Minutes

Meeting name	CUSC Modifications Panel
Meeting number	210
Date of meeting	4 July 2017
Location	Teleconference

Attendees

Name	Initials	Position
Mike Toms	MT	Panel Chair
Caroline Wright	JM	Code Administrator (alternative)
Heena Chauhan	HC	Panel Secretary
Louise Schmitz	LS	National Grid Panel Member
Garth Graham	GG	Users' Panel Member
Simon Lord	SL	Users' Panel Member
Cem Suleyman	CS	Users' Panel Member
Paul Jones	PJ	Users' Panel Member
James Anderson	JA	Users' Panel Member
Paul Mott	PM	Users' Panel Member
Andy Pace	AP	Consumer Panel Member
Nadir Hafeez	NH	Authority Representative

1 Introductions and Apologies for Absence

Apologies were provided by John Martin (JM) and Kyle Martin (KM). Caroline Wright (CW) was asked to act as JM's alternate. KM did not ask for another Panel to act as his alternate and abstained from voting for CMP268.

All presentations given at this CUSC Modifications Panel meeting can be found in the CUSC Panel area on the National Grid website: http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Panel-information/

2 Panel Recommendation Vote

6574. **CMP268 'Recognition of sharing by Conventional Carbon plant of Not-Shared Year-Rou CMP268 'Recognition of sharing by Conventional Carbon plant of Not-Shared Year-Round circuits'.** CMP268 proposes to change the charging methodology to more appropriately recognise of the impact of "Conventional Carbon" generation on transmission network investment costs in areas with low diversity of generation ideally ahead of the December 2016 Capacity Auction.

6575. CS noted that the consultation period for the proposal had felt too short. Prior to providing his vote, CS asked for further clarification on two particular points; firstly, where had the numbers for the incremental cost been derived from and secondly; what is the ALF representing. Confirmation was provided noting that the incremental costs had been actual historic costs taken from the Balancing Mechanism. PJ clarified that the ALF represented the volume of constraints caused by generators, area, load factors etc. and under CMP213 it was decided that the same cost would apply per MWh of constraints. GG considered that these costs would remain constant. JA noted that this was based on usage and that the more likely a generator was to run for, the more likely it would contribute to the constraint costs. PJ highlighted that this was a complex area and did not feel it was correct that the Proposal had focussed on one particular type of plant and did not consider similar impacts on other types of plant.

6576. HC presented the voting presentation to the Panel. The CUSC Panel provided their recommendation vote and voting statement on CMP268 against the Applicable CUSC Objectives (a) to (e). For the avoidance of doubt, the voting opinions has been abbreviated as follows;

- Y = Yes
- N = No
- - = Neutral

6577. **CMP268 Vote 1 – Better than the Baseline:**

James Anderson						
	Better facilitates ACO (a)	**Better facilitates ACO (b)?**	**Better facilitates ACO (c)?**	**Better facilitates ACO (d)?**	**Better facilitates ACO (e)?**	**Overall (Y/N)**
Original	Y	Y	-	-	-	Y
Andy Pace						
	Better facilitates ACO (a)	**Better facilitates ACO (b)?**	**Better facilitates ACO (c)?**	**Better facilitates ACO (d)?**	**Better facilitates ACO (e)?**	**Overall (Y/N)**
Original	Y	Y	-	-	-	Y
Kyle Martin						
	Better facilitates ACO (a)	**Better facilitates ACO (b)?**	**Better facilitates ACO (c)?**	**Better facilitates ACO (d)?**	**Better facilitates ACO (e)?**	**Overall (Y/N)**
Abstained from voting						
Garth Graham						
	Better facilitates ACO (a)	**Better facilitates ACO (b)?**	**Better facilitates ACO (c)?**	**Better facilitates ACO (d)?**	**Better facilitates ACO (e)?**	**Overall (Y/N)**
Original	Y	Y	-	-	-	Y
Louise Schmitz						
	Better facilitates ACO (a)	**Better facilitates ACO (b)?**	**Better facilitates ACO (c)?**	**Better facilitates ACO (d)?**	**Better facilitates ACO (e)?**	**Overall (Y/N)**
Original	Y	Y	-	-	-	Y
Paul Jones						
	Better facilitates ACO (a)	**Better facilitates ACO (b)?**	**Better facilitates ACO (c)?**	**Better facilitates ACO (d)?**	**Better facilitates ACO (e)?**	**Overall (Y/N)**
Original	N	N	N	-	-	N

Simon Lord						
	Better facilitates ACO (a)	Better facilitates ACO (b)?	Better facilitates ACO (c)?	Better facilitates ACO (d)?	Better facilitates ACO (e)?	Overall (Y/N)
Original	N	N	N	-	-	N
Cem Suleyman						
	Better facilitates ACO (a)	Better facilitates ACO (b)?	Better facilitates ACO (c)?	Better facilitates ACO (d)?	Better facilitates ACO (e)?	Overall (Y/N)
Original	N	N	-	-	-	N
Paul Mott						
	Better facilitates ACO (a)	Better facilitates ACO (b)?	Better facilitates ACO (c)?	Better facilitates ACO (d)?	Better facilitates ACO (e)?	Overall (Y/N)
Original	N	N	N	-	-	N

6578. **Vote 2 – Which option is the best?**

Panel Member	BEST Option?
James Anderson	Original
Andy Pace	Original
Kyle Martin	Abstained
Garth Graham	Original
Louise Schmitz	Original
Paul Jones	Baseline
Simon Lord	Baseline
Cem Suleyman	Baseline
Paul Mott	Baseline

6579. **Voting Statements;**

James Anderson
On balance, CMP268 may marginally better facilitate the Applicable CUSC Charging Objectives (ACCOs) than the current baseline.

The analysis carried out by National Grid using the ELSI model (2.15, Figure 3) and confirmed by new analysis carried by National Grid out post send back using the BID 3 modelling tool (2.21) confirms that where there is a high concentration of Low Carbon plant behind a transmission boundary ("low diversity"), the incremental cost of transmission investment caused by Low Carbon plant is significantly greater than the incremental costs caused by Conventional Carbon plant. Further, it would appear that where there is low diversity, while the incremental cost for Low Carbon plant increases, the incremental cost for Conventional Carbon plant remains constant. As the impact of these two different generation classes on the incremental cost of transmission investment is different, there is therefore a justification for different treatment under the Charging Methodology as this would result in the charges being more cost reflective than the current baseline (ACCO (b)).

Charging methodologies which better reflect the costs imposed by parties upon the transmission system better facilitate competition between generator parties and therefore CMP268 is likely to better facilitate ACCO (a).

CMP268 is neutral against the other ACCOs.

Andy Pace
Under the baseline, the non-shared element of the year round charge increases as the proportion of intermittent generation increases. This is due to the increased cost of reducing constraints which occurs as the intermittent plant will require a higher price (in general) than a conventional plant to reduce their output. In addition, the issue of constraints is more likely to occur when there is a greater proportion of intermittent plant due to the low level of diversity in the generation mix.

It is in customers interests for the charging arrangements to be as cost reflective as possible which will lead to more efficient outcomes for consumers. Our assessment is that the baseline is treating conventional plant and intermittent plant in the same way from a charging perspective for the year round element. However, conventional carbon plant is inherently more flexible than intermittent and is therefore more able to reduce its output in a cost efficient manner to the benefit of the system and all users. In principle, the proposal under CMP268 to differentiate between conventional carbon plant is effectively rewarding this type of plant for the additional flexibility it brings which should reduce the cost of managing constraints in areas where there is a high degree of intermittent generation. Consequently, we think that CMP268 is a beneficial change that will increase the cost reflectivity of the current methodology.

Kyle Martin
KM sent his apologies and abstained from voting.

Garth Graham
In their Send Back letter of December 2016, Ofgem set the Panel a number of tasks which are shown in paragraph 1.1 of the Send Back Report that the Panel is being asked to consider today. These tasks included providing 'further evidence', considering 'in more depth' and undertaking 'further consultation'. All of those tasks set by Ofgem in December have, in my view, been achieved.

Having (i) reviewed in detail this further evidence together with the Workgroup's more in depth consideration of the matters at hand and the responses to Code Administrator Consultation of June 2017; all of which is set out in the Draft Final Modification Report dated 30th June 2017; and (ii) being mindful, in particular, of National Grid's viewpoint set out in paragraphs 6.7 and 6.8, my vote and reasoning remains the same as that which I set out at the 15th November 2016 CUSC Panel meeting.

This further evidence, that arose from the send back work, enhances and reinforces the previous analysis conclusions which showed to me that the treatment of low carbon and carbon plant, in terms of the Year Round Non Shared tariffs, within the baseline does not reflect the different costs that these different types of plant impose on the transmission network.

CMP268 better reflects these different costs and therefore ensures that the CUSC is more cost reflective than the baseline and so, in turn, CMP268 is better in terms of cost reflectivity and competition than the baseline.

CMP268 removes an existing discrimination in the charging treatment between low carbon and carbon generation within the baseline CUSC, whereby low carbon and

carbon are charged the same whilst they give rise to different transmission costs in zones with low diversity, whilst not introducing any new discrimination (as witnessed, for example, in National Grid's viewpoint set out in the Draft Final Modification Report). Therefore CMP268 is better in terms of Applicable CUSC Objectives (a) and (b) as well as overall (it being neutral with respect to (c), (d) and (e)).

Louise Schmitz

Objective a) Effective competition derives from users making efficient economic decisions based on their costs. If Tariffs do not reflect Transmission Costs, then this may lead to inefficient investment decisions. When collecting a fixed amount of revenue, if Users pay more than what is required relating to investment, than others will pay less; thus distorting Competition.

Objective b) We note under the current baseline that charges will not perfectly match the costs of the Transmission companies in terms of Transmission Investment due to the averaging of Generation types within the SQSS and the desire to maintain an element of simplicity. However we do not feel the defect in the modification is the result of this. Averaging determines the incremental cost for Peak and Year Round. The defect looks at changing how the Year Round incremental costs are then charged to those Generators not at the averaging. Constraint costs thus investment differ proportionally for Low Carbon and Carbon in areas of low diversity so there is clear evidence to alter the methodology to reflect these differences and further align costs with charges.

There are limited ways in which to charge low carbon and Conventional Carbon differently whilst maintaining simplicity. Adjusting the Year Round Not Shared by a Generators Annual Load Factor achieves this differentiation therefore is better than baseline.

Paul Jones

The current baseline originating from CMP213 contains a generic approach to dealing with diversity based on the assumption that all stations drive different volumes based on their load factor and the cost per kW in different zones is driven by the diversity in that zone. This is based on the likelihood to be able access bids in that zone which is affected by the diversity in that zone. In low diversity zones it is more likely that network is built to accommodate plant rather than by the System Operator incurring constraint costs. Whilst theoretical discussions have taken place in the workgroup on why in principle you may expect to incur constraint costs for a carbon plant rather than build network in a low diversity zone, there is no actual assessment that this is the case in practice and that network is only being built to accommodate low carbon plant in these zones.

Additionally, the solution chosen is to remove the average approach adopted for carbon plant but not that for the low carbon plant. Therefore, given that the argument is that low carbon plant are the higher cost stations and carbon are the lower cost stations, not removing the averaging from low carbon plant would suggest their charges are suppressed. This means that even if the argument is correct that carbon plant should be exposed to lower charges, the methodology is treating plant inconsistently which results in discrimination as a reduction in charges for one subset of parties is not picked up by increases for the correct parties. Instead these are smeared across other parties through the residual.

Additionally, there appears to be an anomaly caused by CMP268 in negative zones which means that the charging methodology would be signalling that National Grid would prefer to see wind plant in these areas rather than peaking plant, even though the latter can provide National Grid with more useful services to manage import constraints.

The above issues mean that CMP268 would be less cost reflective than the baseline, would introduce discrimination which would frustrate competition in the wholesale electricity market.

Simon Lord
The non- shared element of the transmission tariff represents the minimum size of the boundary that must be built to accommodate the maximum level of sharing. The full cost of this minimum boundary size should be targeted onto users behind the boundary. This is the principle behind the sharing element of the TNUoS tariff developed as part of Transmit. Whilst there could be incremental changes to the methodology used to allocate sharing this modification does not proposed changes to this areas These changes would be need to be part of a wider reform package that would also need to review the appropriateness of the "peak" and "year round" split that is increasingly difficult to justify. This modification prosed to “reduce” the cost reflective signal by applying a load factor element to the non-shared element. Whilst it can be agreed that the non-shared element changes as different volumes of generation commits behind a boundary to apply a load factor element pre-judges this position and is not cost reflective. Both the theory and practical implementation of this modification are flawed and is evidenced in the working group report.

Cem Suleyman
The case for CMP268 hinges on the argument that the incremental cost of transmission is lower for Conventional Carbon plant relative to Low Carbon plant in areas of low Diversity. I do not consider that the analysis supporting this view is adequate. The price of constraint actions is determined by the supply and demand for such actions. Where in low Diversity areas there is a degree of scarcity of constraint actions available to the System Operator, the costs of such actions must rise reflecting the additional value of the constraint actions. Therefore in reality it does not appear correct to state that the incremental cost of transmission investment will be significantly lower for Conventional Carbon as opposed to Low Carbon plant. The analysis undertaken does not appear to account for this effect and is therefore overly simplistic.

Moreover, the proposed defect appears to in fact relate to the calculation of relative size of Shared and Not Shared MWkm. Therefore there does not appear to be justification for applying an ALF 'scaling factor' to Not Shared tariffs. This would seem to be borne out by the unintended consequence on negative Not Shared Tariff zones. The resulting signal appears highly counter intuitive.

For the reasons above on balance I do not consider that CMP268 can be considered more cost reflective, thus not better facilitating ACO (b). As a consequence it cannot better facilitate effective competition, ACO (a).

Paul Mott
The cost-reflectivity of the proposal is in grave doubt: at times when (asynchronously-connected, and thus lacking in inertia) wind output is high in export-constrained areas

with abundant low carbon generation, there is likely to be a need (and the data evidences this) to ensure that what little carbon-based generation (this for this purpose includes pumped storage though) is left, is running, due to growing concerns (a recent development on the transmission system influenced by what's connected to it, as a whole system) over the growing national issue of inertia and frequency management, and local system issues such as voltage support (for which Peterhead was given a special contract). By CMP268 not being cost-reflective, it will be re-distributive in a manner that is unwarranted, and thus harmful to competition.

6580. The Panel view was split for both Vote 1 and Vote 2 (did the Original facilitate the Applicable CUSC Charging Objectives better than the Baseline and which option, i.e. the Baseline or the Original, was considered to be the best). There was not a majority support for this Proposal.

3 Workgroup Update

6581. **CMP277 'Special License Condition 4J'** CMP277 seeks to update Section 14.30.6 and 14.32 of the CUSC to reflect the changes made to the terms of the external BSUoS charges recoverable by the SO due to new License Condition 4J and changes to Special License Condition 4C.1.

and

6582. **CMP278 'BSIS 2017 Housekeeping'** CMP278 seeks to update CUSC sections 14.30.11 and 14.32 to reflect the changed cap and collar and sharing factors of the Balancing Services Incentive Scheme as detailed in the current Ofgem Statutory License Consultation and; update 14.32 example BSUoS calculation to reflect changed terms within external BSUoS costs detailed in License change.

6583. CW explained that the original implementation date for these Proposals was delayed due additional clarification which was required for the Legal Text. The Panel noted that this issue has now been resolved and the modifications would be implemented in the CUSC on 6 July 2017.

3 Next meeting

6584. The next normal Panel meeting will take place on 28 July 2017 at National Grid House, Warwick.