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Dear Stuart,

## **Response to Project Transmit – A call for evidence**

### **Introduction and context**

Thank you for the opportunity to respond to the above consultation. GDF SUEZ Energy UK welcomes the opportunity to review the electricity transmission charging arrangements following the Government's decision to implement the enduring connect and manage transmission access arrangements earlier this year.

The energy sector currently faces an unprecedented challenge of providing the requisite investment to meet its challenging climate change targets. This challenge requires GB to connect low carbon generation to the grid, including a large proportion of wind generation, which is intermittent and more often than not located in remote areas. This in itself is challenging from a technical perspective, but we must at the same time maintain security of supply and ensure energy is affordable for customers.

### **About us**

GDF SUEZ Energy UK currently operates two gas fired power stations in the UK; Teesside Power Station (1,875MW) and Shotton CHP in North Wales (210MW). GDF SUEZ has also recently announced our intention to invest in the UK nuclear renaissance having secured an option to purchase land for the development of a new nuclear power station at Sellafield (up to 3.6GW), as part of a consortium with SSE and Iberdrola. We have recently commissioned our first UK wind farm (20MW Craigengelt wind farm in Scotland) and are actively evaluating other onshore renewable investments.

Additionally, we are a leading energy supplier to businesses. GDF SUEZ Energy UK is the fifth largest supplier to the Industrial and Commercial segment for gas and the sixth largest in this segment for electricity.

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## **Summary points**

The transmission charging arrangements are an important area for GDF SUEZ Energy UK and we support Ofgem's suggestion that this area is reviewed via the Significant Code Review (SCR) process. We expect that this approach will provide a clear scope and programme for the review which should support delivery of timely solutions to the most urgent issues.

We understand the intent of this consultation is to gather views from stakeholders on two aspects; firstly the scope that the review should cover and secondly the problems that arise from the existing charging regime. We have limited our comments to these two areas initially rather than proposing detailed solutions at this stage.

### **1. The scope of the review**

The proposed scope of the review needs to be more focused to deliver timely changes for the most urgent issues which pose an unnecessary barrier to new investment. Our main points are outlined below:

#### **1.1) TNUoS**

A review of the generator TNUoS and connection charging methodology is urgently required and this should be the primary focus of the review. The Government made the review of generator connection and transmission charging a clear priority in its decision on the enduring transmission access review and we agree with DECC in this respect.

#### **1.2) Connections**

The new connections charging regime for locations where resource is at its highest, for example, the Scottish Islands should be progressed as a matter of urgency. We are aware that high quality consented projects are stalled due to the unrealistic TNUoS level set by the current charging mechanism. On this point we are keen to see a quick resolution to the issues highlighted in the GB ECM 20 consultation, especially as there is acceptance that in these specific locations TNUoS is too high. We believe that waiting for Project Transmit to conclude would create unacceptable delay to decision making in this area. We favour leaving this particular area outside of scope as suggested by Ofgem and we urge a quick resolution to these issues.

#### **1.3) BSUoS**

Project Transmit offers an opportunity to review BSUoS charging although we would be surprised if any new solutions could be developed and implemented soon enough to be of real value. We consider that the current high cost of BSUoS to be a transitional issue and one which can largely be resolved once the transmission system adapts to new sources of supply. Therefore, unless there are any fresh thinking on solutions which could offer a quick win, BSUoS should not be a primary focus of the review. This is primarily because constraint levels may have eased by the time any remedies are implemented. We note that the Government did not advocate the need for a locational element to BSUoS charging in its decision on the reform of the transmission access arrangements.

However, we would support initiatives that resulted in improved forecasting of BSUoS costs by National Grid.

#### **1.4) Gas**

Gas transmission charging methodology should not be in scope. There has been substantial investment in new entry points over recent years to accommodate changing supply sources such as LNG and on-shore storage projects. This investment has come forward using the established gas entry charging methodology and has not identified any defects substantial enough to pose a barrier to investment. On gas exit, the arrangements have only recently undergone reform and we do not foresee the need for further reform at this stage.

#### **1.5) Embedded Generation**

We are not convinced of the case to include embedded generators within the scope of the review, there is little evidence of the case for this in the open letter or the supporting paper.

### **2. The problems with the current regime**

There are a number of areas where the current arrangements are no longer fit for purpose and need to be reviewed in order to fit with Government policy objectives and the reasonable demands of investors. Our main points are outlined below:

- The current methodology for determining generator TNUoS is no longer fit for purpose as it is in conflict with Government policy objectives. The GB market will need to renew the vast majority of its generation fleet over the next 10-15 years if it is to meet Government policy objectives. The current connection and transmission pricing methodology will actively discourage this investment at a time when it is most urgently required.
- The current TNUoS methodology is based on a zonal framework, which was developed to encourage generation to be built as close as possible to centres of demand. This may have provided incentives in the siting of some existing assets, however locational differentials are no longer relevant in relation to driving investment signals for the new technologies required to provide low carbon electricity, for example:
  - o The siting of nuclear plant is directed by Government and can only be located on or close to existing sites, which tend to be in isolated locations.
  - o The economics for the siting of wind farms demand that they are located where the wind speed is highest and for onshore wind farms, where planning permission is most favourable.
  - o Other plant, such as new gas fired plant, are largely constrained to available brown-field locations due to risks of planning uncertainty and timescales.
  - o Carbon Capture and Storage (CCS) is also a very site specific technology which requires suitable infrastructure and favourable geological conditions close by.
  - o Investment in new renewable or other low carbon technologies therefore cannot respond to any locational price signals; development must be at source rather than at demand and this is irrespective of the impact on the transmission network.

- The incentives in the current locational charging mechanism for generator TNUoS act as a regional support mechanism, which skews competition in both new and existing investments. This is an inappropriate use of the transmission methodology; other forms of incentive mechanisms do not discriminate on location, for example the RO and FiT discriminate by technology but not by geography.
- The effect of this means that those projects that are fortuitously located will have an unfair competitive advantage compared to those in other areas, meaning they will be built first. The consequence of this is that the remaining projects become less likely to be built even if they offer equally good wind speed or load factors, thus reducing the likelihood of maintaining the momentum towards hitting the policy targets. Our view is that the Transmission system is a "common good" and locational charges should not be used as an incentive/penalty mechanism.
- In this respect the current generator charging regime acts as a disincentive to innovation. Some of the more challenging projects may not be made because of the extremes imposed by the current methodology. This may inhibit further technological innovations once the "low hanging fruit" has been depleted and inhibit progress towards the low carbon targets in future years. Investment in otherwise good projects may be delayed or shelved simply as a result of the current charging regime which skews the cost unreasonably on investors. Indeed there is a real possibility that areas of highest potential resource may never be harnessed, such as the Scottish Islands, as high quality renewable energy projects are offered unrealistic connection charges.
- The current modelling of transmission charges involves a complex theoretical model based on the addition of a theoretical load to all nodes on the system. The theoretical modelling process derives a set of nodal costs, to which a Global Locational Security Factor of 1.8 is applied to cover non-specific system investment which is not allocated to any modelled development. The revenue derived is then split to fit arbitrary allocations between Demand (73%) and Generation (27%). Finally, a residual factor is applied to make sure that revenues are scaled to achieve the required overall total. We are not convinced that this current methodology and in particular the weighting of transmission charges between generation and demand is cost reflective. The current split of costs is clearly arbitrary and the size of some of the adjustment factors raise questions as to the validity of the approach. We are therefore questioning the rationale given the impact that this approach has in creating zonal charges for a generation fleet that cannot react to locational signals.
- Whilst we are not necessarily making the case for change in the allocation of costs between sectors it is clear that the proportion paid by the generation sector should not be increased given the levels of investment required over the coming years. There may be a case for reducing the contribution from the generation sector but any change is unlikely to impact the customer bill because the wholesale price of electricity should adjust accordingly.

## **End of Consultation Response**

I trust this information is helpful and if you have any questions or would like to discuss further, please do not hesitate to contact me on 0113 306 2104 or my colleague Andy Scott on 0113 306 2082.

Yours Sincerely,

P. Broom

**Phil Broom**  
**Regulatory Affairs Manager**  
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