

**APPENDIX 4.1****DESIGN FLOW REQUIREMENTS**

The following tables present both the winter and summer design flow requirements for each NGTL design area. The values are derived, as discussed in Chapters 2 and 4, through application of the mainline design assumptions to the June 2006 design forecast.

Design flow requirements, described as Area Design Flow Requirements in the tables, are calculated by subtracting the Area Minimum Deliveries and area fuel (not shown) from the Area Required Receipts. In some areas, Flow Into Area is added to the Area Required Receipts and represents the flow from other design areas. Area Minimum Deliveries are determined based on the design flow assumption discussed in Section 2.6.

Area FS Productive Capability represents the sum of the FS productive capability at each Receipt Point in the design area. The Area Required Receipts are determined through application of the design area delivery, equal prorationing and FS productive capability assumptions.

Area Peak Productive Capability represents the expected coincidental peak receipts received from all receipt points with the design area as described in Section 2.6.2. The Area Peak Receipts are determined through application of the design area delivery and equal prorationing assumptions against the assessed peak productive capability on the Alberta System.

The design flow requirements may differ from the flow schematics shown in Appendix 5. This is because the detailed flow schematic information is taken directly from the hydraulic simulations whereas design flow requirements are estimated for the entire design area.

**Design Flow Requirements**

**Upper Peace River Design Sub Area**

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	23792	23272	22638	24655	26987
Flow Into Area	0	0	0	0	0
Area Required Receipts	19746	18780	18505	20863	22883
Area Deliveries	-13	-13	-13	-13	-13
Area Design Flow Req'mts	19480	18526	18255	20583	22577

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	844	826	803	875	958
Flow Into Area	0	0	0	0	0
Area Required Receipts	701	667	657	741	812
Area Deliveries	0	0	0	0	0
Area Design Flow Req'mts	691	658	648	731	801

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	23792	23272	22638	24655	26987
Flow Into Area	0	0	0	0	0
Area Required Receipts	22450	20713	20842	22765	25485
Area Deliveries	-11	-11	-11	-11	-11
Area Design Flow Req'mts	22151	20436	20564	22462	25147

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	844	826	803	875	958
Flow Into Area	0	0	0	0	0
Area Required Receipts	797	735	740	808	905
Area Deliveries	0	0	0	0	0
Area Design Flow Req'mts	786	725	730	797	893

**Design Flow Requirements**

**Central Peace River Design Sub Area**

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	16830	16824	17112	19575	21691
Flow Into Area	19480	18526	18255	20583	-7424
Area Required Receipts	13933	13553	14001	16565	18398
Area Deliveries	-257	-257	-260	-260	-260
Area Design Flow Req'mts	32976	31648	31816	36675	10478

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	597	597	607	695	770
Flow Into Area	691	658	648	731	-263
Area Required Receipts	495	481	497	588	653
Area Deliveries	-9	-9	-9	-9	-9
Area Design Flow Req'mts	1170	1123	1129	1302	372

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	16830	16824	17112	19575	21691
Flow Into Area	22151	20436	20563	-7538	-4853
Area Required Receipts	15869	14961	15760	18075	20485
Area Deliveries	-89	-90	-90	-90	-92
Area Design Flow Req'mts	37727	35115	36032	10214	15277

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	597	597	607	695	770
Flow Into Area	786	725	730	-268	-172
Area Required Receipts	563	531	559	642	727
Area Deliveries	-3	-3	-3	-3	-3
Area Design Flow Req'mts	1339	1246	1279	363	542

## Design Flow Requirements

### Lower Peace River Design Sub Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	65693	68662	67471	58359	54863
Flow Into Area	32976	31648	31816	36675	10478
Area Required Receipts	54276	55101	54951	49260	46433
Area Deliveries	-493	-499	-505	-510	-518
Area Design Flow Req'mts	86063	85542	85556	84792	55797

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	2332	2437	2395	2071	1947
Flow Into Area	1170	1123	1129	1302	372
Area Required Receipts	1926	1956	1950	1748	1648
Area Deliveries	-18	-18	-18	-18	-18
Area Design Flow Req'mts	3055	3036	3037	3010	1980

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	65693	68662	67471	58359	54863
Flow Into Area	37727	35115	36032	10214	15277
Area Required Receipts	61906	60936	62030	53823	51776
Area Deliveries	-267	-268	-268	-268	-269
Area Design Flow Req'mts	98571	95002	96998	63078	66120

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	2332	2437	2395	2071	1947
Flow Into Area	1339	1246	1279	363	542
Area Required Receipts	2197	2163	2202	1910	1838
Area Deliveries	-9	-10	-10	-10	-10
Area Design Flow Req'mts	3499	3372	3443	2239	2347

## Design Flow Requirements

### Marten Hills Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	7071	8607	8334	7435	6918
Flow Into Area	0	0	0	0	0
Area Required Receipts	5819	6874	6757	6253	5835
Area Deliveries	-176	-176	-177	-177	-183
Area Design Flow Req'mts	5569	6609	6494	5996	5577

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	251	305	296	264	246
Flow Into Area	0	0	0	0	0
Area Required Receipts	207	244	240	222	207
Area Deliveries	-6	-6	-6	-6	-6
Area Design Flow Req'mts	198	235	230	213	198

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	7071	8607	8334	7435	6918
Flow Into Area	0	0	0	0	0
Area Required Receipts	6656	7619	7648	6846	6521
Area Deliveries	-58	-58	-58	-58	-59
Area Design Flow Req'mts	6513	7464	7492	6699	6379

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	251	305	296	264	246
Flow Into Area	0	0	0	0	0
Area Required Receipts	236	270	271	243	231
Area Deliveries	-2	-2	-2	-2	-2
Area Design Flow Req'mts	231	265	266	238	226

**Design Flow Requirements**

North of Bens Lake Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	21827	20755	18805	17739	17011
Flow Into Area	4000	4000	4000	4000	34000
Area Required Receipts	17600	16115	14616	13834	12968
Area Deliveries	-26500	-28336	-32645	-33378	-35563
Area Design Flow Req'mts	-5126	-8428	-14217	-15722	11239

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	775	737	667	630	604
Flow Into Area	142	142	142	142	1207
Area Required Receipts	625	572	519	491	460
Area Deliveries	-941	-1006	-1159	-1185	-1262
Area Design Flow Req'mts	-182	-299	-505	-558	399

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	21827	20755	18805	17739	17011
Flow Into Area	4000	4000	4000	34000	34000
Area Required Receipts	18859	16187	15018	13799	13129
Area Deliveries	-21533	-24578	-28160	-28841	-31073
Area Design Flow Req'mts	1084	-4598	-9334	18780	15887

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	775	737	667	630	604
Flow Into Area	142	142	142	1207	1207
Area Required Receipts	669	575	533	490	466
Area Deliveries	-764	-872	-999	-1024	-1103
Area Design Flow Req'mts	38	-163	-331	667	564

**Design Flow Requirements**

**Fort McMurray Area**

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability					
Flow Into Area					
Area Required Receipts					
Area Deliveries	-25091	-27063	-36709	-41263	-47572
Area Design Flow Req'mts	-25091	-27063	-36709	-41263	-47572

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability					
Flow Into Area					
Area Required Receipts					
Area Deliveries	-891	-961	-1303	-1465	-1688
Area Design Flow Req'mts	-891	-961	-1303	-1465	-1688

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability					
Flow Into Area					
Area Required Receipts					
Area Deliveries	-25977	-32309	-36480	-41033	-47342
Area Design Flow Req'mts	-25977	-32309	-36480	-41033	-47342

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability					
Flow Into Area					
Area Required Receipts					
Area Deliveries	-922	-1147	-1295	-1456	-1680
Area Design Flow Req'mts	-922	-1147	-1295	-1456	-1680

## Design Flow Requirements

## South of Bens Lake Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	16333	16650	15170	15006	14695
Flow Into Area	-626	-3928	-9717	-11222	15739
Area Required Receipts	13274	13049	11899	11818	11327
Area Deliveries	-66	-66	-71	-71	-71
Area Design Flow Req'mts	12412	8887	1958	373	26850

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	580	591	538	533	522
Flow Into Area	-22	-139	-345	-398	559
Area Required Receipts	471	463	422	419	402
Area Deliveries	-2	-2	-3	-3	-3
Area Design Flow Req'mts	441	315	70	13	953

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	16333	16650	15170	15006	14695
Flow Into Area	5584	-98	-4834	23280	20387
Area Required Receipts	14185	13105	12213	11789	11461
Area Deliveries	-16	-16	-21	-21	-21
Area Design Flow Req'mts	19571	12824	7202	34898	31681

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	580	591	538	533	522
Flow Into Area	198	-3	-172	826	724
Area Required Receipts	503	465	433	418	407
Area Deliveries	-1	-1	-1	-1	-1
Area Design Flow Req'mts	695	455	256	1239	1124



## Design Flow Requirements

### Edson Mainline Design Sub Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	39872	38853	41755	43083	44360
Flow Into Area	87631	88151	88050	86788	57375
Area Required Receipts	33003	31249	34050	36404	37579
Area Deliveries	-2	-2	-2	-2	-2
Area Design Flow Req'mts	120209	118998	121661	122723	94469

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	1415	1379	1482	1529	1574
Flow Into Area	3110	3129	3125	3080	2036
Area Required Receipts	1171	1109	1209	1292	1334
Area Deliveries	0	0	0	0	0
Area Design Flow Req'mts	4267	4224	4318	4356	3353

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	39872	38853	41755	43083	44360
Flow Into Area	101084	98466	100490	65777	68499
Area Required Receipts	37594	34521	38407	39753	41877
Area Deliveries	-2	-2	-2	-2	-2
Area Design Flow Req'mts	138193	132542	138402	105019	109836

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	1415	1379	1482	1529	1574
Flow Into Area	3588	3495	3567	2335	2431
Area Required Receipts	1334	1225	1363	1411	1486
Area Deliveries	0	0	0	0	0
Area Design Flow Req'mts	4905	4704	4912	3728	3899

**Design Flow Requirements**

**Eastern Alberta Mainline Design Sub  
Area (James River to Princess)**

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	18156	18102	16783	16060	15951
Flow Into Area	106984	107517	121940	124941	96673
Area Required Receipts	16692	16185	15224	15063	15002
Area Deliveries	-2667	-2606	-3106	-5342	-4867
Area Design Flow Req'mts	120795	120888	133863	134470	106615

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	644	642	596	570	566
Flow Into Area	3797	3816	4328	4435	3431
Area Required Receipts	592	574	540	535	532
Area Deliveries	-95	-93	-110	-190	-173
Area Design Flow Req'mts	4287	4291	4751	4773	3784

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	18156	18102	16783	16060	15951
Flow Into Area	112022	123588	128073	99392	104453
Area Required Receipts	17116	16078	15438	14818	15057
Area Deliveries	-1543	-1543	-1662	-1662	-1662
Area Design Flow Req'mts	127376	137916	141651	112357	117654

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	644	642	596	570	566
Flow Into Area	3976	4387	4546	3528	3707
Area Required Receipts	608	571	548	526	534
Area Deliveries	-55	-55	-59	-59	-59
Area Design Flow Req'mts	4521	4895	5028	3988	4176

**Design Flow Requirements**

**Eastern Alberta Mainline Design Sub  
Area (Princess to Empress/McNeill)**

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	1718	1847	1863	1977	2024
Flow Into Area	125087	119100	122107	115102	108973
Area Required Receipts	1581	1654	1692	1856	1905
Area Deliveries	-8064	-7699	-7573	-7216	-7275
Area Design Flow Req'mts	118584	113034	116205	109719	103579

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	61	66	66	70	72
Flow Into Area	4440	4227	4334	4085	3868
Area Required Receipts	56	59	60	66	68
Area Deliveries	-286	-273	-269	-256	-258
Area Design Flow Req'mts	4209	4012	4125	3894	3676

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	1718	1847	1863	1977	2024
Flow Into Area	120190	116325	110894	104372	99928
Area Required Receipts	1621	1643	1716	1826	1912
Area Deliveries	-8756	-8429	-8536	-8125	-7945
Area Design Flow Req'mts	113034	109518	104051	98049	93870

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	61	66	66	70	72
Flow Into Area	4266	4129	3936	3705	3547
Area Required Receipts	58	58	61	65	68
Area Deliveries	-311	-299	-303	-288	-282
Area Design Flow Req'mts	4012	3887	3693	3480	3332

## Design Flow Requirements

### Western Alberta Mainline Design Sub Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	10888	10398	12498	17199	18182
Flow Into Area	65805	66285	54182	49139	46655
Area Required Receipts	9995	9279	11316	16112	17082
Area Deliveries	-4363	-4137	-4105	-4719	-4338
Area Design Flow Req'mts	71308	71308	61247	60325	59180

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	386	369	444	610	645
Flow Into Area	2336	2353	1923	1744	1656
Area Required Receipts	355	329	402	572	606
Area Deliveries	-155	-147	-146	-168	-154
Area Design Flow Req'mts	2531	2531	2174	2141	2101

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	10897	10408	12507	17207	18190
Flow Into Area	65036	48783	50043	41939	39006
Area Required Receipts	10262	9224	11486	15852	17154
Area Deliveries	-4730	-4403	-4402	-5021	-4591
Area Design Flow Req'mts	70435	53485	56980	52566	51348

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	387	369	444	611	646
Flow Into Area	2308	1731	1776	1489	1384
Area Required Receipts	364	327	408	563	609
Area Deliveries	-168	-156	-156	-178	-163
Area Design Flow Req'mts	2500	1898	2022	1866	1823

## Design Flow Requirements

## Rimbey-Nevis Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	34088	38494	35328	31315	28103
Flow Into Area	0	0	0	0	0
Area Required Receipts	31277	34411	32086	29339	26541
Area Deliveries	-3887	-3894	-3894	-3900	-4949
Area Design Flow Req'mts	26988	30076	27780	25063	21251

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	1210	1366	1254	1111	997
Flow Into Area	0	0	0	0	0
Area Required Receipts	1110	1221	1139	1041	942
Area Deliveries	-138	-138	-138	-138	-176
Area Design Flow Req'mts	958	1067	986	890	754

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	34088	38494	35328	31315	28103
Flow Into Area	0	0	0	0	0
Area Required Receipts	31834	33880	32191	28630	26328
Area Deliveries	-2958	-2958	-2964	-2964	-3979
Area Design Flow Req'mts	28468	30486	28814	25298	22011

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	1210	1366	1254	1111	997
Flow Into Area	0	0	0	0	0
Area Required Receipts	1130	1203	1143	1016	934
Area Deliveries	-105	-105	-105	-105	-141
Area Design Flow Req'mts	1010	1082	1023	898	781

**Design Flow Requirements**

**South and Alderson Design Area**

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	9438	8844	10441	10874	11077
Flow Into Area	0	0	0	0	0
Area Required Receipts	9438	8844	10441	10874	11077
Area Deliveries	-48	-54	-54	-54	-62
Area Design Flow Req'mts	9269	8676	10253	10681	10873

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	335	314	371	386	393
Flow Into Area	0	0	0	0	0
Area Required Receipts	335	314	371	386	393
Area Deliveries	-2	-2	-2	-2	-2
Area Design Flow Req'mts	329	308	364	379	386

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	9438	8844	10441	10874	11077
Flow Into Area	0	0	0	0	0
Area Required Receipts	9438	8844	10441	10874	11077
Area Deliveries	-38	-44	-48	-48	-52
Area Design Flow Req'mts	9279	8686	10259	10687	10883

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	335	314	371	386	393
Flow Into Area	0	0	0	0	0
Area Required Receipts	335	314	371	386	393
Area Deliveries	-1	-2	-2	-2	-2
Area Design Flow Req'mts	329	308	364	379	386

## Design Flow Requirements

## Medicine Hat Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	7663	7362	7059	7563	7768
Flow Into Area	0	0	0	0	0
Area Required Receipts	7663	7362	7059	7563	7768
Area Deliveries	-6726	-6726	-7029	-7053	-7053
Area Design Flow Req'mts	839	542	-61	412	615

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	272	261	251	268	276
Flow Into Area	0	0	0	0	0
Area Required Receipts	272	261	251	268	276
Area Deliveries	-239	-239	-249	-250	-250
Area Design Flow Req'mts	30	19	-2	15	22

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	7663	7362	7059	7563	7768
Flow Into Area	0	0	0	0	0
Area Required Receipts	7663	7362	7059	7563	7768
Area Deliveries	-5343	-5343	-5690	-5762	-5993
Area Design Flow Req'mts	2222	1925	1278	1704	1675

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
FS Productive Capability	272	261	251	268	276
Flow Into Area	0	0	0	0	0
Area Required Receipts	272	261	251	268	276
Area Deliveries	-190	-190	-202	-205	-213
Area Design Flow Req'mts	79	68	45	60	59

**APPENDIX 4.2**

**PEAK EXPECTED FLOWS**

The following tables present both the winter and summer peak expected flows for areas governed by a receipt dominant flow condition.

The Peak Expected Flows, described as Area Peak Expected Flows in the tables, are calculated by subtracting the Area Minimum Deliveries and area fuel (not shown) from the Area Peak Receipts. In some areas, Flow Into Area is added to the Area Peak Receipts and represents the flow from other design areas.



**Peak Expected Flows**

Upper Peace River Design Sub Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	28819	28004	27303	29586	32231
Flow Into Area	0	0	0	0	0
Area Peak Receipts	28819	28004	27303	29586	32231
Area Deliveries	-13	-13	-13	-13	-13
Area Peak Expected Flow	28436	27632	26939	29194	31804

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1023	994	969	1050	1144
Flow Into Area	0	0	0	0	0
Area Peak Receipts	1023	994	969	1050	1144
Area Deliveries	0	0	0	0	0
Area Peak Expected Flow	1009	981	956	1036	1129

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	28819	28004	27303	29586	32231
Flow Into Area	0	0	0	0	0
Area Peak Receipts	28819	28004	27303	29586	32231
Area Deliveries	-11	-11	-11	-11	-11
Area Peak Expected Flow	28438	27634	26941	29196	31806

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1023	994	969	1050	1144
Flow Into Area	0	0	0	0	0
Area Peak Receipts	1023	994	969	1050	1144
Area Deliveries	0	0	0	0	0
Area Peak Expected Flow	1009	981	956	1036	1129

## Peak Expected Flows

## Central Peace River Design Sub Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	23044	23150	24279	27921	30789
Flow Into Area	28436	27632	26939	29194	1804
Area Peak Receipts	23044	23150	24279	27921	30789
Area Deliveries	-257	-257	-260	-260	-260
Area Peak Expected Flow	50927	50228	50647	56496	31938

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	818	822	862	991	1093
Flow Into Area	1009	981	956	1036	64
Area Peak Receipts	818	822	862	991	1093
Area Deliveries	-9	-9	-9	-9	-9
Area Peak Expected Flow	1808	1783	1798	2005	1134

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	23044	23150	24279	27921	30789
Flow Into Area	28438	27634	26941	-804	1806
Area Peak Receipts	23044	23150	24279	27921	30789
Area Deliveries	-89	-90	-90	-90	-92
Area Peak Expected Flow	51097	50397	50820	26668	32108

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	818	822	862	991	1093
Flow Into Area	1009	981	956	-29	64
Area Peak Receipts	818	822	862	991	1093
Area Deliveries	-3	-3	-3	-3	-3
Area Peak Expected Flow	1814	1789	1804	947	1140

## Peak Expected Flows

## Lower Peace River Design Sub Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	79610	82606	83056	72337	68054
Flow Into Area	50927	50228	50647	56496	31938
Area Peak Receipts	79610	82606	83056	72337	68054
Area Deliveries	-493	-499	-505	-510	-518
Area Peak Expected Flow	129022	131274	132132	127394	98600

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	2826	2932	2948	2568	2415
Flow Into Area	1808	1783	1798	2005	1134
Area Peak Receipts	2826	2932	2948	2568	2415
Area Deliveries	-18	-18	-18	-18	-18
Area Peak Expected Flow	4579	4659	4690	4522	3500

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	79610	82606	83056	72337	68054
Flow Into Area	51097	50397	50820	26668	32108
Area Peak Receipts	79610	82606	83056	72337	68054
Area Deliveries	-267	-268	-268	-268	-269
Area Peak Expected Flow	129418	131675	132541	97808	99019

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	2826	2932	2948	2568	2415
Flow Into Area	1814	1789	1804	947	1140
Area Peak Receipts	2826	2932	2948	2568	2415
Area Deliveries	-9	-10	-10	-10	-10
Area Peak Expected Flow	4594	4674	4704	3472	3515

## Peak Expected Flows

## Marten Hills Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	8623	10267	10113	8956	8247
Flow Into Area	0	0	0	0	0
Area Peak Receipts	8623	10267	10113	8956	8247
Area Deliveries	-176	-176	-177	-177	-183
Area Peak Expected Flow	8337	9959	9807	8665	7958

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	306	364	359	318	293
Flow Into Area	0	0	0	0	0
Area Peak Receipts	306	364	359	318	293
Area Deliveries	-6	-6	-6	-6	-6
Area Peak Expected Flow	296	353	348	308	282

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	8623	10267	10113	8956	8247
Flow Into Area	0	0	0	0	0
Area Peak Receipts	8623	10267	10113	8956	8247
Area Deliveries	-58	-58	-58	-58	-59
Area Peak Expected Flow	8455	10078	9925	8783	8082

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	306	364	359	318	293
Flow Into Area	0	0	0	0	0
Area Peak Receipts	306	364	359	318	293
Area Deliveries	-2	-2	-2	-2	-2
Area Peak Expected Flow	300	358	352	312	287

## Peak Expected Flows

## North of Bens Lake Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	28884	27966	26098	24989	23894
Flow Into Area	4000	4000	4000	4000	34000
Area Peak Receipts	28884	27966	26098	24989	23894
Area Deliveries	-26500	-28336	-32645	-33378	-35563
Area Peak Expected Flow	6013	3271	-2883	-4710	22025

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1025	993	926	887	848
Flow Into Area	142	142	142	142	1207
Area Peak Receipts	1025	993	926	887	848
Area Deliveries	-941	-1006	-1159	-1185	-1262
Area Peak Expected Flow	213	116	-102	-167	782

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	28884	27966	26098	24989	23894
Flow Into Area	4000	4000	4000	34000	34000
Area Peak Receipts	28884	27966	26098	24989	23894
Area Deliveries	-21533	-24578	-28160	-28841	-31073
Area Peak Expected Flow	10980	7030	1603	29827	26515

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1025	993	926	887	848
Flow Into Area	142	142	142	1207	1207
Area Peak Receipts	1025	993	926	887	848
Area Deliveries	-764	-872	-999	-1024	-1103
Area Peak Expected Flow	390	250	57	1059	941

**Peak Expected Flows**

South of Bens Lake Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	23393	24474	22453	22289	21781
Flow Into Area	10513	7771	1618	-210	26525
Area Peak Receipts	23393	24474	22453	22289	21781
Area Deliveries	-66	-66	-71	-71	-71
Area Peak Expected Flow	33540	31865	23711	21722	47955

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	830	869	797	791	773
Flow Into Area	373	276	57	-7	941
Area Peak Receipts	830	869	797	791	773
Area Deliveries	-2	-2	-3	-3	-3
Area Peak Expected Flow	1190	1131	842	771	1702

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	23393	24474	22453	22289	21781
Flow Into Area	15480	11530	6103	34327	31015
Area Peak Receipts	23393	24474	22453	22289	21781
Area Deliveries	-16	-16	-21	-21	-21
Area Peak Expected Flow	38558	35674	28247	56309	52496

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	830	869	797	791	773
Flow Into Area	549	409	217	1218	1101
Area Peak Receipts	830	869	797	791	773
Area Deliveries	-1	-1	-1	-1	-1
Area Peak Expected Flow	1369	1266	1003	1999	1863

**Peak Expected Flows**

**Edson Mainline Design Sub Area**

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	50233	48340	52247	54118	55299
Flow Into Area	133359	137233	137939	132059	102559
Area Peak Receipts	50233	48340	52247	54118	55299
Area Deliveries	-2	-2	-2	-2	-2
Area Peak Expected Flow	182946	184952	189514	185481	157146

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1783	1716	1854	1921	1963
Flow Into Area	4733	4871	4896	4687	3640
Area Peak Receipts	1783	1716	1854	1921	1963
Area Deliveries	0	0	0	0	0
Area Peak Expected Flow	6493	6565	6727	6583	5578

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	51091	49168	53024	54844	55974
Flow Into Area	133873	137753	138467	102592	103101
Area Peak Receipts	51091	49168	53024	54844	55974
Area Deliveries	-2	-2	-2	-2	-2
Area Peak Expected Flow	184307	186288	190808	156730	158356

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1813	1745	1882	1947	1987
Flow Into Area	4752	4889	4915	3641	3659
Area Peak Receipts	1813	1745	1882	1947	1987
Area Deliveries	0	0	0	0	0
Area Peak Expected Flow	6542	6612	6773	5563	5621

## Peak Expected Flows

## Rimbey-Nevis Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	36207	41063	38122	33568	30063
Flow Into Area	0	0	0	0	0
Area Peak Receipts	36207	41063	38122	33568	30063
Area Deliveries	-3887	-3894	-3894	-3900	-4949
Area Peak Expected Flow	31856	36643	33739	29238	24729

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1285	1457	1353	1191	1067
Flow Into Area	0	0	0	0	0
Area Peak Receipts	1285	1457	1353	1191	1067
Area Deliveries	-138	-138	-138	-138	-176
Area Peak Expected Flow	1131	1301	1198	1038	878

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	36207	41063	38122	33568	30063
Flow Into Area	0	0	0	0	0
Area Peak Receipts	36207	41063	38122	33568	30063
Area Deliveries	-2958	-2958	-2964	-2964	-3979
Area Peak Expected Flow	32785	37578	34668	30173	25699

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	1285	1457	1353	1191	1067
Flow Into Area	0	0	0	0	0
Area Peak Receipts	1285	1457	1353	1191	1067
Area Deliveries	-105	-105	-105	-105	-141
Area Peak Expected Flow	1164	1334	1231	1071	912



## Peak Expected Flows

## South and Alderson Design Area

10<sup>3</sup>m<sup>3</sup>/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	13508	12793	15099	15840	16162
Flow Into Area	0	0	0	0	0
Area Peak Receipts	13508	12793	15099	15840	16162
Area Deliveries	-48	-54	-54	-54	-62
Area Peak Expected Flow	13287	12575	14851	15583	15893

mmcf/d

PW					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	479	454	536	562	574
Flow Into Area	0	0	0	0	0
Area Peak Receipts	479	454	536	562	574
Area Deliveries	-2	-2	-2	-2	-2
Area Peak Expected Flow	472	446	527	553	564

10<sup>3</sup>m<sup>3</sup>/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	13508	12793	15099	15840	16162
Flow Into Area	0	0	0	0	0
Area Peak Receipts	13508	12793	15099	15840	16162
Area Deliveries	-38	-44	-48	-48	-52
Area Peak Expected Flow	13297	12585	14857	15589	15903

mmcf/d

PS					
Gas Year	2006/07	2007/08	2008/09	2009/10	2010/11
Peak Productive Capability	479	454	536	562	574
Flow Into Area	0	0	0	0	0
Area Peak Receipts	479	454	536	562	574
Area Deliveries	-1	-2	-2	-2	-2
Area Peak Expected Flow	472	447	527	553	564