem to provide us with as concise an interpretation of the model as possible.

In Ofgem's assessment of the impact of a European code on the GB market, we would expect the cost benefit test to be linked to the extent to which the measure contributes to cross-border trade. This should prevent costly and largely pointless industry change.

We think that this can be best achieved by:

- Ensuring consistency in the coupling implementation to maximise the social welfare value from an optimal cross-border capacity utilisation.;
- all market participants should be able to provide capcity efficiently;
- consumers should be shielded as far as possible from the costs of unused capacity; we would expect a full consultation on interconnector capacity allocation algorithms to follow in due course.

5. What process is needed to take this work forward?

We would suggest that Ofgem should:

- Systematically engage with industry in order to inform its own negotiating positions before they engage in Europe. This would involve informing industry of European developments, not only in the existing forums but also within the various working level groups of the major policy areas where necessary.
- Internally, Ofgem needs to integrate the impact of their domestic policies with the target model.
- Any change identified by Ofgem should be communicated as early as possible with industry stakeholders to ensure the best solution and outcome possible.
- Finally, we would expect Ofgem to take the lead or at least be influential in the development of the Framework Guidelines in ACER.

EDF Energy
May 2012