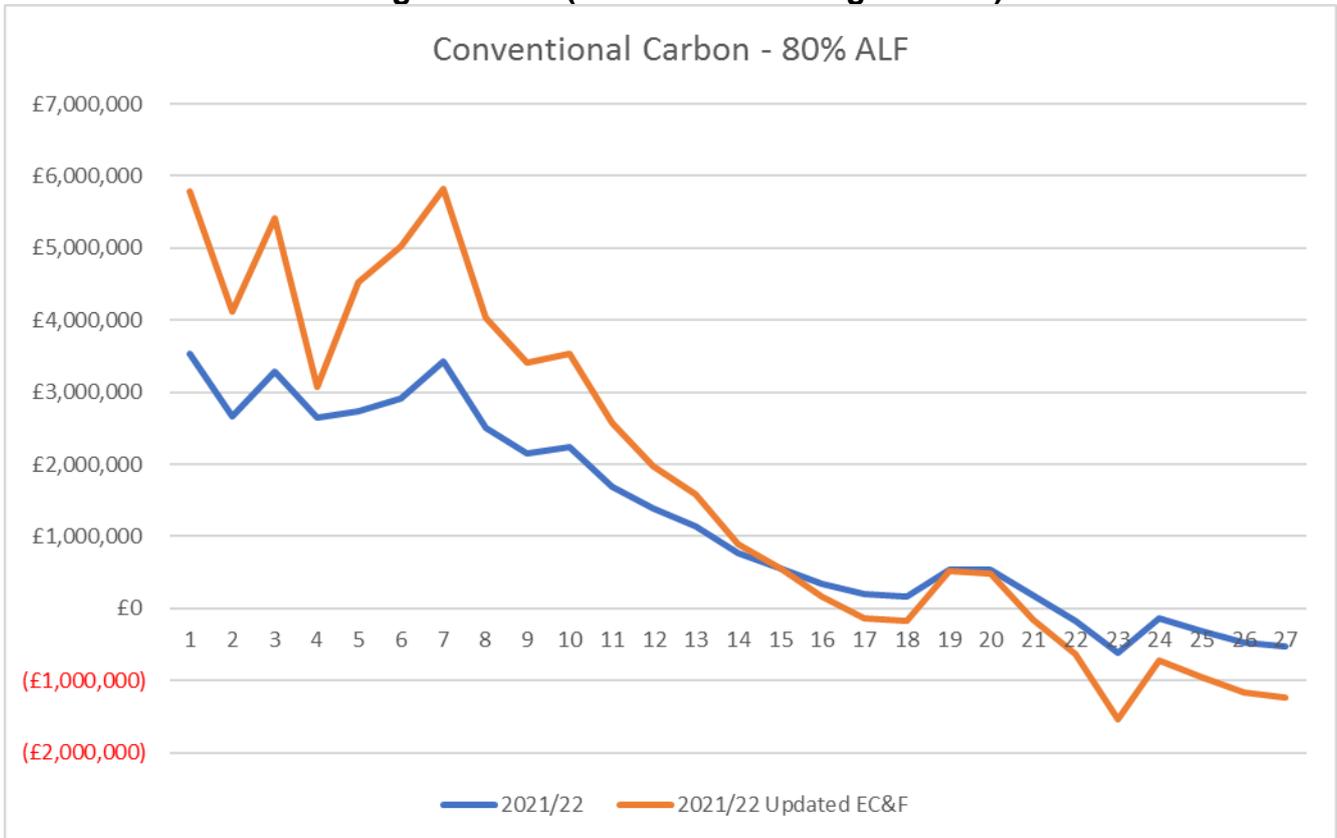
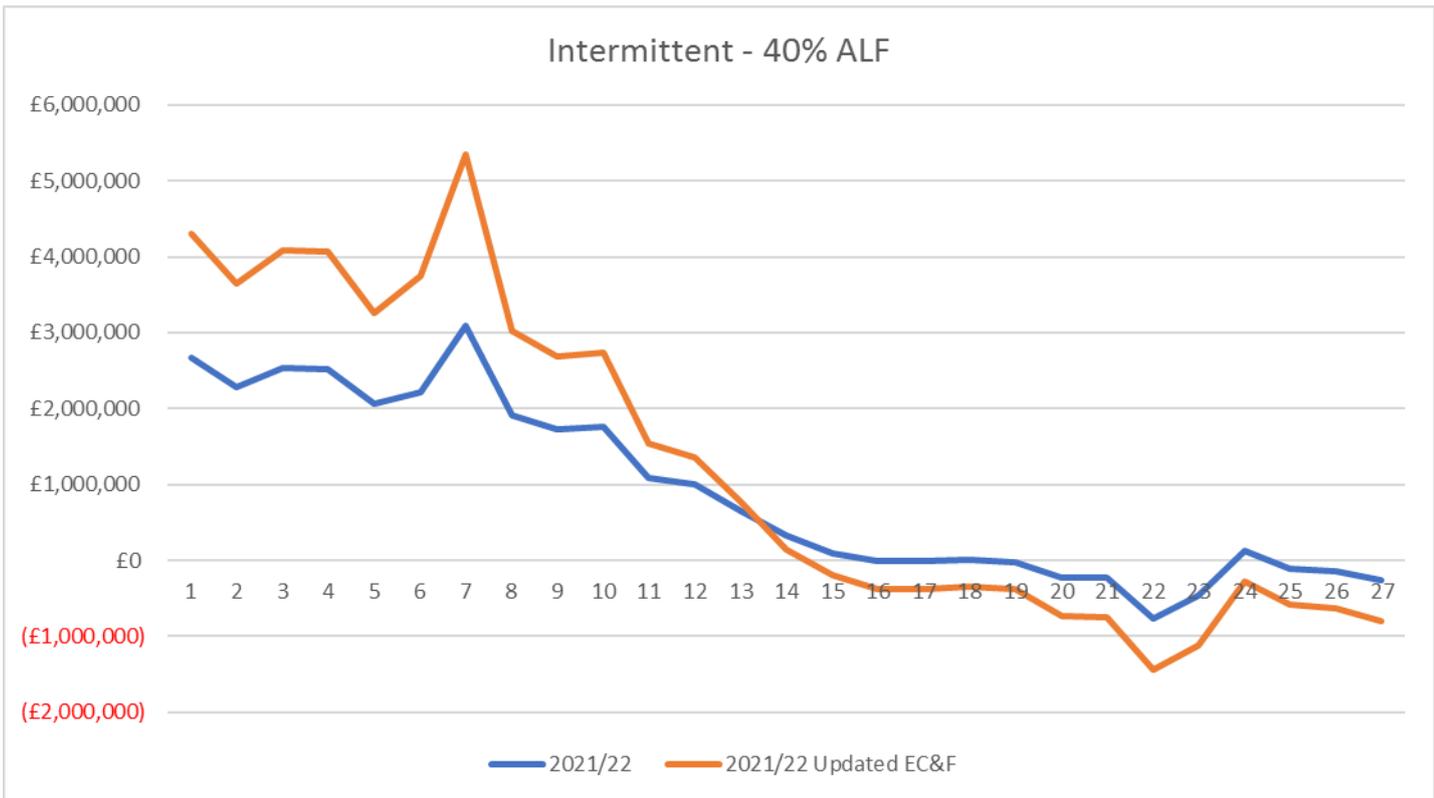
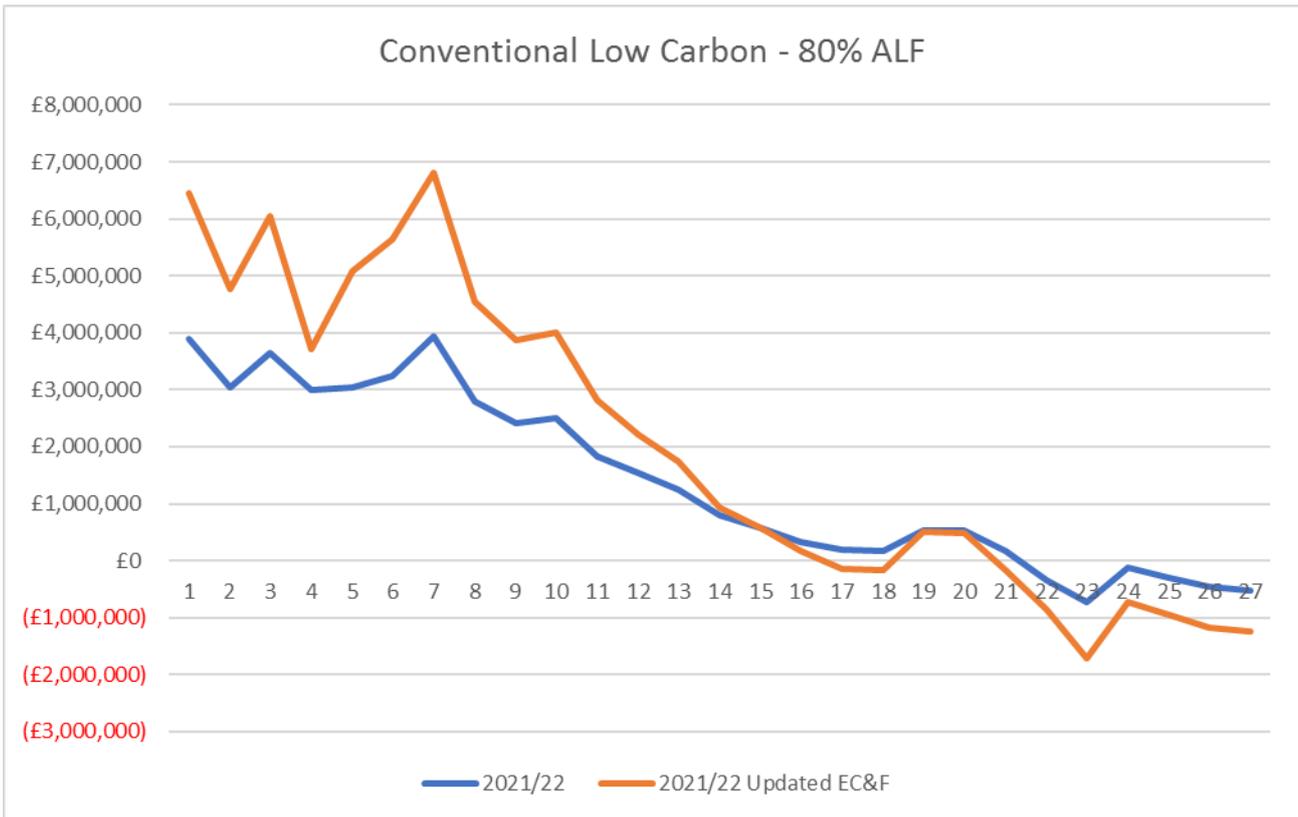


This Annex 4 includes a number of hypothetical examples showing the potential impact to customers of the current RIIO-2 EC (and EFs) per zone¹.

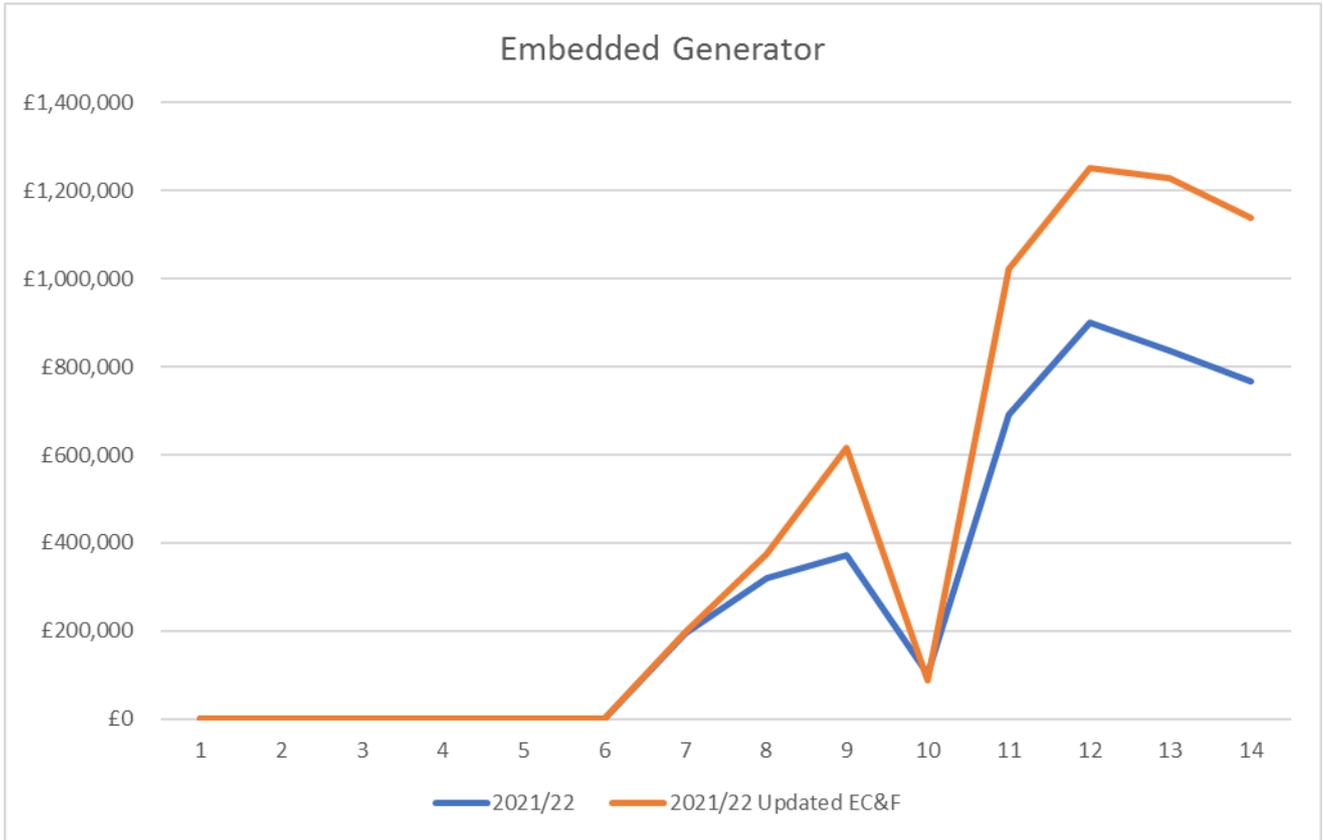
Transmission connected generation (based on 100MW generator)



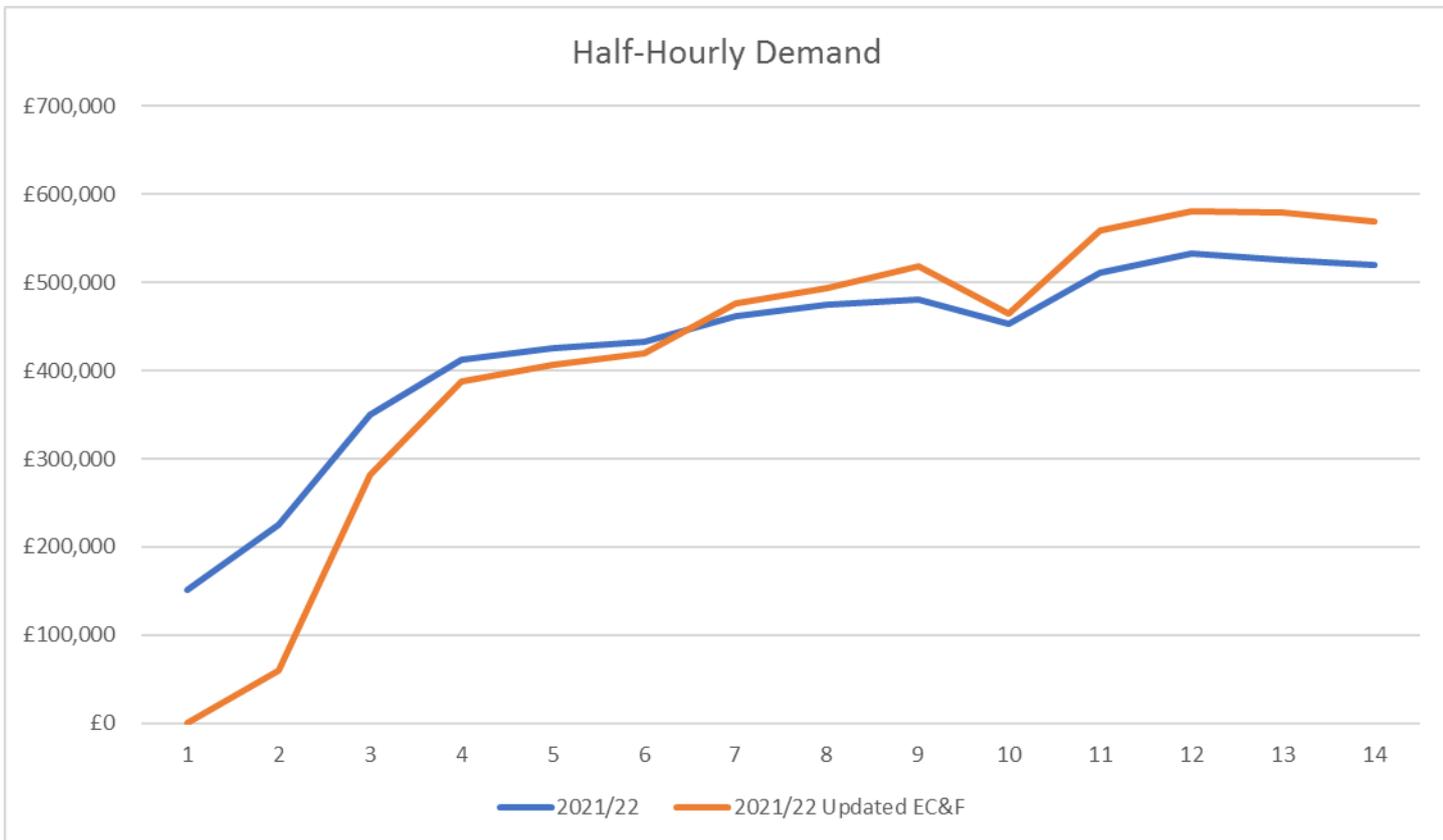
¹ Note – series '2021/22' is base case (Existing uplifted RIIO-1 EC & F's), '2021/22 Updated EC&F' is based on the current calculation (16/10/20) of the RIIO-2 EC&F's.



Embedded generation (based on 100MW generator)



Half-Hourly Demand (Based on 10MW consumption)



Generation Revenue

2021-22 Forecast Revenue (£m)	Peak Security	Year Round Shared	Year Round Not Shared	Residual	Onshore Local Circuit	Onshore Local Substation	Offshore Local	Total
RIIO-1 Uplifted	135.7	105.1	141.5	(17.9)	15.6	19.6	426.9	826.4
Current RIIO-2*	205.2	181.0	292.6	(314.5)	23.8	19.6	426.9	834.7
Var	69.6	75.9	151.1	(296.5)	8.3	-	-	8.3
Var %	51%	72%	107%		53%	0%	0%	1%

Whilst there is minimal impact to the total revenue (increase in onshore local circuit). There is a significant increase in Peak Security, Year Round Shared and Year Round Not Shared, which subsequently has also created a significant increase in the residual.² With the overall increase in the locational elements there is also a considerable change on a zone by zone basis.

Demand Revenue

2021-22 Forecast Revenue (£m)	Gross HH Demand	Less Embedded Export Tariff	NHH Energy Consumption	Total
RIIO-1 Uplifted	845.5	(13.6)	1390.3	2222.2
Current RIIO-2*	846.4	(19.3)	1386.9	2213.9
Var	0.9	(5.8)	(3.4)	(8.3)
Var %	0%	42%	0%	0%

Minimal change to the overall demand revenue, a slight decrease due to the increase in the generation revenue and the increase in the amount of revenue to be collected through EET. The main effects of the increased EC and change in factors can be seen on a zone by zone basis for demand (locational element).

Average Tariffs

2021-22 Forecast Average Tariffs (£/kW)	HH Demand	Demand Residual Element	Embedded Export Tariff	NHH Energy Consumption (p/kWh)	Generation
RIIO-1 Uplifted	44.8	46.6	1.9	5.7	10.7
Current RIIO-2*	44.9	47.9	2.6	5.7	10.8
Var	0.0	1.3	0.8	(0.0)	0.1
Var %	0%	3%	42%	0%	1%

² CMP317/327 is currently being decided upon by Ofgem and will replace the current residual with an adjustment tariff. The figures included here assume that the CMP317/327 original will be approved by Ofgem.

The table above highlights the fact, that from an average tariff perspective there has been minimal impact and that the greater variances in tariffs for generation and demand can be seen at a zonal level.

2021/22 Generation Tariffs – Using RIIO-1 EC (Uplifted) & F's (August 2020 Forecast)

Generation Tariffs		System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff	Residual Tariff	Conventional Carbon 80% Load Factor (£/kW)	Conventional Low Carbon 80% Load Factor (£/kW)	Intermittent 40% Load Factor (£/kW)
Zone	Zone Name	(£/kW)	(£/kW)	(£/kW)	(£/kW)			
1	North Scotland	4.342065	20.090101	18.866291	- 0.232751	35.274428	39.047686	26.669580
2	East Aberdeenshire	3.251840	10.650928	18.866291	- 0.232751	26.632864	30.406122	22.893911
3	Western Highlands	3.979920	18.288499	18.205231	- 0.232751	32.942153	36.583199	25.287880
4	Skye and Lochalsh	- 2.495443	18.288499	18.108400	- 0.232751	26.389325	30.011005	25.191049
5	Eastern Grampian and Tayside	4.450991	13.378695	15.525705	- 0.232751	27.341760	30.446901	20.644432
6	Central Grampian	4.446109	14.400194	16.644875	- 0.232751	29.049413	32.378388	22.172202
7	Argyll	3.675455	12.382620	26.117508	- 0.232751	34.242806	39.466308	30.837805
8	The Trossachs	3.827726	12.382620	14.391109	- 0.232751	25.013958	27.892180	19.111406
9	Stirlingshire and Fife	2.648027	10.835846	13.137368	- 0.232751	21.593847	24.221321	17.238955
10	South West Scotland	3.005321	11.165296	13.379006	- 0.232751	22.408012	25.083813	17.612373
11	Lothian and Borders	2.905501	11.165296	6.590487	- 0.232751	16.877376	18.195474	10.823854
12	Solway and Cheviot	2.423044	7.313546	7.402865	- 0.232751	13.963422	15.443995	10.095532
13	North East England	3.611493	5.574672	4.549843	- 0.232751	11.478354	12.388323	6.546961
14	North Lancashire and The Lakes	2.485067	5.574672	1.216187	- 0.232751	7.685003	7.928241	3.213305
15	South Lancashire, Yorkshire and Humber	4.018904	1.885191	0.352052	- 0.232751	5.575947	5.646358	0.873377
16	North Midlands and North Wales	3.384821	0.269928		- 0.232751	3.368012	3.368012	- 0.124780
17	South Lincolnshire and North Norfolk	1.810333	0.528105		- 0.232751	2.000066	2.000066	- 0.021509
18	Mid Wales and The Midlands	1.273927	0.853057		- 0.232751	1.723622	1.723622	0.108472
19	Anglesey and Snowdon	5.610335	- 0.068323		- 0.232751	5.322926	5.322926	- 0.260080
20	Pembrokeshire	9.473688	- 4.907724		- 0.232751	5.314758	5.314758	- 2.195841
21	South Wales & Gloucester	6.050596	- 5.023364		- 0.232751	1.799154	1.799154	- 2.242097
22	Cotswold	2.617863	3.820598	- 8.882383	- 0.232751	- 1.664316	- 3.440793	- 7.586895
23	Central London	- 4.237683	3.820598	- 5.933549	- 0.232751	- 6.160795	- 7.347505	- 4.638061
24	Essex and Kent	- 4.102577	3.820598		- 0.232751	- 1.278850	- 1.278850	1.295488
25	Oxfordshire, Surrey and Sussex	- 1.124600	- 2.157597		- 0.232751	- 3.083429	- 3.083429	- 1.095790
26	Somerset and Wessex	- 1.931156	- 3.151614		- 0.232751	- 4.685198	- 4.685198	- 1.493397
27	West Devon and Cornwall	- 0.361854	- 5.783941		- 0.232751	- 5.221758	- 5.221758	- 2.546327

2021/22 Generation Tariffs – Using RIIO-2 EC & F Calculation (as of 16/10/20)

Generation Tariffs		System Peak Tariff	Shared Year Round Tariff	Not Shared Year Round Tariff	Residual Tariff	Conventional Carbon 80% Load Factor (£/kW)	Conventional Low Carbon 80% Load Factor (£/kW)	Intermittent 40% Load Factor (£/kW)
Zone	Zone Name	(£/kW)	(£/kW)	(£/kW)	(£/kW)			
1	North Scotland	7.230021	35.495924	32.971932	- 4.086882	57.917424	64.511810	43.083420
2	East Aberdeenshire	3.586921	19.069280	32.971932	- 4.086882	41.133009	47.727395	36.512762
3	Western Highlands	6.676010	32.545211	31.889230	- 4.086882	54.136681	60.514527	40.820432
4	Skye and Lochalsh	- 16.560603	32.545211	31.709633	- 4.086882	30.756390	37.098317	40.640835
5	Eastern Grampian and Tayside	8.601388	23.831827	27.133901	- 4.086882	45.287088	50.713869	32.579750
6	Central Grampian	7.949862	27.140278	30.758688	- 4.086882	50.182153	56.333890	37.527917
7	Argyll	5.612070	22.316869	48.638544	- 4.086882	58.289518	68.017227	53.478410
8	The Trossachs	6.244011	22.316869	25.370615	- 4.086882	40.307116	45.381239	30.210481
9	Stirlingshire and Fife	4.118398	19.497741	23.085565	- 4.086882	34.098161	38.715274	26.797779
10	South West Scotlands	4.758736	19.954439	23.420535	- 4.086882	35.371833	40.055940	27.315429
11	Lothian and Borders	4.648367	19.954439	11.600371	- 4.086882	25.805333	28.125407	15.495265
12	Solway and Cheviot	3.470625	12.901644	12.477846	- 4.086882	19.687335	22.182904	13.551622
13	North East England	5.677345	10.040345	7.783229	- 4.086882	15.849322	17.405968	7.712485
14	North Lancashire and The Lakes	3.839592	10.040345	1.486755	- 4.086882	8.974390	9.271741	1.416011
15	South Lancashire, Yorkshire and Humber	6.105261	3.755575	0.632590	- 4.086882	5.528911	5.655429	- 1.952062
16	North Midlands and North Wales	5.083670	0.853165		- 4.086882	1.679320	1.679320	- 3.745616
17	South Lincolnshire and North Norfolk	2.076663	0.767139		- 4.086882	- 1.396508	- 1.396508	- 3.780026
18	Mid Wales and The Midlands	1.134634	1.513005		- 4.086882	- 1.741844	- 1.741844	- 3.481680
19	Anglesey and Snowdon	8.774360	0.617825		- 4.086882	5.181738	5.181738	- 3.839752
20	Pembrokeshire	15.431676	- 8.146536		- 4.086882	4.827565	4.827565	- 7.345496
21	South Wales & Gloucester	9.193106	- 8.350841		- 4.086882	- 1.574449	- 1.574449	- 7.427218
22	Cotswold	4.574012	3.268471	- 11.702696	- 4.086882	- 6.260250	- 8.600789	- 14.482190
23	Central London	- 7.291715	3.268471	- 8.353563	- 4.086882	- 15.446671	- 17.117383	- 11.133057
24	Essex and Kent	- 5.830921	3.268471		- 4.086882	- 7.303026	- 7.303026	- 2.779494
25	Oxfordshire, Surrey and Sussex	- 1.990501	- 4.386118		- 4.086882	- 9.586277	- 9.586277	- 5.841329
26	Somerset and Wessex	- 3.017675	- 5.680392		- 4.086882	- 11.648871	- 11.648871	- 6.359039
27	West Devon and Cornwall	- 0.346884	- 9.996204		- 4.086882	- 12.430729	- 12.430729	- 8.085364