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23 September 2016

Dear Frances

Open letter: Charging arrangements for embedded generation

Attached is our response to the open letter you issued on 29 July 2016.

Northern Powergrid recognises the market concerns outlined - smaller embedded generators connected to the distribution network can secure benefits from triad avoidance that are not available to larger distribution-connected and transmission generation. We agree that these market distortions should be addressed, creating a level playing field for all generators and removing the risk of inefficient network development.

I trust you will find the information useful. Please get in touch if there is anything you would like to discuss further.

Yours sincerely

Jim Cardwell
Head of Trading & Innovation

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NORTHERN POWERGRID

Embedded generation charging arrangements

Northern Powergrid's response to Ofgem's open letter dated 29 July 2016

KEY POINTS

As patterns of network usage change and new technologies are introduced, it is important that energy policy keeps pace. The issue of charging for generators is a growing one and needs to be addressed. However unintended consequences from any remedy must be avoided so as not to transfer the market distortion and retain the inequity. We would therefore welcome a holistic review of wider distortions in encouraging the efficient development of the energy system.

- The importance of the transmission and distribution network in delivering energy to people's homes and businesses 24/7 needs to be recognised. The networks are an essential part of a chain which ensures security of supply, including through interconnection with Europe.
- Societal decarbonisation is changing the patterns of network use and introducing new technologies and it is important that energy policy, network codes and charging arrangements keep pace. The overall approach should be a balanced one which ensures that:
  - Efficiently-incurred sunk costs are recovered and assets are not left stranded.
  - Distortions do not encourage inefficient development of the energy system.
  - Everybody pays their fair share and that the vulnerable are not unduly penalised.
  - Outcomes are good for consumers as a whole while recognising distributional impacts.
- Northern Powergrid recognises the market concerns outlined - smaller embedded generators (EG) connected to the distribution network can secure benefits from triad avoidance that are not available to larger distribution-connected and transmission generation (TG).
- We agree that a significant market distortion exists and that this should be addressed as a matter of priority, creating a level playing field for all generators and removing the risk of inefficient network development.
- However, this needs to be undertaken so as not to introduce unintended consequences.
  - Removing the TNUoS demand residual charges benefit from EG could encourage greater development of private wires networks around new or existing EG.
  - We have seen a growing interest in these arrangements, which benefit some customers at the expense of others and the likelihood of higher overall system costs.
- We would therefore encourage a wider review of all similar distortions, and welcome Ofgem's proposal to take forwards work on 'behind the meter' issues in the autumn.

23 September 2016

Detailed response to Ofgem's open letter

1. We agree that, based on the evidence put forward, finding a solution to the transmission network use of system (TNUoS) demand residual charges issue should be an area of focus for Ofgem as a significant distortion is occurring and it is likely to increase in coming years.
2. The TNUoS demand residual charging arrangements are the focus of the Connection and Use of System Code (CUSC) modifications being raised by industry[1]. We are open to any process that allows the issue to be addressed quickly and efficiently. However, whatever process is used, there needs to be strategic oversight from Ofgem to ensure that the matter is resolved as quickly as possible and also is progressed in a manner that recognises the other market distortions that need tackling and seeks to avoid unintended consequences from the resolution.
3. We are particularly concerned that the removal of the embedded benefits may result in a stronger case for investors to build generation 'behind the meter', or on a private wire network, potentially creating a further market distortion and inefficient system. We have already seen a significant and growing interest in this type of arrangement.
4. In this wider context an impact assessment would need to include an assessment of all of the risks and address them with a strategy that matches the bigger picture vision of the regulator.
5. As for the other charging element - Balancing Services Use of System (BSUoS) - this is potentially a second order concern and could be considered as part of future developments in relation to the development of local balancing and work on flexibility. We would be supportive of such an approach as local balancing and the potential move to a Distribution System Operator (DSO) role is something we are already considering. But, we realise this is not a fast-track process and careful consideration needs to be given on how this may be best achieved. We therefore look forward to the Ofgem/Department for Business, Energy and Industrial Strategy (BEIS) call for evidence on a Route map to a Smart Flexible Energy System with respect to both DSO and storage.
6. We recognise that Ofgem have concerns regarding the benefits that EG provides and would support a holistic review of some of the wider distortions in encouraging the efficient development of the energy system. In particular we feel a wider review of differences in network charging should include an assessment of the benefits and risks to transmission and distribution networks and the wider energy system.

[1] CMP264 'Embedded Generation TRIAD avoidance' seeks to make changes to TNUoS billing arrangements to remove the ability for new EG to receive the embedded benefit from TRIAD avoidance.

CMP265 'Gross charging of TNUoS for HH demand where embedded generation is in Capacity Market' specifically seeks to address the issue that half hourly metered (HH) demand for TNUoS purposes is currently charged net of embedded generation.

7. We note Ofgem's consideration of transitional arrangements and expect that the modifications process will have to consider the balance to be struck between preventing the further escalation of the level of the demand residual payments and the delay in implementation which is likely to reduce consumer benefits. We would therefore suggest that Ofgem should look to close off the potential for these distortions as soon as possible. Any transitional arrangements should look to mitigate the risk of stranding generation investments that have already been made and should be targeted as closely as possible to minimise the cost to consumers. In striking this balance, Ofgem should consider the extent to which:

   a. Investors in EG have incurred efficient sunk costs in response to the price signals created by the arrangements; and the extent to which

   b. these historical costs should be remunerated to avoid raising investor perceptions of risk when responding to price signals in the energy market.

8. We note Ofgem's recognition that Distrubution Use of System (DUoS) charges give EG a credit for offsetting investment between the generator and the connection to the transmission system (the grid supply point or GSP). This credit should reflect the different costs that EG and TG imposes on the distribution system. Whilst it is the standard for generators connected at both low voltage (LV) and high voltage (HV) to receive credits it is different for extra-high voltage (EHV) designated properties, (where intermittent generators do not currently get a credit). This is a feature of the nationally approved EHV Distribution Charging Methodology (EDCM) and which is currently being reviewed by distributors as part of the annual review.

9. We share Ofgem's concerns on whether other elements of the network connections and charging regimes are having a significant impact on the level playing field between different types of generation and demand including storage and other forms of flexibility. Again this is a topic that is being considered in the review of both of the DUoS charging methodologies (Common Distribution Charging Methodology (CDCM) and EDCM) and we look forward to hearing Ofgem's views with respect to the barriers, in particular the regulatory definitions, that could be changed to ensure these technologies can be considered in a wider context across both transmission and distribution charges. Ultimately, it is a matter for policy makers to work with companies to ensure that the detailed arrangements are calibrated to deliver on national energy policy.

10. Northern Powergrid is actively participating in all of the distribution charging reviews and monitoring the review currently underway on the transmission charging methodologies and we note that stakeholders are looking for a more holistic review and any longer-term developments should have the flexibility to accommodate change. We are aware of the two proposed modifications to the CUSC that have already been raised by industry parties who are concerned about the distortions the embedded benefit is causing, particularly to the capacity market. We welcome Ofgem's encouragement for industry participation in the modification processes, and consider this applicable across multiple codes.

11. We look forward to reading Ofgem's forthcoming joint call for evidence with BEIS on a Route map to a Smart, Flexible Energy System. We are already participating in the transition to more actively-managed networks to provide system support and network operation and exploring the potential for DNOs to add more value in the role of a DSO.

12. As already stated, we are also keen to better understand the risks that result from changes made to the embedded benefit arrangements. While the immediate impact of the changes should benefit consumers, there is a risk of unintended consequences due to distortions created by other aspects of the arrangements. By closing one 'loophole', Ofgem may encourage market participants to use other 'loopholes'. In particular, we can highlight that we have already experienced significant growth in interest in private wire arrangements. There are at least three issues with these arrangements:

    a. They shift historically incurred transmission and distribution costs onto other customers, without actually helping reduce these sunk costs (although they may help reduce ongoing costs).

    b. They allow the energy consumer to avoid policy costs that government policy has imposed (shifting them to other consumers in many cases, and potentially frustrating the government's policy objective).

    c. They are likely to lead to inefficient outcomes and higher overall system costs since

        - the building of private wires in parallel to the regulated networks – necessitated to allow the supplier to be unlicensed and thereby not pay environmental policy costs – may involve inefficient duplication of assets,

        - the EG on the private wires network, responding to distorted incentives, might not be the least cost generation option, which would result in higher overall generation costs.

13. We agree that this is an important issue and look forward to working with Ofgem and the industry to provide evidence and address these concerns.

14. We also keenly anticipate the work in relation to the potential options for ensuring charging for storage is addressed to ensure we take advantage of the significant developments of technology in this area and the benefits this offers for distribution networks and other parts of the energy system. Ensuring that there is a level playing field for all parties and all generators to compete with other forms of flexibility should help to secure a number of policy objectives.