

1.1 Provincial Results - AIES Forecast with Forecast On-site Generation

The AIES Forecast has been updated by the AESO after the finalization of the 2009 Generation Outlook (2009 – 2029) included in the *draft 2011 Long-term Transmission Plan (Appendix E)*. The forecast amount of annual cogeneration energy supply, based on expected future development of cogeneration capacity in the province, is evaluated taking into consideration the expected amount of load served by on-site generation.

Alberta Internal Load (AIL) includes AIES, plus load served by behind-the-fence generation. As AIL remains the same and load served by on-site generation increases, AIES amounts will decrease.

The results in the following three tables reflect the updated forecast amount of on-site generation expected in the forecast time period of 2011 to 2029.

Table 1.1-1: UPDATED Alberta Interconnected Electric System (AIES) - Winter Peak Demand

	Updated FC2009 (MW)	Updated FC2009 growth
2011/12	8,892	–
2012/13	9,360	5.3%
2013/14	9,925	6.0%
2014/15	10,076	1.5%
2015/16	10,417	3.4%
2016/17	11,071	6.3%
2017/18	11,481	3.7%
2018/19	11,945	4.0%
2019/20	12,094	1.2%
2020/21	12,219	1.0%
2021/22	12,611	3.2%
2022/23	13,215	4.8%
2023/24	13,368	1.2%
2024/25	13,527	1.2%
2025/26	13,891	2.7%
2026/27	14,175	2.1%
2027/28	14,502	2.3%
2028/29	15,167	4.6%
2029/30	15,670	3.3%

Table 1.1-2: UPDATED Alberta Interconnected Electric System (AIES) - Summer Peak Demand

	Updated FC2009 (MW)	Updated FC2009 growth
2011	7,964	–
2012	8,494	6.7%
2013	8,911	4.9%
2014	9,418	5.7%
2015	9,893	5.0%
2016	10,191	3.0%
2017	10,563	3.6%
2018	11,003	4.2%
2019	11,217	1.9%
2020	11,522	2.7%
2021	11,866	3.0%
2022	12,177	2.6%
2023	12,502	2.7%
2024	12,760	2.1%
2025	13,075	2.5%
2026	13,361	2.2%
2027	13,707	2.6%
2028	14,020	2.3%
2029	14,421	2.9%

Table 1.1-3: UPDATED Alberta Interconnected Electric System (AIES) - Annual Energy

	Updated FC2009 (GWh)	Updated FC2009 growth	Load Factor
2011	59,539	–	76.4%
2012	63,524	6.7%	77.3%
2013	66,768	5.1%	76.8%
2014	69,968	4.8%	79.7%
2015	73,204	4.6%	79.0%
2016	76,530	4.5%	78.2%
2017	79,110	3.4%	78.4%
2018	81,493	3.0%	78.0%
2019	83,661	2.7%	79.2%
2020	85,964	2.8%	79.6%
2021	88,087	2.5%	79.4%
2022	90,142	2.3%	78.7%
2023	92,395	2.5%	78.3%
2024	94,608	2.4%	79.3%
2025	96,640	2.1%	79.3%
2026	98,792	2.2%	79.3%
2027	101,095	2.3%	79.5%
2028	103,685	2.6%	78.8%
2029	106,408	2.6%	78.6%

1.2 Provincial Results - Demand Tariff Service (DTS) Energy

The AESO forecasts the annual energy amounts served to Demand Tariff Service (DTS) customers. This value is calculated as AIES minus Transmission Losses and Fort Nelson Demand Transmission Service (FTS). The annual DTS amounts from 2011 and beyond are shown in Table 4.3-1 below. These values are updated using the revised AIES energy amounts discussed above.

Table 1.2-1: UPDATED Demand Tariff Service (DTS) - Annual Energy

	Updated FC2009 (GWh)	Updated FC2009 growth
2011	55,471	–
2012	59,481	7.2%
2013	62,852	5.7%
2014	65,247	3.8%
2015	67,589	3.6%
2016	70,593	4.4%
2017	73,001	3.4%
2018	75,231	3.1%
2019	77,244	2.7%
2020	79,276	2.6%
2021	80,842	2.0%
2022	82,449	2.0%
2023	84,504	2.5%
2024	86,507	2.4%
2025	88,499	2.3%
2026	90,575	2.3%
2027	92,793	2.4%
2028	95,303	2.7%
2029	97,951	2.8%
2030 [†]	100,673	2.8%
2031 [†]	103,470	2.8%

[†] extrapolated from 2028 to 2029 growth rate