

**2015 COST OF SERVICE METHODOLOGY REVIEW**

**Manitoba Hydro Undertaking Transcript Page 602**

Provide a table for the Top 50 hours (Summer and Winter) at the Common Bus, in a table similar to GAC/MH I-8

**Response:**

Tables showing the Summer and Winter period Top 50 Common Bus hours from 2011/2012 Load Research Results follow. The tables also include the Top 50 Generation hours (from GAC/MH I-8) for comparison. Peak hours that exist in both tables are identified.

Generation kW peaks are measured at generation and include imports. Common Bus kW peaks are measured at the transformer banks serving domestic load from the transmission system (>100 kV). Class demands shown in Load Research results are measured (or estimated) at the meter.

**Load Research Results 2011/2012**

**Top 50 Common Bus**

**Peaks**

**During Summer Peak**

**Hours**

**June, July and August; 06:00 to 22:00**

Date Time	Common Bus (kW)	Generation (kW)	Gen. Peak (Y/N)
2011-07-19 18:00	2,997,466	4,786,782	Y
2011-07-19 17:00	2,957,866	4,735,552	N
2011-07-19 19:00	2,954,917	4,807,766	Y
2011-07-19 16:00	2,924,088	4,682,012	N
2011-07-19 15:00	2,904,235	4,654,662	N
2011-08-23 17:00	2,883,723	4,549,906	N
2011-08-23 16:00	2,873,054	4,470,417	N
2011-07-19 14:00	2,872,003	4,620,568	N

**Load Research Results 2011/2012**

**Top 50 Generation Peaks**

**During Summer Peak Hours**

**June, July and August; 06:00 to 22:00**

Date Time	Generation (kW)	Common Bus (kW)	CB Peak (Y/N)
2011-07-21 15:00	4,962,924	2,573,405	N
2011-07-20 17:00	4,953,215	2,781,212	Y
2011-07-21 19:00	4,949,806	2,587,606	N
2011-07-20 16:00	4,943,703	2,766,201	Y
2011-07-21 16:00	4,925,747	2,578,432	N
2011-07-21 14:00	4,907,351	2,532,544	N
2011-07-21 18:00	4,903,661	2,616,344	N
2011-07-13 16:00	4,900,783	2,413,725	N

2011-07-18 17:00	2,870,077	4,840,233	Y	2011-07-20 20:00	4,895,871	2,626,394	N
2011-07-18 16:00	2,862,497	4,762,399	N	2011-07-20 21:00	4,889,438	2,571,223	N
2011-07-18 18:00	2,860,709	4,842,387	Y	2011-07-21 11:00	4,888,433	2,427,432	N
2011-07-18 15:00	2,857,057	4,798,705	Y	2011-07-20 13:00	4,887,368	2,626,667	N
2011-08-23 18:00	2,855,745	4,504,131	N	2011-06-29 19:00	4,885,921	2,656,882	N
2011-07-19 20:00	2,848,435	4,680,596	N	2011-07-21 17:00	4,885,119	2,596,507	N
2011-08-23 15:00	2,845,398	4,416,908	N	2011-06-29 18:00	4,885,044	2,655,739	N
2011-07-18 14:00	2,834,498	4,809,000	Y	2011-07-21 13:00	4,877,415	2,486,178	N
2011-07-04 14:00	2,820,037	4,753,570	N	2011-07-20 15:00	4,877,157	2,732,989	Y
2011-08-23 14:00	2,814,496	4,465,204	N	2011-07-20 18:00	4,872,186	2,773,259	Y
2011-07-04 18:00	2,813,589	4,786,217	Y	2011-07-13 17:00	4,870,952	2,451,422	N
2011-07-19 13:00	2,811,537	4,538,070	N	2011-07-21 12:00	4,860,753	2,481,918	N
2011-08-23 19:00	2,808,894	4,571,646	N	2011-07-20 14:00	4,859,693	2,658,859	N
2011-07-04 15:00	2,797,890	4,759,171	N	2011-07-13 15:00	4,858,414	2,397,370	N
2011-07-18 19:00	2,792,412	4,770,633	N	2011-07-13 18:00	4,854,034	2,443,064	N
2011-07-18 13:00	2,786,512	4,806,000	Y	2011-07-13 12:00	4,849,493	2,366,418	N
2011-07-19 12:00	2,783,738	4,606,607	N	2011-07-21 20:00	4,848,212	2,521,062	N
2011-07-20 17:00	2,781,212	4,953,215	Y	2011-06-30 13:00	4,847,979	2,725,734	Y
2011-07-04 17:00	2,776,718	4,670,853	N	2011-07-18 18:00	4,842,387	2,860,709	Y
2011-07-20 18:00	2,773,259	4,872,186	Y	2011-07-18 17:00	4,840,233	2,870,077	Y
2011-07-04 13:00	2,770,651	4,710,862	N	2011-06-29 20:00	4,836,660	2,619,588	N
2011-06-30 15:00	2,769,573	4,750,503	N	2011-07-13 14:00	4,835,667	2,403,455	N

2011-07-20 16:00	2,766,201	4,943,703	Y	2011-07-20 19:00	4,834,738	2,707,772	N
2011-06-30 16:00	2,764,725	4,774,308	N	2011-06-29 17:00	4,821,251	2,613,659	N
2011-06-30 18:00	2,758,221	4,631,950	N	2011-07-20 22:00	4,818,827	2,499,097	N
2011-08-15 18:00	2,757,625	4,611,709	N	2011-07-18 21:00	4,813,143	2,740,214	Y
2011-07-04 16:00	2,757,002	4,665,779	N	2011-07-18 14:00	4,809,000	2,834,498	Y
2011-07-04 19:00	2,756,941	4,746,817	N	2011-07-19 19:00	4,807,766	2,954,917	Y
2011-06-30 17:00	2,754,013	4,714,196	N	2011-07-18 13:00	4,806,000	2,786,512	Y
2011-07-19 21:00	2,752,500	4,638,078	N	2011-07-18 15:00	4,798,705	2,857,057	Y
2011-07-18 20:00	2,750,594	4,774,539	Y	2011-07-20 12:00	4,793,792	2,560,918	N
2011-07-18 12:00	2,750,088	4,685,000	N	2011-08-16 14:00	4,791,723	2,484,828	N
2011-08-23 13:00	2,748,769	4,422,771	N	2011-07-13 13:00	4,789,873	2,388,592	N
2011-06-30 14:00	2,745,190	4,732,467	N	2011-08-03 15:00	4,789,383	2,423,428	N
2011-07-18 21:00	2,740,214	4,813,143	Y	2011-07-19 18:00	4,786,782	2,997,466	Y
2011-08-22 18:00	2,740,005	4,603,492	N	2011-07-04 18:00	4,786,217	2,813,589	Y
2011-07-20 15:00	2,732,989	4,877,157	Y	2011-08-02 18:00	4,783,895	2,607,872	N
2011-08-23 20:00	2,731,236	4,545,912	N	2011-07-21 10:00	4,782,916	2,338,112	N
2011-08-15 17:00	2,726,464	4,587,618	N	2011-06-30 11:00	4,779,988	2,611,974	N
2011-06-30 13:00	2,725,734	4,847,979	Y	2011-08-16 15:00	4,775,903	2,500,403	N
2011-07-15 18:00	2,725,624	4,611,178	N	2011-06-29 21:00	4,774,628	2,579,977	N
2011-07-15 17:00	2,718,193	4,619,222	N	2011-07-18 20:00	4,774,539	2,750,594	Y

**Load Research Results 2011/2012**

**Top 50 Common Bus**

**Peaks**

**During Winter Peak Hours**

**December, January and February; 06:00 to 22:00**

Date Time	Common Bus (kW)	Generation (kW)	Gen. Peak (Y/N)
2012-01-19 9:00	4,035,502	4,835,169	Y
2012-01-19 8:00	4,003,319	4,752,533	N
2012-01-18 19:00	4,001,604	4,908,946	Y
2012-01-18 20:00	3,991,177	4,880,712	Y
2012-01-19 19:00	3,982,313	4,809,357	Y
2012-01-20 9:00	3,978,834	4,788,204	Y
2012-01-17 18:00	3,965,533	4,664,183	N
2012-01-19 18:00	3,964,326	4,753,369	N
2012-01-18 18:00	3,960,664	4,819,902	Y
2012-01-17 19:00	3,957,575	4,664,904	N
2012-01-19 10:00	3,955,062	4,825,047	Y
2012-01-19 20:00	3,945,800	4,747,044	N
2012-01-18 21:00	3,944,784	4,902,384	Y
2012-01-20 8:00	3,932,773	4,704,083	N
2012-01-17 20:00	3,929,664	4,768,073	Y
2012-01-18 9:00	3,927,875	4,679,832	N
2012-01-19 21:00	3,926,857	4,795,276	Y

**Load Research Results 2011/2012**

**Top 50 Generation Peaks**

**During Winter Peak Hours**

**December, January and February; 06:00 to 22:00**

Date Time	Generation (kW)	Common Bus (kW)	CB Peak (Y/N)
2012-01-11 14:00	4,937,215	3,449,374	N
2012-01-11 13:00	4,924,469	3,445,533	N
2012-01-11 15:00	4,910,944	3,463,877	N
2012-01-18 19:00	4,908,946	4,001,604	Y
2012-01-11 16:00	4,906,604	3,491,501	N
2012-01-18 21:00	4,902,384	3,944,784	Y
2012-02-09 18:00	4,886,393	3,589,907	N
2012-01-18 20:00	4,880,712	3,991,177	Y
2012-01-11 9:00	4,871,986	3,424,202	N
2012-01-12 9:00	4,871,846	3,696,116	N
2012-01-03 19:00	4,863,251	3,183,841	N
2012-01-11 12:00	4,860,518	3,442,802	N
2012-01-06 17:00	4,857,679	3,039,481	N
2012-01-11 18:00	4,851,275	3,702,784	N
2012-01-11 17:00	4,846,272	3,598,549	N
2012-01-11 8:00	4,839,721	3,370,175	N
2011-12-08 18:00	4,838,358	3,695,681	N

2012-01-18 8:00	3,889,750	4,724,459	N	2012-01-19 9:00	4,835,169	4,035,502	Y
2012-01-20 10:00	3,885,399	4,662,463	N	2012-01-11 11:00	4,832,641	3,418,276	N
2012-01-17 21:00	3,884,303	4,670,000	N	2012-01-19 10:00	4,825,047	3,955,062	Y
2012-02-10 9:00	3,883,517	4,625,678	N	2012-01-11 20:00	4,820,417	3,636,014	N
2012-01-18 10:00	3,880,751	4,785,371	Y	2012-01-18 18:00	4,819,902	3,960,664	Y
2012-01-18 22:00	3,878,232	4,812,100	Y	2012-01-11 19:00	4,813,286	3,671,153	N
2012-01-19 11:00	3,873,790	4,766,402	Y	2012-01-18 22:00	4,812,100	3,878,232	Y
2012-01-17 9:00	3,866,233	4,606,363	N	2012-01-18 11:00	4,809,673	3,842,513	Y
2012-02-10 8:00	3,858,769	4,612,676	N	2012-01-19 19:00	4,809,357	3,982,313	Y
2012-01-19 22:00	3,846,257	4,743,196	N	2012-01-05 18:00	4,809,181	2,985,853	N
2012-01-18 11:00	3,842,513	4,809,673	Y	2012-01-12 10:00	4,800,221	3,629,492	N
2012-01-17 8:00	3,838,597	4,618,471	N	2011-12-08 17:00	4,797,786	3,570,034	N
2012-01-17 10:00	3,802,754	4,580,082	N	2012-01-06 18:00	4,797,555	3,176,695	N
2012-01-17 22:00	3,796,937	4,620,000	N	2012-01-19 21:00	4,795,276	3,926,857	Y
2012-01-17 17:00	3,794,230	4,677,185	N	2012-01-11 21:00	4,792,830	3,577,514	N
2012-01-19 17:00	3,791,995	4,731,180	N	2012-01-11 10:00	4,791,709	3,391,528	N
2012-01-18 12:00	3,789,003	4,760,845	Y	2011-12-08 12:00	4,791,328	3,361,929	N
2012-01-19 12:00	3,784,346	4,705,275	N	2012-02-09 19:00	4,789,217	3,675,735	N
2012-01-18 17:00	3,777,602	4,729,094	N	2012-01-10 18:00	4,789,074	3,039,541	N
2012-01-20 19:00	3,772,446	4,579,702	N	2012-01-20 9:00	4,788,204	3,978,834	Y
2012-02-10 10:00	3,763,350	4,536,563	N	2012-01-18 10:00	4,785,371	3,880,751	Y
2012-01-19 7:00	3,761,965	4,667,270	N	2012-02-10 19:00	4,783,961	3,726,526	Y

2012-01-16 18:00	3,747,443	4,754,092	Y	2012-01-03 18:00	4,779,536	3,241,023	N
2012-01-20 18:00	3,742,882	4,601,433	N	2011-12-28 10:00	4,775,578	3,195,619	N
2012-01-20 11:00	3,742,330	4,518,500	N	2011-12-02 17:00	4,771,524	3,057,681	N
2012-01-17 11:00	3,735,217	4,584,046	N	2012-01-17 20:00	4,768,073	3,929,664	Y
2012-01-20 20:00	3,734,516	4,524,073	N	2012-01-19 11:00	4,766,402	3,873,790	Y
2012-02-10 19:00	3,726,526	4,783,961	Y	2012-01-12 11:00	4,765,900	3,538,203	N
2012-01-16 20:00	3,723,303	4,727,411	N	2012-01-18 12:00	4,760,845	3,789,003	Y
2012-01-20 7:00	3,716,594	4,670,185	N	2012-01-16 8:00	4,760,239	3,510,146	N
2011-12-05 19:00	3,714,260	4,540,203	N	2012-02-09 21:00	4,758,994	3,692,998	N
2011-12-05 18:00	3,711,647	4,599,612	N	2012-01-07 18:00	4,754,733	3,106,709	N
2012-01-16 19:00	3,711,383	4,670,737	N	2012-01-16 18:00	4,754,092	3,747,443	Y