APPENDIX 2

DESIGN FLOW REQUREMENTS

The following tables present both the winter and summer design flow requirements for design areas where additional facilities are required for the Planning Period. The values are derived, as discussed in Chapters 2 and 4, through application of the mainline design assumptions to the June 2008 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 3. 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

N&E Project Area Flow Within

$10^3m^3/d$

PW

Gas Year	2008/09	2009/10	2010/11	2011/12	2012/13
FS Productive Capability	33753	31723	33829	36682	39300
Flow Into Area	0	0	0	0	0
Area Required Receipts	33753	31723	33829	36682	39300
Area Deliveries	-63457	-70471	-77682	-90739	-99441
Area Design Flow Req'mts	-30005	-39032	-44155	-54384	-60492

mmcf/d

PW

Gas Year	2008/09	2009/10	2010/11	2011/12	2012/13
FS Productive Capability	1198	1126	1201	1302	1395
Flow Into Area	0	0	0	0	0
Area Required Receipts	1198	1126	1201	1302	1395
Area Deliveries	-2252	-2501	-2757	-3221	-3530
Area Design Flow Req'mts	-1065	-1385	-1567	-1930	-2147

$10^3m^3/d$

PS

Gas Year	2008/09	2009/10	2010/11	2011/12	2012/13
FS Productive Capability	35738	33589	35819	38840	41612
Flow Into Area	0	0	0	0	0
Area Required Receipts	35738	33589	35819	38840	41612
Area Deliveries	-54709	-60400	-69412	-84381	-88953
Area Design Flow Req'mts	-19290	-27111	-33912	-45887	-47713

mmcf/d

PS

Gas Year	2008/09	2009/10	2010/11	2011/12	2012/13
FS Productive Capability	1268	1192	1271	1379	1477
Flow Into Area	0	0	0	0	0
Area Required Receipts	1268	1192	1271	1379	1477
Area Deliveries	-1942	-2144	-2464	-2995	-3157
Area Design Flow Req'mts	-685	-962	-1204	-1629	-1693

PS = Peak Summer
PW = Peak Winter