

26 September 2016

Frances Warburton
Partner, Energy Systems
Ofgem
9 Millbank
London
SW1P 3GE

Dear Frances,

Charging arrangements for embedded generation

The Energy Networks Association (ENA) represents electricity and gas network companies across Great Britain (GB) and Ireland, covering Transmission and Distribution.

This response is on behalf of our electricity members in GB¹. We welcome Ofgem setting out the wider background to the embedded benefit issue and seeking policy development input outside of the CUSC modification process. Many of our electricity members will be submitting individual responses on the detail of the consultation letter.

This response highlights some of the analysis undertaken in this area through ENA and also provides some high level comments around scope and governance which are common across our GB electricity members.

Embedded benefits are becoming a distorting factor

Embedded benefits is an issue which arises out of transmission charging arrangements but impacts generators connecting to the distribution network. DNOs have fully embraced the challenge of connecting over 27GW of distributed generation (DG) to their networks. They want to ensure that the price signals driving generators to connect to the distribution system are reflective of the costs and benefits, DG provides and therefore contribute to delivering an efficient whole electricity system. The analysis which is presented in the consultation letter suggests that embedded benefits are going to have an increasingly distortive effect on the electricity market going forward.

An ENA charging group has been looking at charging issues across transmission and distribution.² This has identified the potential impact that embedded benefits have on the decisions generators take on size of plant and whether to locate at transmission or distribution. The current arrangements seem to provide a significant financial benefit for generators to be under 100MW and connect at distribution level.

With the projections in your consultation letter that the level of embedded benefit will increase quite dramatically over the next 4 years, our members think this is an issue which needs further investigation. Our DNO members are already responding to unprecedented levels of applications from DG and storage customers. In some areas the network is at capacity for any further generation. It is important the commercial and market framework driving these generators to connect at distribution level is incentivising the overall efficient operation of the electricity system.

¹ These are Electricity North West Limited, Northern Powergrid, Scottish Power Energy Networks, UK Power Networks, Scottish & Southern Electricity Networks, Western Power Distribution and National Grid Electricity Transmission.

² The TDI charging task force

Scope of work

Our members are keen for the issues around embedded benefits to be looked at in more detail. However, we note there are a series of commercial issues which are linked to embedded benefits – interaction of transmission and distribution charging (UoS and connection); BSUoS³; losses and potentially behind the meter generation.

We note that some changes are already underway through the CUSC modification process. While this process is welcome, we don't think that this is an issue which can be looked at in isolation and looking forward, wider work will be required in order to ensure that changes to one area of the commercial framework do not lead to a knock on distortion elsewhere.

Therefore, to tackle the underlying issues around embedded benefits, a more fundamental review is will be required to look more broadly at current commercial and market arrangements and their interaction across transmission and distribution.

Governance model for the work

Our members would highlight that there is already a considerable volume of 'industry change' work which is underway. This includes smart metering roll out, move to half hourly settlement, faster switching and extending competition in transmission, among others. This is already taking up a significant resource within network companies.

Our members are conscious that the last couple of charging reviews at distribution and transmission have been very lengthy projects which required a significant resource commitment within companies for a number of years.

Consequently, the plea from our members is for any work around embedded benefits and the broader commercial issues to be taken forward as part of a centralised and co-ordinated work programme. It would not efficient for the work to be progressed under separate code modifications – we do not think it would make progress and would require a large commitment to resource the many working groups across different codes which overlap the issues.

Our members consider that Ofgem has a key role to play in any centralised work programme, in terms of setting out a clear scope and project plan for industry to work towards. There are precedents for this governance model which Ofgem has used previously – for instance under the Smart Grid Forum, Ofgem and Government set the outline work programme for industry to deliver with outputs coming back to the forum for comments and sign off.

This may be a model worth exploring should Ofgem decide to take these issues forward.

I hope that the points raised in this response are helpful. In summary, we can clearly see that there is an issue here but would provide two notes of caution.

Firstly, that to properly address these issues a wider review across charging and commercial issues is required and secondly that such a review is a significant undertaking and would need a strong Ofgem input to govern the work programme in an efficient way.

If you have any questions on the points raised in this letter, please do contact mark.askew@energynetworks.org or Ardy.Elansei@energynetworks.org.

Yours sincerely,



David Smith
Chief Executive

³ Balancing services use of system