

Special Condition 4L: Financial incentives on EMR

Introduction

- 4L.1 The purpose of this condition is to establish arrangements to determine an adjustment to the licensee's Maximum SO Internal Revenue (either positive or negative) in Relevant Year t by means of the term $SOEMRINC_t$ for the purposes of paragraphs 4A.3 and 4A.4 of Special Condition 4A (Restriction of System Operator Internal Revenue) as a result of the financial incentives placed upon the licensee relating to the EMR Functions.
- 4L.2 The financial incentives placed upon the licensee are as follows:
- (a) the dispute resolution incentive which adjusts the licensee's revenue depending on how many of the Reviewable Decisions made by the licensee are overturned by the Authority (the "Dispute Resolution Incentive");
 - (b) the demand forecasting accuracy incentive which adjusts the licensee's revenue as a result of the accuracy with which the licensee forecasts Peak National Demand (the "Peak National Demand Forecasting Accuracy Incentive");
 - (c) the demand side response incentive which adjusts the licensee's revenue as a result of the licensee encouraging and facilitating participation of Demand Side Response providers in the Year Ahead Capacity Auction (the "Demand Side Response Incentive"); and
 - (d) the customer and stakeholder satisfaction survey incentive which adjusts the licensee's revenue depending on the licensee's performance as measured by the customer and stakeholder satisfaction survey (the "Customer and Stakeholder Satisfaction Survey Incentive") which is described in Part F of this condition.
- 4L.3 The "Regulations" for the purposes of this condition are:
- (a) The Contracts for Difference (Allocation) Regulations 2014, as amended from time to time (the "CfD Regulations"); and
 - (b) The Electricity Capacity Regulations 2014, as amended from time to time (the "CM Regulations").

Part A: Calculation of $SOEMRINC_t$

- 4L.4 For the purposes of paragraphs 4A.3 and 4A.4 in Special Condition 4A the value of the term $SOEMRINC_t$ is derived in accordance with the following formula:

$$SOEMRINC_t = DRI_t + DFA_t + DSR_t + CSSS_t$$

where:

$SOEMRINC_t$ means the adjustment to the licensee's Maximum SO Internal Revenue (either positive or negative) in Relevant Year t as a

result of the financial incentives placed upon the licensee in relation to the EMR Functions, collectively known as the System Operator Electricity Market Reform Incentives.

DRI _t	means the Dispute Resolution Incentive as described in paragraph 4L.2 (a) above and calculated pursuant to the provisions in Part B of this condition.
DFA _t	means the Peak National Demand Forecasting Accuracy Incentive as described in paragraph 4L.2 (b) above and calculated pursuant to the provisions in Part C of this condition.
DSR _t	means the Demand Side Response Incentive as described in paragraph 4L.2 (c) above and calculated pursuant to the provisions in Part D of this condition.
CSSS _t	means the Customer and Stakeholder Satisfaction Survey Incentive as described in paragraph 4L.2 (d) above and calculated pursuant to the provisions in Part E of this condition.

Part B: Calculation of DRI_t

4L.5 The DRI_t term has the value derived in accordance with the following formula:

$$DRI_t = CfDQD_t + CMQD_t + \text{CMECAQD}_t + CANMR_t$$

where:

CfDQD _t	means the revenue adjustment for the licensee related to CfD Qualification Decisions. It is equal to: for Relevant Years 2016/17 and 2017/18 the amount shown in column 1 of the table in Schedule 1 of this condition; and for Relevant Years from 2018/19 onwards the amount shown in column 1 of the table in Schedule 2 of this condition, against the number of decisions made in relation to CfD Qualification Decisions under the CfD Regulations in Relevant Year t-2, which have been overturned by the Authority under regulation 46 of the CfD Regulations.
CMQD _t	means the revenue adjustment for the licensee related to CM Qualification Decisions. It is equal to:

for Relevant Years 2016/17 and 2017/18 the amount shown in column 2 of the table in Schedule 1 of this condition; and

for Relevant Years from 2018/19 onwards the amount shown in column 2 of the table in Schedule 2 of this condition,

against the number of decisions made in relation to CM Qualification Decisions in Relevant Year t-2, which have been overturned by the Authority under regulation 71 of the CM Regulations.

CMECAQD_t

means the revenue adjustment for the licensee related to CM Early Capacity Auction Qualification Decisions.

It is equal to, for Relevant Year 2018/19, the amount shown in column 3 of the table in Schedule 2 of this condition, against the number of decisions made in relation to CM Early Capacity Auction Qualification Decisions in Relevant Year 2016/17, which have been overturned by the Authority under regulation 71 of the CM Regulations.

Where a CM Early Capacity Auction Qualification Decision is overturned by the Authority and that decision is materially the same as a CM Qualification Decision that has also been overturned by the Authority for the same CMU, the CM Early Capacity Auction Qualification Decision overturned will not count for the purposes of this incentive.

CANMR_t

means the revenue adjustment for the licensee related to Capacity Agreement Notice Decisions and Capacity Market Register Decisions. It is equal to:

for Relevant Years 2016/17 and 2017/18 the amount shown in column 3 of the table in Schedule 1 of this condition against the number of decisions made in relation to CM Capacity Agreement Notice (“CAN”) Decisions and CM Capacity Market Register (“CMR”) Decisions in Relevant Year t-2, which have been overturned by the Authority under regulation 71 of the CM Regulations.

for all other years, CANMR_t shall take the value zero.

- 4L.6 If no CfD qualification process took place either in or in respect of Relevant Year t-2, CfDQD_t shall equal zero and if no CM pre-qualification process took place either in or in respect of Relevant Year t-2, CMQD_t shall equal zero.
- 4L.7 The Authority shall, after consultation with the licensee, and having regard to the rest of Part B of this condition, direct the value of DRI_t for Relevant Year t.
- 4L.8 The direction made pursuant paragraph 4L.7 shall be made by the Authority on or before 30 November in the year preceding Relevant Year t.

Part C: Calculation of DFA_t

4L.9 The DFA_t term is derived in accordance with the following formula:

$$DFA_t = DFAA_{t-2} + DFAB_{t-2} \pm \underline{DFAC_{t-2}}$$

where:

$$DFAA_{t-2} = \pounds 1,000,000 \times \frac{4\% - \min(DFEA_{t-2}, 8\%)}{4\%}$$

$$DFAB_{t-2} = \pounds 2,000,000 \times \frac{2\% - \min(DFEB_{t-2}, 4\%)}{2\%}$$

$$\underline{DFAC_{t-2} = \pounds 2,000,000 \times \frac{2\% - \min(DFEC_{t-2}, 4\%)}{2\%}}$$

DFAA _{t-2}	means the Peak National Demand Forecasting Accuracy Incentive for Relevant year t-2 arising from the Peak National Demand Forecast made in year t-6.
DFAB _{t-2}	means the Peak National Demand Forecasting Accuracy Incentive for year t-2 arising from the Peak National Demand Forecast made in year t-3.
<u>DFAC_{t-2}</u>	<u>means the Peak National Demand Forecasting Accuracy Incentive for year 2017/18 arising from the Peak National Demand Forecast made in year 2016/17.</u>
DFEA _{t-2}	means the difference between Peak National Demand observed in year t-2 and the Peak National Demand Forecast for year t-2 made in year t-6 expressed as an absolute percentage.
DFEB _{t-2}	means the difference between Peak National Demand observed in year t-2 and the Peak National Demand Forecast for year t-2 made in year t-3 expressed as an absolute percentage.

<u>DFEC_{t-2}</u>	<u>means the difference between Peak National Demand observed in Relevant Year 2017/18 and the Peak National Demand Forecast for year 2017/18 made in year 2016/17 expressed as an absolute percentage.</u>
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- 4L.10 If either of the Peak National Demand Forecasts in DFEA, ~~DFEB~~ or DFEC are not available, or such forecast has been prepared before this condition came into force (1 April 2016), then DFAA, ~~DFAB~~ or DFAC as applicable shall take the value zero.
- 4L.11 The Weather Correction Methodology used for calculating Peak National Demand will be the Weather Correction Methodology in place at the time each Peak National Demand Forecast was produced.
- 4L.12 The Weather Correction Methodology must be published by the licensee at the same time as the Electricity Capacity Report that uses that Peak National Demand Forecast.
- 4L.13 The licensee shall write annually to the Authority, at the same time it publishes the Electricity Capacity Report, setting out the steps it has taken to improve its Peak System Demand Forecast and publish this letter on its website.

Part D: Calculation of DSR_t

- 4L.14 The DSR_t term is derived in accordance with the following formula except in respect of any Relevant Year up to and including the Relevant Year when the first Year Ahead Capacity Auction takes place, where the value of DSR_t is nil:

If $DSRC_t \geq DSRT_t + 0.2$, then

$$DSR_t = \pounds 1,000,000 \times \frac{\min(DSRC_t, DSRT_t + 2) - DSRT_t - 0.2}{1.8}$$

If $DSRT_t + 0.2 > DSRC_t \geq DSRT_t - 0.2$, then

$$DSR_t = \pounds 0$$

If $DSRC_t < DSRT_t - 0.2$, then

$$DSR_t = \pounds 1,000,000 \times \frac{\max(DSRC_t, DSRT_t - 2) - DSRT_t + 0.2}{1.8}$$

where:

DSR_t means the revenue adjustment for the licensee related to additional volume of Demand Side Response Capacity that pre-qualifies for the Year Ahead Capacity Auction for delivering electricity capacity one year ahead in Relevant Year t-2.

$DSRC_t$ means the volume of Demand Side Response Capacity (expressed in gigawatts to three decimal places) that pre-qualifies for the Year Ahead Capacity Auction for delivering electricity capacity one year ahead in Relevant Year t-2.

$DSRT_t$ means the target for the volume of Demand Side Response Capacity to be delivered.

For the first Relevant Year following the first Year Ahead Capacity Auction $DSRT_t$ is equal to the volume in gigawatts (expressed to three decimal places) of pre-qualified Demand Side Response Capacity in the first Year Ahead Capacity Auction.

For the second and subsequent Relevant Years following the first Year Ahead Capacity Auction, $DSRT_t$ is calculated as the average of the volume in gigawatts (expressed to three decimal places) of pre-qualified Demand Side Response Capacity in the two previous Year Ahead Capacity Auctions.

4L.15 The licensee shall, as soon as practicable, but in any event no later than three months after the corresponding Year Ahead Capacity Auction pre-qualification round, submit to the Authority a report setting out the steps that it has taken in each Year Ahead Capacity Auction pre-qualification round to encourage and facilitate the participation of Demand Side Response, including how it has ensured that Demand Side Response providers understand the implications of capacity market participation.

4L.16 The licensee shall publish the report described in paragraph 4L.15 on its website.

Part E: Calculation of $CSSS_t$

4L.17 The $CSSS_t$ term is derived in accordance with the following formula:

$$CSSS_t = CSSSCfD_t + CSSSCM_t$$

where:

$CSSSCfD_t$ means the adjustment to revenues resulting from the incentive on Contracts for Difference (“CfD”) Customer and Stakeholder Satisfaction Survey Scores in Relevant Year t-2 as calculated below.

CSSSCM_t means the adjustment to revenues resulting from the incentive on Capacity Market (“CM”) Customer and Stakeholder Satisfaction Survey Scores in Relevant Year t-2 as calculated below.

If CfDS_{t-2} ≥ CfDT, then:

$$\text{CSSSCfD}_t = \text{£}300,000 \times \frac{\min(\text{CfDS}_{t-2}, \text{CfDC}) - \text{CfDT}}{\text{CfDC} - \text{CfDT}}$$

If CfDS_{t-2} < CfDT, then:

$$\text{CSSSCfD}_t = -\text{£}300,000 \times \frac{\text{CfDT} - \max(\text{CfDS}_{t-2}, \text{CfDF})}{\text{CfDT} - \text{CfDF}}$$

If CMS_{t-2} ≥ CMT, then:

$$\text{CSSSCM}_t = \text{£}300,000 \times \frac{\min(\text{CMS}_{t-2}, \text{CMC}) - \text{CMT}}{\text{CMC} - \text{CMT}}$$

If CMS_{t-2} < CMT, then:

$$\text{CSSSCM}_t = -\text{£}300,000 \times \frac{\text{CMT} - \max(\text{CMS}_{t-2}, \text{CMF})}{\text{CMT} - \text{CMF}}$$

where:

- CfDS_{t-2} means the arithmetic average of all CfD Customer and Stakeholder Satisfaction Survey Scores.
- CfDT means the target for all CfD Customer and Stakeholder Satisfaction Survey Scores. CfDT is equal to the higher of:
- (i) CfDS_k where k equals 2015/16 or if no CfD allocation round commenced in 2015/16, the first Relevant Year in which a CfD allocation round takes place, rounded to one decimal place, and
 - (ii) 5.0.
- CfDC means the score cap applying to all CfD Customer and Stakeholder Satisfaction Survey Scores and is equal to CfDT + CfDSD_k, rounded to one decimal place, but in any event, must not be lower than CfDT + 1.
- CfDF means the score floor applying to all CfD Customer and

	Stakeholder Satisfaction Survey Scores and is equal to $CfDT - CfDSD_k$, rounded to one decimal place, but in any event, must not be higher than $CfDT - 1$.
$CfDSD_k$	means the standard deviation of all CfD Customer and Stakeholder Satisfaction Survey Scores in year k where k equals 2015/16 or if no CfD allocation round takes place in 2015/16, the first Relevant Year in which a CfD allocation round takes place. The standard deviation is calculated as the square root of the sum of the squared variances from the population average.
CMS_{t-2}	means the arithmetic average of all CM Customer and Stakeholder Satisfaction Survey Scores.
CMT	means the target for all CM Customer and Stakeholder Satisfaction Survey Scores. CMT is equal to the higher of: <ul style="list-style-type: none"> (i) CMS_k where k equals 2015/16 or if no CM auction commenced in 2015/16, the first Relevant Year in which a CM auction takes place, rounded to one decimal place, and (ii) 5.0.
CMC	means the score cap applying to all CM Customer and Stakeholder Satisfaction Survey Scores and is equal to $CMT + CMSD_k$, rounded to one decimal place, but in any event, must not be lower than $CMT + 1$.
CMF	means the score floor applying to all CM Customer and Stakeholder Satisfaction Survey Scores and is equal to $CMT - CMSD_k$, rounded to one decimal place, but in any event, must not be higher than $CMT - 1$.
$CMSD_k$	means the standard deviation of all CM Customer and Stakeholder Satisfaction Survey Scores in year k where k equals 2015/16 or if no CM auction takes place in 2015/16, the first Relevant Year in which a CM auction takes place. The standard deviation is calculated as the square root of the sum of the squared variances from the population average.

4L.18 If no results of a CfD allocation round were published either in or in respect of Relevant Year t-2, then $CSSSCfD_t$ shall take the value zero, and the licensee is not obliged to conduct the CfD Customer and Stakeholder Satisfaction Survey.

4L.19 In case of multiple CfD allocation rounds in Relevant Year t-2, the licensee is only obliged to conduct one CfD Customer and Stakeholder Satisfaction Survey.

4L.20 If no results of a capacity market auction were published either in or in respect of Relevant Year t-2, then $CSSSCM_t$ shall take the value zero, and the licensee is not obliged to conduct the CM Customer and Stakeholder Satisfaction Survey.

4L.21 In case of multiple capacity market auctions in Relevant Year t-2, the licensee is only obliged to conduct one CM Customer and Stakeholder Satisfaction Survey.

Part F: Customer and Stakeholder Satisfaction Surveys

4L.22 In each CM and CfD Customer and Stakeholder Satisfaction Survey, the licensee may include such questions as it deems appropriate, subject to the inclusion of one question that asks for overall satisfaction with the licensee's performance of its CfD or CM activity respectively to be rated on a scale of 1 to 10, when 1 is low and 10 is high.

4L.23 The licensee must report on the outcomes of each overall customer and stakeholder satisfaction question in accordance with Standard Condition B15 (Regulatory Instructions and Guidance).

4L.24 The licensee must publish the outcomes from these surveys on its website within three months of these surveys taking place.

4L.25 The Authority will review the licensee's approach to conducting the surveys and reporting the outcome of the satisfaction questions as required by paragraph 4L.22 of this condition and provide feedback to the licensee.

Part G: Definitions

4L.26 The Definitions in this condition will have the following meaning:

Annual Average Cold Spell Conditions		as defined in the Grid Code;
Capacity Agreement Notice		as defined in regulation 2 of the CM Regulations;
Capacity Market Register		as defined in regulation 2 of the CM Regulations;
CfD Qualification Decisions		means decisions made by the licensee under regulation 20(4) of the CfD Regulations to uphold Non-qualification Determinations;
CfD Customer and Stakeholder Satisfaction Survey Score		means the score from 1 to 10 that a survey participant assigns to the question referred to in paragraph 4L.22 of this condition in Relevant Year t-2;
CM Capacity Agreement Notice (“CAN”) Decisions		means decisions made by the licensee under regulation 69(3) of the CM Regulations to uphold the decision not to amend the Capacity Agreement Notice;
CM Capacity Market Register (“CMR”) Decisions		means decisions made by the licensee under regulation 69(3) of the CM Regulations to uphold the decision not to rectify the Capacity Market Register;
CM Customer and Stakeholder Satisfaction Survey Score		means the score from 1 to 10 that a survey participant assigns to the question referred to in paragraph 4L.22 of this condition in Relevant Year t-2;
CM Qualification Decisions		means decisions made by the licensee under regulation 69(3) of the CM Regulations to uphold Prequalification Decisions;
<u>CM Early Capacity Auction Qualification Decisions</u>		<u>means decisions made by the licensee under regulation 69(3) of the CM Regulations to uphold Prequalification Decisions in relation to the Early Capacity Auction in Relevant Year 2016/17;</u>
Demand Side Response		means a commitment by a person to provide an amount of electricity capacity by either reducing the import of electricity or exporting

		electricity generated (as more fully defined in the CM Regulations);
Demand Side Response Capacity		means amount of electricity capacity made available by Demand Side Response providers;
Electricity Capacity Report		as defined in regulation 7 of the CM Regulations;
EMR Functions		has the same meaning as the term “EMR functions” in Chapter 5 of Part 2 of the Energy Act 2013;
National Demand		as defined in the Grid Code;
Non-qualification Determinations		as defined in regulation 19(2)(b) of the CfD Regulations;
Peak National Demand		means the outturn peak National Demand adjusted in accordance with the Weather Correction Methodology;
Peak National Demand Forecast		means the one-year or four-year ahead forecast of Peak National Demand that is associated with the licensee’s Peak System Demand Forecast and estimate of capacity to meet that Peak System Demand Forecast in the Electricity Capacity Report ;
Peak System Demand Forecast		means the forecast in the Electricity Capacity Report of peak demand across the whole of the electricity system met by all forms of generation; which includes forecasts of Peak National Demand, peak demand met by distributed generation and peak demand reduction by Demand Side Response .
Prequalification Decisions		as defined in regulation 2 of the CM Regulations;
Reviewable Decisions		means CfD Qualification Decisions, CM Qualification Decisions, CM Capacity Agreement Notice Decisions and CM Capacity Market Register Decisions;
<u>Early Capacity Auction</u>		<u>means the additional capacity auction held in Relevant Year 2016/17 to provide capacity in Relevant Year 2017/18;</u>

Weather Correction Methodology		means the methodology used by the licensee at the time a Peak National Demand Forecast was produced to correct the associated outturn Peak National Demand to Annual Average Cold Spell Conditions;
Year Ahead Capacity Auction		means a capacity auction held not less than one year and not more than two years before the start of the delivery year for which the capacity auction is held (as more fully defined in the CM Regulations).

Schedule 1

Components of the term DRI_t in 2009/10 prices for qualification decisions taken in respect of CfD allocation and/or CM auctions conducted in 2014/15 and 2015/16

	(1)	(2)	(3)
Number of overturned decisions	$CfDQD_t$ £000s	$CMQD_t$ £000s	$CANMR_t$ £000s
No overturned decisions	50	50	25
1 overturned decision	0	0	0
2 overturned decisions	-10	-10	-5
3 overturned decisions	-20	-20	-10
4 overturned decisions	-30	-30	-15
5 overturned decisions	-40	-40	-20
6 or more overturned decisions	-50	-50	-25

Schedule 2

Components of the term DRI_t in 2009/10 prices for qualification decisions taken in respect of CfD allocation and/or CM auctions conducted from 2016/17 onwards

	(1)	(2)	<u>(3)</u>
Number of overturned decisions	$CfDQD_t$ £000s	$CMQD_t$ £000s	<u>$CMECAQD_t$</u> <u>£000s</u>
No overturned decisions	100	100	<u>50</u>
1 overturned decision	0	0	<u>0</u>
2 overturned decisions	-35	-35	<u>-18</u>
3 overturned decisions	-65	-65	<u>-35</u>
4 or more overturned decisions	-100	-100	<u>-50</u>