VATTENFALL

Our ref: UKGEN/015

lionel.avignon@vattenfall.com
Tel. +44-781-801-6520

04 July 2011

Ynon Gablinger
Distribution Policy
Ofgem
9 Millbank
London
SW1P 3GE
4 July 2011

Dear Ynon,

Electricity distribution charging methodologies—DNOs' proposals for the higher voltages

Vattenfall welcomes the opportunity to comment upon Ofgem's consultation regarding the EHV Distribution Charging Methodology (EDCM). We own 431MW of installed wind capacity in the UK with a further 150MW in commissioning, a pipeline of onshore projects across the UK to be connected to the distribution network, and a joint venture with Scottish Power Renewables to develop the Round 3 Zone 5 located off East Anglia with a potential of up to 7.2GW of offshore wind,

This response sets out the issues Vattenfall has identified with the DNOs' proposals, but as a generator in the British market we concentrate on the proposals concerned with generation export charges and respond only on aspects of the Ofgem's consultation related to this. The regulator's intention is to require the distributors to have the new methodology in place from 1 April 2012, though at this stage it should be noted that only indicative charges for April 2011 have been provided.

Vattenfall has a number of significant concerns with the proposed methodology and the process for its delivery, and we do not consider that the distributors have adequately reflected concerns previously fed into their consultation. They fall under the following headings:

- charges applied to pre-2005 connected generators;
- stability and predictability of generator charges under the new methodology;
- the case for extending EDCM credits to intermittent generators;
- the need to address hedging mechanisms to deal with the associated risks; and

- process failings and implementation.

We address each in turn below.

Charges for pre-2005 connected generators

The decision to levy distribution use of system charges on generators with a connection contract that was agreed before April 2005 is flawed, and could have serious implications for Vattenfall. We have no certainty regarding the charges our Kentish Flats wind farm will face in just under nine months nor the level of any 'compensation' we may receive as a result of Ofgem's decision to lift the charging exemption. We also note that several respondents to previous consultations have challenged the compatibility of the change with current contractual arrangements and some have challenged the legality of such a move.

We are of the opinion that significant retrospective regulatory changes applied to projects midway through their operational life are wrong and will undermine the climate of certainty for investors, testing investor confidence in existing renewables projects; they could threaten future commitment to new ones. It is also inappropriate to introduce locational charges retrospectively as the signal cannot be reacted to.

Ofgem needs to urgently reconsider its position on this matter. Furthermore it needs to clear up residual uncertainty over the legality of its move before a complex new methodology is implemented predicated on it.

EDCM charge stability and predictability

In terms of the proposed methodology itself, the greatest concern we have is that it might create distribution use of system (DUoS) charges that year-on-year are unpredictable and volatile. This is evidenced by the instability of indicative tariff rates published during the development of the EDCM. We have produced a summary of the proposals with regard to our two major schemes in the SPEN area and how these have changed over the duration of the project to date—see *Appendix A* attached to this letter, which we would like you to treat as confidential.

A real weakness of the model is that any attempt to derive a methodology that fulfils Ofgem's stated principles and objectives is not served by its inherent complexity. Nevertheless the power flow analysis adopted to underpin the EDCM is a stylised and simplified attempt to allocate cost-reflective and locational charges to network users. But in creating a methodology that tries to meet the first of these – promotion of cost-reflectivity - it subsequently fails to meet the remaining three. Further we would argue that it is very complex and the resultant volatility of DUoS charges will distort competition. We see no particular attempt to address this issue in the impact statement.

The fact that DNOs are permitted to utilise two power flow analysis methodologies (LRIC and FCP) also undermines the first test that the EDCM is 'common' across all DNOs. Secondly, although it may be possible to unpick how

annual DUoS charges are derived *after the event*, it is impossible for users to make any meaningful use of the models in advance.

There are three related issues here that are likely to prevent distributed generators achieving the necessary understanding of their charges and how they might change going forward.

- *Inadequate transparency of in-put information*

Appendix 5 Assessment of Potential EDCM Volatility of the DNO proposals stated: "It has not been possible to publish the EDCM model as it contains individual data for every EHV customer and would be a breach of the confidentiality clause within DCUSA. DNOs are investigating ways of engaging with EHV customers to make this data available and will provide more information once an approach is agreed."

We have some sympathy with the position the DNOs have been placed in, but it is very clear that the DCUSA needs to be changed. The industry needs to urgently move to a position where the charging models used to produce indicative charges are made publicly available.

We have had discussions with UK Power Networks regarding DUoS charges in the SPEN area and the distributor has tried to be helpful in explaining our charges and how these have been impacted by the various methodological changes over the life of the project. But it is still impossible to validate the basis on which charges and credits have been allocated to generators. Further it is likely that any additional information that could be released will be anonymised to an extent that it limits its value for those users that are prepared to commit resource to try and estimate their future UoS exposure.

- *Application is very sensitive to interaction of demand, generation and changes in both*

Vattenfall welcomes Ofgem's decision to try and address these concerns by obliging DNOs to annually publish long-term tariff scenarios. However, the work we have seen to date is of insufficient robustness and usefulness to give us faith that we can respond to these price signals and adequately plan for network charges beyond a year, let alone a more realistic business planning horizon of several years. In this context we note the statement at *Appendix 5 Assessment of Potential EDCM Volatility* that a ±3% change in network power flows (i.e. demand) could lead to an average impact on generator's DUoS charges of between -11% and 14%, but up to -3,131% and 3,808% for the most impacted customers.

However, as we have noted, disappointingly the impact assessment[1] published alongside Ofgem's consultation document does not evaluate the distributional impacts of the EDCM on users.

- *Tariffs are very sensitive to changes in the methodology*

---

1 http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/Ofgem_EDCM_Impact_Assessment.pdf

Since the introduction of the regulator's Code Governance Review[2] recommendations in 2010 network charging methodologies have been subject to open governance arrangements. As DNOs have a licence obligation to review charging arrangements on an annual basis and network users (and their representatives, such as consumer advocacy bodies) can suggest charging methodology change proposals we fully expect that following its introduction the EDCM will be subject to numerous changes. While the new governance arrangements are designed to allow parties to instigate changes, there is a real danger that the process will become dominated by the DNOs, and users will not have the resource or expertise to fully engage in a complex process that does not form part of their core business.

To ensure that the EDCM is not perpetually being modified we recommend that Ofgem give consideration to:

- limiting the number of EDCM changes permitted within a charging year;
- any changes to the EDCM approved by the Authority should only be implemented on a common date (such as the start of a charging year) to prevent frequent incremental changes to the charging methodology that users will find difficult to track and take account of; and
- to encourage the annual review of the EDCM to introduce processes that ensure proposed changes to the methodology are developed so that users can adequately understand the principles underlying any proposed modifications before they enter the formal governance change process.

It would be a failure of the governance change regime if it was used by DNOs to alter the EDCM to make their revenue collection more predictable at the expense of introducing uncertainty and volatility on all network users.

EDCM credits for intermittent generators

Vattenfall welcomes and supports the proposal to provide intermittent plant generation credits. If the EDCM is implemented with the binary application of generation credits (i.e. no credits for intermittent generation and credits for thermal plant), it could materially affect the business case for future extensions to existing plant and new developments, and it would unfairly discriminate against plant based on technology alone.

Indeed the issue of how DG can contribute towards network security is much more complex than implied by the proposed methodology. This is because:

- thermal plant will not necessarily be available to run 100% of the time, due to technical (planned or unplanned downtime) or commercial/market pressures (i.e. very high fuel prices/ low demand);
- wind generation can and does support the system during periods of stress.

[2] http://www.ofgem.gov.uk/LICENSING/INDCODES/CGR/Pages/GCR.aspx

Wider policy imperatives to incentivise renewable generation (and specifically increase the level of DG) should also be considered to ensure the generation credit mechanism does not incentivise the construction of fossil fuel generation over renewables.

Consequently we support the application of "F factors", as set out in the Distribution Code Engineering Recommendation P2/6. Questions that should be resolved are:

- do the factors represent the latest best practice and understanding of real world availability of plant?
- over what time-frames would DNOs reasonably seek generation plant to be relied upon for system security (not just the "super-red" period)?

Vattenfall believes that the principle that all DG can offer a degree of system security should be reflected in charges.

Hedging unnecessary risk

Potential changes of the magnitude noted above demonstrates to Vattenfall the unhedgeable nature of charges. Despite the fact they are regulated, volatile charges of this nature constitute a significant business risk. We question how this regulatory development fulfils the Government's better regulation objectives of transparency, accountability, proportionality, consistency, and targeted action.

Understanding how regulated charges are derived is secondary to the need for stable and fair charges. Given that Ofgem itself noted concern about charge volatility in its October 2008 decision, we are disappointed at the limited progress made by the DNOs so far. As far as we can see Energy Networks Association's Charging Methodology Group Workstream C has not yet produced any proposals of merit for longer-term products to discuss with network users.

Consequently we fully endorse the regulator's proposals to place a requirement on DNOs to deliver a package of measures to mitigate some of the inherent volatility within the EDCM. This package should include the option to manage charge volatility through access to a long-term product with a more stable (but not necessarily fixed) charge. However, this requirement should be framed so that users are able to access such products from 1 April 2012, given that DNOs will have had three and a half years to prepare. Indeed we see the availability of such measures as a pre-condition of implementation of the new methodology.

Other options that should be given immediate consideration by the DNOs include mechanisms that ensure that year-on-year (or indeed within year) charges can only be changed by a defined percentage or capped. If mitigation cannot be implemented in these timescales (that is, by April 2012), phasing and caps should be. For instance, where an individual customer's costs increase by, say, more than 20%, a phased implementation over five or more years should be introduced.

Process failings and Implementation

It has been hard for Vattenfall to track this process, although it is integral to our business, partly because of the opacity of the methodology, the degree of change inherent in the proposals put to the market and the widely fluctuating nature of the different indicative charges we have seen.

SPEN has been very helpful in explaining the methodology at set points of the project. However, for distributed generators this has provided limited comfort. Based on recent discussions with the distributor the indicative charges have again changed and materially. The introduction of credits for some intermittent plant, which we welcome as a concept, would introduce another material variable. The point remains that the very large swings in potential charges are very damaging to the confidence of distributed generators in the methodology. They must also surely undermine confidence in what can actually be deemed to constitute cost-reflective charging.

One of the key reasons behind Ofgem's decision to postpone the submission of the EDCM until April 2011 and delay implementation was to allow the distributors sufficient time to ensure customers were fully aware of the impacts of the new methodology. As we have noted there has been further change since the submission of the proposals on 1 April, and there remains scope for more. Additionally Ofgem is also seeking views as part of this consultation on a variety of issues that could result in a further material shift in the methodology.

In these circumstances the distributors need to conclude their development work, address and resolve the outstanding issues Ofgem has raised, and fix the issue of public release of the modelling inputs that will allow generators (and other network users) to properly understand the proposed methodology.

On this basis we would conclude that the methodology proposed by the distributors is incomplete, inadequately quantified in terms of its impact on some network users and too inherently volatile to merit approval.

Yours sincerely,

Lionel Avignon
Head of Generation UK
Vattenfall Wind Power Ltd