



Ynon Gablinger
Distribution Policy
Ofgem
9 Millbank
London SW1P 3GE

4 July 2011

Dear Ynon,

Please find attached Tata Steel's responses to the questions posed in the 'Electricity distribution charging methodologies: DNO's proposal for the higher voltages' consultation issued 20 May 2011.

The EDCM methodology would seem to meet the EDCM project objectives, however Tata Steel would agree that there remain some perhaps small areas where improvements could still be made. The degree to which locational pricing will encourage new connections in areas with spare capacity, and allow users in congested parts to manage their costs is rather overstated, particularly given the large scaling charges.

Tata Steel acknowledges that the DNO's have worked hard to improve the methodology since their December 2010 consultation. The adoption of the site-specific method of demand scaling, together with the use of caps and collars to generate the network use factors, has made the costs more asset reflective and reduced the numbers of outliers. There are a number of smaller improvements too, however it is in these areas that some improvements could still be made.

Tata Steel remains concerned about several issues: -

- 1) There may be a case for costs associated with spare capacity above the needs of meeting maximum demand and security of supply to be recovered from all network users through the scaling process, and this should be further investigated by the DNO's, taking into account the effects of caps and collars being applied to NUF's already.
- 2) Payment of significant credits to intermittent generation from wind risks creating a cross-subsidy from large end users to wind generation that is not cost reflective of the contribution either to deferral of re-enforcement, or to reduction of peak demand. Though any such credits

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associated with deferment of reinforcement would have a to be based on a robust assessment of real diversity and may well prove to be very small in any case. Solar power during the summer months reduces peak load on the system; however, in winter months it does not.

- 3) If intermittent generation is to be paid credits there does not seem to be any good reason why embedded generation situated on end-user sites should not also be given credit where such developments defer reinforcement, by reducing demand on the network that would otherwise be there at peak times.
- 4) Tata Steel would agree that the calculation of the generation revenue target is inconsistent and ideally should be corrected.
- 5) The argument put forward by Ofgem for taking into account the proportion of assets provided in to service the export capacity needs of generation, in generation dominated mixed import-export sites, when calculating Network Use Factors for associated demand users is probably sound. However the manner in which assets for generation dominated sites would be treated differently is currently unclear and needs additional work.
- 6) There is some tidying up to be done in respect of demand and generation side agreements, offers for which should be available for any end user that requests it.
- 7) Tata Steel agree that end users should have access to an open governance process but fear that end users views may not be effectively represented. Ofgem need to monitor the process and remain involved.

A handwritten signature in blue ink that reads 'S.C. Russell' with a horizontal line underneath.

Simon Russell
Manager, UK Electricity Supplies
Procurement UK



Response to Ofgem consultation: 'Electricity distribution charging methodologies: DNO's proposals for the higher voltages' Issued 20 May 2011.

Q2.1. What are your views on the key issues with the methodology we have highlighted? Are there any other issues or concerns with the methodology as a whole that we should consider?

The allocation of costs associated with spare capacity do indeed interface with the Network Use Factors used in calculating the shared asset MEAV's. The cap and collar approach does indeed affect the amount of costs allocated to end users. This would seem to pass a lot of the cost through to the scaling process anyway. However, it is worth the DNO's doing some more work to assess the materiality of spare capacity costs in some instances being unfairly distributed to some users.

Credits for intermittent generation such as wind does not seem to be cost reflective in terms of their low benefits to the system. Wind does not reduce the maximum system peak loading, since it cannot guarantee to be available at peak loading times. In fact the choice of wind rather than non-intermittent generation significantly reduces any reduction in reinforcement cost. Solar also contributes less to reducing system peak loadings than non-intermittent plant, though it is predictable. Neither technology can guarantee to provide support in outage conditions. Given these factors any credits for wind would have to be small and reflect the actual output during peak demand periods. In comparison, the credits for solar power would be small but considerably larger than for wind power. There is therefore no great justification for these credits, but for solar they are more justified.

The methodology for calculating the revenue target for generation does indeed seem to have some inconsistencies in it between the O&M handling for pre-2005 and post 2005 DG capacity. Ideally this should be rectified.

Use of 15 different customer demand customer categories is necessary if there is to be proper differentiation between customers.

Broadly comfortable with the way only shared assets are taken into account when determining customers share of revenue.

For generation charges for mixed sites we remain concerned that on-site generation arrangements may not yet be fully understood and bedded down. Further DNO-Customer-Ofgem dialogue is recommended.

Ideally all customers should have access to demand and generation side management agreements, though they will have varying benefits for each customer.

Q.2. Should we approve the methodology, do you agree with our proposal to implement it in full from 1 April 2012? If not, why is phasing in charges or delaying implementation appropriate?

Broadly agree.



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Q3.1 Do you agree with our assessment that the approach for the revenue target is reasonable?

Broadly yes.

Q3.2 Do you think that the principle the maximum import capacity is a cost driver at the voltage of connection is reasonable for charging purposes?

Yes.

Q.3.3 Do you agree with our view that reactive power flows should be incorporated as part of the capacity that attracts indirect costs and 20% of residual?

Yes, unless separate reactive power charge is adopted. The latter would encourage proper control of power factors by customers.

Q3.4 Is it appropriate to consider the specific assets the customer uses for the calculation of the customer's charge, or would it be more appropriate to consider only the voltage levels the customer uses for calculation of its charges?

It is appropriate to consider the specific assets.

Q3.5 Do you think that the 'spare capacity' issue we identify should be addressed?

Ideally yes.

Q3.6 Do you think notional asset values should take into account assets below the customer's voltage of connection?

No, particularly if those assets are associated with distributed generation below the customer's level when it would be an oversimplification that customer is supplied by that generation.

Q3.7 Are there any other demand specific issues that you think we should consider as part of our decision?

No,

Q4.1 Do you agree with our proposal to modify the generation revenue target in order to avoid double charging for operations and maintenance costs on sole use assets? This issue aside, do you agree with our view that the approach to calculating a generation revenue target is reasonable?

Yes, to both.

Q4.2 Do you agree with our assessment that the approach to scaling is reasonable?

Yes. The large of the scaling fixed adder in many DNO's serves to dilute the impact of locational pricing.

Q4.3 Do you think it is appropriate for only units exported by non-intermittant generators during the super-red time band to be eligible for credits?

Yes.



Q4.4 Do you agree with our proposal that intermittent DG should be eligible for credits as they are deemed to provide network benefits under ER P2/6? If they do become eligible for credits, should the credits only relate to units exported during the super-red time band or is a single credit rate to all units exported more appropriate?

This risks creating cross subsidy from other end users which is not properly reflective of the low contribution made by wind power to reducing network costs. Some credit for network benefits from deferred re-enforcement at higher network levels may be appropriate where collective diversified capacity may be robustly taken into account. However, this should be insignificant for wind as the contribution even when diversification is taken into account to deferral of re-enforcement cost, or reductions in peak load is very small. Any credits should be for export during the super-red band only, in line with credits for non-intermittent generation. Although they have little control over timing of production it would not be cost reflective to apply credits to all units exported, they should apply only at peak times. The small credit per unit plus the application to red band only may make these credits very small. Solar PV is more predictable than wind but since it does not produce at winter peak the same argument applies. In short the variable nature of these technologies mitigates against them being paid credits.

**Q4.5 On import charges for generation dominated mixed import-export:-
Do you agree with our suggested alternative to using the collar of the network use factor for the calculation of the import tariff?
Do you think that the methodology is appropriate for demand customers connected to generation dominated assets?**

This alternative needs to be more fully analysed. Generally the methodology is appropriate.

Q4.6 Are there any other generation specific issues that you think we should consider as part of our decision?

The treatment of on-site generation needs much greater thought. Export from generation that is non-intermittent in nature can be very intermittent depending as it does on varying site demand. However, such generation makes a huge contribution to deferring network re-enforcement, and it does not seem right that its generation volume during peak red time bands does not attract a credit, as it would were the generator a stand alone separate site.

Q5.1 Do you agree when calculating LDNO charges that DNO costs upstream and downstream of the point of connection should be considered?

Yes.

Q5.2 Do you think that DNO's should provide LDNO's with a discount on all non-asset based charges?

Yes.

Q5.3 Do you think that varying LDNO discounts only with the point of connection will better achieve a balance between reflecting upstream and downstream costs?

Broadly, yes.

Q5.4 Do you agree that it may be appropriate in some circumstances for the DNO to pay LDNOs use of system credits?

Unsure.



Q6.1 Do you think sole use assets should attract scaling 'costs' to the same extent as shared assets? Does the charging rate on sole use assets seem reasonable given the nature of these assets?

No they should not. However, am uncertain about the reasonableness of the charges.

Q6.2 Do you agree with our view that the arrangements for demand and generation side management agreements are appropriate? Do you think such agreements should be available to all customers?

Arrangements are appropriate. Such agreements should be available to all customers.

Q6.3 Do you agree with our assessment that an explicit reactive power charge is not appropriate?

It is not appropriate if it results in double charging as outlined. However, the downside is that it does not encourage the adoption of power correction equipment. Some way of setting out the benefits of such power correction installations needs to be found.

Q6.4 On the proposal for sense checking branch incremental costs in LRIC: Do you agree with our view that positive cost recovery (i.e.charges) and negative cost recovery (i.e. credits) should be considered separately?

Do you consider that recovery from demand customers and recovery from generation customers should be considered separately?

Yes and Yes

Q6.5 Do you think the EDCM should include a mechanism to mitigate the potential volatility from network use factors? We welcome views on measures to mitigate volatility and help customers manage volatility.

Yes, a three rolling average for NUF's would be helpful. In general the customer can influence the other factors so controlling NUF volatility is the most helpful.