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Dear Colin

Enduring Transmission Charging Arrangements for DG

United Utilities recognizes the importance of this consultation, and in particular the fundamental issues it raises. We are very pleased to be able to provide comments into this debate.

For us there are four main factors that we believe Ofgem must take into account in the progress of this consultation. These are:

- The costs and benefits of making any significant change in the industry structure;
- The overall effect, or possible effects, on project development appropriate to a low-carbon economy;
- The lack of a security standard that deals with the contributions to the Total System of embedded generation;
- The apparent lack of coherence of the policy goals of DTI and Ofgem.

We attach as an appendix some more detailed thoughts on these and other points. However it is appropriate to make some fundamental points early in our response. Firstly it is very hard to make any clear recommendations as to the most beneficial future approach to either the structure of the industry or charging without an assessment of the current inefficiencies or difficulties, nor without an estimate of how they might grow in the future if nothing is done. We believe that Ofgem should undertake the necessary work to create a draft Regulatory Impact Assessment. Without a RIA it is unlikely that affected parties will be able to make appropriate informed judgements of the costs and benefits of any changes. We note Ofgem's intention to consult again on these issues in the Spring and we believe that it would not be appropriate to bring that consultation forward without at least a draft RIA.

A RIA should also deal appropriately with our second bullet above. Although the issues covered by this consultation are key to industry players, they do also need to be seen in the wider context of energy policy and environmental obligations.

We also believe that the existing Transmission Security Standard should be reviewed in the light of this consultation. We do not accept that it is possible to draw conclusions such as that implied in 5.6; investment is driven by the needs of the Security Standard – which might identify flows at system peak demand as the critical driver, but this is by no means obviously true where GSPs have significant volumes of DG operating at system peak. Ideally such a review should be undertaken before a RIA is attempted, but we recognize that in practice an iterative approach is more likely.

Finally we note that some of the issues that this consultation is trying to address are aggravated by the approach that is being fostered by DTI in moving the licensing regime to 50MW or even 100MW, at the same time as the Transmission Charging Arrangements are allowing projects in this size range to escape TNUoS charges. These moves mean that projects in this size range no longer have a contractual relationship with NGET, thereby making it much more difficult to ensure simple proportionate TNUoS charging.

In terms of the way forward we would reiterate the need for a comprehensive RIA to help inform the need for, and/or timing of, future changes. In the absence of a RIA, we are currently of the view that the existing arrangements are probably broadly appropriate, recognizing the current deficiencies and balancing possible costs and benefits of making changes. Ultimately, if the growth of DG makes the status quo untenable we would see that moving to Option 7, with the DNO as the agency, as the best long term enduring approach. We expand on our thoughts in regard to this and other options in the appendix. Finally we can also see that should a move to Option 7 never be justified, Option 6 could be implemented to remove the worst of the distortions that exist with the status quo.

We trust you find these comments, and our more detailed thoughts in the appendix, helpful. Please do not hesitate to contact me if you would like us to elaborate on any particular point.

Yours sincerely,

Mike Boxall
Electricity Regulation Director

Appendix to UU's response to Enduring Transmission Charging Arrangements for DG.

In considering UU's response to the above consultation, we believe the following factors should be taken into consideration by Ofgem.

Wider Policy Framework

Ofgem appears to be only considering the narrow issues associated with efficiency of decisions taken in relation to network assets and system operation. Whilst this is generally something we would fully support, there are also wider issues. There could be a case for some modest network economic inefficiencies giving wider benefits to GB by facilitating the connection of increasing amounts of renewable generation. Ofgem's consultation makes no mention of this consideration.

Even though there are now sub-100MW generators exporting power from distribution systems, it is questionable that this will ever be significant in a GB context. Making significant changes to the industry could therefore be disproportionate.

We would expect the RIA to specifically recognize these two points.

Coherency of DTI/Ofgem Policy

The present difficulties have been significantly contributed to by policy decisions taken over the years to specifically shield smaller generators from the costs of operation of the transmission system. The DTI has progressively raised the limit on licensing from 10MW to effectively 100MW at the same time as Ofgem has allowed transmission charging regimes to ignore generators below 100MW. This current consultation now seems to acknowledge that this is inappropriate.

Transmission Security Standards

Although Ofgem recognizes that cost drivers could be different between DNOs and TOs, there is no exploration of the extent to which costs are driven by demand security standards (ie licence conditions). Ofgem does not appear to recognize that these considerations will mean that costs will not necessarily follow peak flows in any given period. NGET made the point during the CAP093 Working Group discussions that there is no transmission security standard that deals fully with the security requirements of exporting GSPs.

The cost of a network is driven by the security standards it is expected to achieve. The allocation of costs should be based on the effects that parties connecting to it will have on it in accordance with those standards, and principally, in the case of interconnected networks, by what can flow across the connecting node and under what conditions. Neglecting directly connected generators, and irrespective of the detail of the allocation, there are only two classes of party who can know and manage those potential flows. The first is DNOs connected to a node, and the

second is Suppliers for their flows across it. In reality there are considerable cost and systems implications in having a reasonably complete knowledge, and Suppliers certainly do not have a complete set under current industry arrangements based on GSP Groups. Consideration of how these cost drivers can be managed leads to the suggestion of the “agency” solutions that Ofgem propose as solution 7.

Status of the 132kV system

Ofgem and DTI appear to cling to the incorrect assertion that the 132kV system is significantly different in Scotland from the rest of GB. This misconceived classification is a considerable current driver of cost, complexity and inefficiency in the industry.

It is true that there are more smaller generators connected to the Scottish 132kV system, but to claim that its role of a bulk carrier of energy is different from that in England and Wales is demonstrably false. We would cite the Cumbrian Ring as a generation dominated bulk carrier of energy that also fulfils a distribution function, as does the majority of the Scottish 132kV network.

There would be future advantages in promoting active networks if the Scottish 132kV system was classed as distribution as this will help precipitate provisions for active networks to be institutionalized in DNO practices. This would of course also solve the problem of the 132kV discount in Scotland.

Thresholds and boundaries

These are always a cause of perverse behaviour. Moving significant break points down the voltages will only aggravate this. We are already seeing wind farm developers move to register smaller and smaller multiple aggregations of turbines to get under the existing thresholds. An enduring solution ideally will solve this.

UU's Observations on Ofgem's Options

Ofgem makes the helpful observation that any identical change of behaviour by either a transmission connected or distribution connected party has an identical effect on any constrained boundary of the main interconnected transmission system. Ofgem points out that if there was consistent charging of locational signals to generators and demand (ie Suppliers), then there could possibly be little need to change anything else, although this probably assumes long term rational market behaviour by Suppliers in their contracts with distribution connected generators. In principle it must be right to try to reflect these

UU also believes that Ofgem has overlooked an option that is a variation of Option 2. Although Option 2 is deeply unattractive, for completeness the option of constraining DG plant (as opposed to de-energizing), so that there is no spill, must be recognized.

UU's views on the remaining Ofgem options are summarized in the table below.

Options described in Ofgem's Chapter 5	Advantages	Disadvantages
1. Do nothing UU Conclusion – Could be enduring option, dependent on DG growth.	Lack of administrative Burden Can continue to be tweaked by industry (eg CAP 093) to keep “fit for purpose”	Does not address existing concerns
2. De- energise spilling plant UU Conclusion – inappropriate option	Would solve exporting GSP problem.	Potentially not needed if CAP093 resolved. Seen as a drastic measure, and not a feature of a “well managed” market.
2a DNO constrains spilling plant <i>(UU suggestion not contained in Ofgem's consultation)</i> UU Conclusion – inappropriate option	Would solve exporting GSP problem.	Would require G Code and D Code changes. Potentially not needed if CAP093 resolved. Not as severe as 2 above, but has significant commercial impacts on generators.
3. Charging Model Amendments UU Conclusion – inappropriate option	None identified	This option as described by Ofgem has no effect on embedded plant.
4. Extend the ICRP into the distribution network UU Conclusion – this is not a favoured option. It is a fundamental move that potentially affects other areas of charging	Would introduce more consistency across parties in respect to charges at 132kV	DNO cost drivers likely become distorted by the cost drivers of the transmission system DGs would just locate further down the distribution network in order to avoid transmission related charges.
5. Amend use of size definitions for	Likely to introduce more	DGs would just locate further down the

Options described in Ofgem's Chapter 5	Advantages	Disadvantages
charging and commercial arrangements UU Conclusion – would be a compromise solution that moves towards addressing some of the issues, but is not one of an enduring nature	consistency across parties in respect to charges at 132kV	distribution network in order to avoid transmission related charges. Would introduce other significant Grid Code burdens on smaller generators, and potentially on DNOs.
6. Create consistent liability for charges UU Conclusion – simple solution that has few drawbacks, but might not work as intended. Could be useful transition step.	Potentially removes differences of charging between embedded or directly connected generation. Administratively simple for DNOs.	Requires modification to NGET's charging methodology. Intended operation depends entirely on behaviour of Suppliers.
7a Agency Model (Supply) UU Conclusion – not the right Agency approach	Achieves some of Ofgem's key objectives (consistent charging regime for DGs, removes perverse DG incentives, increases competition)	To work properly would require major changes to Settlements, and probably significant real path connectivity information from DNOs to allow the disaggregation of GSP Groups into GSPs. DNOs potentially faced with increased costs, and no obvious benefits
7b Agency Model (DNO) UU Conclusion – Long term this is probably a beneficial model. However not clear if benefits will ever outweigh costs of implementation and operation.	DNOs would actively manage networks. Would probably force DNOs to develop some sort of access régime, either based on Transmission and/or DNO network capacity.	DNOs would need to new system management tools, approaches, and costs. Not clear if DNO/generation interaction would ever be sufficiently liquid to justify this change.

Options described in Ofgem's Chapter 5	Advantages	Disadvantages
	Would probably lead to separate SO incentives for DNOs.	Current lack of incentives to act in this new capacity
7c Independent Distribution System Operator (DSO) UU Conclusion – no driver for this model	No obvious advantage over 7B above.	Independent SO necessary in transmission as transmission assets in Scotland owned by other parties. There was no need for independent SO prior to BETTA. Would require SO/DNO Codes and contracts. Significantly more complex than either the supply/DNO agency models Additional layer of management and control