

Issue 106 Digital Meeting Etiquette

- Welcome to the Issue 106 Workgroup meeting 5 – we'll start shortly
- No video please to conserve bandwidth
- Please stay on mute unless you need to talk – use IM if you can't break through
- Talk – pause – talk
- Lots of us are working remotely – be mindful of background noise and connection speeds

Slido Guidance

- We would love to gather your thoughts using Slido as we move through today's session. We hope this is an engaging experience.
- Everyone should be able to vote and answer questions live during the presentation using Slido

Requirements:

- Internet access
- Web browser

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ELEXION

**Issue 106 'Review of BSC Credit Cover
Arrangements'**

Meeting 5

13 November 2023

Meeting Agenda

Objectives for meeting 5:

- Objective 1: Recap on the Issue 106 discussion
- Objective 2: Review the potential outcomes
- Objective 3: Agree on closing Issue 106

Agenda Item	Lead
1. Welcome and meeting objectives	Lawrence Jones (Elexon) - Chair
2. Recap of previous discussions	Cecilia Portabales (Elexon) - Lead Analyst
3. Review of the proposed Credit Cover Calculation. Recommendations and outcome.	Chris Wood (Elexon) – Market Design
4. Further analysis on Credit Default proposal. Recommendations and outcome.	Tirath Maan (Elexon) – Proposer, Subject Matter Expert
5. Review of the Risk-based approach. Decision, outcome.	Tirath Maan
6. Next Steps	Tirath Maan, Cecilia Portabales
7. Meeting close – Any other business?	Lawrence Jones



ISSUE 106 RECAP

Issue 106. Summary

BSC	Work stream	Topic	Issues	Meeting	Discussion	Outcome
Section M	WS 2 Data and Timeframes	CEI	Does not represent reality	Meetings 1, 2, 3 and 4	<p>Elexon presented a new indebtedness calculation. The IG approved:</p> <ul style="list-style-type: none"> Using a Proxy for Meter Reads 	<ul style="list-style-type: none"> Modification to implement the New Indebtedness Calculation, once MHHS go live A potential Modification to implement Credit Risk Profiles could be raised, but it requires substantial work by the Workgroup.
		MEI	Does not represent reality		<p>The IG Rejected:</p> <ul style="list-style-type: none"> Estimating Trading Charges and Lead BM Units submissions 	
		AEI	Works fine		<p>During Meeting 4, Elexon presented 3 solutions for the Looking forward aspect of the new calculation:</p> <ul style="list-style-type: none"> Calculating/ estimating new values. It got rejected by the IG. Create Credit Risk Profiles – There was consensus. Further work will be needed. Modify the Default Thresholds Percentages – It received some consensus. 	
		CAP	It's arbitrary and not aligned with real prices	Meeting 3	<p>Elexon presented a mechanised solution. The IG discarded it for being too volatile. Parties would need to react too fast to changes.</p>	-
	WS 4 Impacts of Providing Credit Cover	MEA	The timeframe to withdraw money is too long	Meeting 2	<p>Elexon presented a potential solution, but the IG discarded it because of the potential of Parties being malicious and withdraw collateral knowing they are going into Default.</p>	-

Issue 106. Summary

BSC	Work stream	Topic	Issues	Meeting	Discussion	Outcome
Section M (Cont.)	WS 2 Data and Timeframes	Credit Default	L1 and L2 Default Credit Refusal/Rejection Period	Meetings 2, and 3	<p>During Meeting 2, Elexon presented three potential solutions. There was no agreement.</p> <p>During Meeting 3, Elexon presented a solution for the Rejected/Refusal period in alignment with a Proposal received by the Power Exchange. There was a general agreement on the proposal.</p>	<ul style="list-style-type: none">• Modification to implement the delay for the Rejected/Refusal period

Issue 106. Summary

BSC	Work stream	Topic	Issues	Meeting	Discussion	Outcome
Section K	WS 2 Data and Timeframes	CALF	Does not represent reality	Meetings 2 and Meeting 3	Covered with the new indebtedness calculation	<ul style="list-style-type: none">Section M and K Modification as part of the New Credit Cover Calculation
		GC/DC	Does represent reality			
Section H	WS 5 Communication and Credit Governance	Enforcement	Time to appoint a SoLR	Meeting 5	Elexon is internally discussing the Elexon-Ofgem handover process with Ofgem.	<ul style="list-style-type: none">Elexon-Ofgem review of enforcement measures



Review of the proposed Credit Cover Calculation

WHAT IS THE ISSUE WITH THE CALCULATION?

Credit Calculation's Issue and proposed Solution

- The Credit Cover calculation assesses indebtedness over a 29 Calendar Day rolling period. Charges are also calculated for information at five Working Days in
- Many of the variables included in the Calculation are in-accurate estimates (exasperated for certain technology types) and have been highlighted as pain points during the Survey (MEI, CEI, CAP, CALF, GC/DC)
- During the last meetings, Elexon proposed a new methodology to assess indebtedness based on trading charges incurred and uses a proxy of meter readings to eliminate the need of using the estimated variables

In the event of a default, there needs to be funds to cover Charges accrued, and potential charges that maybe accrued between default and Market Exit

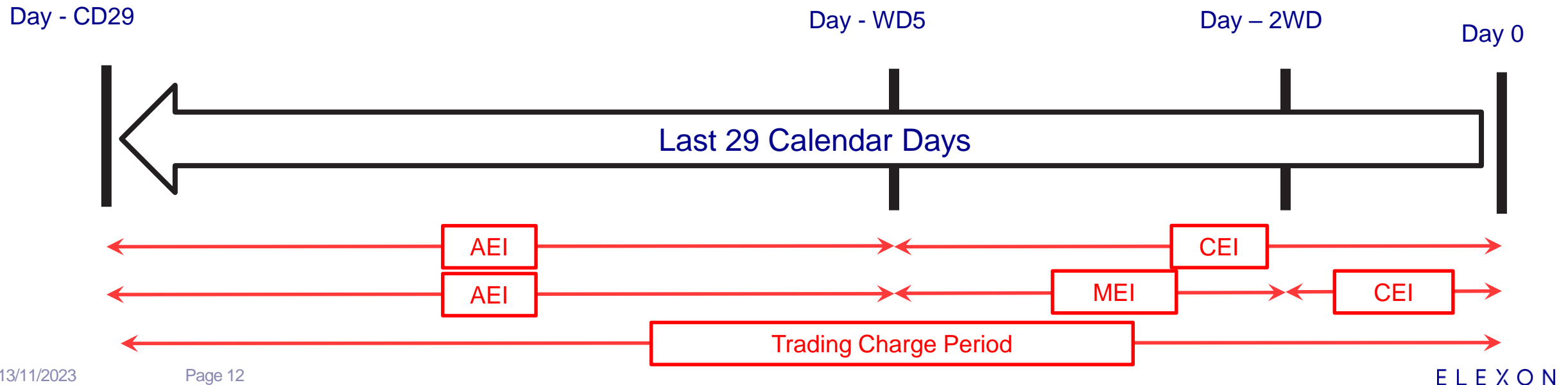
In simple terms – we need to be able to access enough money to cover outstanding costs at the point of Market Exit

Existing Credit Calculation

$$Credit\ Assessment\ Energy\ Indebtedness + (Metered\ Energy\ Indebtedness) + Actual\ Energy\ Indebtedness = Total\ Energy\ Indebtedness$$

$$CEI + (MEI) + AEI = TEI$$

- CEI (and MEI) – is a volume in MWh based on approximations and estimates
- That is then add to AEI, which is Trading Charges (a monetary amount in £ that has to actually be paid) divided by the CAP (a nominal figure in £/MWh – this then gives us an estimated Volume in MWh
- The three values summed give us TEI, a value in MWh
- The TEI is then multiplied by CAP to give a price in £
- This is the amount that we base Credit calculations on such that, if this amount is more than 80% of the Credit lodged, we will start to take default actions





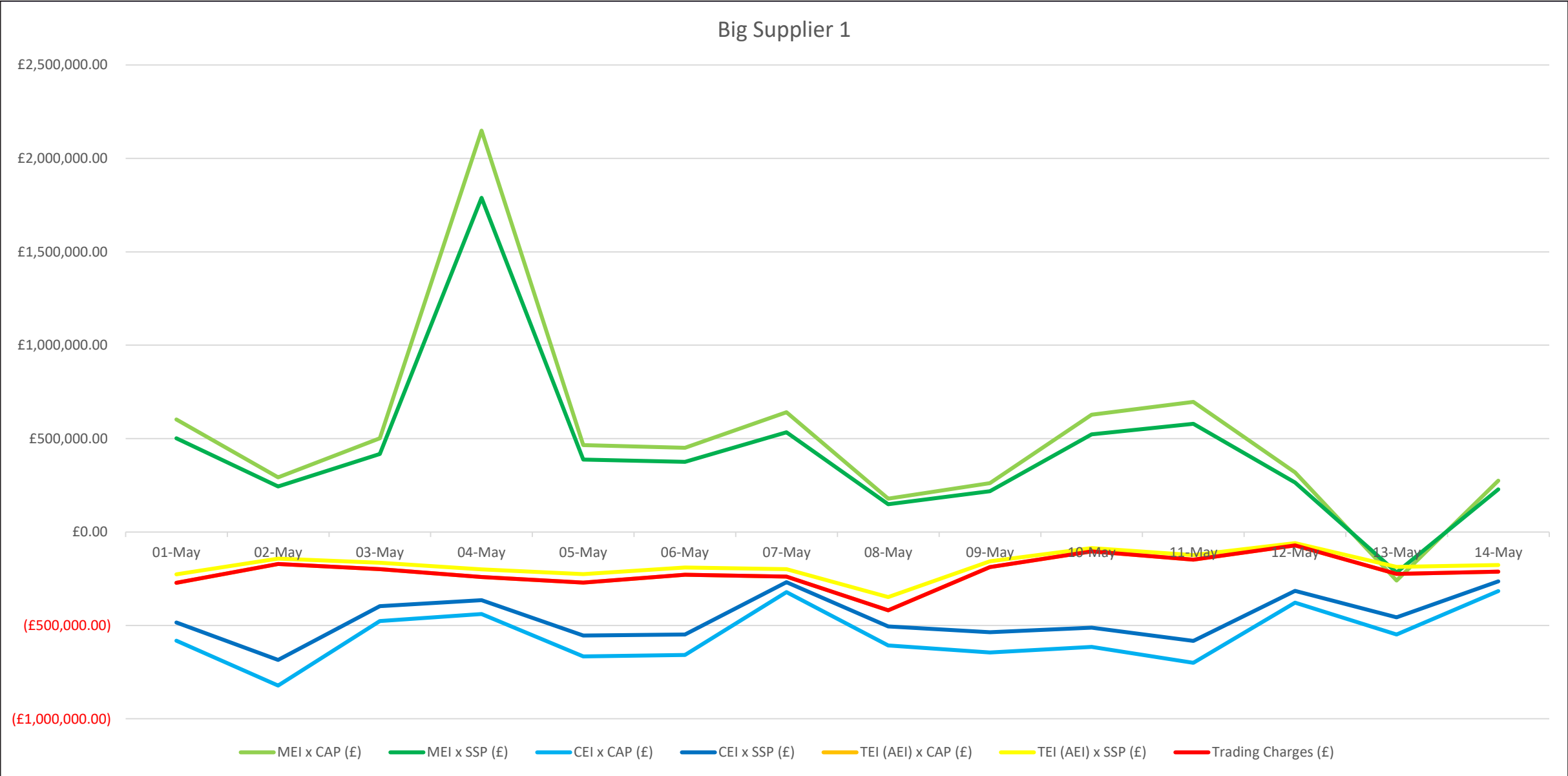
DATA ANALYSIS

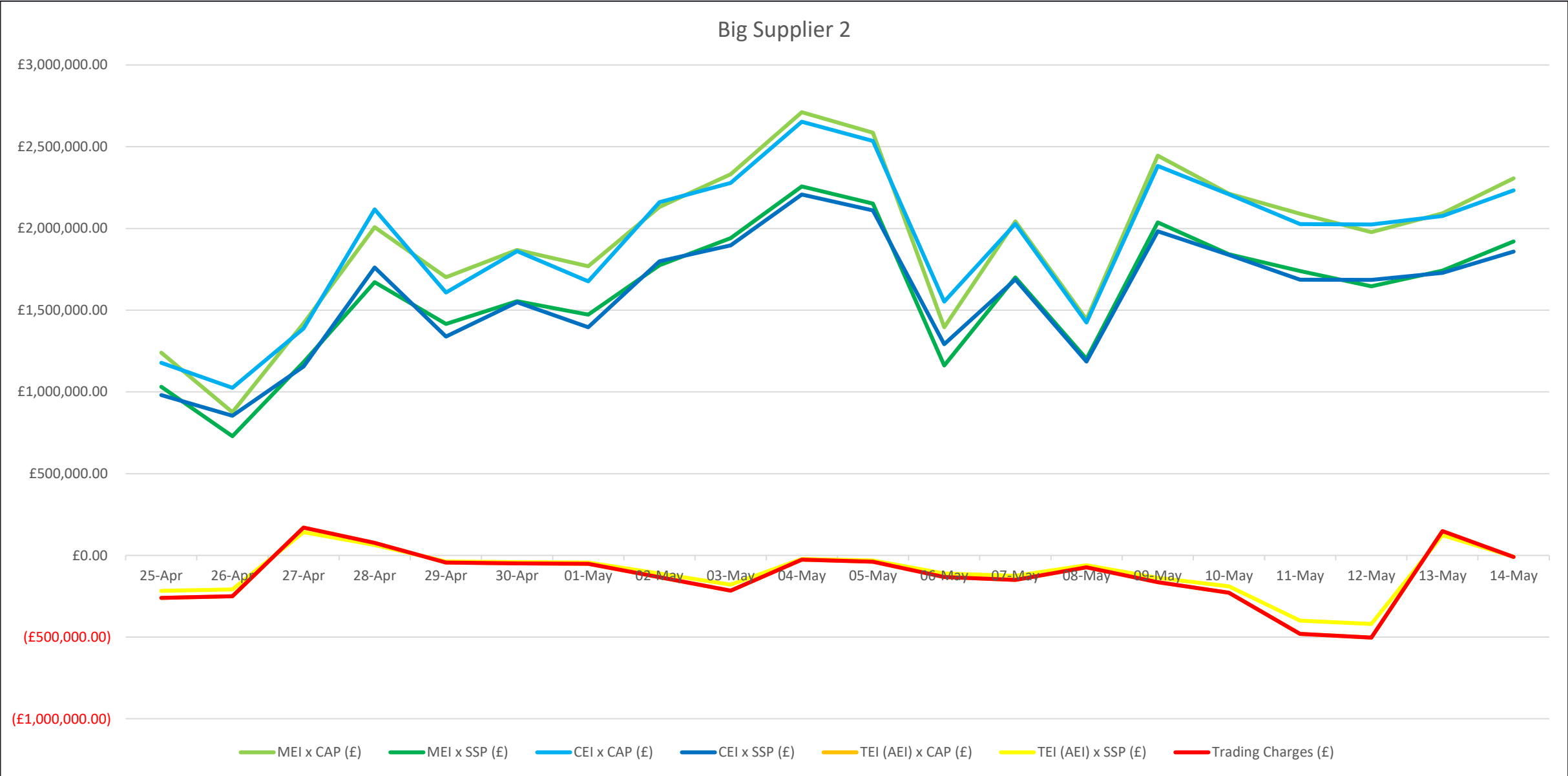
Data Analysis

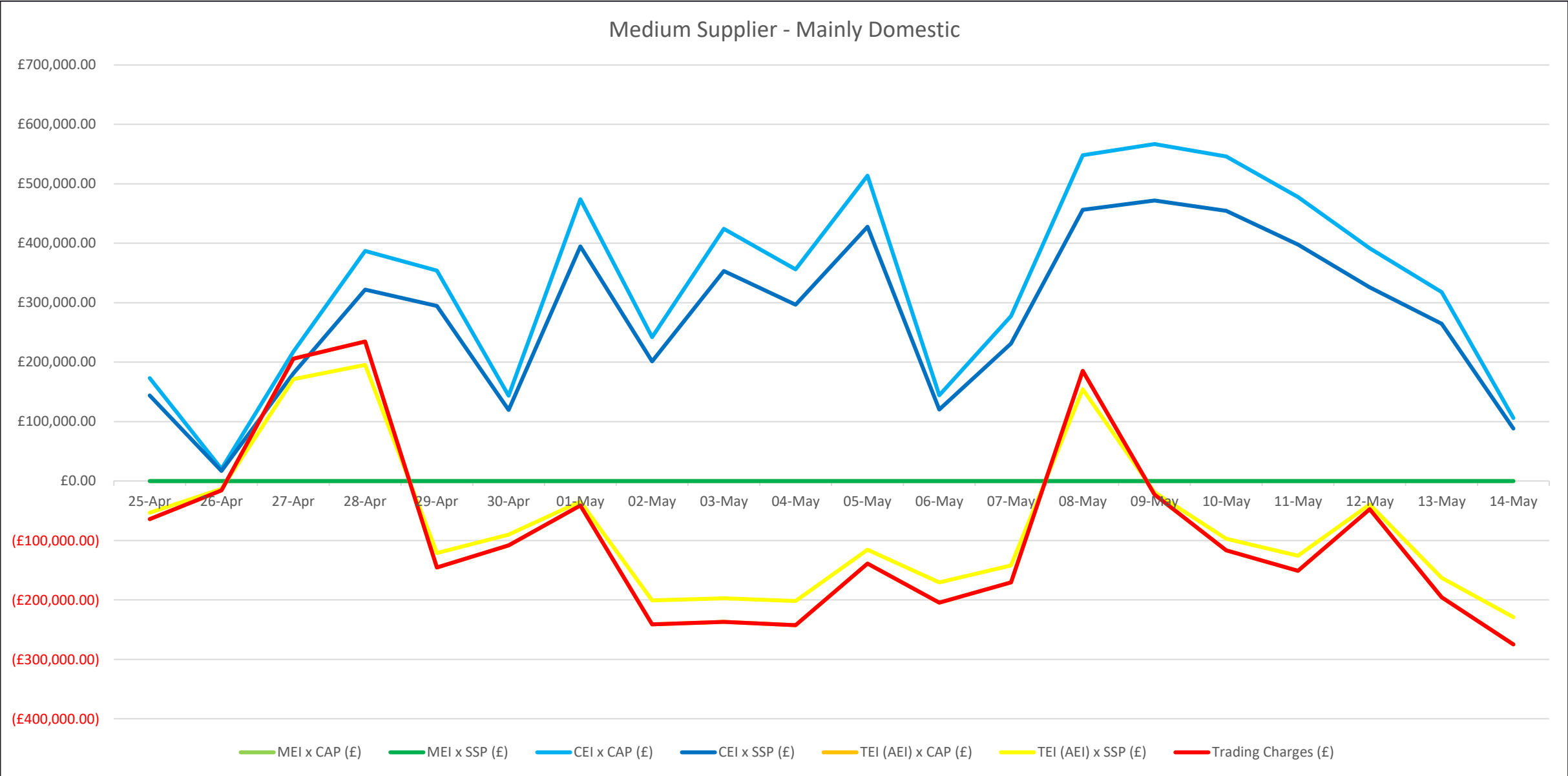
	Trading Charges (£)	AEI (MWh)	MEI (MWh)	CEI (MWh)	TEI (MWh)
22-May	-£69,062.51			-627.84	-627.84
21-May	-£55,079.95			-500.73	-500.73
20-May	-£205,416.02			-1867.42	-1867.42
19-May	-£142,509.68			-1295.54	-1295.54
18-May	-£116,387.25			-1058.07	-1058.07
17-May	£866,421.33		7876.56		7876.56
16-May	£427,763.77		3888.76		3888.76
15-May	£486,629.55		4423.91		4423.91
14-May	-£212,077.80	-1927.98	2,498.26	-2,877.97	-1927.98
13-May	-£224,589.87	-2041.73	-2,363.04	-4,981.75	-2041.73
12-May	-£71,186.60	-647.15	2,898.12	-3,441.78	-647.15
11-May	-£148,192.46	-1347.20	6,331.16	-6,366.65	-1347.20
10-May	-£103,733.98	-943.04	5,707.25	-5,586.42	-943.04
09-May	-£187,718.84	-1706.53	2,382.86	-5,859.10	-1706.53
08-May	-£418,664.62	-3806.04	1,623.34	-5,515.91	-3806.04
07-May	-£238,937.57	-2172.16	5,826.42	-2,927.49	-2172.16
06-May	-£228,614.56	-2078.31	4,097.25	-5,986.70	-2078.31
05-May	-£270,447.99	-2458.62	4,233.41	-6,050.17	-2458.62
04-May	-£240,736.03	-2188.51	19,534.32	-3,986.14	-2188.51
03-May	-£198,243.88	-1802.22	4,563.04	-4,332.10	-1802.22
02-May	-£171,533.18	-1559.39	2,657.57	-7,476.19	-1559.39
01-May	-£272,014.79	-2472.86	5,477.78	-5,291.26	-2472.86
30-Apr	-£169,519.27	-1541.08	N/A	N/A	-1541.08
29-Apr	£136,379.86	1239.82	N/A	N/A	1239.82
28-Apr	-£582,171.26	-5292.47	N/A	N/A	-5292.47
27-Apr	-£468,123.68	-4255.67	N/A	N/A	-4255.67
26-Apr	-£37,102.86	-337.30	N/A	N/A	-337.30
25-Apr	-£218,029.32	-1982.08	N/A	N/A	-1982.08

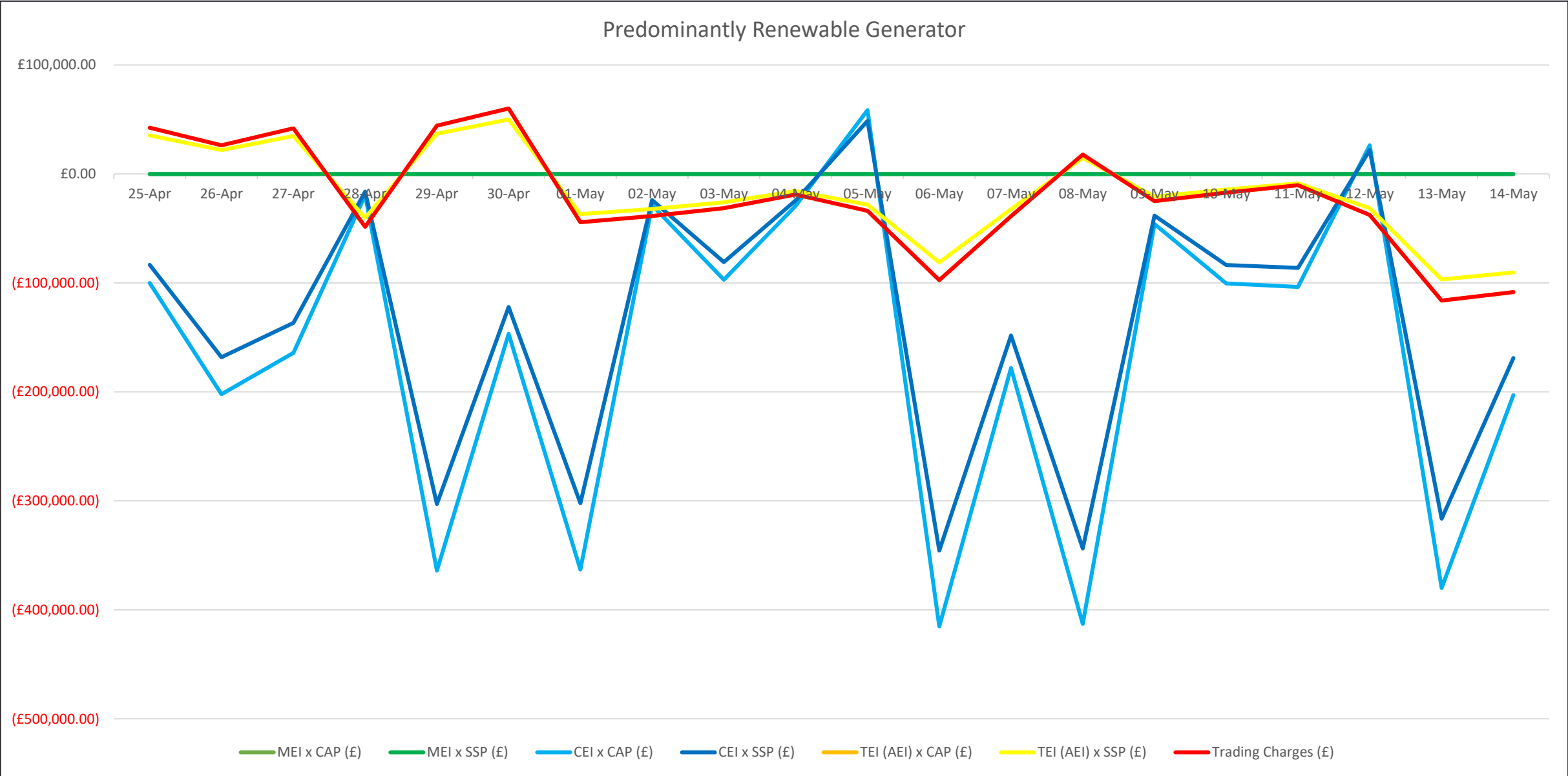
CAP = £110.00/MWh

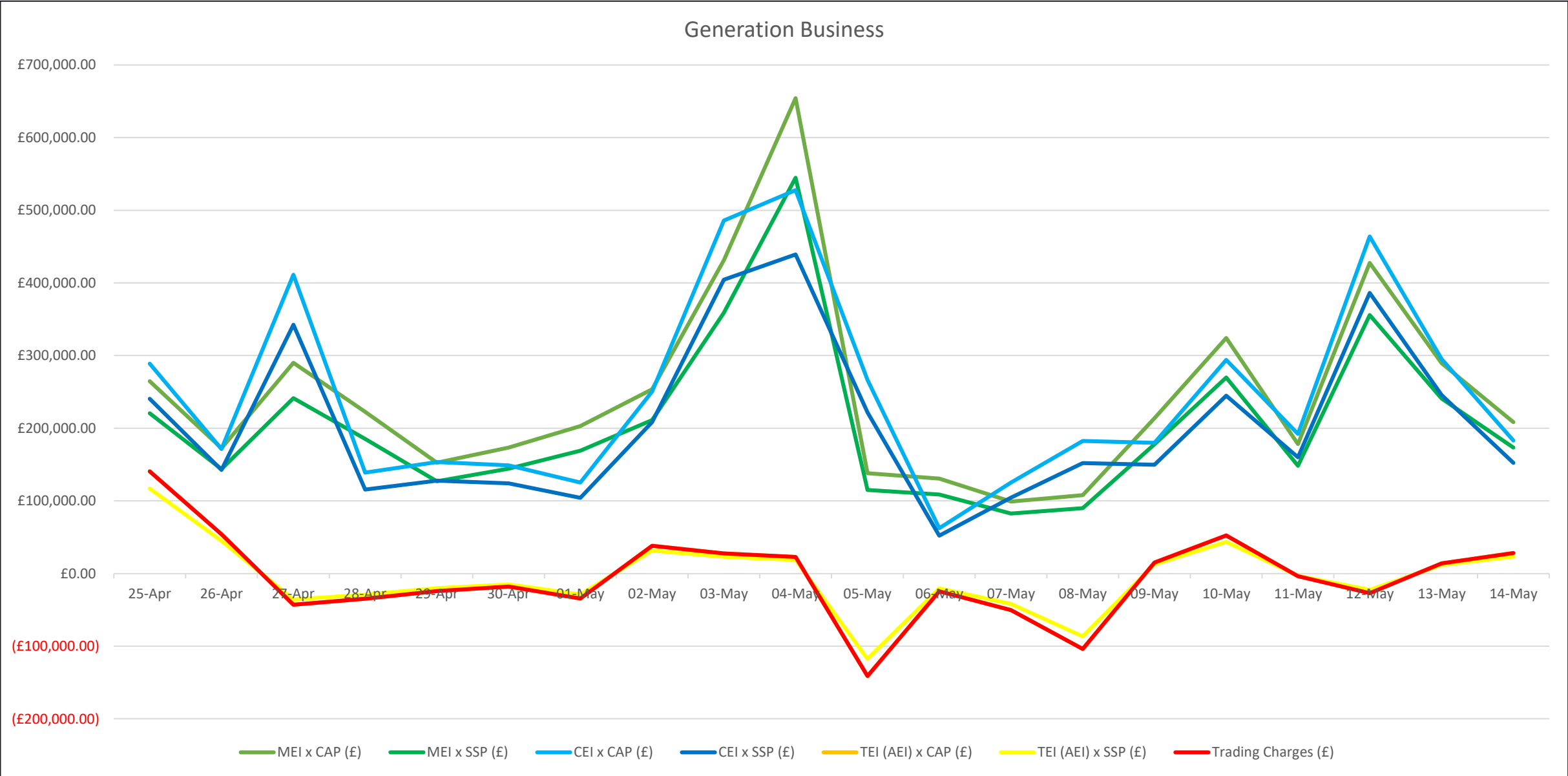
SSP = £91.57/MWh









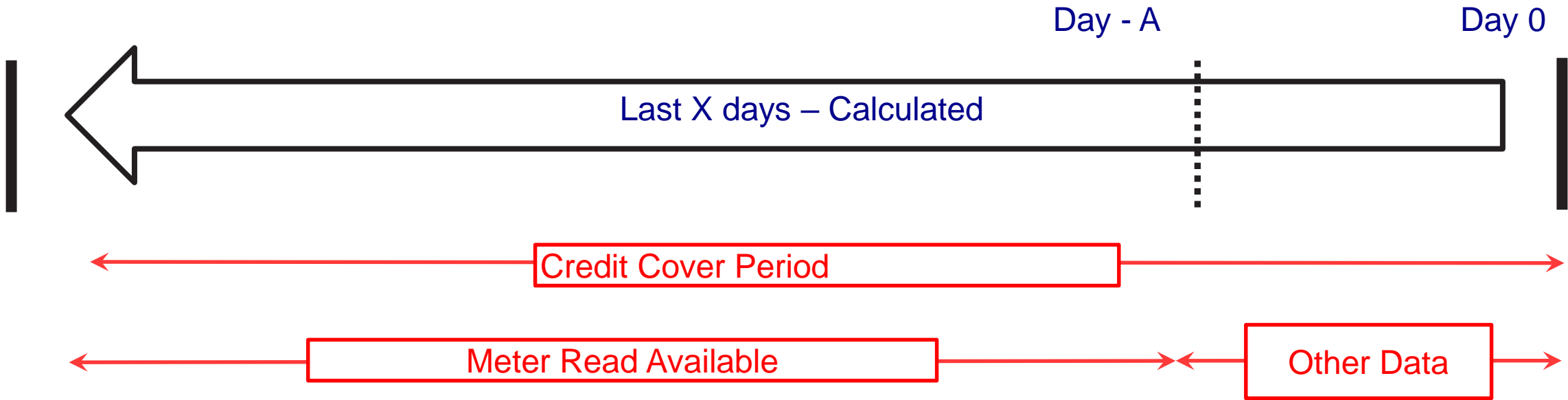




AGREED SOLUTION

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Proposed 'looking back' calculation



- Between 'Day -A' and 'Day -X' we will use existing calculations for Trading Charges – an amount in Pounds Sterling (£)
- Between 'Day 0' and 'Day -A', options agreed, in order of preference were:
 - To use average meter reads as proxy for BM Unit Metered Volume (QM_{ij}) for calculating Trading Charges between Day 0 and Day A
 - Second preference was to use rolling average of trading charges for period Day 0 – A
 - Third option was dynamic GC/DC and CALF values using more up to date values rather than the same season last year
 - 'Dynamic' means updating weekly/monthly almost on a rolling basis
 - Discounted – Lead Party submitting proxy reads and/or GC/DC and CALF values
- Can be explored further if there's a preference, or a 'if not data A is not available/fails validation, then use data set B' once Modification is raised



DURATION OF DAY 0 TO DAY A?

Trading Charges Calculation

- Before we determine the time frames for the new calculation, we need to understand what values we use to determine Trading Charges, where we get them from, and when they become available in BSC Systems
- When we break down each of the Trading Charges calculations to their components' parts, and then add them together, it looks like this:

Trading Charges per BM Unit per Settlement Period =

$$\begin{aligned} & (\sum_j \sum_{i \in p} (\sum_n ((\sum_k QAO^{kn}_{ij}) * (1 + TLF_{ij} + (-\{\alpha(\sum^+ QM_{ij} + \sum^- QM_{ij}) + \sum^+_{(non-I)} (QM_{ij} * TLF_{ij})\} / \sum^+_{(non-I)} QM_{ij})) * PO^n_{ij}) + \sum_n ((\sum_k QAB^{kn}_{ij}) * (1 + TLF_{ij} + \\ & (-\{\alpha(\sum^+ QM_{ij} + \sum^- QM_{ij}) + \sum^+_{(non-I)} (QM_{ij} * TLF_{ij})\} / \sum^+_{(non-I)} QM_{ij})) * PB^n_{ij})) + (\sum_j \sum_{i \in p} (\sum^n (((Min(AO^{nu}_{ij}, RQND O^{u-1}_{ij})) * Max\{(PO^n_{ij} - SSP_j), 0\} * (1 + \\ & TLF_{ij} + (-\{\alpha(\sum^+ QM_{ij} + \sum^- QM_{ij}) + \sum^+_{(non-I)} (QM_{ij} * TLF_{ij})\} / \sum^+_{(non-I)} QM_{ij}))) + ((Max(AB^{nu}_{ij}, RQND B^{u-1}_{ij})) * Min\{(NDPB^n_{ij} - SSP_j), 0\} * (1 + TLF_{ij} + (- \\ & \{\alpha(\sum^+ QM_{ij} + \sum^- QM_{ij}) + \sum^+_{(non-I)} (QM_{ij} * TLF_{ij})\} / \sum^+_{(non-I)} QM_{ij})))) + ((-\sum_i ((QM_{ij} * TLM_{ij}) - \sum_a \{((QM_{ij} - (\sum^n (QAO^n_{ij} + QAB^n_{ij}) + \sum^n (RRAO^n_{ij} + RRAB^n_{ij}) \\ & + QAS_{ij} + \sum_N ((C_{iNj} + CLOSS_{iNj}) * (1 + (CF_{Hj} - 1) * WT_N) - C_{iNj}) + \sum_N ((AQVMD_{iNLKj} + ((\sum^{(vv)}_L ((LLF_{Lj} - 1) * \sum^{(vv)}_{PR} AQVMD_{iNLKj})))) * (1 + (CF_{Hj} - 1) \\ & * WT_N)) - QDD_{ij} + \sum_{i2} (QBS_{ij} - (Max\{Min(QBS_{ij}, (Min\{Max\{(FPN_{ij} + QBS_{ij}) - QM_{ij}, 0\}, (\sum^n QAO^n_{ij} + \sum^n RRAO^n_{ij}))))), (Max\{Min\{(FPN_{ij} + QBS_{ij}) - QM_{ij}, \\ & 0\}, (\sum^n QAB^n_{ij} + \sum^n RRAB^n_{ij})))))) * (\sum_z QMPR_{ziaj}/100 + \sum_z QMFR_{ziaj}) * (1 + TLF_{ij} + (-\{\alpha(\sum^+ QM_{ij} + \sum^- QM_{ij}) + \sum^+_{(non-I)} (QM_{ij} * TLF_{ij})\} / \sum^+_{(non-I)} QM_{ij}))) - \\ & ((\sum_i (QBS_{ij} * TLM_{ij}) + (\sum_{i2} QSND_{i2j} * TLM_{i2j})) - (\sum_{b,z} ECQ_{zabj} - \sum_{b,z} ECQ_{zbaj})) * SSP_j) + (\sum_j \sum_{i \in p} ((QM_{ij} - (FPN_{ij} + (\sum^n (QAO^n_{ij} + QAB^n_{ij}) \\ & + \sum^n (RRAO^n_{ij} + RRAB^n_{ij}) + QAS_{ij} + BMUADDV_{ij} + SNBABSVD_{ij} - QDD_{ij} + QBSD_{ij}))) * IIP_j)) + (\sum_j \sum_{a \in p} (((\sum^+_i (QCE_{iaj}) + \sum^-_i (-QCE_{iaj}))/ \\ & \{\sum_a \{\sum^+_i (QCE_{iaj}) + \sum^-_i (-QCE_{iaj})\}\}) * (\sum_a CAEI_{aj}))) \end{aligned}$$

- The following two slides, show the component parts of the formula (some values appear several times above), when they enter Settlement Systems and who is responsible for entering them into Settlement Systems

Values used in Trading Charge calculations – Volumes (MWh)

Meter Volumes BM Unit Metered Volume – The Metered Volume (QM_{ij})

- Determined by SVAA and derived from BM Unit Metered Volume (QM_{ij}) and data submitted by VLP/AMVLP:
 - ABSVD BM Unit Metered Consumption ($AQVMD_{iNLK_j}$)
 - Half Hourly Consumption (Non Losses) (C_{inj})
 - Half Hourly Consumption (Losses) ($CLOSS_{inj}$)
 - Period BM Unit Demand Disconnection Volume (QDD_{ij})

Balancing Volumes – all MWh

- Period FPN (FPN_{ij})
- BM Unit ABSVD (QAS_{ij})
- Period BM Unit Balancing Services Volume (QBS_{ij})
- Period Accepted Offer Volume (QAO_{knij})
- Period Accepted Bid Volume (QAB_{knij})
- Period BM Unit Total Accepted Offer Volume (QAO_{nij})
- Remaining Period BM Unit Non-Delivered Offer Volume ($RQNDO_{u-1ij}$)
- Period RR Total Accepted Offer Volume ($RRAO_{nij}$)
- Period BM Unit Total Accepted Bid Volume (QAB_{nij})
- Remaining Period BM Unit Non-Delivered Bid Volume ($RQNDB_{u-1ij}$)
- Period RR Total Accepted Bid Volume ($RRAB_{nij}$)

Reallocation Volumes

- Metered Volume Reallocation Percentage Data ($QMPR_{ziaj}$)
- Metered Volume Reallocation Fixed Data ($QMFR_{ziaj}$)
- Energy Contract Volume from account 'a' to account 'b' (ECQ_{zabj})
- Energy Contract Volume from account 'b' to account 'a' (ECQ_{zbaj})

Price

- System Sell Price (SSP_j)
- Offer Price (PO_{nij})
- Bid Price (PB_{nij})
- Accepted Offer Ranking (AO_{nuij})
- Information Imbalance Price (IIP_j)

Constant values

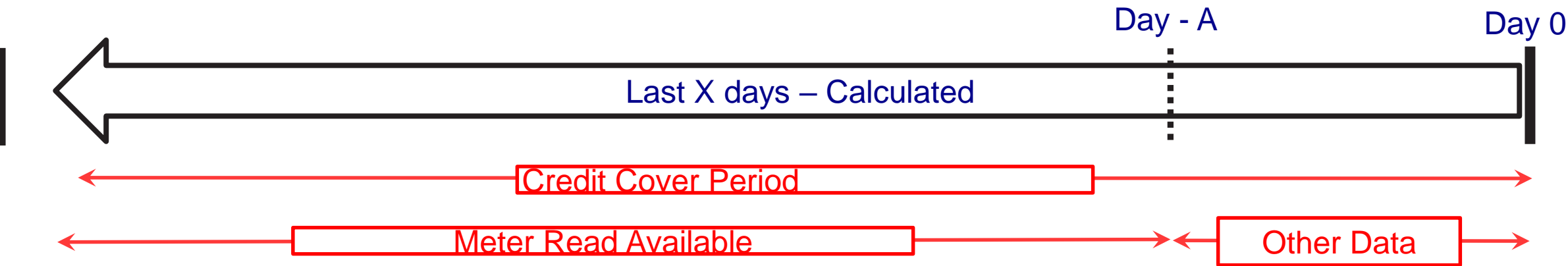
- Transmission Loss Multiplier (TLM_{ij})
- GSP Group Correction Factor (CFH_j)
- GSP Group Correction Scaling Weight (WTN)
- Line Loss Factor ($LLFL_j$)
- Transmission Loss Factor (TLF_{ij})

Timings for data entering Settlement Systems – BSCP01

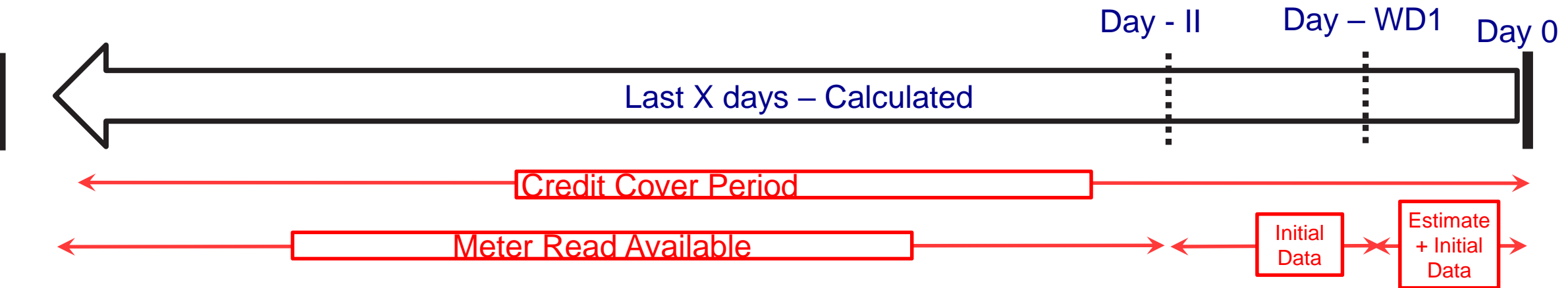
Notification	Value(s)	Timing	Day	From	To
ECVN	ECQ_{zabj} , ECQ_{zbaj}	Before Submission Deadline	Day 0	ECVNA	ECVAA
MVRN	$QMPR_{ziaj}$, $QMFR_{ziaj}$	Before Submission Deadline	Day 0	MVRNA	ECVAA
FPN	FPN_{ij}	Multiple times daily (see BSCP01)	Day 0	Lead Parties NETSO BMRA	NETSO BMRA ECVAA
BOAs	QAO_{knij} , QAB_{knij} , QAO_{nij} , $RQND O_{u-1ij}$, $RRAO_{nij}$, QAB_{nij} , $RQNDB_{u-1ij}$, $RRAB_{nij}$, PO_{nij} , PB_{nij} , AO_{nuij}	Before Gate Closure	Day 0	Lead Parties	NETSO
Dynamic Data		Before Gate Closure	Day 0	Lead Parties	NETSO
Submitted Expected Volumes		Before Gate Closure	Day 0	Lead Parties	NETSO
Published Accepted BOAs	QAO_{knij} , QAB_{knij} , QAO_{nij} , $RQND O_{u-1ij}$, $RRAO_{nij}$, QAB_{nij} , $RQNDB_{u-1ij}$, $RRAB_{nij}$, PO_{nij} , PB_{nij} , AO_{nuij}	15 minutes after acceptance	Day 0	NETSO	BMRA
BM Unit Applicable Balancing Services Volume Data	QAS_{ij} , QBS_{ij}	5 Mins after acceptance/ Gate Closure +15m	Day 0	NETSO	BMRA
RR Data		5 Mins after acceptance/ Gate Closure +15m	Day 0	BMRA	NETSO
Indicative SSP		15M + CADL after end of Period	Day 0	NETSO	BMRA
CDCA Metered Data	QM_{ij} ($AQVMD_{iNLK_j}$, C_{inj} , $CLOSS_{inj}$, QDD_{ij})	Settlement Day +1 (1300)	Day +1	Meter Systems	CDCA
Teleswitch data	QM_{ij} ($AQVMD_{iNLK_j}$, C_{inj} , $CLOSS_{inj}$, QDD_{ij})	+ 1WD	Day + 1	Tele-switch Agent	SVAA
IC BM Unit Metered Volume	QM_{ij} ($AQVMD_{iNLK_j}$, C_{inj} , $CLOSS_{inj}$, QDD_{ij})	+ 1WD	Day + 1	IC Agent	SAA
SVA Volumes	QM_{ij} ($AQVMD_{iNLK_j}$, C_{inj} , $CLOSS_{inj}$, QDD_{ij})	+4 WD/ +1WD post-MHHS	Day + 4	DAs/ Data Services post-MHHS	SVAA
MSID and AMSID Delivered Volumes	QM_{ij} ($AQVMD_{iNLK_j}$, C_{inj} , $CLOSS_{inj}$, QDD_{ij})	+1 WD (1700)	Day + 1	VLP/ AMVLP	SVAA
Market Index Data		+1 WD	Day + 1	MID Providers	SAA
System Sell Price	SSP_j	+4WD	Day+4	SAA	All

Recommendations

- Day 0 – WD1 = as previously agreed, use Estimated QM_{ij} and all other available data
- WD1 – Settlement Run II = Use Data available, but some is Indicative
- Settlement Run II onwards = Trading Charge calculations as they are now; therefore suggest Day X remains 29 Days, but open to discussion
- Instead of:



Revised Proposal is:



slido



Do you agree with the proposed solution?

① Start presenting to display the poll results on this slide.

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Would your party be interested in raising this change ?

① Start presenting to display the poll results on this slide.



FURTHER ANALYSIS ON CREDIT DEFAULT PROPOSAL

Re-Cap of Proposal

- At the third WG meeting, we presented a proposal to modify the Credit Default Refusal/Rejection Periods in relation to Energy Contract Volume Notifications (ECVN) and Metered Volume Reallocation Notifications (MVRN) after a Party goes into Level 2 Credit Default.
- This proposal aims only to modify the timings to mitigate the impacts of Level 2 Credit Default on Trading Counter parties.
- The Refusal & Rejection of ECVNs and MVRNs would only be notifications which increase the Energy Indebtedness of a Party.

Proposed change to Section M 3.3.3 a (i)

From:

- '(i) the "Credit Default **Refusal** Period" is the period from the Submission Deadline for **Settlement Period J** until the Submission Deadline for the Settlement Period after the first subsequent Settlement Period in relation to which the Credit Cover Percentage for the Imbalance Party becomes not greater than ninety (90) per cent (%)'

To:

- '(i) the "Credit Default **Refusal** Period" is the period from the Submission Deadline for **Settlement Period J+4** until the Submission Deadline for the Settlement Period after the first subsequent Settlement Period in relation to which the Credit Cover Percentage for the Imbalance Party becomes not greater than ninety (90) per cent (%)'
- The proposal delays the refusal of any new ECVN's & MVRN's which is submitted during the Credit Default Refusal Period by a further 90 minutes (3 Settlement Periods) from the current process.

Re-Cap of Proposal

Proposed change to Section M 3.3.3 a (ii)

From:

- '(ii) the "Credit Default **Rejection Period**" is the period from the Submission Deadline for **Settlement Period J+3** until the Submission Deadline for the third Settlement Period after the first subsequent Settlement Period in relation to which the Credit Cover Percentage for the Imbalance Party becomes not greater than ninety (90) per cent (%)'

To:

- '(ii) the "Credit Default **Rejection Period**" is the period from the Submission Deadline for **Settlement Period J+4** until the Submission Deadline for the third Settlement Period after the first subsequent Settlement Period in relation to which the Credit Cover Percentage for the Imbalance Party becomes not greater than ninety (90) per cent (%)'
- The proposal delays the rejection of any upcoming previously accepted ECVN's & MVRN's which falls within the Credit Default Rejection Period by a further 30 minutes (1 Settlement Period) from the current process.

Analysis of the impact to delaying the Rejection of ECVNs

- Analysis looked at genuine instances of Level 2 Credit Default within the last 12 months and what the impact would be in each scenario if rejection of ECVNs were delayed by one Settlement Period.
- As the proposal is to delay the rejection of ECVNs by a further Settlement Period (ECVNs rejected at J+4 instead of J+3), The value of impact is determined by what ECVN volume is seen on J+3 from the period in which the Party entered level 2 Default. ECVN volume at J+3 would no longer be rejected under new proposal and would be 'permitted' to enter Settlement within the Credit calculation.
- A theoretical example was also looked at using the maximum ECVN volume seen for a tier 1 supplier. This would provide a view on what the maximum impact would likely be on the BSC if the rejection of this ECVN was delayed.

Instances of Credit Default within the last 12 months

	<u>Party Type</u>	<u>Date entered Credit Default</u>	<u>Reason for Credit Breach/Default</u>	<u>Length of Default (Hours)</u>	<u>Length of Default (Settlement Periods)</u>	<u>Impacted Volume (Mwh)</u>	<u>Value of Impact (£)</u>	<u>How the Default was resolved</u>
1	Non-Physical Trader/Interconnector User	29th December 2022	Breach occurred between the Christmas and New Year holiday periods.	22.5	46	0.15 Mwh	16	Party lodged additional Credit Collateral to clear Default
2	Supplier	31st December 2022	Breach occurred during the New Year holiday period.	82.5	164	8 Mwh	840	Party lodged additional Credit Collateral to clear Default
3	Wind Farm Generator	4th April 2023	Breach occurred a week before the Easter bank holiday period.	2	4	No Contract Volume was Rejected as Party had no net contracted volumes which increased the energy indebtedness within the first 5 Settlement Periods of Default commencing		Party Cleared the Default by naturally reducing it's indebtedness position
4	Non-Physical Trader/Interconnector User	12th April 2023	Breach occurred during the Easter holiday period.	9.5	19	No Contract Volume was Rejected as Party had no net contracted volumes within the first 7 settlement Periods of the Default commencing		Party lodged additional Credit Collateral to clear Default
5	Non-Physical Trader	24th August 2023	General Credit Breach over 80% indebtedness	7.5	15	12 Mwh	1,260	Party lodged additional Credit Collateral to clear Default

- 3 out of the 5 instances of Credit Default were during bank holiday periods where the ratio between the number of CEI, MEI & AEI days vary within the credit calculation.
- None of the Defaults were as a result of Section H SoLR events, and hence as a result of a Party failing or trading at 100% imbalance and subject to high system prices.
- 2 Parties had no ECVN volumes rejected on J+3 as they either had no net contracted volumes which increased the energy indebtedness, or no net contracted volumes at all.

Example Scenario

Tier 1 Supplier Example

- If we used an example of a Tier 1 supplier and looked at the highest ECVN volume over a period of the last 12 months, we can see the following.

Highest Energy Contract Volume in a single Settlement Period over last 12 months was in January 2023 = **1,678 Mwh**
Using a Current CAP value of £105/Mwh, the total contracted volume in a value amount = **£176,190**

- This is not a single ECVN for the Settlement Period, rather the net sum amount of ECVN trades within that Settlement Period.
- This represents the biggest period loss that we would have seen over the last 12 months if rejection of ECVN's were to be delayed by a further Settlement Period.

Summary Of Analysis

- The analysis gives an estimated value of impact. We use the CAP value as it gives a proxy for system prices, however it is difficult to know the true value of impact on trading counter parties.
- The process is doing what was intended in that the incentive to resolve the Default promptly is there. The measure of incentive is instances of where Parties have avoided entering Credit Default.
- Given we class material impacts in Settlement at a minimum of £3000, none of the examples exceed the materiality level deemed to be of significant value.
- From previous examples seen, and even when considering the biggest period loss using the example of a Tier 1 supplier, the overall impact on the BSC is low, and when compared to the benefits of delaying the rejection of ECVNs for liquidity in trading between counter Parties and limiting utilisation of collateral outside of the BSC, it represents a small risk.
- The threat of entering Credit Default level 2 is prominent and by delaying the rejection of ECVNs by one further Settlement Period will bring benefits to Counter Parties as it allows greater control and opportunity to terminate ECVN's with any Defaulting Party that may impact their own position.
- Delaying the rejection and refusal of ECVNs will be of benefit to all Counter Parties so as to mitigate as much as possible its risk of trading with another Party that is in Default.
- There is also a big difference to the many BSC Parties that utilise the power exchanges and the benefits of increased competition in short term trading and for Counter parties to reduce risk of exposure.
- There is an administrative effort involved in changing the guidance documentation and updating the BSC. However the change to the system should be relatively simple in that we are changing the parameters that already exist.

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Do you agree with the proposed solution?

① Start presenting to display the poll results on this slide.

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Does the WG recommend raising the proposal as a Modification?

① Start presenting to display the poll results on this slide.

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Would your party be interested in raising this change ?

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CURE PERIOD PROPOSAL

Proposal to Remove Cure Period

- At the second WG meeting, we presented a proposal to remove the Cure Period as part of new Credit Default measures. The Cure Period applies when a Party's Credit Cover Percentage remains between 80% - 90% after the Query Period has concluded.
- The Removal of the Cure Period was initially proposed to firstly simplify the Credit Default process hence making it easier for Parties to understand when they are in Default.
- After review, we are proposing that the Cure Period remain for the following reasons.
 - Allow Parties additional time to lodge credit collateral during business hours. This will help if Parties have entered a Query period over the weekend and for international payments to clear in time.
 - Additional time for Parties to trade out of their position and reduce the indebtedness naturally.



ANALYSIS AND REVIEW OF RISK BASED APPROACH TO CREDIT COVER

Re-Cap of Proposal

- At the fourth WG meeting, we presented a proposal on a solution that would use a risk profile based approach to determine a level of collateral that BSC Parties would lodge as part of market entry requirements. This collateral would only be used to cover mutualisation of costs to the industry as a result of unpaid Trading Charges should the Party Default and exit the BSC. So would sit separately to credit collateral.
- This was proposed in response to the WG highlighting that unpaid Trading Charges mutualised to industry as part of the Default Funding Share (DFS) should be minimised as much as possible.
- Parties more at risk of Default and therefore higher risk of accumulating unpaid Trading Charges resulting in bad debt should be required to hold more collateral.

Risk Based Approach and Risk Criteria

- The proposed solution was that upon accession to the BSC, Parties would be assigned an initial risk profile based on a certain set of criteria.
- A review of the risk profile would be carried out for each party, where further criteria would be assessed based on Credit & Payment performance of the Party.
- A points system could be used to assess the risk criteria with a certain number of points determining a risk factor which would in turn determine the amount of collateral a Party would need to lodge. Depending on the points assessment of those criteria, a party may either move up or down in risk level, which determines the amount of collateral that must be held.
- This collateral amount would be held separately from the credit collateral used to cover the Trading Charges as part of the Credit calculation. Increases and decreases to this collateral amount would solely depend on the risk profile a party is assigned which would be determined by the risk criteria.

Risk Profiles & Criteria

- Parties will be assigned to one of three risk profiles depending on the risk criteria assessed. Each risk criteria will carry a points weighting which when aggregated will determine which risk profile a Party is assigned.
- Upon Market Entry and registration to the BSC, an initial set of Criteria will be assessed for each BSC Party.

Initial Risk Criteria Upon BSC Accession

- The Initial set of criteria that will be assessed upon registration will be:
 - Credit Rating
 - Registrant Party Role
 - Customer MPAN numbers (Suppliers Only)
- A points weighting will be totalled for each criteria depending on assessment.

<u>Credit Rating</u>	AAA	-	0	<u>Registrant Party Role</u>	Supplier	-	2	<u>Customer Numbers</u>	0 – 500	-	0
	AA	-	0		Non-Physical Trader	-	1		501 – 5000	-	1
	A	-	0		Generator	-	0		5001 +	-	2
	B	-	1								
	C	-	2								

Risk Profiles & Criteria

- After BSC accession, the risk profile for each Party will be reviewed every 3 months. Depending on the Credit & Payment performance of the Party in the previous 3 months leading up to review will determine if a Parties risk profile will change or remain the same.

Credit & Payment Risk Criteria

- The Credit & Payment set of criteria to be assessed and points weighted could be:
 - Number of Credit breaches > 80% Credit Cover Percentage
 - Number of Payment Defaults relating to Trading Charges
 - Exceeding 3 occasions of Default relating to Credit/Payment
 - Number of times in authorised Credit Default Level 1
 - Number of time in authorised Credit Default Level 2
 - Triggering a Default under Section H relating to Credit/Payment

Number of Credit breaches > 80% Credit Cover Percentage

1 – 5 breaches	-	1
6 – 10 breaches	-	2
10 + breaches	-	3

Number of Payment Defaults relating to Trading Charges

1 – 3 Defaults	-	1
4 – 8 Defaults	-	2
9 + Defaults	-	3

<u>Exceeding 3 occasions of Default relating to Credit/Payment</u>	1 – 5 breaches	-	1
	6 – 10 breaches	-	2
	10 + breaches	-	3
<u>Number of times in authorised Credit Default Level 1</u>	1 – 3 Defaults	-	2
	4 + Defaults	-	4
<u>Number of times in authorised Credit Default Level 2</u>	1 – 2 Defaults	-	4
	3 + Defaults	-	6
<u>Triggering a Default under Section H relating to Credit/Payment</u>	EoD	-	5

Risk Profiles & Criteria

- The accumulated points assessed for each of the criteria will then determine what risk profile is assigned to a Party. There would initially be 3 risk profiles. High, Medium and Low
- Each Risk Profile will determine a factor which when applied to the Average Trading Charge amount seen over the previous 3 months for that Party, will determine the amount the Party must lodge as collateral.
- A calculation would derive what the risk score would be based on the criteria scoring and in turn determine if it breaches the threshold into a higher or lower risk profile.
- Party will be required to make a deposit to the FAA to form a collateral amount that will only be called upon in event of that Party defaulting under the BSC and where the Panel have determined that any unpaid Trading Charges will be mutualised through DFS. This deposit will be made separately alongside any deposits towards Credit collateral.
- If a Parties risk profile were to reduce and hence the amount of collateral required to lodge is reduced, it will have the option to withdraw that excess collateral via notification to the FAA. Timescales would be decided but this could be similar to current MEA procedure (where Parties have 2WDs from receipt of result to notify FAA).
- As part of a review process, all parameters around the risk criteria and the points weighting can be re-assessed at any time interval, to determine if criteria are still relevant and the points weighting is accurate.

Points to consider

- This proposal is a conceptual idea of how we could potentially use a risk based approach towards parties lodging a collateral amount to mitigate as much as possible the impact of bad debt on the rest of the industry.
- There is a high level of complexity in developing a scoring system and calculation to determine a risk factor. The resource and time to define a process of this nature is a great deal when asking Parties to lodge a sum of collateral relative to the size of the Party, particularly for most parties where there isn't a lot of risk and lodging collateral as cover which just isn't palatable.
- There is complexity Vs value point to consider with this approach as there will be further work required to determine what further criteria could feed into the overall risk assessment and the overall risk profiles, and what the value of this is compared to amounts required to be held as cover.
- The requirement to lodge collateral upon Market Entry could result in the most risk adverse parties having to lodge funds that simply are not available.
- It will require a fixed approach that aligns with Ofgem and their processes around Parties fit for purpose to enter the Market. We've identified a need for financial resilience which is part of the wider Ofgem criteria piece of Parties fit to enter the market.
- If the WG believe there is a way to progress this, then lets consider the approach.

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Does the WG recommend raising the proposal as a Modification?

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Would your party be interested in raising this change ?

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NEXT STEPS

Next steps

- Workgroup summary to be sent to members/ included in final report
 - Issue 106 Report to be written and shared with members for review
 - After reviewed, Final Report to be tabled at BSC December 2023 Panel
-
- In parallel, Elexon will continue to work to agree a more aligned process between Elexon and Ofgem

Plan of Credit Calculation Solution Implementation

- We've discussed MHHS and when implemented we will see reduced settlement timescales. The go live date for the new credit calculation will fall in line with go live of MHHS, which will reflect the new Settlement timetable which goes live in December 2026.
- MHHS will give us new tools to enable the credit calculation to be more effective, however initially we may not have all the sufficient data required.
- There are more benefits for the credit calculation going live in line with MHHS mainly because the current technology is legacy based. By rebuilding around MHHS, we will have a scalable credit solution that will enable easier changes. We can then review and evolve the process as we move forward and data quality and quantity increases. This both reduces the time resource as well as the overall cost implications.
- There are changes that we have already discussed such as the delay to rejection/refusal of ECVNs/MVRNs, which can be implemented fairly quickly and we will look to raise a modification to include this.
- However as the new calculation will coincide with MHHS go live, it's important that we plan what this will look like over an extended period of time over the next few years.

Plan of Credit Calculation Solution Implementation

YEAR 1

- First Modification to be raised which will focus on the changes that can be implemented with minimum time constraint. Work over the next few months will be on the initial modification:
 - Delay to refusal/rejection of ECVNs & MVRNs

YEAR 2

- Planning will begin to look at how we will implement the new credit calculation in line with MHHS, and developing plans around key area points which will need added focus when during go live. Producing a view of what the full end to end credit calculation and process looks like and how this will fit alongside MHHS. Will consider any testing requirements.

YEAR 3

- Implementation of the new calculation changes alongside MHHS go live. Focus will be on monitoring day to day running of the process and addressing any issues.

YEAR 4 & 5

- Review process will continue throughout and the will continue to evolve the solution as more data becomes available.

ANY OTHER BUSINESS?

ELEXON

THANK YOU

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13 November 2023