SSEN'S FIXED REFERNCE BASELINE

This document outlines SSEN's fixed reference baseline information relating to EV_DSR&V2G[1], Flexible_site_demand and Heat pumps. The fixed reference baseline only applies to the domestic level assets. This methodology uses a fixed daily profile derived from the energy behaviour of a representative group of DERs that represents normal operating behaviour or a System Operator's network planning assumptions. The fixed reference baseline provides FSPs[2] with a benchmark for how system operators view the impact of different DER technologies on the distribution system.

EV_DAR&V2G

Time	Settlement Period	Baseline (Kw)
00:00	1	1.874341424
00:30	2	2.133511455
01:00	3	2.267180812
01:30	4	2.212970461
02:00	5	2.066676776
02:30	6	1.891421398
03:00	7	1.841666693
03:30	8	1.690174755
04:00	9	1.538682817
04:30	10	1.345604858
05:00	11	1.24535284
05:30	12	1.053017488
06:00	13	0.888158615
06:30	14	0.800530925
07:00	15	0.709190198
07:30	16	0.565866943
08:00	17	0.582204309
08:30	18	0.476754039
09:00	19	0.467842749
09:30	20	0.486407937
10:00	21	0.496061835
10:30	22	0.490120975
11:00	23	0.473783609
11:30	24	0.472298394

[1] Electric Vehicles, Demand Side Response and Vehicle to Grid

[2] Flexibility Service Providers

12:00	25	0.510171378
12:30	26	0.594828637
13:00	27	0.588887777
13:30	28	0.643098127
14:00	29	0.700278908
14:30	30	0.665376353
15:00	31	0.700278908
15:30	32	0.69656587
16:00	33	0.784936167
16:30	34	0.918605524
17:00	35	1.090890472
17:30	36	1.212678109
18:00	37	1.405756068
18:30	38	1.601061851
19:00	39	1.6946304
19:30	40	1.898104866
20:00	41	1.915184839
20:30	42	1.974593442
21:00	43	1.83349801
21:30	44	1.777802444
22:00	45	1.582496662
22:30	46	1.615171394
23:00	47	1.708739943
23:30	48	1.679035642

Flexible_site_damand

Time	Settlement Period	Baseline_Kw
00:00	1	0.50594
00:30	2	0.41956
01:00	3	0.3702
01:30	4	0.33318
02:00	5	0.3085
02:30	6	0.28382
03:00	7	0.27148
03:30	8	0.25914
04:00	9	0.25914
04:30	10	0.25914
05:00	11	0.25914
05:30	12	0.27148
06:00	13	0.29616
06:30	14	0.33318
07:00	15	0.38254
07:30	16	0.46892
08:00	17	0.54296
08:30	18	0.65402
09:00	19	0.71572
09:30	20	0.76508
10:00	21	0.83912
10:30	22	0.8638
11:00	23	0.90082
11:30	24	0.91316
12:00	25	0.95018
12:30	26	0.95018
13:00	27	0.91316
13:30	28	0.83912
14:00	29	0.77742
14:30	30	0.77742
15:00	31	0.78976
15:30	32	0.8021
16:00	33	0.88848
16:30	34	0.97486
17:00	35	1.06124
17:30	36	1.1106
18:00	37	1.13528
18:30	38	1.1106

19:00	39	1.08592
19:30	40	1.0489
20:00	41	1.01188
20:30	42	0.96252
21:00	43	0.95018
21:30	44	0.88848
22:00	45	0.82678
22:30	46	0.7404
23:00	47	0.617
23:30	48	0.51828

Heat_pump

Time	Settlement Period	Baseline_Kw
00:00	1	0.3335
00:30	2	0.3335
01:00	3	0.3335
01:30	4	0.341838
02:00	5	0.341838
02:30	6	0.450225
03:00	7	0.358513
03:30	8	0.408538
04:00	9	0.458563
04:30	10	0.475238
05:00	11	0.833751
05:30	12	1.192263
06:00	13	1.425714
06:30	14	1.433634
07:00	15	1.425714
07:30	16	1.25146
08:00	17	0.933801
08:30	18	0.550275
09:00	19	0.525263
09:30	20	0.358513
10:00	21	0.358513
10:30	22	0.36685
11:00	23	0.36685
11:30	24	0.341838
12:00	25	0.341838
12:30	26	0.341838
13:00	27	0.36685
13:30	28	0.733701
14:00	29	0.808738
14:30	30	1.200601
15:00	31	1.489079
15:30	32	1.50492
16:00	33	1.496999
16:30	34	1.50492
17:00	35	1.50492
17:30	36	1.433634
18:00	37	1.330666
18:30	38	1.242288

19:00	39	1.117226
19:30	40	1.117226
20:00	41	1.192263
20:30	42	1.217276
21:00	43	1.200601
21:30	44	0.925463
22:00	45	0.56695
22:30	46	0.625313
23:00	47	0.3335
23:30	48	0.3335