

Stage 03: Attachment A: Detailed Assessment for P285

P285 'Revised treatment of RCRC for Interconnector BM Units'

What stage is this document in the process?

01 Initial Written Assessment

02 Definition Procedure

03 Assessment Procedure

04 Report Phase

Contents

1	Workgroup's Detailed Analysis	2
2	Calculation of RCRP	8
3	Solution Requirements	9
4	Workgroup Details	10

About this Document

This is Attachment A to the P285 Assessment Consultation. It provides additional details of the Workgroup's analysis and discussions.

1 Workgroup's Detailed Analysis

Introduction

Modification Proposal P285 will amend the allocation of the Residual Cashflow Reallocation Cashflow (RCRC) so that Interconnector BM Units would no longer be subject to RCRC. This analysis looks at recent data (from 2011), and models the impact that P285 would have on Parties' RCRC charges/payments.

Note that the results of this analysis is not confidential, since the data used for the analysis appears in the SAA-I014 Settlement reports which are available to all BSC Parties and other interested parties (and thus any Party could recreate the results if they wished).

Redistribution of RCRC under P285

Under P285, Parties with Interconnector BM Units will see a reduction in their RCRC charges/payments, as they will no longer be subject to RCRC. Parties with non-Interconnector BM Units will see an increase in their RCRC charges/payments, as the monies originally reallocated to Interconnector BM Units will have been reallocated to them instead.

The table below contains each BSC Party's net RCRC payments for 2011 under the current baseline and under a P285 baseline, expressed both as the total amount of money and as a £/MWh value. For the avoidance of doubt, based on BSC Section T1.2.3(a)(ii), a positive number indicates a payment to the Party, while a negative number shows a charge against the Party. Each Party's change in RCRC allocation is also displayed, with a positive value indicating a net benefit to the Party (either through increased RCRC payments or decreased RCRC charges), while negative values indicate a net disbenefit (either through decreased RCRC payments or increased RCRC charges).

Please note that the net RCRC in 2011 was negative – i.e. a net charge across all Parties across the entire year. This can be considered abnormal, as RCRC has generally been positive (a net payment) in previous years. Therefore, it is likely that the Parties who would benefit in this analysis may actually disbenefit if RCRC was positive, and vice versa, although the absolute percentage by which their RCRC charges/payments change is likely to be the same in either direction (e.g. if a Party benefits by 50% if RCRC is negative, they are likely to disbenefit by 50% if RCRC was positive).



Redistribution of RCRC

This analysis examines the data from 2011, and assumes that P285 had been in effect, but that everything else is unchanged.

Please note that the net RCRC was negative in 2011. If RCRC was positive, it is likely that Parties who are shown to benefit here would actually disbenefit, and vice versa. However, the approximate percentage by which their RCRC charges/payments change is likely to be roughly the same in either direction.

This analysis should therefore be taken only as an indication of the possible impact of P285 on individual Parties.

Net impact of P285 on individual BSC Parties (Jan 11 – Dec 11)						
Party ID	Net RCRC (current)		Net RCRC (P285)		Change in RCRC	
ACCORD	-£3,182	-£0.13/MWh	£0	£0.00/MWh	£3,182	100%
AESIQPL	£10,942	£1.04/MWh	£11,107	£1.06/MWh	£165	2%
AIRGEN	-£544	-£0.43/MWh	-£566	-£0.45/MWh	-£21	-4%
BAENERGY	-£8	£0.00/MWh	-£9	£0.00/MWh	£0	-3%
BAGLAN	-£160,787	-£0.05/MWh	-£165,864	-£0.05/MWh	-£5,077	-3%
BARCAP	£8,518	£0.01/MWh	£0	£0.00/MWh	-£8,518	-100%
BARKING	£35,446	£0.01/MWh	£35,073	£0.01/MWh	-£373	-1%
BEDL001	-£35	-£1.33/MWh	-£36	-£1.37/MWh	-£1	-3%

P285
Detailed Assessment

23 August 2012

Version 1.0

Page 2 of 11

© ELEXON Limited 2012

Net impact of P285 on individual BSC Parties (Jan 11 – Dec 11)

Party ID	Net RCRC (current)		Net RCRC (P285)		Change in RCRC	
	Value	Unit	Value	Unit	Value	%
BEGL001	-£10	-£0.17/MWh	-£10	-£0.17/MWh	£0	-3%
BKW	-£19,297	-£0.07/MWh	£0	£0.00/MWh	£19,297	100%
BPGAS	-£18,876	-£0.05/MWh	£0	£0.00/MWh	£18,876	100%
BRITGAS	-£1,732,118	-£0.03/MWh	-£1,803,813	-£0.03/MWh	-£71,695	-4%
BRITNED	-£119,818	-£0.06/MWh	£0	£0.00/MWh	£119,818	100%
CECL	-£78,364	-£0.02/MWh	-£82,778	-£0.02/MWh	-£4,413	-6%
CENBARRY	£793	£0.06/MWh	£819	£0.06/MWh	£26	3%
CENKIL	£31,687	£0.32/MWh	£32,188	£0.33/MWh	£501	2%
CENKL	£3,867	£0.12/MWh	£3,935	£0.12/MWh	£68	2%
CENLANG	£9,454	£0.03/MWh	£9,348	£0.03/MWh	-£106	-1%
CENPB	£18,508	£0.36/MWh	£18,786	£0.37/MWh	£278	2%
CENRPS	£9,243	£0.40/MWh	£9,383	£0.40/MWh	£139	2%
CHEENERGY	-£8	£0.00/MWh	-£9	£0.00/MWh	£0	-3%
CNRP	£6,947	£0.08/MWh	£0	£0.00/MWh	-£6,947	-100%
CORBY	£13,328	£0.24/MWh	£13,565	£0.24/MWh	£237	2%
COTPOWER	£162,630	£0.30/MWh	£166,629	£0.30/MWh	£4,000	2%
CR2LTD	-£55	-£0.04/MWh	-£58	-£0.04/MWh	-£3	-6%
CUKL	-£432,100	-£0.06/MWh	-£447,067	-£0.07/MWh	-£14,967	-3%
CWSL	£0	£0.00/MWh	£0	£0.00/MWh	£0	-4%
DAMHEAD	£20,670	£0.28/MWh	£21,185	£0.28/MWh	£516	2%
DANSKE	-£12,024	-£0.05/MWh	£0	£0.00/MWh	£12,024	100%
DB	-£7,846	-£0.03/MWh	£0	£0.00/MWh	£7,846	100%
DCOGEN	£10,185	£0.21/MWh	£10,365	£0.22/MWh	£179	2%
DEEM1000	-£270,904	-£0.07/MWh	-£278,447	-£0.08/MWh	-£7,544	-3%
DEESIDE	£22,686	£0.14/MWh	£23,214	£0.14/MWh	£528	2%
DONG001	£85	£0.21/MWh	£87	£0.22/MWh	£3	3%
DONG003	-£10	-£0.12/MWh	-£11	-£0.13/MWh	£0	-4%
DONG005	£0	£0.08/MWh	£0	£0.08/MWh	£0	1%
DONG006	£0	£0.08/MWh	£0	£0.08/MWh	£0	1%
DONGSVR	£6,813	£0.15/MWh	£6,980	£0.16/MWh	£167	2%
DPDCOLTD	-£1,086,912	-£0.07/MWh	-£1,124,145	-£0.08/MWh	-£37,233	-3%
DRAX	-£1,213,246	-£0.05/MWh	-£1,253,656	-£0.05/MWh	-£40,410	-3%
DUALENER	-£8	£0.00/MWh	-£9	£0.00/MWh	£0	-3%
EAGLE2	-£15,935	-£0.07/MWh	-£16,419	-£0.07/MWh	-£484	-3%
EBEA	£317	£0.00/MWh	£280	£0.00/MWh	-£37	-12%

P285
Detailed Assessment

23 August 2012

Version 1.0

Page 3 of 11

© ELEXON Limited 2012

Net impact of P285 on individual BSC Parties (Jan 11 – Dec 11)

Party ID	Net RCRC (current)		Net RCRC (P285)		Change in RCRC	
	Value	Unit	Value	Unit	Value	%
EDFETRNS	£13,759	£0.00/MWh	£13,449	£0.00/MWh	-£311	-2%
EDFT	£2,372	£0.00/MWh	£0	£0.00/MWh	-£2,372	-100%
ENDC	-£1,073	-£0.04/MWh	-£1,091	-£0.04/MWh	-£18	-2%
ENDE0773	-£6,636	-£0.07/MWh	£0	£0.00/MWh	£6,636	100%
ENERGIDK	£472	£0.02/MWh	£0	£0.00/MWh	-£472	-100%
ENTERGY	-£4,436	-£0.04/MWh	£0	£0.00/MWh	£4,436	100%
EONETRAD	-£310,981	-£0.01/MWh	-£194,521	-£0.01/MWh	£116,460	37%
EPCO1	£14	£0.24/MWh	£14	£0.24/MWh	£0	2%
EPL001	£410,596	£0.08/MWh	£417,854	£0.08/MWh	£7,258	2%
ESBIENI	-£8,809	-£0.17/MWh	£0	£0.00/MWh	£8,809	100%
ESBIGT	£9,363	£0.04/MWh	£12,465	£0.05/MWh	£3,101	33%
FDUN1	-£1	£0.00/MWh	-£1	£0.00/MWh	£0	-3%
FOUR	-£18,103	-£0.03/MWh	-£18,856	-£0.03/MWh	-£753	-4%
FRST01	-£6,568	-£0.02/MWh	-£6,900	-£0.02/MWh	-£332	-5%
FSTHYDRO	£70,441	£0.35/MWh	£71,805	£0.36/MWh	£1,365	2%
GAZPROM	-£27,327	-£0.02/MWh	-£17,265	-£0.01/MWh	£10,062	37%
GCHP	£0	£0.00/MWh	£0	£0.00/MWh	£0	14%
GGOWL	-£1	-£0.13/MWh	-£1	-£0.13/MWh	£0	-3%
GMTR	-£8	£0.00/MWh	-£8	£0.00/MWh	£0	-3%
GOFPOWER	£1	£0.00/MWh	£1	£0.00/MWh	£0	3%
GREENERGY	£0	£0.00/MWh	£0	£0.00/MWh	£0	-1%
GRWL	-£9	-£0.19/MWh	-£10	-£0.20/MWh	£0	-5%
HAVEN	-£76,690	-£0.02/MWh	-£80,313	-£0.02/MWh	-£3,624	-5%
HUMPOWER	£46,715	£0.08/MWh	£47,486	£0.08/MWh	£770	2%
IBERGEN	-£4,934	-£0.07/MWh	£0	£0.00/MWh	£4,934	100%
ICHPLLP	£29,465	£0.30/MWh	£30,020	£0.30/MWh	£555	2%
ICICP	£119,944	£0.07/MWh	£123,776	£0.07/MWh	£3,831	3%
INNOGY01	-£1,046,691	-£0.03/MWh	-£922,317	-£0.03/MWh	£124,374	12%
JARON	-£7,005	-£0.12/MWh	£0	£0.00/MWh	£7,005	100%
JPMSL	-£7,748	-£0.02/MWh	£0	£0.00/MWh	£7,748	100%
KGL	£235,638	£0.20/MWh	£240,075	£0.20/MWh	£4,437	2%
KILBRAUR	-£494	-£0.09/MWh	-£512	-£0.09/MWh	-£17	-4%
LENCO	-£19	£0.00/MWh	-£20	£0.00/MWh	-£1	-3%
LINCWFL	-£2	-£0.08/MWh	-£2	-£0.08/MWh	£0	-5%
LONDELEC	-£6,037,119	-£0.05/MWh	-£6,238,660	-£0.05/MWh	-£201,541	-3%

Net impact of P285 on individual BSC Parties (Jan 11 – Dec 11)

Party ID	Net RCRC (current)		Net RCRC (P285)		Change in RCRC	
	Value	Unit	Value	Unit	Value	%
MA200308	-£2,209	-£0.04/MWh	-£2,291	-£0.04/MWh	-£82	-4%
MAGNOX	-£482,296	-£0.07/MWh	-£497,153	-£0.07/MWh	-£14,856	-3%
MAKUK	-£9,883	-£0.10/MWh	£0	£0.00/MWh	£9,883	100%
MEDWAY	£14,432	£0.33/MWh	£14,624	£0.33/MWh	£192	1%
MILLEN07	-£341	-£0.08/MWh	-£352	-£0.09/MWh	-£11	-3%
MPL	-£7,548	-£0.01/MWh	-£8,122	-£0.01/MWh	-£573	-8%
MSCGI	£1,038	£0.04/MWh	£0	£0.00/MWh	-£1,038	-100%
NEAS	-£2,824	-£0.04/MWh	£0	£0.00/MWh	£2,824	100%
NEEB	-£8	£0.00/MWh	-£9	£0.00/MWh	£0	-3%
NGIFA	-£2,606	-£0.06/MWh	£0	£0.00/MWh	£2,606	100%
NITW001	-£8	£0.00/MWh	-£9	£0.00/MWh	£0	-3%
NPOWER01	-£1,803,478	-£0.04/MWh	-£1,870,764	-£0.04/MWh	-£67,286	-4%
ORMONDE	£0	£0.00/MWh	£0	£0.00/MWh	£0	-1%
OVOE	£1,464	£0.01/MWh	£1,420	£0.01/MWh	-£45	-3%
OXFPOWER	-£28,377	-£0.01/MWh	-£30,239	-£0.01/MWh	-£1,861	-7%
PGENERGY	-£28	£0.00/MWh	-£29	£0.00/MWh	-£1	-3%
POWER4	-£57,390	-£0.04/MWh	-£59,517	-£0.04/MWh	-£2,128	-4%
POWERGEN	-£1,129,414	-£0.02/MWh	-£1,198,750	-£0.02/MWh	-£69,336	-6%
PURE	-£3	£0.00/MWh	-£3	£0.00/MWh	£0	-3%
REGPOWER	£5,936	£0.82/MWh	£6,037	£0.83/MWh	£102	2%
RENC	£2,726	£0.02/MWh	£2,744	£0.02/MWh	£18	1%
RPCL	-£295,425	-£0.06/MWh	-£304,984	-£0.07/MWh	-£9,559	-3%
RWE	£0	£0.00/MWh	£0	£0.00/MWh	£0	100%
RWETDL	-£556,780	-£0.05/MWh	-£576,042	-£0.05/MWh	-£19,262	-3%
SALTEND	£31,928	£0.26/MWh	£32,879	£0.27/MWh	£951	3%
SCIRA	£0	£0.07/MWh	£0	£0.07/MWh	£0	0%
SCPL	£4,723	£0.07/MWh	£4,795	£0.07/MWh	£72	2%
SEABANK	£65,725	£0.13/MWh	£66,586	£0.13/MWh	£861	1%
SEEBOARD	-£9	£0.00/MWh	-£9	£0.00/MWh	£0	-3%
SMARTEST	£245,705	£0.09/MWh	£253,153	£0.09/MWh	£7,449	3%
SONILTD	-£1,045	-£0.09/MWh	£0	£0.00/MWh	£1,045	100%
SPAL	-£302,151	-£0.08/MWh	-£311,494	-£0.08/MWh	-£9,342	-3%
SPARKNRG	£1,436	£0.04/MWh	£1,484	£0.04/MWh	£48	3%
SPCRE01	£1,029	£0.05/MWh	£1,057	£0.06/MWh	£27	3%
SPGEN01	£256,613	£0.23/MWh	£261,929	£0.23/MWh	£5,316	2%

P285
Detailed Assessment

23 August 2012

Version 1.0

Page 5 of 11

© ELEXON Limited 2012

Net impact of P285 on individual BSC Parties (Jan 11 – Dec 11)						
Party ID	Net RCRC (current)		Net RCRC (P285)		Change in RCRC	
SPOWER02	-£1,662,420	-£0.04/MWh	-£1,722,556	-£0.04/MWh	-£60,136	-4%
SPSUP01	-£16	£0.00/MWh	-£16	£0.00/MWh	-£1	-3%
SSE	-£3,893,190	-£0.04/MWh	-£3,927,620	-£0.04/MWh	-£34,430	-1%
SSEGEN	£120,233	£0.18/MWh	£122,653	£0.18/MWh	£2,419	2%
STATKRA1	-£18,378	-£0.02/MWh	£14,102	£0.01/MWh	£32,481	177%
STATPOW	£231	£0.02/MWh	£226	£0.02/MWh	-£5	-2%
SUTTBURGE	-£8,083	-£0.03/MWh	-£8,402	-£0.03/MWh	-£319	-4%
TEESSIDE	£4,011	£0.13/MWh	£4,069	£0.13/MWh	£57	1%
TFEGP	-£265,316	-£0.05/MWh	-£186,621	-£0.04/MWh	£78,695	30%
TOW	-£1	£0.00/MWh	-£1	£0.00/MWh	£0	-3%
TXURUGE	£40,734	£0.13/MWh	£41,673	£0.13/MWh	£939	2%
TXUWBUR	£89,201	£0.24/MWh	£91,004	£0.25/MWh	£1,803	2%
USKMOUTH	£16,555	£0.14/MWh	£16,782	£0.14/MWh	£227	1%
UTILITA	-£8	£0.00/MWh	-£9	£0.00/MWh	£0	-3%
VESL	-£20,798	-£0.14/MWh	£0	£0.00/MWh	£20,798	100%
VITOLSA	-£29,783	-£0.11/MWh	£0	£0.00/MWh	£29,783	100%
VOLA	£1,624	£0.08/MWh	£1,658	£0.08/MWh	£33	2%
VTS	-£75,669	-£0.05/MWh	-£76,383	-£0.05/MWh	-£714	-1%
WBURTONB	£0	£0.00/MWh	£0	£0.00/MWh	£0	-1%
YE	-£8	£0.00/MWh	-£8	£0.00/MWh	£0	-3%

Based on the data above, the net volume of money that would be reallocated between Parties is around -£700k out of the total -£21.2m, or around 3% of the total RCRC monies. It should be noted that this is a net value – many Parties will hold both Interconnector and non-Interconnector BM Units. In this case, the Party would see both a reduction in RCRC charges/payments against their Interconnector BM Units and an increase in RCRC charges/payments against their non-Interconnector BM Units, and these will offset each other to give a Party's net change in RCRC charges/payments.

Impact in individual Settlement Periods

The above analysis shows each Party's net RCRC across a period of one year. However, the impacts on individual Parties will vary in individual Settlement Periods, depending on whether RCRC is positive (i.e. a net payment back to Parties) or negative (i.e. a net charge to Parties).

The RCRC is determined as the net money remaining after all imbalance charges have been paid or recovered in a given Settlement Period. In each Settlement Period, there are two components of RCRC. The first is determined by the Net Imbalance Volume (NIV) in the Settlement Period. If the System was short then this will be a positive amount of

money, as the Parties causing the imbalance will have been charged for their shortfall at System Buy Price. Conversely, if the system was long, then the Parties causing the spill will have been paid for their excess energy at System Sell Price (SSP), so this portion of RCRC will be negative.

The second component arises from offsetting imbalance, caused by one Party being long while another is short. As SBP will always be greater than or equal to SSP, the Parties who are short will pay more at SBP than the Parties who are long will be paid at SSP, resulting in residual money. Therefore, this component of RCRC will always be positive.

In most cases, the total RCRC will be positive, resulting in a net payment back to Parties. However, if the system is long, then it is possible that the money paid to resolve the NIV will be larger than the money arising from offsetting imbalances, resulting in negative RCRC, which forms a net charge to all Parties.

In addition, it should be noted that a Party's Residual Cashflow Reallocation Proportion (RCRP) is determined by the net of the Credited Energy Volume in each of their Energy Accounts, as per Section T4.10.2 of the Code. However, if a BM Unit is operating in the opposite direction to its Trading Unit as a whole (i.e. a BM Unit is exporting but the Trading Unit that it belongs to is offtaking, or vice versa), then the Credited Energy Volumes will count negatively to this calculation. Therefore, it is possible for a Party to receive a negative share of RCRC, which means that they would be charged if RCRC is positive, but would be paid if RCRC is negative.

Allocation of RCRC		
	RCRC > 0	RCRC < 0
RCRP > 0	Party Paid RCRC	Party Charged RCRC
RCRP < 0	Party Charged RCRC	Party Paid RCRC

Proposed changes to the calculation of RCRP for P285

The following changes are proposed by P285 to the current equation for calculating RCRP, which is given in Section T4.10.2 of the Code, as follows:

$$RCRP_{aj} = \{ \sum_i^+ (QCE_{iaj}) + \sum_i^- (-QCE_{iaj}) \} / \{ \sum_a \{ \sum_i^+ (QCE_{iaj}) + \sum_i^- (-QCE_{iaj}) \} \}$$

where:

\sum_i^+ is, for each Energy Account a in Settlement Period j, the sum over all BM Units i other than Interconnector BM Units that are in delivering Trading Units;

\sum_i^- is, for each Energy Account a in Settlement Period j, the sum over all BM Units i other than Interconnector BM Units that are in offtaking Trading Units; and

\sum_a represents the sum over all Energy Accounts a, other than the TC (Non-IEA) Energy Account held by the Transmission Company.



Operational requirements

This section summarises the operational solution requirements for P285.

The P285 solution is not intended to impact any reporting flows. For example, the SAA-I014 will still report each Energy Account's RCRP and each Party's RCRC in the same way as currently.

Requirement 1

The QCE_{iaj} of Interconnector BM Units will be excluded from the calculation of each Energy Account's RCRP.

The SAA shall amend its systems to exclude the QCE_{iaj} of Interconnector BM Units from the calculation of each Energy Account's RCRP, effective from the P285 Implementation Date.

Lead Parties of Interconnector BM Units who load values of RCRP from the SAA-I014 flow should not need to amend their systems, but may wish to amend their advance contracts to account these BM Units no longer being liable for RCRC.

Requirement 2

The RCRC previously allocated to Interconnector BM Units will be redistributed across all other BM Units.

The SAA shall amend its systems to calculate RCRP as per the equation in Section 2, which is based on each Energy Account's non-Interconnector QCE_{iaj} as a proportion of all non-Interconnector QCE_{iaj} . This shall be effective from the P285 Implementation Date.

Lead Parties of non-Interconnector BM Units who load values of RCRP from the SAA-I014 flow should not need to amend their systems, but may wish to amend their advance contracts to account these BM Units being liable for increased amounts of RCRC.

Detailed Solution Requirements

For the full detailed solution requirements, please refer to the P285 Draft Solution to Identify Impacts Document which was issued for industry impact assessment and which is available on the [P285](#) page of the ELEXON website.

Workgroup's Terms of Reference

Specific areas set by the BSC Panel in the P285 Terms of Reference

What changes are needed to BSC documents, systems and processes to support P285 (including any impacts on Parties' systems), and what are the related costs and lead times?

Should the BSC still allocate RCRC charges/payments to Interconnector BM Units?

What is the appropriate Implementation Date for P285, given the proposed Implementation Date for CMP202? What would be the impact if CMP202 is implemented before P285 is implemented?

What would be the impact on the distribution of RCRC between Parties if P285 was implemented?

What are the benefits to the Applicable BSC Objectives?

Assessment Procedure timetable

P285 Assessment Timetable

Activity	Date
Panel submits P285 to Assessment Procedure	14 Jun 12
Workgroup Meeting 1	21 Jun 12
15WD Impact Assessment undertaken	06 Jul 12 – 27 Jul 12
Workgroup Meeting 2	08 Aug 12
15WD Industry Consultation undertaken	23 Aug 12 – 14 Sep 12
Workgroup Meeting 3	20 Sep 12
Panel considers Workgroup's Assessment Report	11 Oct 12

P285 has been progressed in parallel with P286 'Revised treatment of RCRC for generation BM Units'.

Workgroup membership and attendance

P285 Workgroup attendance			
Name	Organisation	Meeting 1 21/06/12	Meeting 2 08/08/12
Members			
Dean Riddell	ELEXON (<i>Chair</i>)	✓	✓
David Kemp	ELEXON (<i>Lead Analyst</i>)	✓	✓
Iain Pielage	National Grid Electricity Transmission plc (<i>Proposer</i>)	✓	✓
Esther Sutton	E.ON	✓	✓
Cem Suleyman	Drax	✓	✓
Man Kwong Liu	IBM (ScottishPower Unit)	✓	✓
Bill Reed	RWE Supply & Trading	✗	✓
Sarah Owen	Centrica	✓	✓
Martin Mate	EDF	✗	✗
Attendees			
Zaahir Ghanty	ELEXON (<i>Design Authority</i>)	✓	✓
Nick Brown	ELEXON (<i>Legal</i>)	✗	✗
Emma Burns	Ofgem	✓	✓