



Forum

Targeted Charging Review Update

The webinar will begin shortly





Forum

Targeted Charging Review Update

16 July 2020





national**grid**ESO





Agenda

- > Targeted Charging Review
 - > Update on modifications
 - > How the demand residual will work
 - > Q&A
 - > Grahame Neale, ESO
 - > Lee Wells, Northern Powergrid
 - > Kayt Button, Ofgem

Targeted Charging Review (SCR)

Modifications update
Grahame Neale, ESO



Ofgem's Targeted Charging Review (TCR) decision – a reminder

> Ofgem's [TCR Decision](#) was released on 21st November 2019 . The Key points were:

1. TNUoS Generation Residual (TGR) to be set at £0 (subject to compliance with EU Regulation No 838/2010 as being progressed via CMP317)
2. BSUoS to Suppliers to be based on gross demand as measured at the GSP
3. 2nd Balancing Services Charges Task Force to be set up to determine who should pay BSUoS and on what basis
4. Major reform of Network Residual charges to make them unavoidable and remove any behavioural signals by charging on a £/site/day basis.



1 – Transmission Generation Residual (TGR)

- > [CMP317](#) was already in flight when Ofgem's decision was made – looking at ensuring compliance with EU Regulation No 838/2010.
 - i.e. the average annual transmission charge for all generators must be within a range of €0-2.50/MWh. TGR currently negative to ensure €2.50/MWh cap is not breached.*
- > Ofgem's direction was to set TNUoS Generation Residual (TGR) at £0 (subject to compliance with EU Regulation No 838/2010).
- > [CMP327](#) was to implement Ofgem's direction and amalgamated with CMP317 due to overlap.
- > 84 options developed by the workgroup for implementation in April 2021.
- > Code Administrator Consultation open until 20th July.
- > Final report to be set to Ofgem for a decision between the options in early August



2 – BSUoS to suppliers on Gross Demand

- > Ofgem have determined that BSUoS (Balancing Services Use of System Charge) to Suppliers is to be charge based on gross demand as measured at the GSP, rather than net of embedded generation
- > [CMP333](#) raised to implement this change. Progressed through workgroups and to be presented to Ofgem in August.
- > Implementation – April 2021



3 – Second Balancing Services Task Force

- > Ofgem directed that a Second Balancing Services Charges Task Force be commenced to determine who should pay BSUoS, and on what basis.
- > The Task Force have convened 6 times since January 2020, but was paused for 3 months. The Task force last met 8 July 2020.
- > The Task Force will be consulting on their interim report in the week commencing 20 July 2020.
- > There will be a webinar on 20 July 2020 to explain the progress the Task Force have made thus far.



4 – Reform of Network Residual charges

Overview

- > Ofgem's direction is to make residual charges (both Transmission and Distribution) unavoidable and remove any behavioural signals.
- > This will be done by creating a banding methodology that will levy a £/p per site per day charge to all customers in the band.
- > Joint working between DNOs and NGENSO via the ENA to design and implement these changes collaboratively with industry.
- > Numerous code changes raised and progressed to implement these changes for April 2022 for both distribution and transmission.
- > The Project Initiation Document (PID) was updated in April and is [available here](#).

4 – Reform of Network Residual charges Code Changes

Mod No.	Code	Description	Update
DCP358	DCUSA	Setting non-domestic charging bands.	With Ofgem for decision
DCP359	DCUSA	Defining 'Site' and 'Final Demand' – developed jointly with CMP334.	With Ofgem for decision
DCP360	DCUSA	Allocating to non-domestic charging bands (based on LLFC) including disputes and reallocation.	With Ofgem for decision
DCP361	DCUSA	Calculating charges including treatment of bands with low customer numbers.	Voting statements to be issued to DCUSA members shortly (17 th July)
CMP334	CUSC	Defining 'Site' and 'Final Demand' – developed jointly with DCP359.	Workgroups finished, to be sent to Ofgem early August.
CMP335/6	CUSC	Billing, allocation to bands and consequential changes.	Consultation closed and Workgroups ongoing. Early October ETA with Ofgem.
CMP340/343	CUSC	Creation of Bandings and tariffs per band.	Consultation open – closes 31 st July
P402	BSC	Supporting Data requirements and processes.	Consultation due mid-August



Menti Questions

- On a scale of 1-10, how up to date do you feel on the progress of the Target Charging Review Modifications?
- Could you please explain why you have given your score?

Demand Residual

Lee Wells, Northern Powergrid





Network Residual Charges - how it will work

DCP359 – Eligibility = a ‘Final Demand Site’

- > A Final Demand Site will mean a *“Single Site at which there is Final Demand”*
- > No Final Demand ‘threshold’ will be used, it is all or nothing
- > Single Site will mean *“one or more Non-Domestic Premises that are connected to the distribution system pursuant to a single Connection Agreement (whether a Bespoke Connection Agreement or one created via the National Terms of Connection)”*
- > Final Demand defined by the Authority as *“Electricity which is consumed other than for the purposes of generation or export onto the electricity network”*
- > For a Single Site to be a Non-Final Demand Site (i.e. no residual fixed charge), valid certification must be provided to the distributor for distribution-connected sites
- > A transitional period will operate to 31 October 2021 where a Single Site may switch between a Final Demand site and vice versa. Certification required by 31 July 2021



Network Residual Charges - how it will work

- > Distributors will use reasonable endeavours to identify Non-Final Demand Sites for the purposes of setting the charging bands and setting 2022/23 use of system charges in December 2020
- > The transitional period provides a reasonable amount of time to ensure a Single Site is charged appropriately ahead of setting 2023/24 use of system charges in December 2021
- > Banding will be unaffected



Network Residual Charges - how it will work

- > **DCP358 and DCP360** – Banding and allocation based on MIC (Maximum Import Capacity) or annual consumption
 - > NHH annual consumption equivalent to the EAC (Estimated Annual Consumption) provided by NHH Data Aggregators (NHHDAs)
 - > HH annual consumption calculated based on annual metered data provided by ElectraLink – BSC change will remedy the ‘gap’
 - > Boundaries will be rounded up to the nearest integer, and Final Demand Sites will be allocated where their MIC/annual consumption (as appropriate) is $> \text{min}$ and $\leq \text{max}$ boundary
 - > Banding will be refreshed periodically, and revised charging bands effective from the beginning of each electricity transmission owner price control period e.g. RIIO-ET2 etc
 - > Allocation generally based on average data over 24 months where available
 - > A Final Demand Site will generally be in that band for the duration of the price control period, subject to: (i) the transitional period; (ii) exceptional circumstances (e.g. ‘significant’ change in usage); (iii) or a successful dispute



Network Residual Charges - how it will work

- > **DCP361** – Calculation of residual charges was well-defined in the decision
 - > Once the charging bands have been determined and Final Demand Sites have been allocated:
 - > The amount of CDCM and EDCM residual will be determined, as per the current methodologies
 - > For each charging band, the total annual consumption (kWh) is needed
 - > The residual is then allocated based on charging band consumption: the CDCM/EDCM residuals are 'ring-fenced' to respective customers and the TNUoS residual is allocated to all charging bands
 - > Consumption excludes all Non-Final Demand Sites other than unmetered supplies
 - > The annual residual fixed charge per site is calculated by dividing the residual to be recovered by the number of Final Demand Sites in each charging band
 - > A daily fixed charge on a per day per Final Demand Site basis is then calculated by dividing the annual fixed charge (in pence or pounds) for each band by the number of days in the charging year
 - > Where there is less than two Final Demand Sites in a given charging band, the consumption and count of Final Demand Sites will be combined with other charging band(s) at the same voltage for the purpose of calculating the charge
 - > Unmetered supplies will receive a p/kWh residual charge (status quo for DUoS)



Indicative charging bands

> We have refreshed the charging bands based on the DCP358 legal text and ...

- > NHH annual consumption using the May data from the NHHDA, supplemented with data from earlier information
- > Excluded 'related' Metering System (off-peak) consumption if not combined with the primary Metering System
- > HH annual consumption based on data received in June from ElectraLink
- > MIC based on that billed by distributors in April 2020
- > EHV excludes Final Demand Sites that are included in charge setting assumptions but have not yet connected
- > For LV and HV, all Single Sites have been assumed to be a Final Demand Site other than those identified as an Eligible Electricity Storage Facility consistent with DCP341/342
- > For EHV distributors have used reasonable endeavours to exclude expected Non-Final Demand Sites

Voltage	%ile	Banding		
		#	Lower boundary	Upper boundary
LV no MIC (kWh)	40%	1	-	4,248
	70%	2	4,248	14,178
	85%	3	14,178	28,836
	100%	4	28,836	∞
LV MIC (kVA)	40%	1	-	82
	70%	2	82	150
	85%	3	150	230
	100%	4	230	∞
HV (kVA)	40%	1	-	425
	70%	2	425	1,000
	85%	3	1,000	1,800
	100%	4	1,800	∞
EHV (kVA)	40%	1	-	4,000
	70%	2	4,000	12,000
	85%	3	12,000	20,000
	100%	4	20,000	∞

Note: Banding for transmission-connected sites to be determined via CMP343





Comparison to the IA

Voltage	%ile	Banding			Impact Assessment			Variance				
		#	Lower boundary	Upper boundary	#	Lower boundary	Upper boundary	#	Absolute		%	
									Lower boundary	Upper boundary	Lower boundary	Upper boundary
LV no MIC (kWh)	40%	1	-	4,248	1	-	5,403	1		(1,155)		(21%)
	70%	2	4,248	14,178	2	5,403	17,538	2	(1,155)	(3,360)	(21%)	(19%)
	85%	3	14,178	28,836	3	17,538	33,559	3	(3,360)	(4,723)	(19%)	(14%)
	100%	4	28,836	∞	4	33,559	∞	4	(4,723)		(14%)	



Comparison to the IA

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	70%	2	4,248	14,178	2	5,403	17,538	2	(1,155)	(3,360)	(21%)	(19%)
	85%	3	14,178	28,836	3	17,538	33,559	3	(3,360)	(4,723)	(19%)	(14%)
	100%	4	28,836	∞	4	33,559	∞	4	(4,723)		(14%)	
LV MIC (kVA)	40%	1	-	82	1	-	80	1		2		2%
	70%	2	82	150	2	80	150	2	2	-	2%	-
	85%	3	150	230	3	150	225	3	-	5	-	2%
	100%	4	230	∞	4	225	∞	4	5		2%	



Comparison to the IA

Voltage	%ile	Banding			Impact Assessment			Variance				
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	70%	2	4,248	14,178	2	5,403	17,538	2	(1,155)	(3,360)	(21%)	(19%)
	85%	3	14,178	28,836	3	17,538	33,559	3	(3,360)	(4,723)	(19%)	(14%)
	100%	4	28,836	∞	4	33,559	∞	4	(4,723)		(14%)	
LV MIC (kVA)	40%	1	-	82	1	-	80	1		2		2%
	70%	2	82	150	2	80	150	2	2	-	2%	-
	85%	3	150	230	3	150	225	3	-	5	-	2%
	100%	4	230	∞	4	225	∞	4	5		2%	
HV (kVA)	40%	1	-	425	1	-	400	1		25		6%
	70%	2	425	1,000	2	400	900	2	25	100	6%	11%
	85%	3	1,000	1,800	3	900	1,600	3	100	200	11%	13%
	100%	4	1,800	∞	4	1,600	∞	4	200		13%	



Comparison to the IA

Voltage	%ile	Banding			Impact Assessment			Variance				
		#	Lower boundary	Upper boundary	#	Lower boundary	Upper boundary	#	Absolute		%	
									Lower boundary	Upper boundary	Lower boundary	Upper boundary
LV no MIC (kWh)	40%	1	-	4,248	1	-	5,403	1		(1,155)		(21%)
	70%	2	4,248	14,178	2	5,403	17,538	2	(1,155)	(3,360)	(21%)	(19%)
	85%	3	14,178	28,836	3	17,538	33,559	3	(3,360)	(4,723)	(19%)	(14%)
	100%	4	28,836	∞	4	33,559	∞	4	(4,723)		(14%)	
LV MIC (kVA)	40%	1	-	82	1	-	80	1		2		2%
	70%	2	82	150	2	80	150	2	2	-	2%	-
	85%	3	150	230	3	150	225	3	-	5	-	2%
	100%	4	230	∞	4	225	∞	4	5		2%	
HV (kVA)	40%	1	-	425	1	-	400	1		25		6%
	70%	2	425	1,000	2	400	900	2	25	100	6%	11%
	85%	3	1,000	1,800	3	900	1,600	3	100	200	11%	13%
	100%	4	1,800	∞	4	1,600	∞	4	200		13%	
EHV (kVA)	40%	1	-	4,000	1	-	2,200	1		1,800		82%
	70%	2	4,000	12,000	2	2,200	10,000	2	1,800	2,000	82%	20%
	85%	3	12,000	20,000	3	10,000	19,090	3	2,000	910	20%	5%
	100%	4	20,000	∞	4	19,090	∞	4	910		5%	

What could it mean for charges?

Voltage and band				Jun-20 indicative			Ofgem Impact Assessment			Variance (£)			Variance (%)		
				DUoS	TNUoS	Total	DUoS	TNUoS	Total	DUoS	TNUoS	Total	DUoS	TNUoS	Total
LV	Domestic			£35	£27	£62	£33	£34	£67	£2	(£7)	(£5)	6%	(21%)	(8%)
	LV no MIC (kWh)	-	4,248	£20	£12	£32	£19	£18	£38	£0	(£6)	(£6)	2%	(34%)	(15%)
		4,248	14,178	£99	£65	£164	£96	£89	£185	£3	(£24)	(£21)	3%	(27%)	(11%)
		14,178	28,836	£238	£156	£394	£222	£207	£430	£16	(£52)	(£36)	7%	(25%)	(8%)
		28,836	∞	£704	£488	£1,193	£631	£589	£1,220	£73	(£100)	(£28)	12%	(17%)	(2%)
	LV MIC (kVA)	-	82	£1,020	£848	£1,868	£905	£1,088	£1,993	£115	(£240)	(£125)	13%	(22%)	(6%)
		82	150	£2,327	£1,544	£3,871	£2,097	£1,953	£4,050	£230	(£409)	(£179)	11%	(21%)	(4%)
		150	230	£3,592	£2,476	£6,068	£3,142	£3,125	£6,268	£450	(£649)	(£200)	14%	(21%)	(3%)
		230	∞	£9,142	£5,635	£14,777	£8,222	£7,215	£15,436	£921	(£1,580)	(£659)	11%	(22%)	(4%)
	HV	HV (kVA)	-	425	£5,792	£3,658	£9,450	£5,034	£4,456	£9,489	£759	(£798)	(£39)	15%	(18%)
425			1,000	£19,283	£12,780	£32,063	£16,508	£16,164	£32,672	£2,775	(£3,384)	(£610)	17%	(21%)	(2%)
1,000			1,800	£37,862	£26,067	£63,929	£29,222	£29,492	£58,715	£8,640	(£3,425)	£5,215	30%	(12%)	9%
1,800			∞	£94,577	£68,297	£162,874	£80,765	£85,091	£165,855	£13,813	(£16,794)	(£2,981)	17%	(20%)	(2%)
EHV	EHV (kVA)	-	4,000	£8,024	£30,398	£38,422	£3,572	£12,292	£15,864	£4,452	£18,106	£22,558	125%	147%	142%
		4,000	12,000	£39,579	£156,057	£195,636	£17,106	£127,331	£144,436	£22,473	£28,726	£51,200	131%	23%	35%
		12,000	20,000	£78,767	£328,651	£407,419	£35,838	£342,165	£378,003	£42,929	(£13,513)	£29,415	120%	(4%)	8%
		20,000	∞	£241,028	£817,126	£1,058,154	£170,934	£894,404	£1,065,338	£70,093	(£77,277)	(£7,184)	41%	(9%)	(1%)
Transmission-connected				-	£675,605	£675,605	-	£549,123	£549,123	-	£126,482	£126,482	-	23%	23%

Illustrative 2021/22 residual charges for Northern Powergrid (Northeast) plc only (equivalent for other DNOs to be circulated with the slides)

Notes:

- > The IA was based on 2019/20 charging assumptions
- > Banding for transmission-connected sites to be determined via CMP343



Banding next steps

- > If (and until otherwise) approved, the RII0-ET2 banding will be determined in accordance with DCP358, based on the following key milestones:

Milestone	Due date	Responsibility
Distributors receive August NHH EACs via the NHHDA's	Early August 2020	NHHDA's
Distributors receive refresh of HH no MIC data from ElectraLink?	August 2020	ElectraLink
Distributors to collate MIC Final Demand Site information from the August 2020 DUoS invoicing	Early September 2020	Distributors
Distributors to provide data for all Final Demand Sites to the Banding Agent (likely NGE SO)	End of September 2020	Distributors
Banding Agent to provide the charging bands to all distributors	End of October 2020	Banding Agent
Distributors to provide information to suppliers identifying which charging band a Single Site has been allocated	End of November 2020	Distributors
DNOs to publish 2022/23 use of system charges	1 January 2021	DNOs



Allocating Final Demand Sites

- > Customers will continue to be allocated to the appropriate tariff and therefore charging band using the mapped Line Loss Factor Class (LLFC)
 - > Distributors are creating new LLFCs and will be submitting to Elexon in the upcoming Market Domain Data (MDD) iterations
 - > Distributors will provide information as to which LLFCs map to the tariffs plus the mapping of old LLFCs to the new LLFCs
 - > Once the new LLFCs have been created, customers will be migrated to the new LLFCs at different times depending on the distributor, and LLFCs will continue to be different between distributors
 - > Some distributors will use alphanumeric LLFCs

Q&A





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Thanks

