

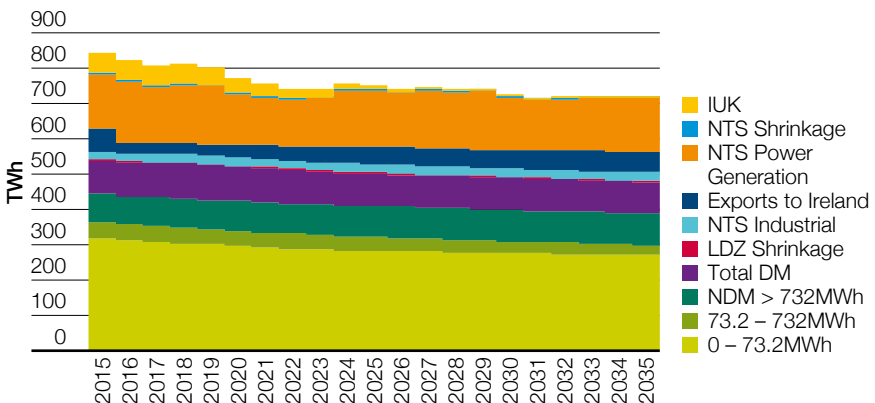
Appendix 5 – Gas Demand and Supply Volume Scenarios

5.1 Demand

Table A5.1A
Slow Progression: Annual demand – Split by load categories (TWh)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
0–73.2MWh	317	310	306	302	298	293	290	287	283	281	279	278	277	276	274	273	272	271	270	269	267
73.2–732MWh	45	44	44	43	43	43	42	42	41	40	40	38	37	36	35	34	32	31	30	29	28
NDM > 732MWh	78	78	80	82	83	84	84	85	86	87	88	88	88	88	88	88	89	89	89	89	89
Total NDM	439	432	429	427	423	420	416	413	411	408	406	404	402	400	397	395	393	391	389	387	384
Total DM	95	97	98	99	98	97	96	94	92	91	91	91	91	90	90	90	90	90	90	90	90
LDZ Shrinkage	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Total LDZ	537	532	530	528	524	519	516	511	506	502	500	497	495	493	490	488	486	484	482	480	477
NTS Industrial	23	23	23	24	24	24	24	24	24	24	23	23	23	23	23	23	23	23	23	23	23
Exports to Ireland	61	29	28	31	29	35	37	37	43	47	49	51	50	50	52	52	53	55	56	56	58
NTS Power Generation	154	173	160	165	167	143	134	133	136	157	157	152	162	161	163	147	141	145	148	150	150
NTS Consumption	238	225	211	220	220	202	195	194	202	228	230	227	236	235	239	223	218	223	227	230	231
NTS Shrinkage	3	3	3	3	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	4
Total excluding IUK	779	760	745	751	747	725	714	708	712	734	734	728	734	731	732	715	707	711	712	713	712
IUK	59	58	56	55	52	44	36	28	22	16	10	6	2	2	2	2	2	2	2	2	2
Total including IUK	838	817	800	806	799	769	750	736	734	750	744	734	736	734	735	717	710	713	715	715	714

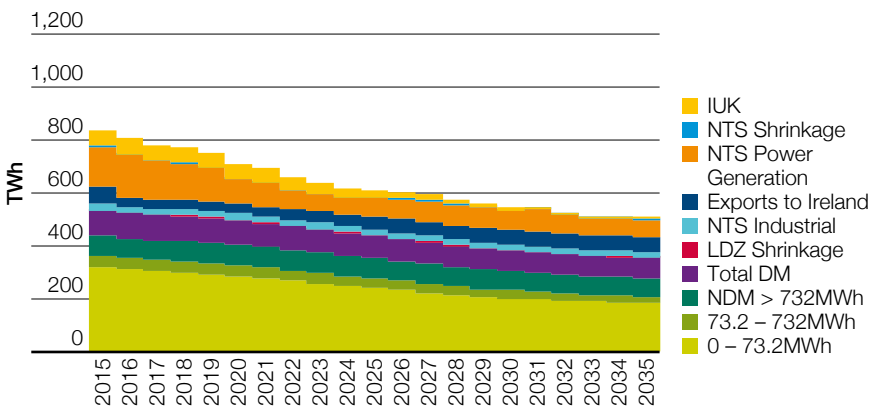
Figure A5.1A
Slow Progression: Annual demand



*Table A5.1B
Gone Green: Annual demand – Split by load categories (TWh)*

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
0-73.2MWh	316	308	302	297	291	283	275	266	256	247	239	230	221	211	205	200	195	191	188	186	184
73.2-732MWh	44	43	43	42	42	42	41	40	40	38	37	36	34	33	31	30	28	27	26	25	24
NDM > 732MWh	75	74	73	75	76	76	76	75	77	77	77	76	75	73	72	71	70	69	68	68	68
Total NDM	435	425	418	414	410	401	392	382	373	363	353	341	330	317	308	300	293	287	283	279	276
Total DM	95	95	94	96	95	92	90	89	86	84	83	82	82	81	80	79	78	77	77	77	77
LDZ Shrinkage	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Total LDZ	533	523	516	513	507	496	485	473	462	450	439	426	414	401	391	382	374	367	362	358	356
NTS Industrial	24	23	23	23	23	23	23	23	23	23	22	22	22	22	22	21	21	21	22	22	22
Exports to Ireland	63	32	33	35	32	36	37	38	42	46	50	53	50	51	53	53	54	54	54	56	57
NTS Power Generation	154	163	146	138	128	92	87	72	64	59	67	73	82	80	77	74	85	71	64	63	61
NTS Consumption	240	218	202	196	184	151	148	132	128	128	140	148	154	153	151	148	161	146	139	141	139
NTS Shrinkage	3	3	3	3	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	4
Total excluding IUK	776	745	721	713	694	651	636	609	593	581	582	578	571	557	545	533	538	516	504	502	498
IUK	60	60	58	58	57	56	54	50	43	36	28	24	20	16	12	8	4	4	4	4	4
Total including IUK	836	804	779	770	751	707	691	659	637	617	610	602	591	574	558	542	543	521	509	507	503

*Figure A5.1B
Gone Green: Annual demand*



Appendix 5 – Gas Demand and Supply Volume Scenarios

Table A5.1C
 No Progression: Annual demand – Split by load categories (TWh)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
0-73.2MWh	319	315	313	312	310	308	307	305	304	303	303	302	302	301	301	300	300	299	298	298	297
73.2-732MWh	45	45	45	45	45	45	45	44	44	43	42	41	39	38	37	36	34	33	32	31	30
NDM > 732MWh	78	78	79	83	87	90	93	95	97	98	99	99	100	100	101	101	102	102	103	103	104
Total NDM	443	438	438	439	442	443	444	445	444	444	444	442	441	440	439	437	436	434	433	432	430
Total DM	97	99	100	102	103	103	103	102	102	101	101	101	100	100	100	100	100	100	100	101	101
LDZ Shrinkage	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Total LDZ	543	540	541	544	548	549	550	550	549	548	547	546	544	543	541	540	539	537	536	535	533
NTS Industrial	25	25	26	26	26	26	26	26	26	26	25	25	25	25	25	25	25	25	25	25	25
Exports to Ireland	60	30	32	37	34	37	41	44	52	54	57	58	59	61	61	60	61	62	62	63	65
NTS Power Generation	154	173	160	165	167	143	134	133	136	157	157	152	162	161	163	147	141	145	148	150	150
NTS Consumption	240	228	218	228	227	207	202	204	214	237	240	236	246	247	250	232	226	232	235	238	240
NTS Shrinkage	3	3	3	3	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	4
Total excluding IUK	786	771	762	776	778	760	755	757	767	788	790	785	794	793	794	775	769	773	774	776	777
IUK	59	59	58	58	56	52	48	44	40	36	32	28	24	20	19	16	14	12	10	8	6
Total including IUK	845	830	820	833	834	812	804	801	807	825	823	813	818	814	813	792	783	786	785	785	783

Figure A5.1C
 No Progression: Annual demand

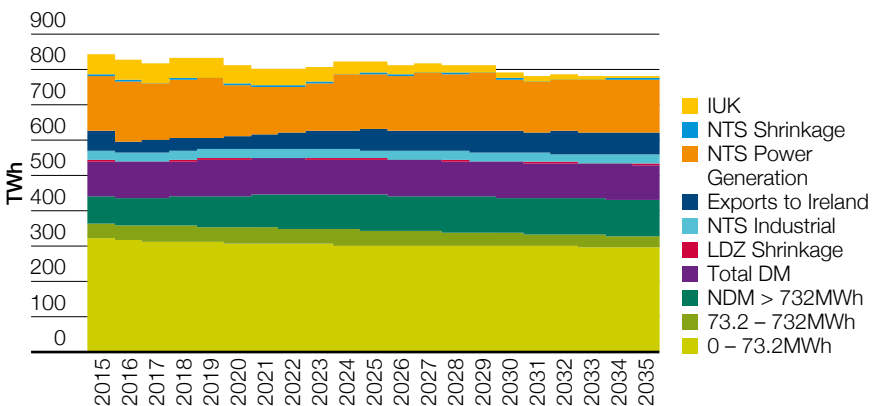
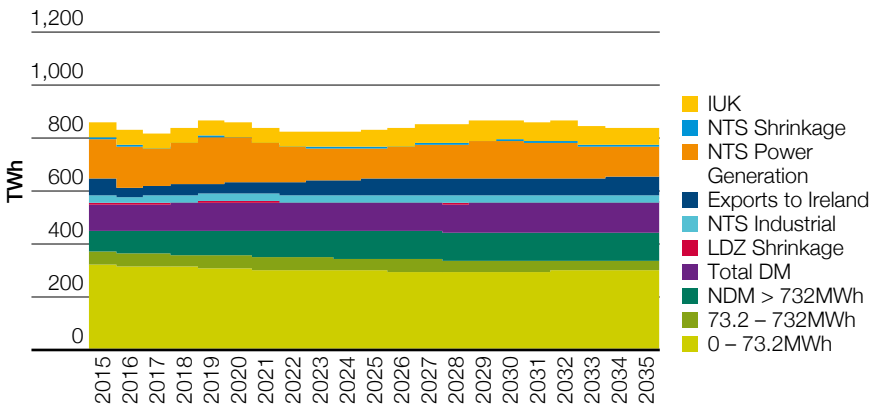


Table A5.1D
Consumer Power: Annual demand – Split by load categories (TWh)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
0-73.2MWh	319	314	311	308	305	302	300	298	296	294	294	293	292	292	292	292	292	293	293	294	294
73.2-732MWh	47	47	48	48	48	48	48	48	48	47	47	46	45	43	42	41	40	39	38	36	35
NDM > 732MWh	82	82	85	88	91	94	96	98	100	102	103	104	105	105	107	107	108	109	109	110	111
Total NDM	447	443	443	445	445	444	444	443	444	444	443	442	441	441	441	441	441	440	440	440	440
Total DM	100	101	102	105	108	110	108	106	105	105	105	106	106	106	107	107	108	108	108	109	109
LDZ Shrinkage	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Total LDZ	550	548	549	553	556	557	555	552	551	551	551	550	550	550	551	551	551	551	551	551	551
NTS Industrial	26	27	27	27	27	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
Exports to Ireland	65	34	37	43	41	46	48	49	54	57	62	62	63	63	63	61	62	63	65	67	68
NTS Power Generation	151	157	141	151	177	165	143	132	122	122	116	120	132	132	142	144	136	138	121	117	116
NTS Consumption	242	218	204	221	246	239	219	209	205	207	206	211	222	224	234	233	226	229	214	212	212
NTS Shrinkage	3	3	3	3	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	4
Total excluding IUK	795	769	756	777	805	799	777	764	759	762	760	765	776	777	787	788	781	783	769	767	767
IUK	60	59	58	57	56	56	55	57	59	61	66	68	71	73	75	76	77	77	72	68	65
Total including IUK	855	828	814	834	861	854	832	822	818	823	826	833	847	850	863	864	857	860	841	835	832

Figure A5.1D
Consumer Power: Annual demand

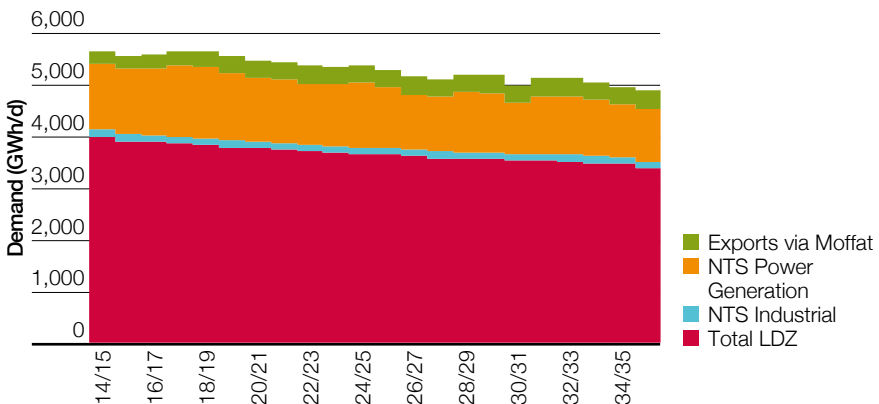


Appendix 5 – Gas Demand and Supply Volume Scenarios

Table A5.1E
Slow Progression: 1 in 20 peak day undiversified demand (GWh/d)

National	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36
Scotland	341	333	330	328	325	322	320	318	316	313	313	311	309	307	305	304	303	300	299	298	296	294
Northern	208	204	202	201	199	197	196	194	193	191	191	190	188	187	186	185	184	183	182	181	180	178
North West	480	470	467	464	460	454	453	450	446	442	442	439	437	433	432	430	428	424	424	421	419	415
North East	247	241	240	238	236	233	233	231	229	227	227	226	224	222	222	221	220	218	218	217	215	213
East Midlands	393	385	382	380	376	372	370	368	365	360	359	357	355	352	351	350	348	345	345	343	341	337
West Midlands	347	340	338	335	333	328	327	325	323	319	318	316	315	312	311	310	308	305	305	303	301	298
Wales North	43	42	42	41	41	40	40	40	39	39	39	39	38	38	38	38	37	37	37	37	37	36
Wales South	192	189	189	185	183	180	179	177	175	173	173	172	170	169	168	167	167	165	165	164	163	123
Eastern	324	318	317	315	313	310	309	309	294	293	293	291	290	287	287	286	285	282	282	281	279	277
North Thames	413	405	403	401	398	393	393	390	388	384	384	382	380	376	376	374	372	369	369	367	365	361
South East	435	425	423	421	419	414	413	410	408	403	383	401	400	377	376	375	373	390	390	368	366	363
Southern	316	311	310	309	307	304	303	301	298	294	293	292	290	288	288	286	285	282	282	281	280	277
South West	231	226	225	224	223	220	220	218	217	215	215	214	213	211	211	210	209	207	207	206	205	203
Total LDZ	3,975	3,892	3,873	3,848	3,819	3,774	3,760	3,736	3,697	3,660	3,634	3,635	3,616	3,564	3,557	3,542	3,525	3,513	3,508	3,473	3,452	3,380
NTS Industrial	136	132	132	132	132	132	132	132	132	132	128	128	128	128	128	128	128	128	128	128	128	128
NTS Power Generation	1,285	1,270	1,296	1,381	1,375	1,306	1,212	1,212	1,174	1,202	1,256	1,161	1,049	1,049	1,150	1,150	980	1,126	1,126	1,088	1,015	1,015
Exports via Moffat	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
Exports via IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NTS	1,652	1,637	1,691	1,779	1,799	1,761	1,671	1,688	1,651	1,679	1,729	1,634	1,522	1,522	1,622	1,622	1,453	1,599	1,599	1,561	1,488	1,488
Total	5,626	5,530	5,563	5,626	5,617	5,534	5,432	5,424	5,348	5,338	5,363	5,268	5,138	5,086	5,179	5,164	4,978	5,112	5,107	5,034	4,940	4,868

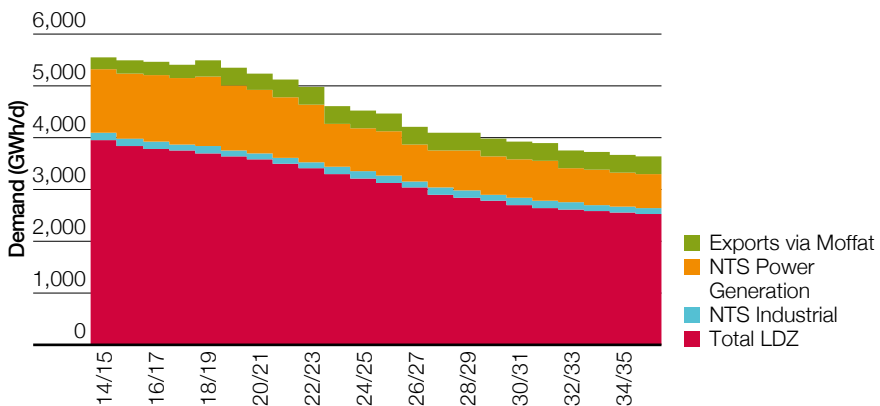
Figure A5.1E
Slow Progression: 1 in 20 peak day undiversified demand



*Table A5.1F
Gone Green: 1 in 20 peak day undiversified demand (GWh/d)*

National	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36
Scotland	338	328	323	319	316	310	304	297	291	283	276	269	260	250	243	237	231	226	222	219	217	215
Northern	206	201	198	196	194	191	187	183	179	174	170	165	161	155	151	147	145	141	139	138	136	135
North West	476	463	456	451	447	438	431	421	409	397	389	377	366	352	343	335	328	320	316	312	309	305
North East	245	238	235	232	230	225	222	216	212	206	201	195	190	183	178	174	170	166	164	162	160	158
East Midlands	391	380	375	370	366	359	353	344	336	325	317	307	298	286	279	272	266	259	256	253	250	247
West Midlands	344	335	330	326	323	316	311	303	296	287	280	271	263	252	246	239	233	227	224	221	219	216
Wales North	43	42	41	40	40	39	38	37	36	35	34	33	32	31	30	29	29	28	28	27	27	27
Wales South	193	187	183	179	177	170	166	164	161	157	155	152	149	145	142	139	137	134	133	131	130	129
Eastern	322	314	310	307	305	298	294	290	270	263	257	250	242	233	227	222	217	212	209	207	205	203
North Thames	409	399	394	389	386	378	372	363	356	346	338	328	318	306	298	290	284	276	273	270	267	264
South East	434	419	413	408	405	398	392	383	374	362	353	344	334	302	312	304	280	291	288	267	264	261
Southern	314	307	303	300	298	292	287	281	274	265	259	251	244	235	229	224	219	214	211	209	207	205
South West	229	223	220	218	216	211	208	203	199	193	188	183	177	170	166	162	158	154	152	151	149	148
Total LDZ	3,948	3,843	3,788	3,742	3,710	3,630	3,571	3,491	3,398	3,299	3,224	3,132	3,040	2,906	2,850	2,780	2,703	2,653	2,620	2,572	2,548	2,519
NTS Industrial	136	132	132	132	132	132	132	132	132	132	128	128	128	128	128	128	128	128	128	128	128	128
NTS Power Generation	1,240	1,270	1,296	1,271	1,352	1,257	1,210	1,143	1,106	835	835	860	705	725	779	730	744	783	673	673	659	659
Exports via Moffat	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
Exports via IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NTS	1,607	1,637	1,691	1,669	1,775	1,712	1,670	1,619	1,583	1,311	1,308	1,332	1,177	1,197	1,252	1,203	1,217	1,256	1,146	1,146	1,131	1,131
Total	5,554	5,481	5,478	5,411	5,485	5,342	5,240	5,111	4,981	4,610	4,531	4,464	4,217	4,103	4,102	3,983	3,920	3,909	3,766	3,718	3,679	3,650

*Figure A5.1F
Gone Green: 1 in 20 peak day undiversified demand*



Appendix 5 – Gas Demand and Supply Volume Scenarios

Table A5.1G
 No Progression: 1 in 20 peak day undiversified demand (GWh/d)

National	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36
Scotland	343	337	336	337	338	339	340	341	340	339	340	339	338	336	335	334	333	331	330	330	329	326
Northern	209	206	206	206	206	207	207	207	207	206	206	205	205	203	203	202	202	200	200	199	198	197
North West	483	476	475	475	477	477	480	480	480	477	478	477	476	473	473	472	470	467	467	465	464	460
North East	249	244	244	244	245	245	247	247	246	245	246	245	244	243	243	242	241	240	240	239	238	236
East Midlands	396	390	389	390	391	391	393	393	393	390	390	389	388	386	386	385	384	381	381	380	379	376
West Midlands	349	344	343	344	345	345	348	348	348	345	346	345	344	342	342	341	340	337	338	337	335	332
Wales North	43	43	42	42	42	42	43	43	42	42	42	42	42	42	41	41	41	41	41	41	40	40
Wales South	194	192	193	190	189	189	188	187	187	186	185	184	183	182	182	181	180	179	178	178	177	176
Eastern	326	321	322	322	324	325	327	328	328	326	327	326	326	324	324	324	323	321	322	321	320	317
North Thames	415	409	410	411	413	414	418	419	419	417	418	417	417	414	414	413	412	409	410	409	407	404
South East	438	429	429	430	433	434	437	439	439	437	438	438	437	415	436	435	414	432	433	412	411	408
Southern	318	314	314	316	318	318	320	321	321	318	318	318	317	315	316	315	314	312	312	312	311	309
South West	232	229	229	230	231	232	234	234	234	233	234	234	234	232	233	232	232	230	231	230	230	228
Total LDZ	4,001	3,940	3,938	3,943	3,961	3,962	3,988	3,993	3,990	3,966	3,974	3,965	3,957	3,911	3,933	3,923	3,892	3,885	3,888	3,858	3,845	3,814
NTS Industrial	136	132	132	132	132	132	132	132	132	132	128	128	128	128	128	128	128	128	128	128	128	128
NTS Power Generation	1,285	1,270	1,296	1,381	1,375	1,306	1,212	1,212	1,174	1,202	1,256	1,161	1,049	1,049	1,150	1,150	980	1,126	1,126	1,088	1,015	1,015
Exports via Moffat	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
Exports via IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NTS	1,652	1,637	1,691	1,779	1,799	1,761	1,671	1,688	1,651	1,679	1,729	1,634	1,522	1,522	1,622	1,622	1,453	1,599	1,599	1,561	1,488	1,488
Total	5,652	5,578	5,629	5,722	5,760	5,723	5,659	5,681	5,640	5,645	5,703	5,599	5,479	5,433	5,555	5,545	5,346	5,484	5,487	5,419	5,333	5,302

Figure A5.1G
 No Progression: 1 in 20 peak day undiversified demand

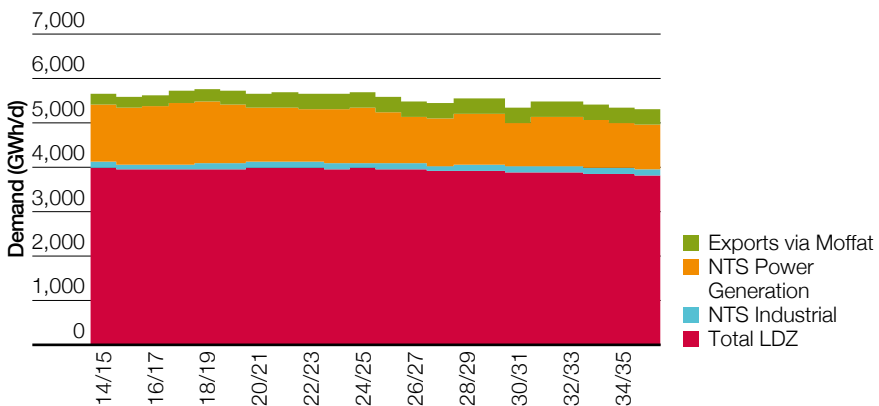
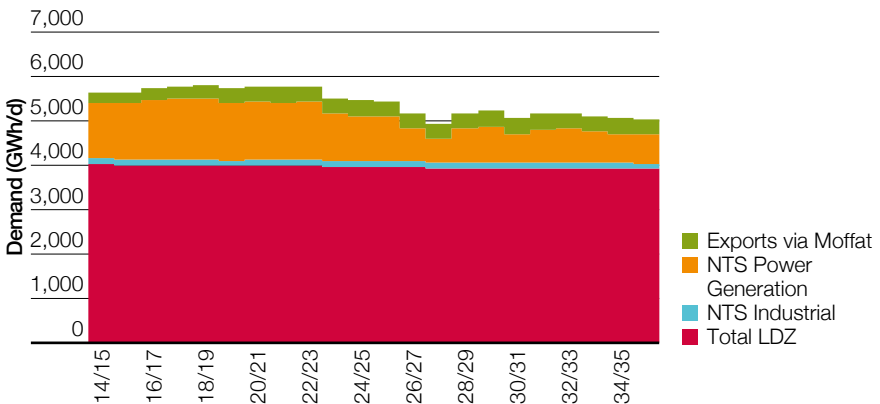


Table A5.1H
Consumer Power: 1 in 20 peak day undiversified demand (GWh/d)

National	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	
Scotland	346	341	341	342	343	342	342	343	342	342	343	343	342	341	341	342	342	341	341	341	341	341	340
Northern	210	208	208	208	208	208	208	207	207	206	207	206	206	204	205	205	205	204	204	204	204	204	203
North West	487	481	481	482	483	480	482	482	481	479	481	480	479	477	478	478	478	476	478	478	478	477	475
North East	250	247	247	248	248	247	248	248	248	247	247	247	247	245	246	246	246	245	246	246	246	246	244
East Midlands	399	394	394	395	395	393	394	394	394	391	391	390	390	388	389	390	390	388	390	390	389	389	388
West Midlands	352	348	348	349	349	347	348	348	348	346	347	346	346	344	345	345	345	344	345	345	345	345	343
Wales North	44	43	43	43	43	43	43	43	43	43	43	43	42	42	42	42	42	42	42	42	42	42	42
Wales South	195	194	194	191	191	191	191	188	186	185	185	185	184	183	183	183	182	182	182	182	182	181	181
Eastern	328	324	325	326	327	325	327	327	326	324	325	325	325	323	324	325	325	323	325	325	325	325	324
North Thames	419	415	416	417	418	416	418	419	419	417	419	418	418	416	418	418	418	416	418	418	418	417	415
South East	440	432	432	433	434	432	433	433	433	431	412	431	431	409	410	411	411	409	411	411	411	411	409
Southern	320	318	318	320	321	319	320	320	320	317	318	317	317	315	316	316	316	315	316	315	316	316	315
South West	234	232	232	233	234	232	234	233	234	233	234	234	234	232	234	234	234	233	234	234	234	234	233
Total LDZ	4,030	3,983	3,986	3,993	4,000	3,981	3,994	3,990	3,986	3,967	3,958	3,971	3,966	3,925	3,938	3,940	3,940	3,923	3,938	3,938	3,936	3,917	
NTS Industrial	136	132	132	132	132	132	132	132	132	132	128	128	128	128	128	128	128	128	128	128	128	128	128
NTS Power Generation	1,240	1,270	1,354	1,370	1,366	1,290	1,312	1,293	1,310	1,070	1,022	1,003	722	541	755	812	640	756	756	687	648	648	
Exports via Moffat	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
Exports via IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total NTS	1,607	1,637	1,748	1,768	1,790	1,744	1,771	1,770	1,786	1,547	1,494	1,476	1,195	1,014	1,227	1,285	1,113	1,228	1,228	1,160	1,121	1,121	
Total	5,637	5,620	5,735	5,761	5,790	5,726	5,765	5,760	5,772	5,514	5,453	5,446	5,161	4,939	5,165	5,225	5,053	5,151	5,166	5,097	5,057	5,038	

Figure A5.1H
Consumer Power: 1 in 20 peak day undiversified demand



Appendix 5 – Gas Demand and Supply Volume Scenarios

Table A5.11
Slow Progression: 1 in 20 peak day diversified demand (GWh/d)

Diversified Peak	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36
0-73.2MWh	2,531	2,468	2,440	2,412	2,378	2,329	2,301	2,269	2,239	2,207	2,217	2,189	2,181	2,173	2,175	2,168	2,160	2,123	2,122	2,126	2,118	2,130
73.2-732MWh	345	342	338	334	331	327	329	325	320	311	307	298	289	280	271	262	253	243	236	229	219	211
NDM > 732MWh	489	486	498	510	515	519	528	532	539	543	548	549	550	552	552	553	554	553	558	562	560	560
Total NDM	3,364	3,295	3,276	3,255	3,223	3,174	3,158	3,126	3,099	3,062	3,071	3,036	3,020	3,005	2,998	2,983	2,966	2,919	2,916	2,916	2,896	2,901
Total DM	461	452	456	457	458	458	460	461	448	446	426	446	445	423	424	424	425	443	444	424	424	385
LDZ Shrinkage	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Total LDZ	3,834	3,756	3,740	3,720	3,690	3,641	3,625	3,595	3,554	3,515	3,505	3,489	3,472	3,436	3,429	3,414	3,398	3,370	3,367	3,347	3,327	3,292
NTS Industrial	75	72	73	74	74	75	75	75	75	74	74	73	73	73	73	74	73	73	73	74	73	73
Exports to Ireland	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
NTS Power Generation	797	738	822	801	970	847	770	774	776	833	889	906	807	853	826	864	783	859	886	866	790	839
NTS Consumption	1,103	1,047	1,158	1,141	1,336	1,245	1,172	1,194	1,196	1,252	1,308	1,325	1,225	1,271	1,245	1,282	1,202	1,277	1,305	1,285	1,208	1,257
NTS Shrinkage	10	9	9	9	9	9	9	9	9	10	10	10	10	9	10	9	10	10	9	9	9	10
Total excluding IUK	4,946	4,812	4,907	4,869	5,035	4,894	4,807	4,798	4,758	4,778	4,823	4,824	4,707	4,716	4,683	4,705	4,609	4,656	4,681	4,641	4,544	4,559
IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total including IUK	4,946	4,812	4,907	4,869	5,035	4,894	4,807	4,798	4,758	4,778	4,823	4,824	4,707	4,716	4,683	4,705	4,609	4,656	4,681	4,641	4,544	4,559
Total Undiversified	5,626	5,530	5,563	5,626	5,617	5,534	5,432	5,424	5,348	5,338	5,363	5,268	5,138	5,086	5,179	5,164	4,978	5,112	5,107	5,034	4,940	4,868
Low power	525	261	327	259	203	173	141	92	61	75	39	39	40	43	40	35	32	32	32	29	28	27
High power	798	942	1,021	1,044	1,259	1,201	1,197	1,156	1,169	1,261	1,314	1,301	1,272	1,279	1,225	1,202	1,173	1,172	1,096	1,095	1,089	1,081
Diversified Total + High Power	4,947	5,016	5,106	5,112	5,324	5,248	5,234	5,180	5,152	5,205	5,248	5,218	5,172	5,142	5,082	5,044	4,999	4,969	4,891	4,870	4,844	4,801
Diversified Total + Low Power	4,674	4,334	4,412	4,327	4,269	4,220	4,178	4,117	4,043	4,020	3,973	3,957	3,940	3,906	3,897	3,877	3,858	3,829	3,827	3,804	3,783	3,748

Figure A5.11
Slow Progression: 1 in 20 peak day diversified demand

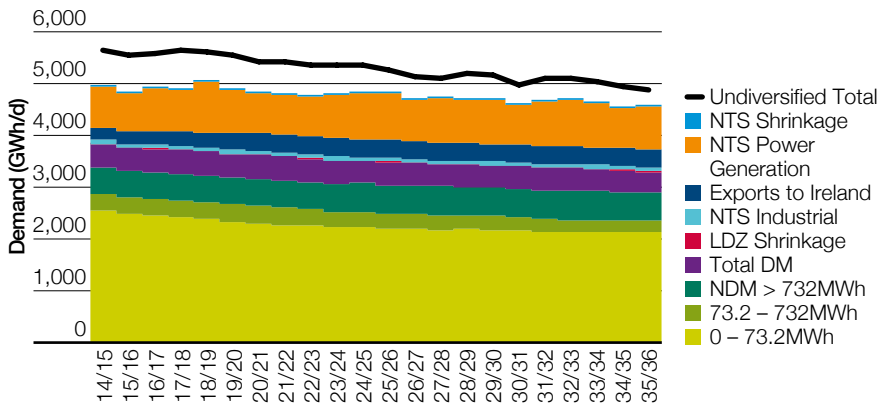
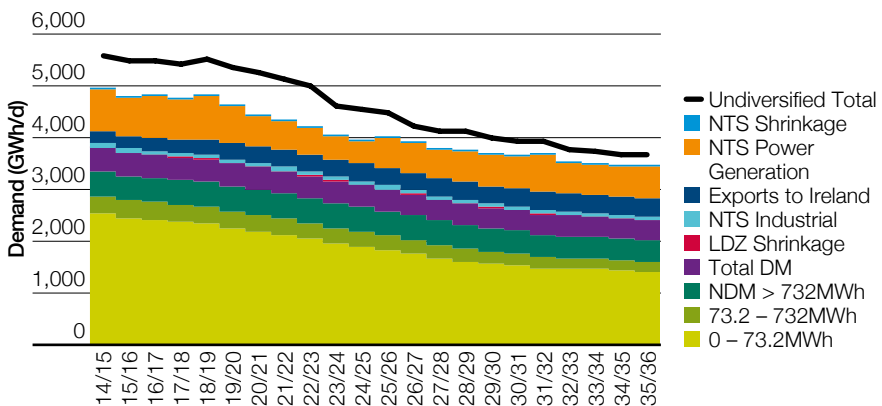


Table A5.1J
Gone Green: 1 in 20 peak day diversified demand (GWh/d)

Diversified Peak	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36
0-73.2MWh	2,527	2,456	2,422	2,382	2,336	2,260	2,197	2,124	2,046	1,959	1,896	1,827	1,755	1,678	1,616	1,569	1,545	1,493	1,470	1,465	1,447	1,427
73.2-732MWh	339	337	332	329	326	321	321	315	308	299	291	279	268	257	243	232	222	208	201	195	188	180
NDM > 732MWh	474	466	459	466	477	477	478	473	481	484	481	474	470	463	453	445	440	426	427	427	428	427
Total NDM	3,340	3,259	3,213	3,176	3,138	3,058	2,996	2,912	2,835	2,742	2,668	2,579	2,492	2,398	2,312	2,246	2,207	2,127	2,098	2,087	2,062	2,034
Total DM	459	445	439	437	441	438	436	437	421	418	415	414	412	389	404	401	382	395	394	375	376	376
LDZ Shrinkage	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Total LDZ	3,807	3,712	3,661	3,621	3,587	3,504	3,441	3,357	3,264	3,167	3,090	3,001	2,912	2,794	2,724	2,654	2,596	2,530	2,498	2,469	2,445	2,416
NTS Industrial	75	73	73	73	74	74	73	73	72	71	71	70	69	69	68	68	68	68	68	68	69	69
Exports to Ireland	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
NTS Power Generation	798	749	783	774	842	694	551	539	510	429	428	569	550	540	590	589	613	717	596	603	580	595
NTS Consumption	1,104	1,058	1,119	1,114	1,208	1,091	953	957	927	846	844	984	964	953	1,003	1,002	1,026	1,130	1,010	1,017	994	1,009
NTS Shrinkage	10	9	9	9	9	9	9	9	9	10	10	10	10	9	10	9	10	10	9	9	9	10
Total excluding IUK	4,921	4,779	4,789	4,743	4,804	4,604	4,402	4,323	4,200	4,022	3,943	3,995	3,886	3,756	3,736	3,665	3,631	3,669	3,517	3,495	3,448	3,435
IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total including IUK	4,921	4,779	4,789	4,743	4,804	4,604	4,402	4,323	4,200	4,022	3,943	3,995	3,886	3,756	3,736	3,665	3,631	3,669	3,517	3,495	3,448	3,435
Total Undiversified	5,554	5,481	5,478	5,411	5,485	5,342	5,240	5,111	4,981	4,610	4,531	4,464	4,217	4,103	4,102	3,983	3,920	3,909	3,766	3,718	3,679	3,650
Low power	525	283	319	236	174	112	72	53	37	30	24	25	25	25	24	25	26	28	29	29	27	26
High power	800	941	1,022	1,070	1,261	1,174	1,063	1,062	1,041	1,069	1,099	1,131	1,167	1,175	1,200	1,120	1,019	1,020	872	865	851	822
Diversified Total + High Power	4,924	4,971	5,029	5,039	5,223	5,084	4,914	4,845	4,731	4,662	4,614	4,556	4,503	4,392	4,346	4,197	4,037	3,972	3,793	3,757	3,719	3,661
Diversified Total + Low Power	4,648	4,313	4,326	4,205	4,136	4,021	3,923	3,836	3,728	3,623	3,539	3,450	3,360	3,242	3,171	3,101	3,045	2,980	2,950	2,921	2,895	2,866

Figure A5.1J
Gone Green: 1 in 20 peak day diversified demand

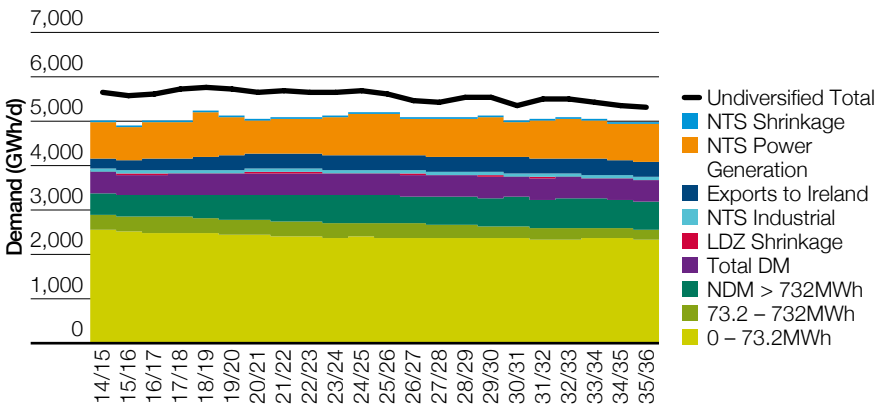


Appendix 5 – Gas Demand and Supply Volume Scenarios

Table A5.1K
 No Progression: 1 in 20 peak day diversified demand (GWh/d)

Diversified Peak	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36
0-73.2MWh	2,545	2,502	2,495	2,488	2,471	2,440	2,427	2,413	2,404	2,384	2,389	2,383	2,381	2,377	2,371	2,370	2,379	2,346	2,349	2,359	2,355	2,337
73.2-732MWh	349	350	350	348	347	345	348	345	340	332	326	317	308	299	288	277	269	258	251	243	232	222
NDM > 732MWh	492	487	494	509	535	556	580	595	604	611	618	622	626	630	632	633	637	637	645	650	651	648
Total NDM	3,386	3,339	3,338	3,345	3,353	3,341	3,356	3,352	3,348	3,327	3,333	3,322	3,315	3,306	3,291	3,280	3,284	3,241	3,245	3,251	3,238	3,207
Total DM	465	459	461	463	471	478	484	486	486	484	484	484	485	463	484	484	465	484	485	465	466	466
LDZ Shrinkage	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Total LDZ	3,860	3,807	3,807	3,816	3,832	3,827	3,847	3,846	3,842	3,818	3,824	3,814	3,806	3,776	3,782	3,771	3,756	3,732	3,738	3,724	3,711	3,680
NTS Industrial	79	79	80	81	82	83	82	82	81	80	80	79	79	78	78	78	78	77	77	77	77	77
Exports to Ireland	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
NTS Power Generation	795	738	828	815	982	853	774	785	794	849	904	916	819	870	849	880	793	865	889	868	796	845
NTS Consumption	1,105	1,053	1,171	1,162	1,357	1,259	1,184	1,211	1,220	1,274	1,329	1,340	1,243	1,293	1,271	1,303	1,216	1,287	1,312	1,290	1,218	1,267
NTS Shrinkage	10	9	9	9	9	9	9	9	9	10	10	10	10	9	10	9	10	10	9	9	9	10
Total excluding IUK	4,974	4,869	4,988	4,987	5,198	5,095	5,040	5,067	5,071	5,102	5,162	5,163	5,059	5,078	5,063	5,083	4,982	5,029	5,058	5,023	4,938	4,956
IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total including IUK	4,974	4,869	4,988	4,987	5,198	5,095	5,040	5,067	5,071	5,102	5,162	5,163	5,059	5,078	5,063	5,083	4,982	5,029	5,058	5,023	4,938	4,956
Total Undiversified	5,652	5,578	5,629	5,722	5,760	5,723	5,659	5,681	5,640	5,645	5,703	5,599	5,479	5,433	5,555	5,545	5,346	5,484	5,487	5,419	5,333	5,302
Low power	525	292	367	288	284	246	195	186	193	195	229	190	165	182	166	170	140	126	127	130	136	132
High power	797	920	1,028	1,055	1,293	1,269	1,176	1,233	1,240	1,312	1,461	1,472	1,473	1,551	1,531	1,519	1,501	1,512	1,524	1,533	1,531	1,523
Diversified Total + High Power	4,976	5,051	5,189	5,227	5,509	5,510	5,443	5,515	5,517	5,564	5,719	5,719	5,712	5,759	5,746	5,722	5,690	5,676	5,693	5,688	5,673	5,634
Diversified Total + Low Power	4,704	4,423	4,527	4,460	4,499	4,487	4,462	4,468	4,469	4,448	4,487	4,437	4,405	4,391	4,381	4,372	4,328	4,290	4,296	4,285	4,279	4,244

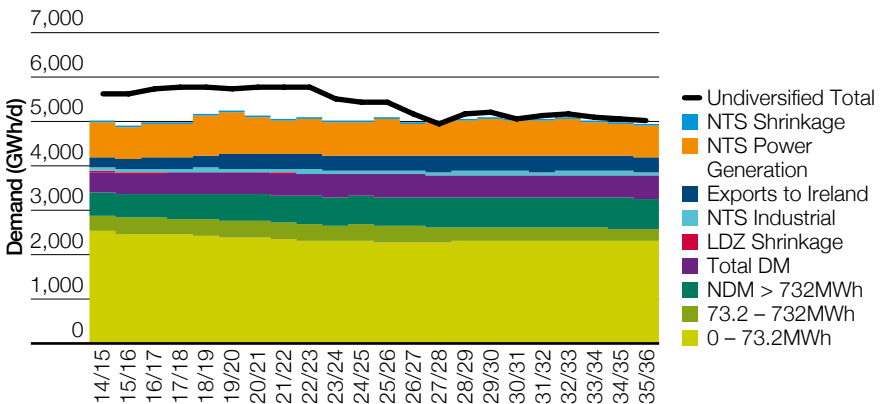
Figure A5.1K
 No Progression: 1 in 20 peak day diversified demand



*Table A5.1L
Consumer Power: 1 in 20 peak day diversified demand (GWh/d)*

Diversified Peak	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36
0-73.2MWh	2,540	2,488	2,474	2,456	2,439	2,402	2,383	2,356	2,338	2,313	2,326	2,305	2,299	2,298	2,310	2,311	2,313	2,307	2,317	2,326	2,328	2,319
73.2-732MWh	358	365	368	370	371	373	377	375	373	367	365	356	349	340	332	323	314	303	296	286	276	265
NDM > 732MWh	512	514	526	548	568	584	601	612	622	632	645	649	657	661	669	674	679	680	690	691	696	696
Total NDM	3,409	3,367	3,367	3,374	3,378	3,359	3,361	3,343	3,333	3,313	3,336	3,310	3,305	3,299	3,311	3,309	3,306	3,289	3,304	3,303	3,299	3,280
Total DM	473	470	474	478	486	492	498	499	499	498	481	502	505	484	488	490	492	492	494	495	497	496
LDZ Shrinkage	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Total LDZ	3,891	3,845	3,849	3,860	3,872	3,859	3,867	3,850	3,839	3,818	3,824	3,820	3,817	3,791	3,805	3,806	3,805	3,788	3,805	3,805	3,803	3,783
NTS Industrial	81	83	85	85	86	86	87	88	88	87	88	87	87	87	87	88	88	88	88	88	88	88
Exports to Ireland	231	236	263	266	292	323	328	345	345	345	345	345	345	345	345	345	345	345	345	345	345	345
NTS Power Generation	798	726	759	742	904	931	824	745	806	758	731	796	703	760	782	827	786	797	834	745	707	697
NTS Consumption	1,109	1,045	1,107	1,093	1,282	1,341	1,239	1,178	1,239	1,190	1,164	1,228	1,135	1,192	1,215	1,260	1,219	1,230	1,267	1,178	1,140	1,130
NTS Shrinkage	10	9	9	9	9	9	9	9	9	10	10	10	10	9	10	9	10	10	9	9	9	10
Total excluding IUK	5,009	4,900	4,965	4,962	5,163	5,208	5,115	5,037	5,087	5,018	4,997	5,058	4,962	4,992	5,030	5,076	5,034	5,027	5,082	4,992	4,953	4,923
IUK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total including IUK	5,009	4,900	4,965	4,962	5,163	5,208	5,115	5,037	5,087	5,018	4,997	5,058	4,962	4,992	5,030	5,076	5,034	5,027	5,082	4,992	4,953	4,923
Total Undiversified	5,637	5,620	5,735	5,761	5,790	5,726	5,765	5,760	5,772	5,514	5,453	5,446	5,161	4,939	5,165	5,225	5,053	5,151	5,166	5,097	5,057	5,038
Low power	525	265	294	200	205	110	123	92	90	77	58	53	48	47	47	52	56	62	67	57	56	55
High power	799	942	1,005	1,031	1,283	1,211	1,192	1,191	1,270	1,193	1,288	1,240	1,300	1,309	1,274	1,257	1,127	1,090	1,089	1,017	1,008	1,000
Diversified Total + High Power	5,011	5,115	5,211	5,251	5,542	5,488	5,483	5,483	5,551	5,453	5,554	5,502	5,559	5,541	5,522	5,505	5,375	5,321	5,336	5,264	5,253	5,227
Diversified Total + Low Power	4,737	4,438	4,500	4,420	4,465	4,387	4,414	4,384	4,371	4,337	4,324	4,315	4,308	4,279	4,295	4,300	4,304	4,293	4,314	4,304	4,301	4,281

*Figure A5.1L
Consumer Power: 1 in 20 peak day diversified demand*



Appendix 5 – Gas Demand and Supply Volume Scenarios

Figure AS.1M
2015/16 Load curve – Slow Progression

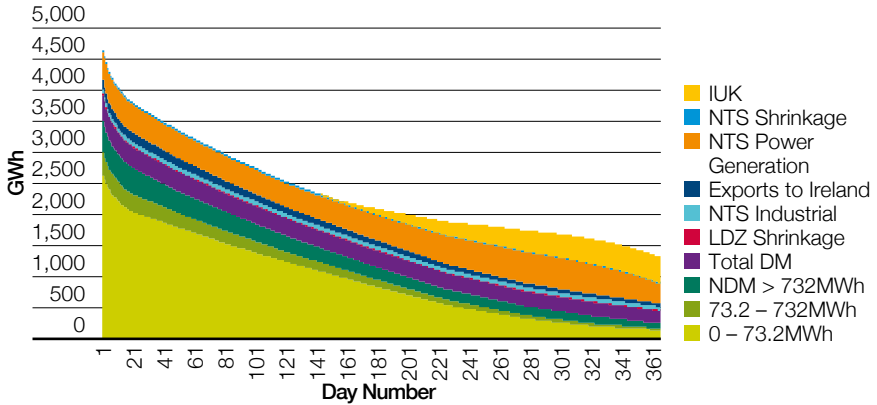


Figure AS.1N
2015/16 Load curve – Gone Green

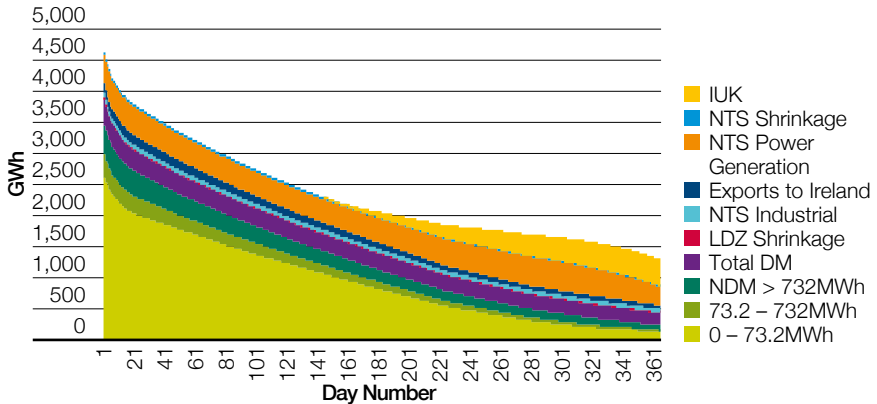


Figure A5.10
2015/16 Load curve – No Progression

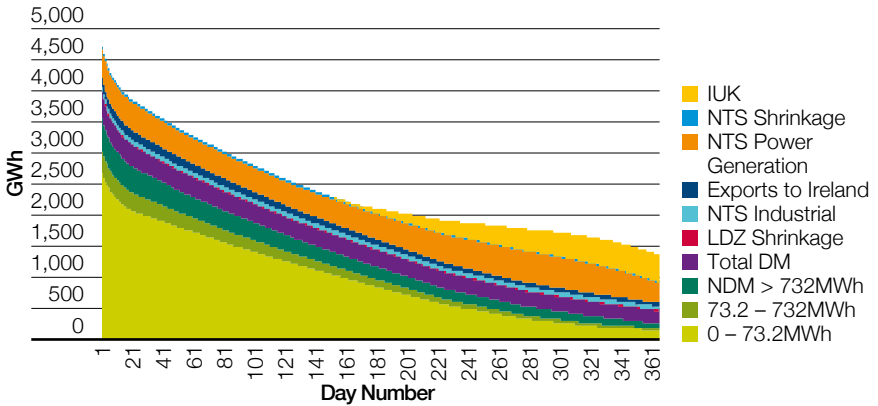
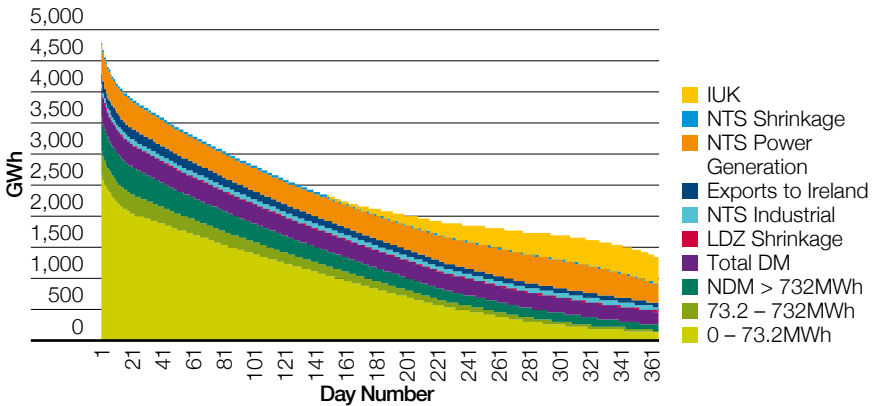


Figure A5.1P
2015/16 Load curve – Consumer Power



Appendix 5 – Gas Demand and Supply Volume Scenarios

Figure AS.1Q
2025/26 Load curve – Slow Progression

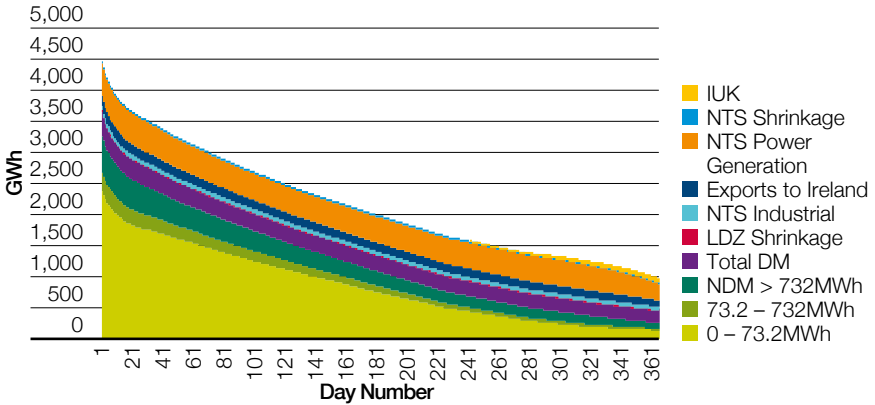


Figure AS.1R
2025/26 Load curve – Gone Green

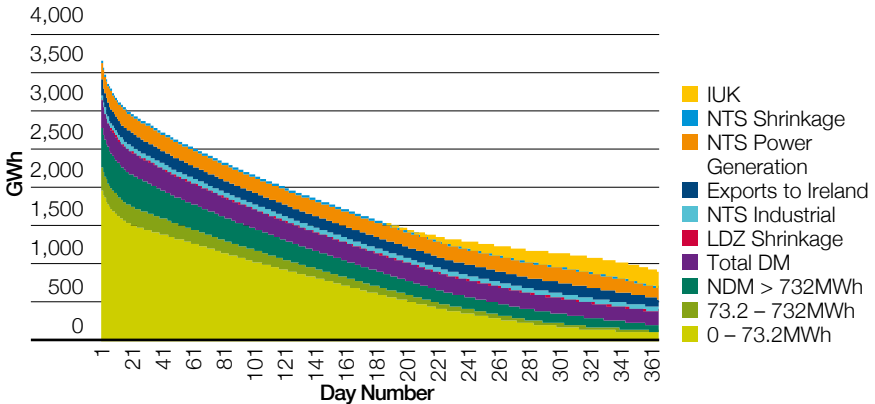


Figure AS.1S
2025/26 Load curve – No Progression

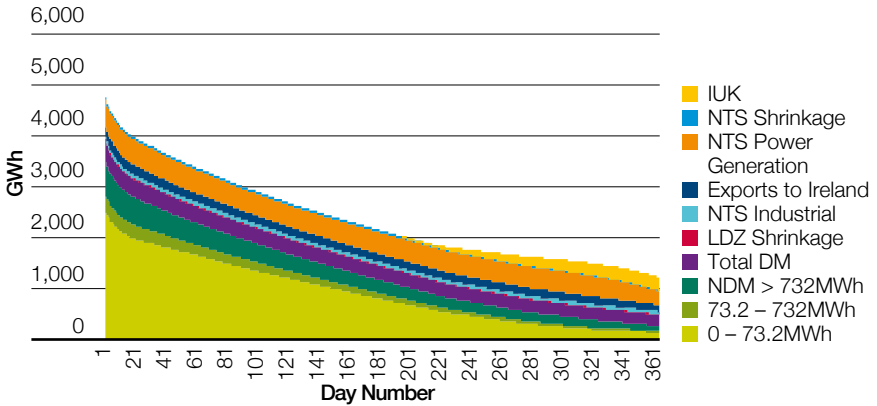
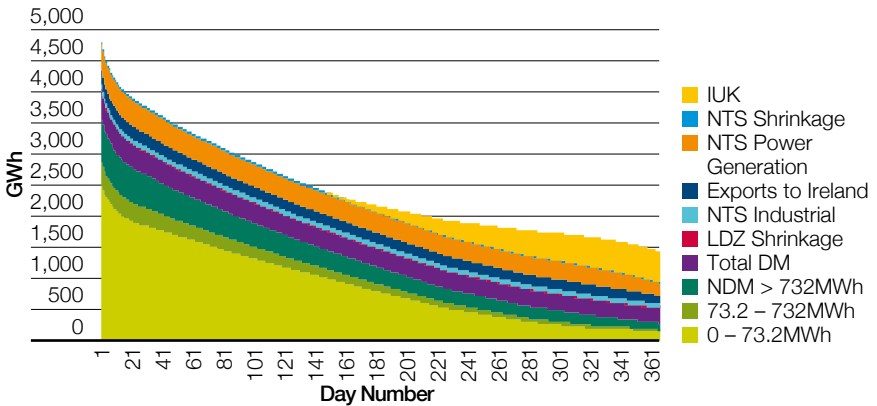


Figure AS.1T
2025/26 Load curve – Consumer Power



Appendix 5 – Gas Demand and Supply Volume Scenarios

Figure AS.1U
2030/31 Load curve – Slow Progression

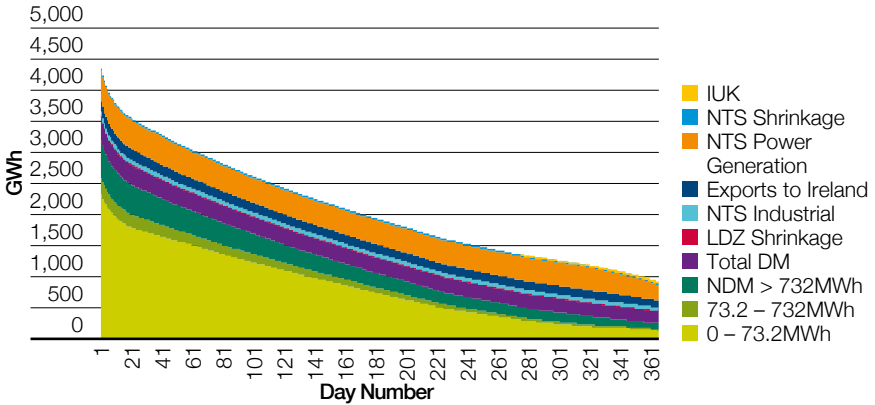


Figure AS.1V
2030/31 Load curve – Gone Green

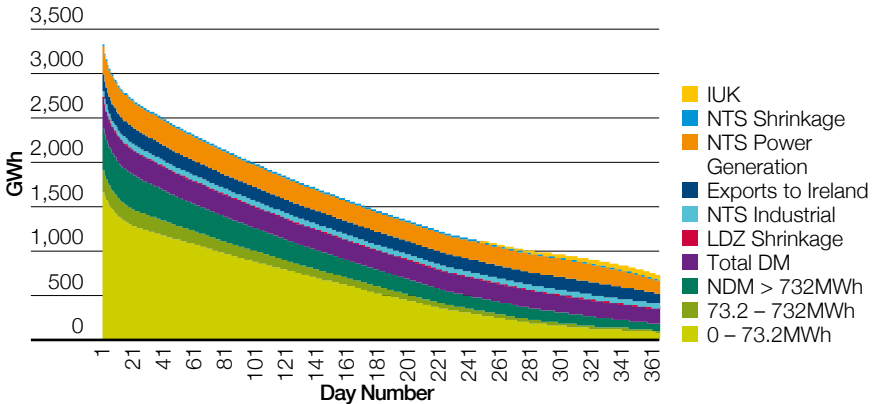


Figure AS.1W
2030/31 Load curve – No Progression

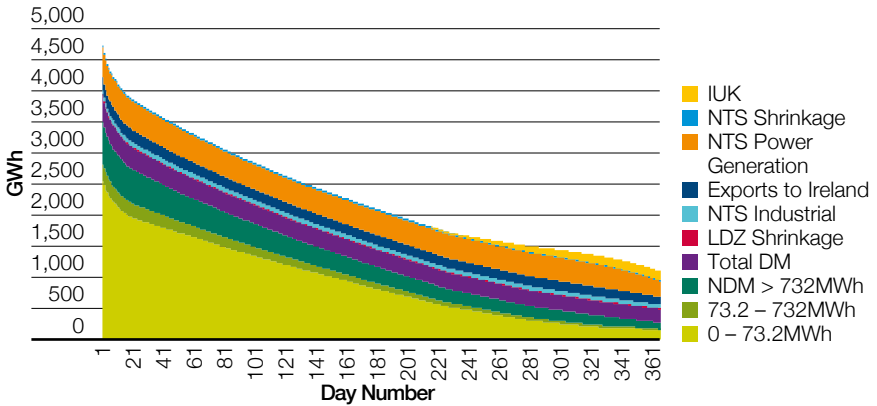
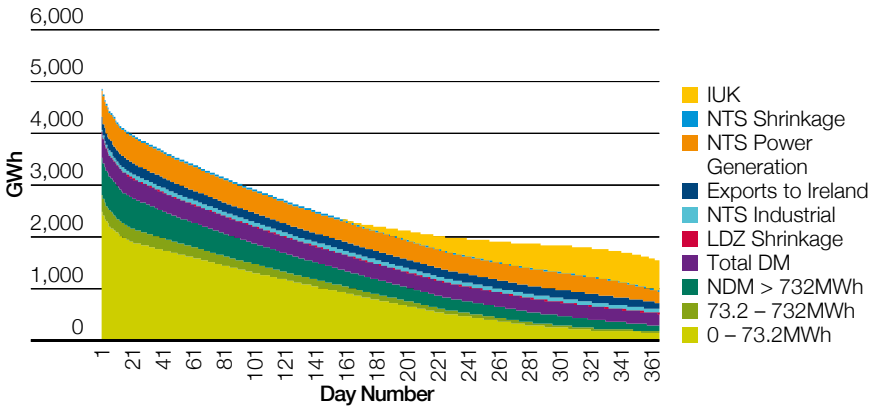


Figure AS.1X
2030/31 Load curve – Consumer Power



Appendix 5 – Gas Demand and Supply Volume Scenarios

5.2 Supply

Figure A5.2A
Peak Bacton scenarios (mcm/d)

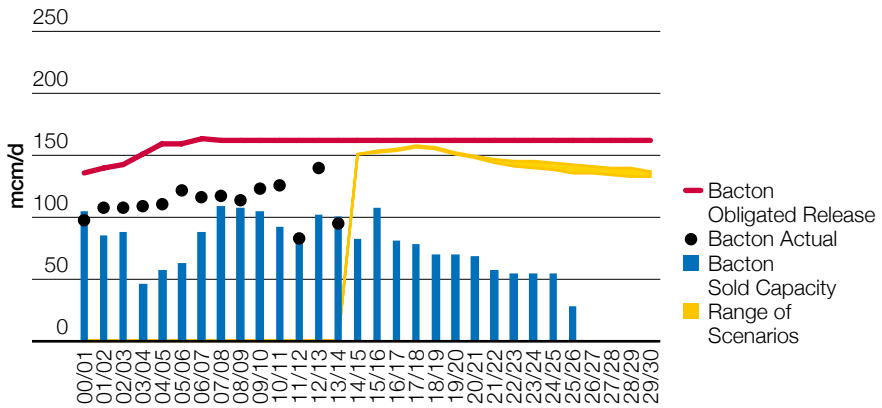


Figure A5.2B
Peak Barrow scenarios (mcm/d)

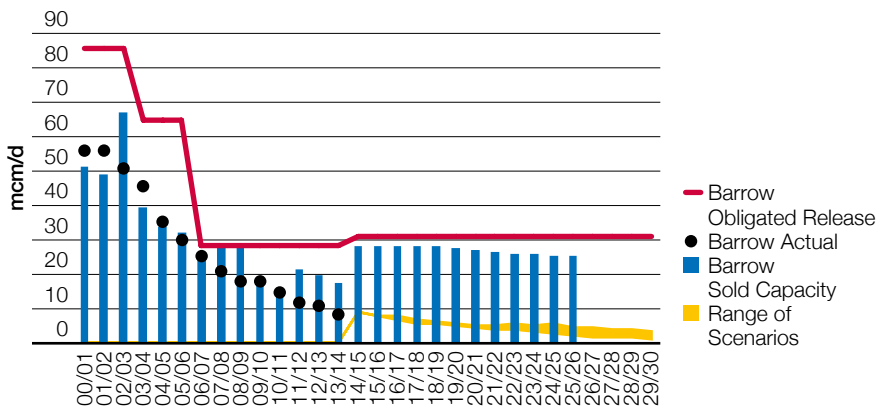


Figure A5.2C
Peak Easington scenarios (mcm/d)

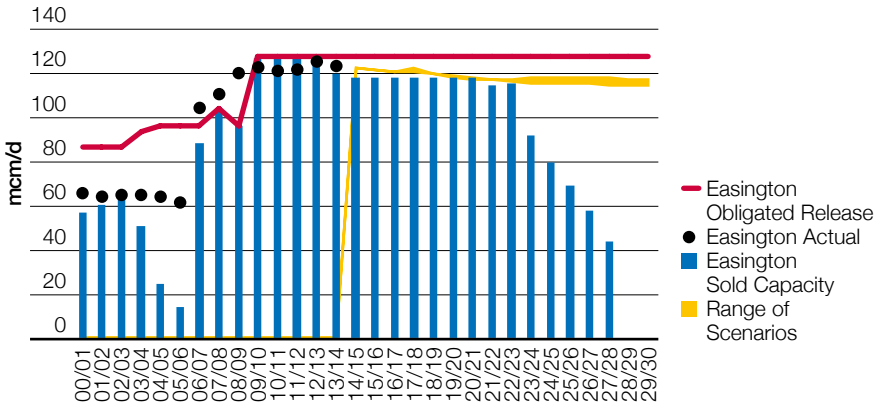
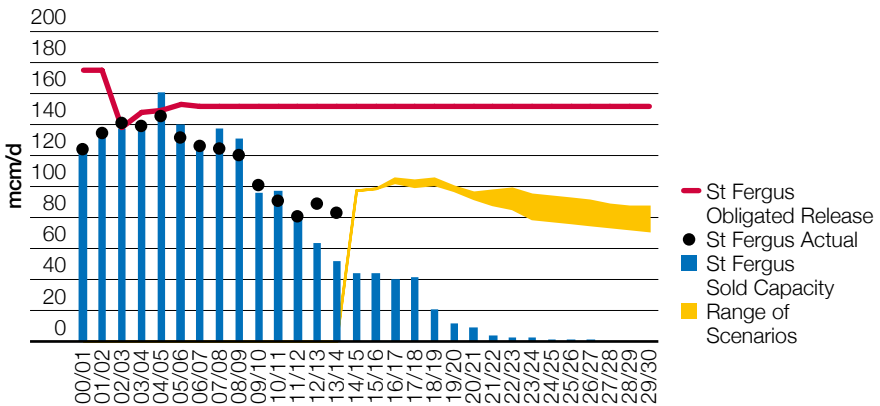


Figure A5.2D
Peak St. Fergus scenarios (mcm/d)



Appendix 5 – Gas Demand and Supply Volume Scenarios

Figure A5.2E
Peak Teesside scenarios (mcm/d)

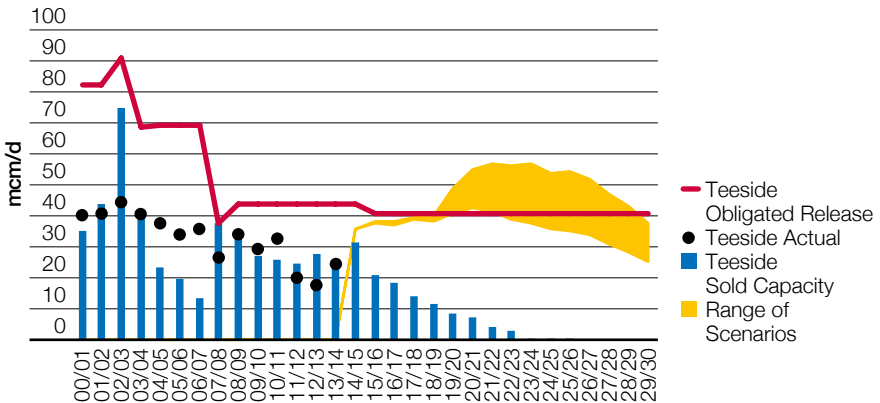


Figure A5.2F
Peak Theddlethorpe scenarios (mcm/d)

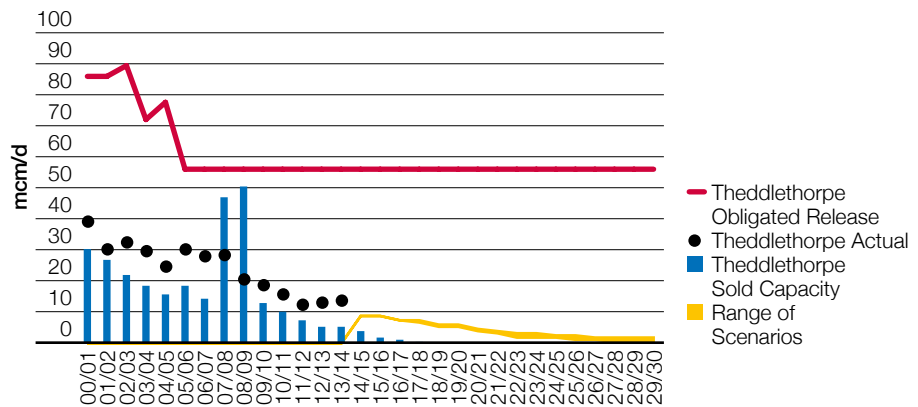


Figure A5.2G
Peak Grain LNG scenarios (mcm/d)

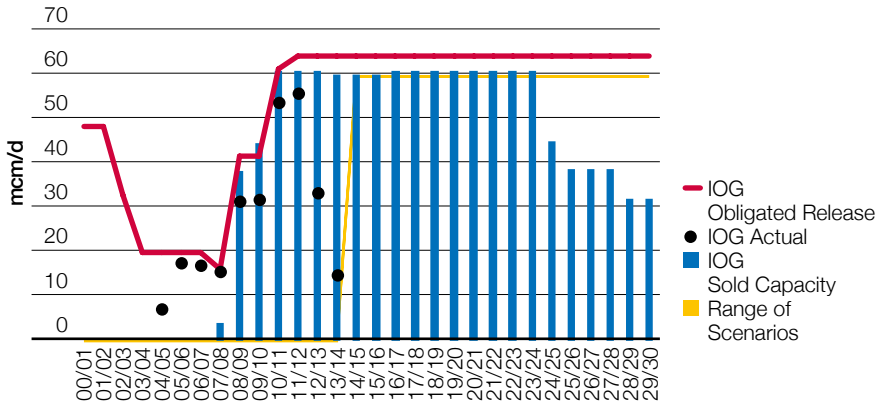
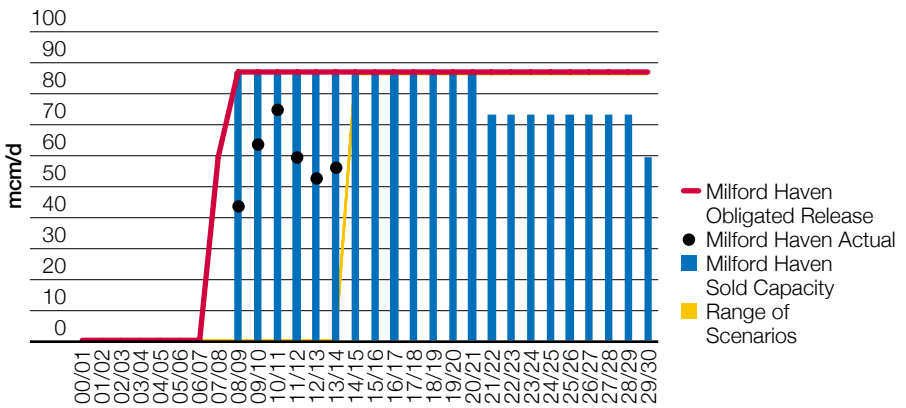


Figure A5.2H
Peak Milford haven scenarios (mcm/d)



Appendix 5 – Gas Demand and Supply Volume Scenarios

Figure A5.2I
Annual supply by terminal. Gone Green high continent/low LNG case

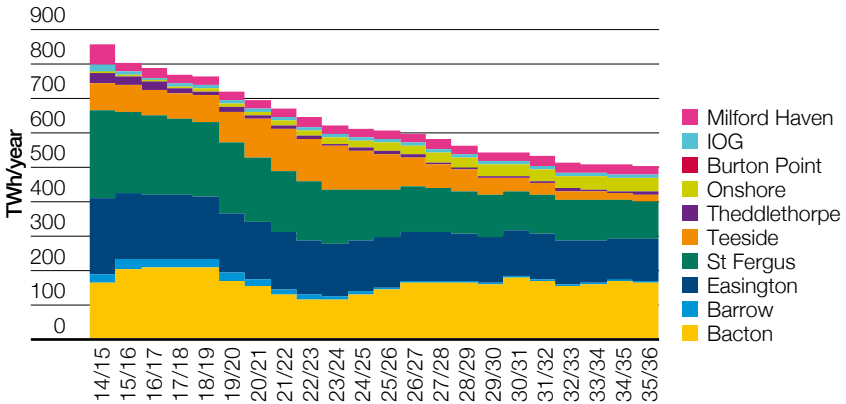


Figure A5.2J
Annual supply by terminal. Gone Green low continent/high LNG case

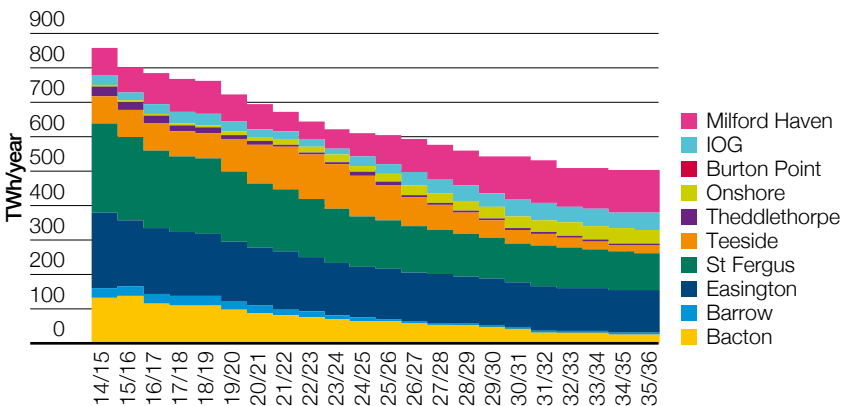


Figure A5.2K
Peak supply by terminal. Gone Green

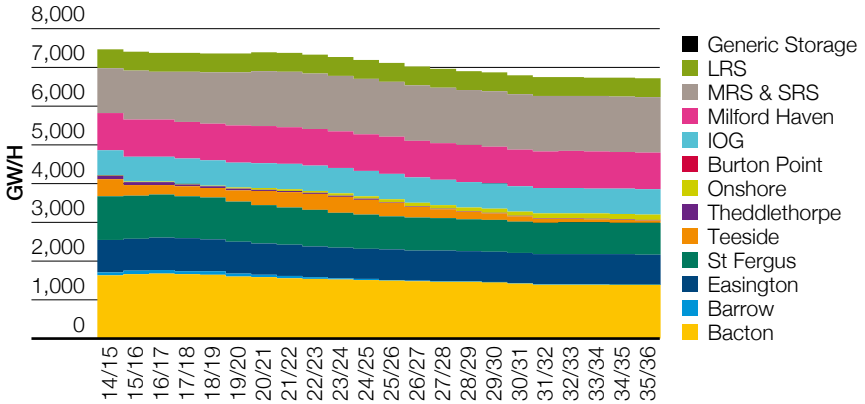
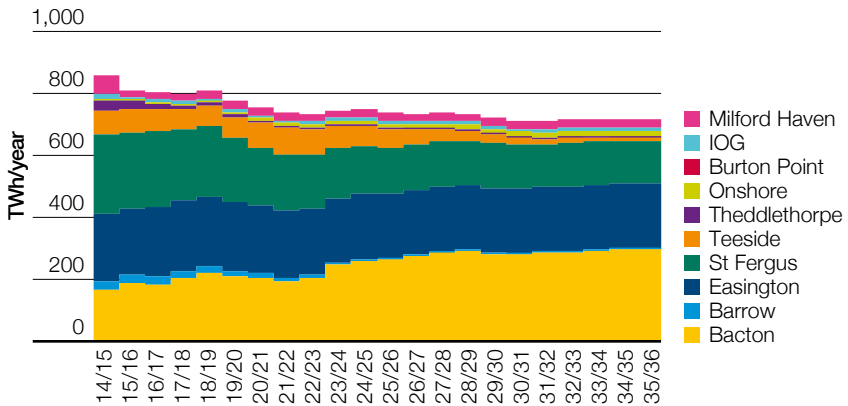


Figure A5.2L
Annual supply by terminal. Slow Progression high continent/low LNG case



Appendix 5 – Gas Demand and Supply Volume Scenarios

Figure A5.2M
Annual supply by terminal. Gone Green high continent/low LNG case

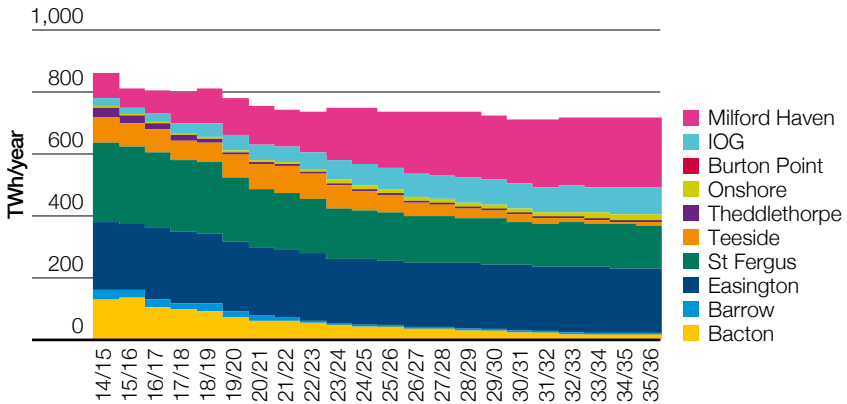


Figure A5.2N
Peak supply by terminal. Slow Progression

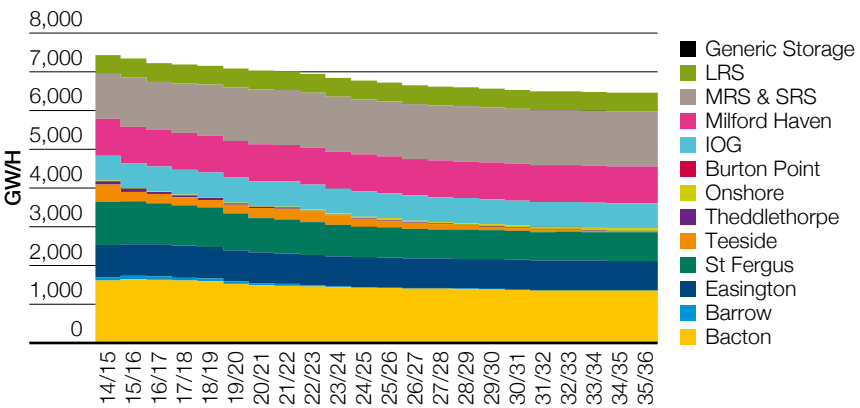


Figure A5.2O
Annual supply by terminal. No Progression high continent/low LNG case

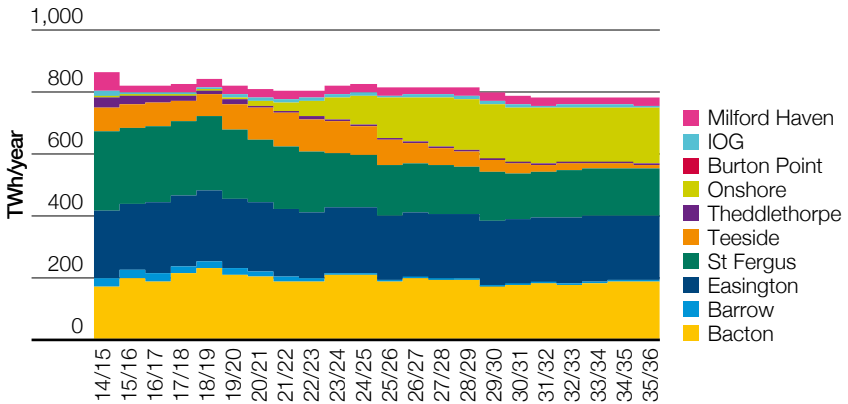
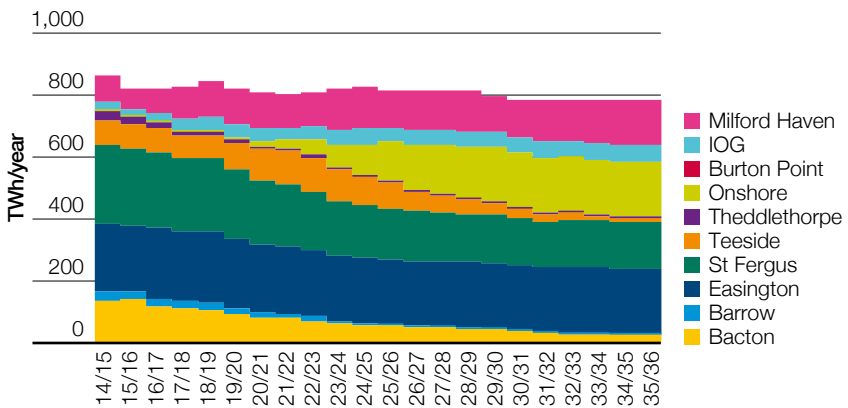


Figure A5.2P
Annual supply by terminal. No Progression low continent/high LNG case



Appendix 5 – Gas Demand and Supply Volume Scenarios

Figure A5.2Q
Peak supply by terminal. No Progression

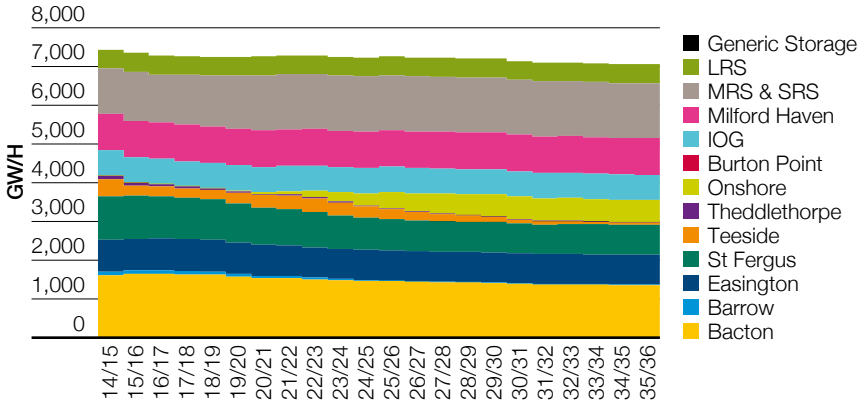


Figure A5.2R
Annual supply by terminal. Consumer Power high continent/low LNG case

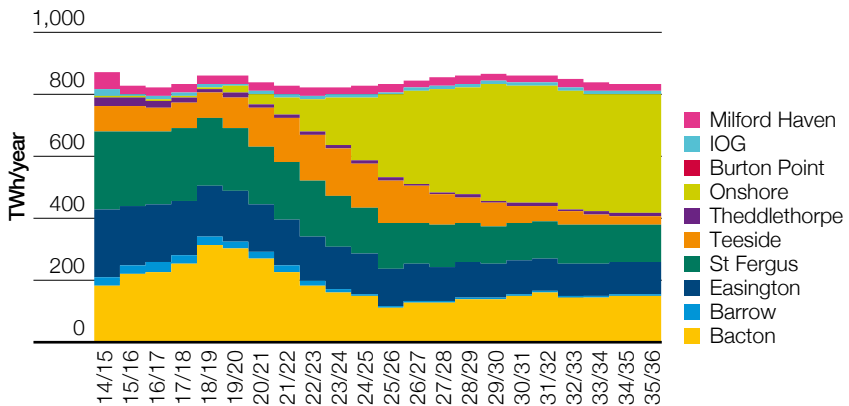


Figure A5.2S
Annual supply by terminal. Consumer Power low continent/high LNG case

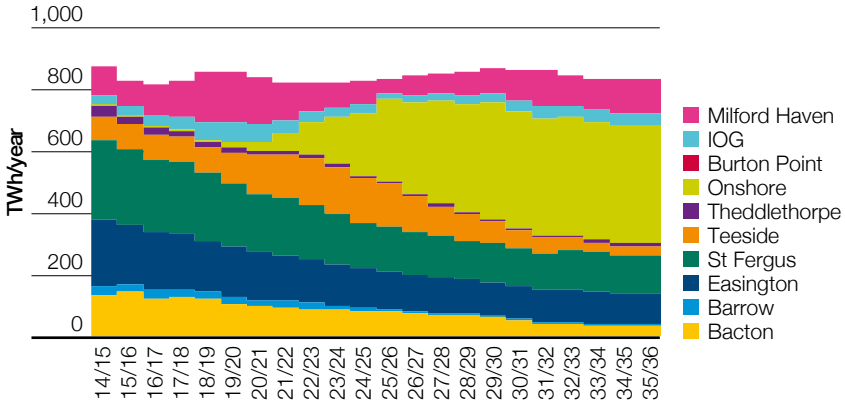
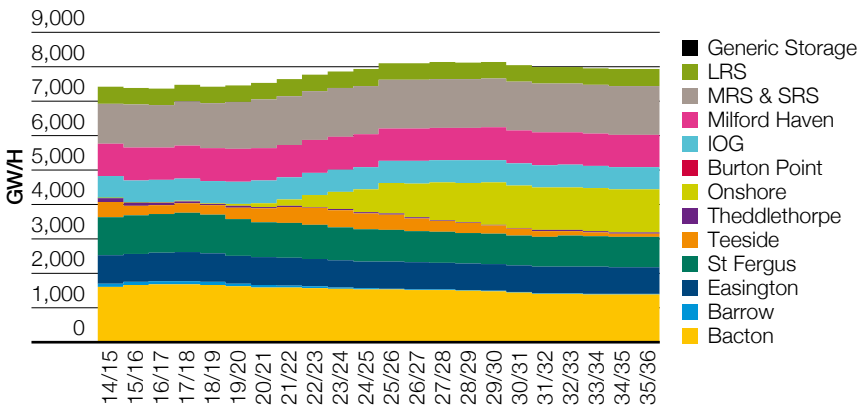


Figure A5.2T
Peak supply by terminal. Consumer Power



Appendix 5 – Gas Demand and Supply Volume Scenarios

5.3 UK Importation Projects

While there are proposals for further import projects, currently no importation projects are under construction. The UK's import capacity is currently around 152 bcm/y, this is split into three near equal sources: the Continent (46 bcm/y), Norway (56 bcm/y) and LNG (49 bcm/y). The UK is served through a diverse set of import routes from Norway, Holland, Belgium and from other international sources through the LNG importation terminals.

Table A5.3A shows existing UK import infrastructure and Table A5.3B shows proposals for further import projects.

*Table A5.3A
Existing UK import infrastructure*

Project	Operator/Developer	Type	Location	Capacity (bcm/y)
Interconnector	IUK	Pipeline	Bacton	26.9
BBL Pipeline	BBL Company	Pipeline	Bacton	19.5
Isle of Grain 1-3	National Grid	LNG	Kent	20.4
South Hook 1-2	Qatar Petroleum and ExxonMobil	LNG	Milford Haven	21
Dragon 1	Bg Group/Petronas	LNG	Milford Haven	7.6
Langeled	Gassco	Pipeline	Easington	26.3
Vesterled	Gassco	Pipeline	St Fergus	14.2
Tampen	Gassco	Pipeline	St Fergus	9.8
Gjoa	Gassco	Pipeline	St Fergus	6.2
Total				152

Source: National Grid

Table A5.3B
Proposed UK import projects¹

Project	Operator/ Developer	Type	Location	Start-up	Capacity (bcm/y)	Status
Isle of Grain 4	National Grid	LNG	Kent	~	~	Open Season
Norsea LNG	ConocoPhillips	LNG	Teeside	~	~	Planning Granted, no FID. Currently on Hold
Port Meridian	Port Meridian Energy	LNG	Barrow, Cumbria	~	5	Open Season
Amlwch	Halite Energy	LNG	Anglesey	~	~30	Approved
				Total		

Source: National Grid

Please note: Tables A5.3A and A5.3B represent the latest information available to National Grid at time of going to press. Developers are welcome to contact us to add or revise this data.

¹ This list is in no way exhaustive; other import projects have at times been detailed in the press.

Appendix 5 – Gas Demand and Supply Volume Scenarios

5.4 UK Storage Projects

In the last 12 months no proposals have attained a Final Investment Decision for subsequent construction. The following

tables detail UK storage in terms of existing storage sites, those under construction and proposed sites.

*Table A5.4A
Existing UK storage*

Project	Operator/Developer	Location	Space (bcm)	Approximate max delivery (mcm/d)	Injection (mcm/d)
Rough	Centrica Storage	Southern North Sea	3.1	44.7	28
Aldborough	SSE/Statoil	East Yorkshire	0.3	40	19.7
Hatfield Moor	Scottish Power	South Yorkshire	0.07	2	1.9
Holehouse Farm	EDF Trading	Cheshire	0.05	11	10.8
Holford	E.ON	Cheshire	0.2	22	22.1
Hornsea	SSE	East Yorkshire	0.3	18	2
Humbly Grove	Humbly Grove Energy	Hampshire	0.3	7	8.2
Avonmouth	National Grid LNGS	Avon and Somerset	0.08	13	0
Hill Top Farm	EDF Energy	Cheshire	0.02	2.1	5.5
Stublach	Storenergy	Cheshire	0.2	15	29.7
		Total	4.6	175	127.9

Source: National Grid

Note, due to operational considerations, the space and deliverability may not be fully consistent with that used for operational planning as reported in our 2015/16 Winter Outlook Report.

Over the last few years, a number of projects have been put on hold or cancelled. These include Aldborough 2, Baird, Caythorpe, Gateway and Portland. Table A5.4B shows other storage site.

*Table A5.4B
Proposed storage²*

Project	Operator/Developer	Location	Space (bcm)	Approximate max delivery (mcm/d)
Deborah	Eni	Offshore Bacton	4.6	Planning granted, no FID
Islandmagee	InfrasStrata	County Antrim, Northern Ireland	0.5	Planning granted, no FID
King Street	King Street Energy	Cheshire	0.3	Planning granted, no FID
Preesail	Halite Energy	Lancashire	0.6	Planning granted, no FID
Saltfleetby	Wingaz	Lincolnshire	0.8	Planning granted, no FID
Whitehill	E.ON	East Yorkshire	0.4	Planning granted, no FID
		Total	7.2	

Source: National Grid

Please note: Tables A5.4A and A5.4B represent the latest information available to National Grid at the time of going to press. Developers are welcome to contact us to add or revise this data.

²This list is in no way exhaustive; other storage projects at times have been detailed in the press.