

# **APPENDIX B**

## **Historical Peak Substation Load Data**



Historical Summer Peak Substation Loads						
Area	Substation	2005	2006	2007	2008	2009
Alliance/Battle River (36)	Bigfoot 756S	5.9	5.7	6.1	5.7	6.2
	Battle River757S	0.0	11.9	0.0	0.0	0.0
	Heisler 764S	9.1	8.6	8.0	7.2	7.0
	Mannix Mine 765S	0.8	0.9	0.9	0.8	0.7
	Bigknife Creek 843S	2.0	2.0	2.0	2.0	2.0
	Paintearth 863S	30.0	26.5	22.4	21.8	18.5
	<b>Total Area 36</b>	<b>47.8</b>	<b>55.6</b>	<b>39.4</b>	<b>37.4</b>	<b>34.3</b>
Cold Lake (28)	Encana Foster Creek 1200S	7.6	11.2	16.6	18.5	30.8
	Bonnyville 700S	16.6	18.3	17.6	18.4	18.9
	Leming Lake 715S	67.1	68.0	80.6	82.7	31.1
	Lacorey 721S	13.9	14.7	15.5	17.0	19.5
	Wolflake 822S	1.1	3.7	1.5	4.7	1.5
	Mahihkan 837S	26.4	21.3	23.6	24.4	8.2
	Grandcentre 846S	20.3	22.5	22.0	21.9	22.6
	Primrose 859S		50.7	53.8	70.4	65.2
	Foster Creek 877S	5.6	5.9	5.2	5.4	5.9
<b>Total Area 28</b>	<b>158.6</b>	<b>216.3</b>	<b>236.4</b>	<b>263.4</b>	<b>203.7</b>	
Lloydminster (13)	Kitscoty 705S	4.6	5.4	4.7	4.8	5.0
	IrishCreek 706S	23.5	23.8	24.5	28.4	24.8
	Vermilion 710S	17.3	17.3	17.5	18.7	17.0
	Lloydminster 716S	10.0	26.4	15.1	23.6	16.6
	Hill 751S	37.5	38.9	36.5	40.7	34.5
	Briker 880S		8.8	8.9	5.9	6.5
	<b>Total Area 13</b>	<b>92.9</b>	<b>120.6</b>	<b>107.2</b>	<b>122.1</b>	<b>104.4</b>
Wainwright (32)	Sedgewick 137S	14.0	16.0	12.7	12.8	13.5
	Jarrow 252S	5.4	6.7	4.6	4.8	3.6
	Rosyth 296S	15.2	21.1	19.2	18.5	22.7
	HRT Express 329S	6.9	6.7	6.5	6.5	6.1
	Hardisty 377S	16.7	17.6	16.8	17.5	16.5
	Wainwright 51S	21.7	23.2	23.3	24.0	21.2
	Buffalo Creek 526S	12.8	13.5	12.7	12.7	14.6
	Cochin Pipeline 968S	1.3	0.7	0.6	0.5	0.5
	<b>Total Area 32</b>	<b>94.1</b>	<b>105.6</b>	<b>96.4</b>	<b>97.2</b>	<b>98.8</b>
Provost (37)	Hughenden 213S	14.3	14.6	14.1	13.6	13.1
	Sunken Lake 221S	11.4	15.6	15.0	16.3	18.0
	Killarney Lake 267S	23.2	23.2	23.1	24.3	23.9
	Hayter 277S	25.1	26.0	28.9	27.4	35.1
	Provost 545S	19.9	29.7	18.9	19.4	28.9
	Metiskow 648S	10.9	10.9	10.3	9.7	11.9
	Edgerton 899S	6.4	7.2	7.8	6.9	8.7
	<b>Total Area 37</b>	<b>111.2</b>	<b>127.1</b>	<b>118.2</b>	<b>117.6</b>	<b>139.6</b>
Vegreville (56)	Strome 223S	12.0	12.8	11.1	8.3	17.6
	Northholden 395S	7.1	9.8	7.9	6.7	6.9
	St. Paul 707S	13.4	14.4	14.4	13.9	16.6
	Vegreville 709S	14.6	17.4	15.6	15.5	16.2
	Willingdon 711S	6.1	6.5	6.0	5.2	5.1
	vilna 777S	9.3	9.4	9.6	11.7	12.7
	<b>Total Area 56</b>	<b>62.5</b>	<b>70.3</b>	<b>64.6</b>	<b>61.3</b>	<b>75.0</b>
<b>Total of All Areas</b>	<b>567.1</b>	<b>695.5</b>	<b>662.1</b>	<b>699.0</b>	<b>655.7</b>	

Note: These values do not include behind the fence loads.

Historical Winter Peak Substation Loads						
Area	Substation	2005	2006	2007	2008	2009
Alliance/Battle River (36)	Bigfoot 756S	6.0	6.5	6.3	6.3	6.3
	Battle River 757S	0.0	11.9	0.0	0.0	0.0
	Heisler 764S	10.1	9.9	9.0	8.6	8.5
	Mannix Mine 765S	1.1	1.1	1.1	1.0	1.1
	Bigknife Creek 843S	0.1	0.0	0.1	0.6	2.0
	Paint Earth 863S	25.8	25.2	19.9	21.9	16.1
	<b>Total Area 36</b>	<b>43.0</b>	<b>54.7</b>	<b>36.4</b>	<b>38.5</b>	<b>33.9</b>
Cold Lake (28)	Encana Foster Creek 1200S	10.0	14.3	17.3	25.1	32.2
	Bonnyville 700S	21.1	22.1	23.3	25.2	25.6
	Leming Lake 715S	26.3	33.6	98.3	96.1	41.1
	Lacorey 721S	15.4	15.4	17.5	19.9	22.4
	Wolflake 822S	1.3	5.0	2.7	2.0	2.5
	Mahihkan 837S	10.4	8.6	29.3	29.0	13.4
	Grandcentre 846S	25.3	26.7	28.1	29.7	31.2
	Primrose 859S	3.3	59.1	63.3	76.8	62.3
	Foster Creek 877S	6.1	6.2	6.0	5.8	6.2
<b>Total Area 28</b>	<b>119.2</b>	<b>191.0</b>	<b>285.8</b>	<b>309.6</b>	<b>237.0</b>	
Lloydminster (13)	Kitscoty 705S	6.3	6.5	6.5	7.1	7.1
	IrishCreek 706S	27.8	26.2	27.9	30.2	28.8
	Vermilion 710S	19.9	21.9	20.2	21.0	20.5
	Lloydminster 716S	12.6	15.8	16.7	18.5	19.0
	Hill 751S	38.5	35.2	39.6	36.2	37.9
	Briker 880S	8.0	10.1	6.9	6.9	7.4
	<b>Total Area 13</b>	<b>113.1</b>	<b>115.7</b>	<b>117.8</b>	<b>119.9</b>	<b>120.8</b>
Wainwright (32)	Sedgewick 137S	18.0	13.1	14.3	16.2	16.9
	Jarrow 252S	5.4	7.0	4.4	5.4	5.2
	Rosyth 296S	20.7	20.9	19.8	20.1	18.7
	HRT Express 329S	6.7	6.5	6.4	6.1	5.6
	Hardisty 377S	18.0	18.5	18.3	18.2	16.7
	Tucuman 478S	N/A	N/A	N/A	N/A	8.3
	Wainwright 51S	24.3	26.4	25.6	24.4	25.4
	Buffalo Creek 526S	14.2	14.8	14.4	16.4	16.2
	Cochin Pipeline 968S	1.0	0.7	0.4	0.5	0.6
<b>Total Area 32</b>	<b>108.3</b>	<b>107.8</b>	<b>103.6</b>	<b>107.3</b>	<b>113.7</b>	
Provost (37)	Hughenden 213S	15.4	15.5	15.2	14.4	13.5
	Sunken Lake 221S	18.3	17.1	18.6	17.9	16.7
	Killarney Lake 267S	25.4	25.3	25.1	26.5	25.9
	Hayter 277S	26.7	32.1	30.0	28.5	29.0
	Provost 545S	21.7	28.7	20.7	26.0	22.0
	Metiskow 648S	12.0	21.3	12.0	10.6	10.6
	Edgerton 899S	9.6	8.1	8.5	8.8	8.9
<b>Total Area 37</b>	<b>129.2</b>	<b>148.2</b>	<b>130.1</b>	<b>132.8</b>	<b>126.6</b>	
Vegreville (56)	Strome 223S	14.0	10.7	10.4	7.0	13.6
	Northholden 395S	8.8	10.4	9.3	9.7	10.1
	St. Paul 707S	16.6	16.3	16.7	17.8	18.7
	Vegreville 709S	17.0	18.7	17.3	19.4	19.2
	Willingdon 711S	7.0	8.4	7.3	7.8	7.3
	vilna 777S	10.9	10.9	13.2	14.3	14.3
	<b>Total Area 56</b>	<b>74.3</b>	<b>75.4</b>	<b>74.2</b>	<b>76.0</b>	<b>83.2</b>
<b>Total of All Areas</b>	<b>587.2</b>	<b>692.8</b>	<b>747.9</b>	<b>784.0</b>	<b>715.2</b>	

Note: These values do not include behind the fence loads.