national**gridESO**

Meeting minutes

Transmission Charging Methodologies Forum and CUSC Issues Steering Group 95

Date:	10/04/2019	Location:	WebEx
Start:	10:30 AM	End:	12:30 PM

Participants

Attendee	Company	Attendee	Company	
Jon Wisdom (JW)	National Grid ESO (Chair)	Josh Logan (JL)	Drax	
Jennifer Groome (JG)	National Grid ESO (TCMF Technical Secretary)	Garth Graham (GG)	SSE	
Rachel Hinsley (RH)	Code Administrator, National Grid ESO (Presenter)	Angus Macrae	SSE	
Grahame Neale (GN)	National Grid ESO (Presenter)	Laurence Barrett	E.ON UK	
Eleanor Horn (EH)	National Grid ESO (Presenter)	Laurentiu Traian	RWE	
Richard Smith (RS)	National Grid ESO (Presenter)	Matthew Paige-Stimson (MPS)	National Grid TO	
David Preston (DP)	National Grid ESO (Presenter)	Daniel Hickman	Drax	
Grace Smith (GS)	UK Power Reserve (Presenter)	Neil Bennet (NB)	SSE	
Guy Nicholson (GN)	Statkraft	Ankita Mehra	Ofgem	
Simon Vicary (SV)	EDF	Paul Mott (PM)	EDF Energy	
Robert Longden (RL)	Cornwall Insight	Tim Aldridge	Ofgem	
Peter Bolitho	Waters Wye Associates	Rachel Durham	SmartestEnergy	
Lorraine Nicholson	ESB	Alan Currie	Ventient Energy	



Agenda, slides and modifications appendices

https://www.nationalgrideso.com/charging/transmission-charging-methodology-forum-tcmf

TCMF and CISG Discussion and details

Please note: These minutes are produced as an accompaniment to the slide pack presented. They aim to capture the main discussion points from in the meeting.

Actions update - Jon Wisdom, National Grid ESO

JW gave an update on TCMF & CISG meeting actions.

- 1. Action ID22 (status in-progress): JW updated attendees that information is now in 5-year forecast explaining the error margin calculation. SV disagreed that this was the action taken and that the action was for the ESO to provide some evidence on the governance around the calculation of the margin. SV highlighted that without the governance being understood, there is a risk that the ESO can use their own interpretation of the methodology to calculate the margin. RL agreed and explained that this has been an action at two TCMF meetings now. JW clarified that the action was around the understanding of governance. JW explained that currently the CUSC requires that there needs to be a margin, not how to calculate it. SV suggested that due to lack of clarity it might be a modification. JW explained that there is a modification next week on the cap a and collar, which can include this discussion. JW took the action away to raise with the revenue team what they can show in the 5-year forecast on the error calculation in future.
- 2. Action ID24 (status Complete).
- 3. Action ID25 (status Complete): the ESO will seek to address this.

Code Modifications Update - Rachel Hinsley, National Grid ESO

RH updated on the progress of current CUSC modifications.

- 1. RL gave positive feedback on slide 9, and requested that an improvement would be to add the priority of each modification to the table on the slide.
- 2. There were no questions.

Transmission Charging Methodology Forum

TNUoS Charging Methodology for Co-located Generation - Eleanor Horn and Grahame Neale National Grid ESO

EH and GN gave the background to the modification before explaining the defect, what's in scope, the outputs of workshops and timelines for the modification process.

- 3. The definition of Co-location is on slide 16. The Grid Code definition of a power station is also on the slide.
- 4. RL asked how predominant is defined. GN explained that currently there is no definition of 'predominant' and as it has never happened, therefore it is unclear how it would be interpreted. The CUSC modification is to confirm whether the predominant approach is used (as opposed to prorating) and how this will be calculated (e.g. installed capacity, actual MWh output or another option).
- 5. RL queried the category which Storage falls into. EH responded that this is Conventional Carbon. JW made attendees aware that the categories were clarified in the notes from a couple of years ago, which are available on the NGESO website. https://www.nationalgrideso.com/document/50456/download
- 6. EH explained that the word implementation on the slide represent when this will impact industry as it will impact charge setting.
- 7. PM queried whether the modification will include both options on slide 19. GN responded that NGESO are not ruling out either approach, but explained that feedback from the workshop is that the pro-rata approach



would be more cost reflective and therefore the one they would prefer to explore. Either are in scope of the modification to resolve the defect.

Balancing Services Charges Task Force update - Grace Smith, UK Power Reserve

GS presented an update on the Balancing Services Charges Task Force (further details are available on www.chargingfutures.com).

- 8. GS updated that a draft report from the Task Force will be circulated to Task Force members by the end of April, and a consultation will go out to industry in May. The consultation will be 10 working days, with a deadline probably around 15 May.
- 9. GS explained that these are intended to provide verification that the Task Force has not missed anything major. Anything new which is raised in the consultation responses will go straight to Ofgem.
- 10. She explained that this is not a decision-making consultation, and that any development on BSUoS that comes out of this will go through a normal development process, with more industry consultation.
- 11. GS updated: The Task force had a presentation from Frontier Economics around LRMC and SRMC, looking towards locational BSUoS. A cost reflective signal should be based on a marginal cost, whereas BSUoS is recovering the total cost of the ESO actions. BSUoS costs also come about as a result of the network configuration, so are not suitable for a forward-looking price. Under ideal economic conditions, a SRMC signal and LRMC signal will be the same over time. TNUoS costs are LRMC locational signal, based on the structure of the network and BSUoS should be careful not to double-count with TNUoS. The economic orthodoxy is that locational SRMC signals will lead to market splitting. A market split price would effective be the marginal cost of the interconnection and, whilst providing a market signal, will not recover the correct costs, meaning a residual element will still be needed, like with current TNUoS arrangements. Cost reflective charges can be found for a simple "two zone" system, but multiple zones or constraints behind constraints become much more complicated.
- 12. The Task Force all together looked at Locational Transmission constraints: one of the reasons identified in Deliverable One as to why current BSUoS doesn't send an effective signal is that both sides of a constraint are treated the same. There is a line in the transmission licence that constraint costs should be recovered from all parties equally per MWH, so this would need to be adjusted. The limitations presented by Frontier apply to any locational charge around constraints. The balance between costs of network reinforcement and managing the constraint is addressed through the NAO process, which is out of scope of the Task Force.
- 13. The Task Force then split into three sub-groups to look at other elements that were identified as potentially be able to send a forward-looking signal. Reactive Power and voltage constraints is partly a locational element, which could lead to double counting with TNUoS charges, as with transmission constraints. The Task Force has asked for more information on the drivers for reactive power, whether it's a combination of the demand/generation mix or unforeseeable events like outages. The Task Force struggled to identify any marginal costs for reactive power. The administrative price, which forms the bulk of reactive power costs, may not be cost-reflective in itself, so there could be benefits to reviewing how the service is procured to reduce BSUoS costs. Response and Reserve availability is a cost that has already been agreed as the ESO decides how much capacity to procure. The Task Force couldn't identify any user behaviour that would lower availability costs within a given settlement period. A way to lower costs would be to reduce the risk of a frequency event, and so require the ESO to procure less. There is no obvious justification for availability costs to be charged half hourly, but given each service is procured on a different timescale, there is no obvious more sensible timing. In terms of future-proofing, balancing services are moving closer to real-time. Response and Reserve utilisation costs are triggered by users failing to manage their imbalance or unforeseen events, such as trips. Users are already incentivised to be in balance, so any signal would have to reinforce the imbalance price. A signal would also have to be related to gate closure. Users already take all appropriate actions to avoid trips/breakdowns etc, so it is hard to see an effective signal that could improve that. Trips/breakdowns etc. have different financial impacts at different times/places on the network, so trying to assign a value is not straightforward. There are also unforeseeable events that are out of users' control (such as TO assets, weather etc.), which a charge on users will not effect.



14. She concluded: it is likely the Task Force will be unable to recommend an effective, useful forward looking signal for elements of BSUoS and any potential signals may be more complex than is justified. While there are potentially improvements to cost-reflectively that can be made, that is out of scope of the Task Force.

CUSC Issues Steering Group

User commitment - long lead time, high value schemes - Richard Smith, National Grid ESO

RS attended CISG to update on the work going on with User Commitment. As agreed at one of the Customer Seminars last year it was agreed that NGESO would develop a workpiece on Long Lead Time High Value Schemes. If you have any queries regarding this topic please contact Mike Oxenham - Michael.Oxenham1@nationalgrideso.com

- 15. NB commented that this is a niche sector and there are not many long lead items. He raised concern regarding the change and suggested that there are small tweaks to CUSC that might be better, and was unsure whether these have been considered.
- 16. There were questions regarding consenting and the trigger period.
- 17. NB raised concern that barriers to entry may happen if this was widened out. He gave the example that numerous schemes in Scotland are connected to the MITS. NB suggested NGESO should look at more areas and the wider impacts of implementation.
- 18. RS noted this feedback and asked if other attendees felt similarly.
- 19. GG raised four queries 1) how many case studies were carried out, 2) why NGESO is proposing another modification on Backfeeds, 3) How much expenditure happens earlier than 4 years out. in relation to £1, £2, £3/kW figures. 4) There are several numbers in CUSC which haven't been inflated and gave examples, GG suggested perhaps these should all be reviewed across the board rather than piecemeal.
- 20. RS stated that in the vast majority of cases, expenditure ahead of trigger the date is not significant. RL queried whether those which do have high spend before the trigger date are of sufficient magnitude to look at. NB raised that there is only an issue if they fix.
- 21. GG suggested the consumer might end up paying through another route anyway, for example a CFD or government scheme. In which case he suggested there might be no impact on the consumer.
- 22. GG raised that it would be useful to understand if this is about all parties who fix or only those who fall into this small sub category. RS responded that is open to discussion. GG raised that targeting everybody would be a fundamental change. He explained that for normal schemes NG does little work in this timeframe and that most expenditure happens 1, 2 or 3 years out. He suggested that if this was done NG would have to produce individual percentage profiles per customer, which could be very complicated for all parties concerned. GG recognised that there is an argument for large unique sites which have special circumstances but raised that there might only be 1 or 2 sites in the country like this.
- 23. NB raised concern around trigger dates (slide 31). NB raised that some embedded customers are contracted now and are not connecting for number of years. If this change was made, these parties may find themselves 5 years and not even consented yet, but having to secure for 100%. NB raised that this would be a barrier to entry. RS noted the point and raised that they are reserving capacity for themselves which could be being used.
- 24. GN raised the following on the webex chat: "I want to see an analysis of securities by generators and TO costs across the whole GB. This would show how much of an issue there is. I understand that one large cost scheme is Hinkley Point at ~£800m which are all beyond the MITS so will not be attributable works and is therefore unsecured by the generator. Please correct me if I am wrong. One further point is the NGESO cannot properly administer the current scheme, so making it more complex would lead to more errors. I support Neil Bennet who said that customer have to secure schemes for full value when they are almost built. This needs addressing."
- 25. GG asked how many case studies were carried out and how many were generators, interconnectors, demand or DNOs connecting, and whether they were single or multiple sites. He added that if it is only one



generator and the other sites are demand or interconnectors, the end impact on consumers is the same. He suggested that changing the approach for every other generator in the country for one site might be trying to solve a non-problem.

- 26. RS gueried GG's point asking how costs end up with the consumers when a scheme must terminate.
- 27. RS took away an action to see what detail and analysis can be shared.
- 28. NB raised that the ability to fix pre-trigger should not be removed, as for some schemes this is key.

Reactive Power Update - David Preston, National Grid ESO

DP presented the work currently going on in the Reactive Power / Voltage space, including resources currently available to look at and what attendees can expect to see next.

- 29. DP gave an update on Reactive Power including a review of all wider innovation and strategic industry projects that could influence the development of future markets in the Reactive / Voltage space. This included a reminder of the recent long term NOA Voltage Pathfinder RFI that has been published for the Mersey area and confirmation that the timing of developments to the ORPS / Mandatory components will be considered and prioritised against all Operability challenges.
- 30. GG questioned the "effectiveness" data that is starting to be shared within specific Reactive tenders highlighting that the transparency of such is critical to help inform participants approach to a tender but then needs to remain consistent through the assessment. Where the "effectiveness" rate changes he does not believe that a participant should be held to their original offer.
- 31. DP acknowledged that "effectiveness" is import to such tenders that are exposed to very locational requirements. National Grid ESO have recently introduced "heat maps" overlaid onto network diagrams to give an indication of effectiveness ranges, and within the Mersey NOA Pathfinder RFI has also given an indication for effectiveness based on which voltage level a participant is connected to. This is a learning process and will be refined overtime but can potentially be subject to change to the network. RL queried who bares the risk of that. GG stated this should lie with the ESO, as there is a risk that the tender rules change ex-poste and resulting in players being financially penalised. He suggested that if it changes post event, it should be re-tendered. DP noted this feedback.
- 32. MPS raised a point around management of access. He stated that the Significant Code Review work going on at the moment is addressing entry, exit and DNO boundaries. MPS queried where reactive power sits within access rights and managing interface access rights. DP took an action to speak to Jennifer Doherty about this.

AOB

33. None.

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Action Item Log

Action items: In progress and completed since last meeting

ID	Month	Agenda Item	Description	Owner	Notes	Target Date	Status
22	Feb-19	Actions	JW took an action to speak to the revenue team to ascertain whether they could publish anything on the calculation of the error margin. Action updated in March: A request was for an explanation of the governance and the precise calculation of the error margin - showing evidence of methodology.	JW	An update will be given at the next TCMF meeting.	Jun-19	In- progress
24	Mar-19	Code Modifications Update	RH took an action to share a progress report on CMP308.	RH	Report shared.	Apr-19	Complete
25	Mar-19	CUSC Horizon Scan	TNUoS Generation zones: HH took an action to get that clarification on whether the £1 which was set in 1992 and never inflated will be addressed in this modification	НН	This will be addressed in the modification.	Apr-19	Complete

Action items: Previously completed

If you wish to view any previously completed actions, please contact cusc.team@nationalgrid.com