Stability Market Design Expert Group 3

Date:	14/03/2023	**Location:**	Teams
Start:	13.00pm	**End:**	15.30pm

Participants

Attendee	Organisation	Attend/Regrets
Ed Farley (Chair)	National Grid ESO	Attend
Thomas Pownall	National Grid ESO	Attend
Amir Alikhanzadeh	National Grid ESO	Regrets
Cian McLeavey-Reville	National Grid ESO	Attend
Kelly Larkin	National Grid ESO	Attend
Kerry Anne Shanks	AFRY	Attend
Rob Lee	AFRY	Attend
Emilio Ambrogi	AFRY	Attend
Stephen Woodhouse	AFRY	Attend
Sonalika Ghosh	AFRY	Attend
Nicola Todd	National Grid Electricity Transmission	Attend
Iain McIntosh	Orsted	Attend
Cem Suleyman	Drax	Attend
Anser Shakoor	GE	Attend
Max Collins	Statkraft	Attend
Guy Nicholson	Statkraft	Attend
James Hill	Ofgem	
Priyanka Mohapatra	Scottish Power Renewables	Attend
Murdo McGhie	SSE Renewables	
Mike Ryan	Constantine Energy Storage	
John Costa	EDF Energy	Attend
Matthew Tucker	Welsh Power	

1 Introductions

1.1 AFRY provided an overview on the workshop format and the project timeline

1.2 Industry Representative asks about the next steps after the project ends as this project is a part of National Grid's innovation funding which was only for a year and a half project or two years.

1.2.1 Ed Farley (EF) reassured this work is within that scope of innovation project and will be considered in the markets roadmap to be released in March

1.3 Stephen Woodhouse (SW) provided attendees with a brief overview on the scope and background on the exam questions present in Stability Market Design Phase 2 Work Package 2

2 Background

2.1 Industry representative asked about their earlier comment on the pre-read slides - 'Was any consideration given to applying a pay-as-clear availability price for Long- & Medium-Term markets? Did you think the product would be too difficult to standardise possibly?' He adds that since in ST, there is a £/MW seconds per hour price, and so that would mean reactive and the fault current capability are not relevant, but only inertia.

2.1.1 SW clarified that a little more thought is needed on whether a delivery payment is needed for those products at all or whether it can bundle in the Availability payment (AP). However, based on the work ESO has done in meantime, it shows the inertia is only real binding constraint.

2.2 Industry representative enquired about the term Delivery Payment and how that links to utilisation – whether the cost for utilization (hours consumed) would be included in DP.

2.2.1 Rob Lee (RL) explains the intended meaning as an arming or arming and delivery payment but noted that a better term may be needed.

2.2.2 SW provides further clarification on DP that if some technologies have a relatively high marginal cost to be put into the mode on the day and other ones basically don't.

2.3 Industry Representative asked why DVS and SCL has only been considered for LT market and not MT market. They added that future grid forming solutions can provide MT and ST services which could be an incremental change rather than a new plant.

2.3.1 SW clarified that SCL and DVS would be for both LT and MT markets, ST is for inertia only.

2.4 SW explained slide 8 on existing PF arrangements and future stability markets.

2.5 Industry representative asked the relationship then between PFs and ST market, - whether it would mean ST market wouldn't be brought until the existing PFs could to an end between 2027 and 2035?

2.5.1 SW responded that a glidepath for PF contracts and considering the enhanced capability of existing assets are both needed, the timing of ST market can be dealt with a bit later.

2.5.2 EF says a glidepath needed, there will be a transition from PFs and there will be regular procurement options b/w 3 markets. Dev. EF reassured about the transition from current PFs, but the development of these markets in sequence won't impact one another and can be done parallelly.

2.5.3 Industry representative commented that cost benefit analysis is needed to support this rationale.

3 Q3a: Criteria for Selective Characteristics

3.1 Industry representative asked if his previously proposed options of allowing non-zero MW running at Stable Export Limit (SEL) has been considered or are only zero MW allowed in ST markets. They proposed a solution if the markets change after the day at auction, you can appear in the unit up to SEL. That way providers don't pay the availability fee for the stability.

3.1.1 SW and industry discuss the feasibility and implications of the proposed option. Industry representative commented that the objective of this should be not to pay someone for something they do anyway and also not rely on BM as it is not transparent.

3.1.2 EF reassured that this topic would be taken up in a separate conversation

3.2 SW explained eligibility criteria in slide 8. Industry Representative asked about why Y-4 has been selected. They added that from offshore wind point of view, 4 years in advance is too late as it is already past the design phase and in the FID phase. It should be 5 or 6 years.

3.2.1 SW responded that it could be technology dependent and further feedback on this is needed from the expert group.

3.3 SW explained shortfall vs opportunistic procurement in slide 9 and questions in slide 10. Industry asked what counts as physical refurbishment – if software loaded on to a converter to make it grid forming capable – counts or not. The lead time for such work could be up to 2 years - more time is needed for bigger windfarms.

3.3.1 SW responded that insights from industry is needed on possible refurbishments, but if it is a minor cost, then it wouldn't be counted, whereas if it is a major cost, it could be counted as a physical refurbishment. PM added that main concern is about inertia as costs of grid forming capability cannot be recovered in ST.

3.3.2 SW clarified that there is a possibility of MT or LT contract in such cases since it is an enhance capability.

3.4 Industry commented that clutch on existing CCGTs is a massive investment so it is essential to find out which assets would this 'incremental capability' cater to and what are the timescale targeted for it.

3.4.1 SW responded that industry feedback is needed on technology costs and timelines.

3.5 Industry commented on four years is needed for additional extras – route to market, how you utilize the connection point with other potential assets.

3.6 Industry commented the competition and discrimination issues that could arise by forgoing payment if you were ended up running. He reiterated the need for a cost benefit analysis of zero MW eligibility.

3.7 Industry commented about the lead times for the long-term procurement – whether there is scope to really play with it as alignment with other low carbon markets etc is also needed.

3.7.1 EF responded NG has to model the requirements of what they need as well and the longer the lead time probably the less certainty they have in the requirement.

4 Q2a: LT contract length

4.1 SW explained the design option and the selection of 10-year contract length in slide 16.

5 Q2b: Contract resolution for ST market

5.1 Kerry Anne (KA) explained the design options and the rationale for selecting EFA blocks in slides 20-21

6 Q2c: Provisions for contract extension

6.1 SW went over the recommendations for expired contracts in slide 24.

6.2 Industry representative commented that he would prefer to have as many options as possible for ST extension – one year, two years etc.

6.3 Another industry representative asked that whilst those contracts are still in play (six years still to go) could they still participate in the ST market and double up the revenues on top of the LT contract revenues they've got or is it just the ST market once they're finished?

6.3.1 SW clarified that they could only participate in other markets once they are out of contract.

7 Q2d: Utilisation payment

7.1 SW explained existing PF payment approach and future payment model options in slides 27-30

7.2 Industry commented that providers should be able to nominate their MW consumption and index it to imbalance so they can get rid of all that power price risk on that side and allow them the optionality to pump and generate depending on where the prices go. This would enable them to manage sudden changes e.g., unplanned need for power – this way system keeps the stability, but it also gets the megawatts as well.

7.3 Another Industry representative asked about what the day ahead energy markets are going to be an hour after the market closed.

7.3.1 SW clarifies that there is a continuous intraday process in which you can trade individual half hour, so the prices should all be visible.

7.3.2 Industry added that this could be risky as provider could end up paying more. EF asked MC if he could suggest any alternatives for reducing risk.

7.4 Another industry representative commented that co-optimisation of 10-12 services including inertia day ahead was done in the Irish model. Another industry representative added that the Irish L CIS market at the low Carbon Innovation Service market had excluded performing in the first phase, but they got serious pushback. So now they are including it in the next.

7.5 They asked about the timing of launch of these markets so that they can be considered in the investment models for their upcoming projects.

7.5.1 EF responded that a markets roadmap will be released soon that will provide signal for the technologies discussed.

7.6 Another industry representative asked about the cost elements that would DP be indexed to in option C.

7.6.1 SW responded that industry feedback is needed on what should be included to reflect reasonable cost structures.

7.6.2 They added they would provide further comments on the proposed models later.

8 Next steps

KA went over the next steps – circulating a survey form, session on 30th March

Meeting ends.