



Alberta Energy and Capacity

Presentation to AESO Adequacy and Demand Curve Working Group

August 9, 2017

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Definitions

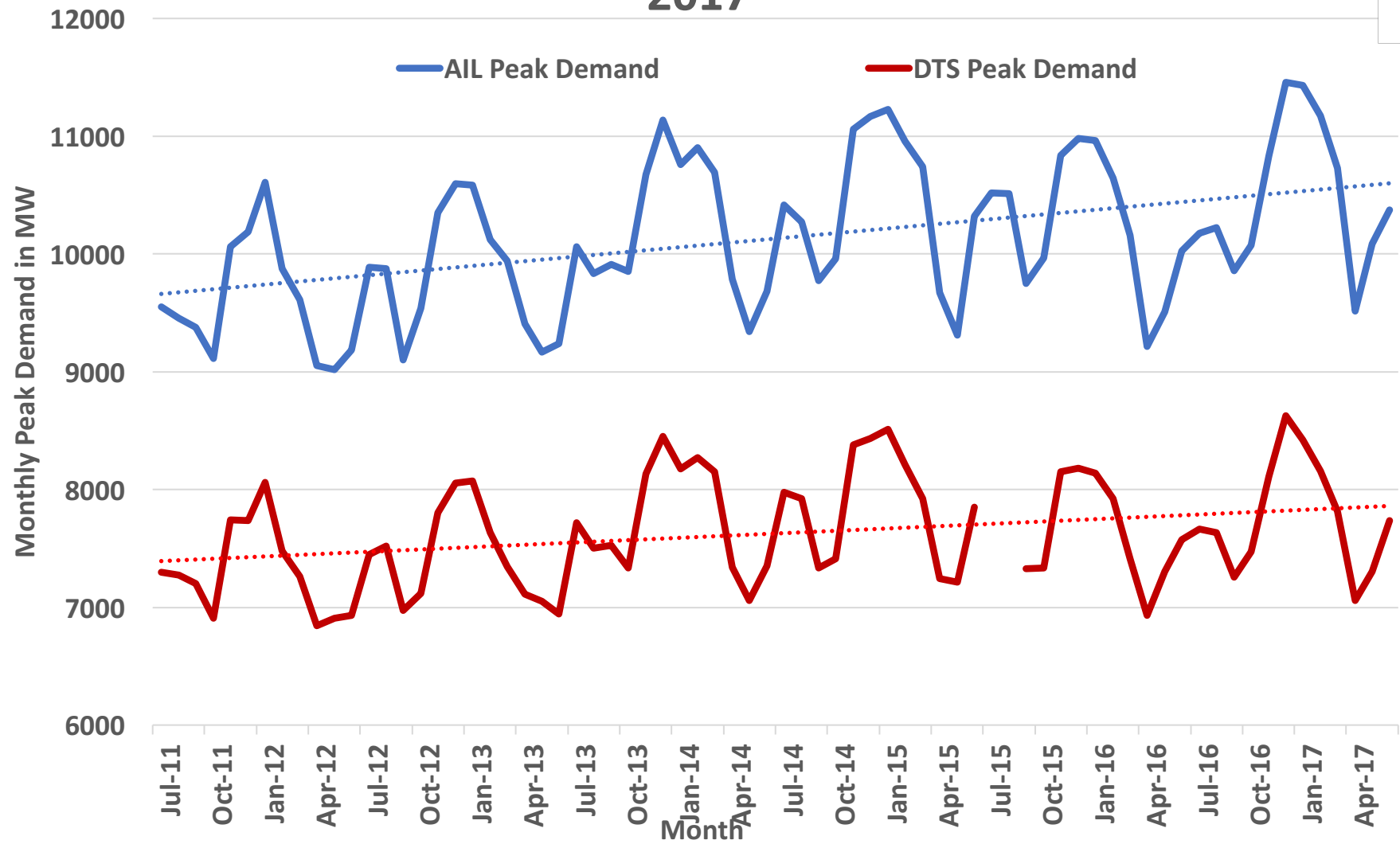
- **Alberta Internal Load (AIL)** - The total electricity consumption within the province of Alberta, including behind-the-fence (BTF) load, the City of Medicine Hat and losses (transmission and distribution).
- **Demand Transmission Service (DTS)** - means the total, in an hour, of all metered demands under Rate DTS
- **System load** - means the total, in an hour, of all metered demands under Rate DTS, Rate FTS and Rate DOS of the ISO tariff **plus transmission system losses.**

Alberta Historical Monthly Energy and Demand from July 2011 through June 2017

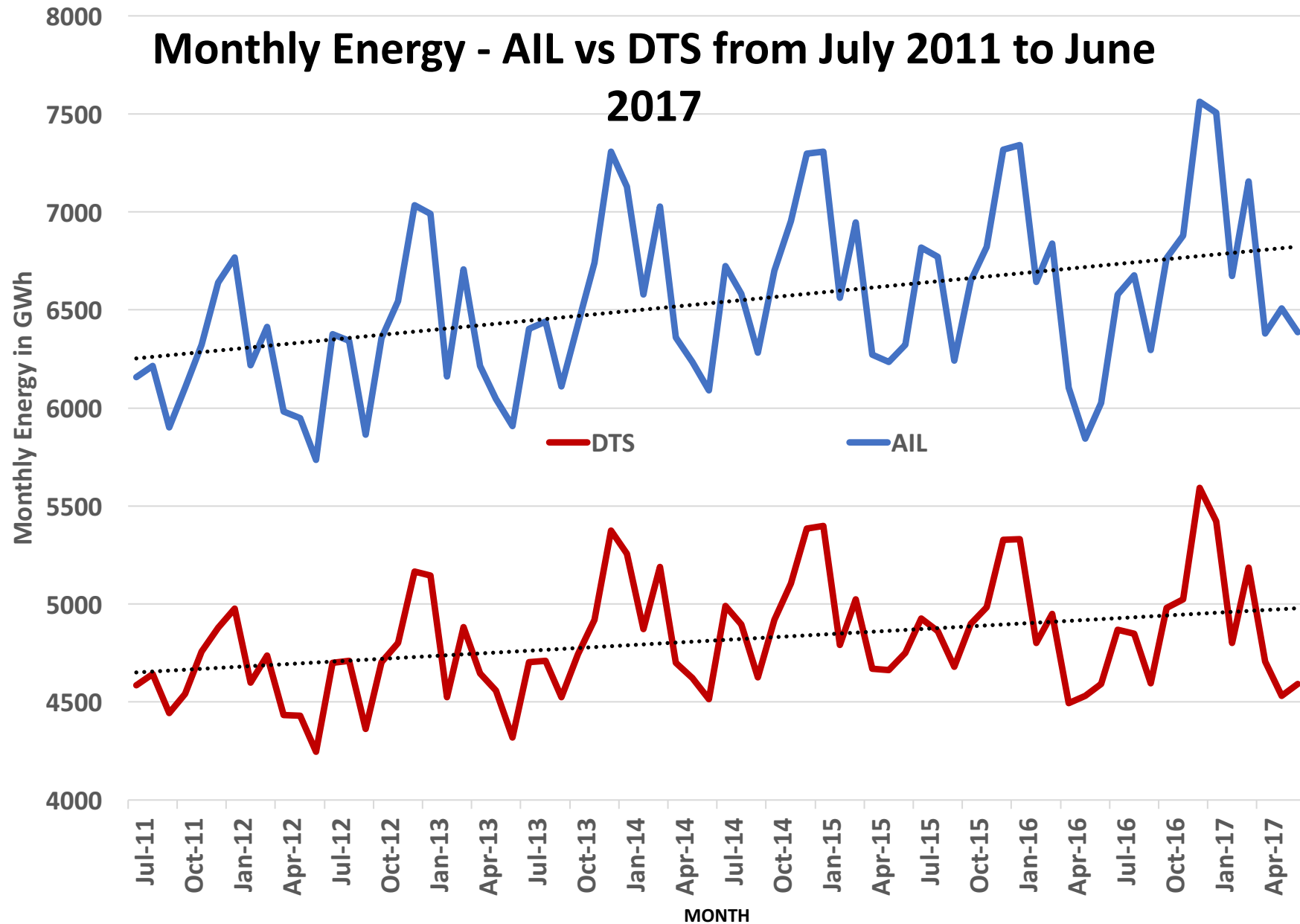
- Extracted from AESO Monthly Reports and the DTS data from the AESO's Operating Reserve Supplement

<https://www.aeso.ca/rules-standards-and-tariff/tariff/operating-reserve-charge-supplement-2/>

Monthly Peak = AIL vs DTS from July 2011 to June 2017



Monthly Energy - AIL vs DTS from July 2011 to June 2017

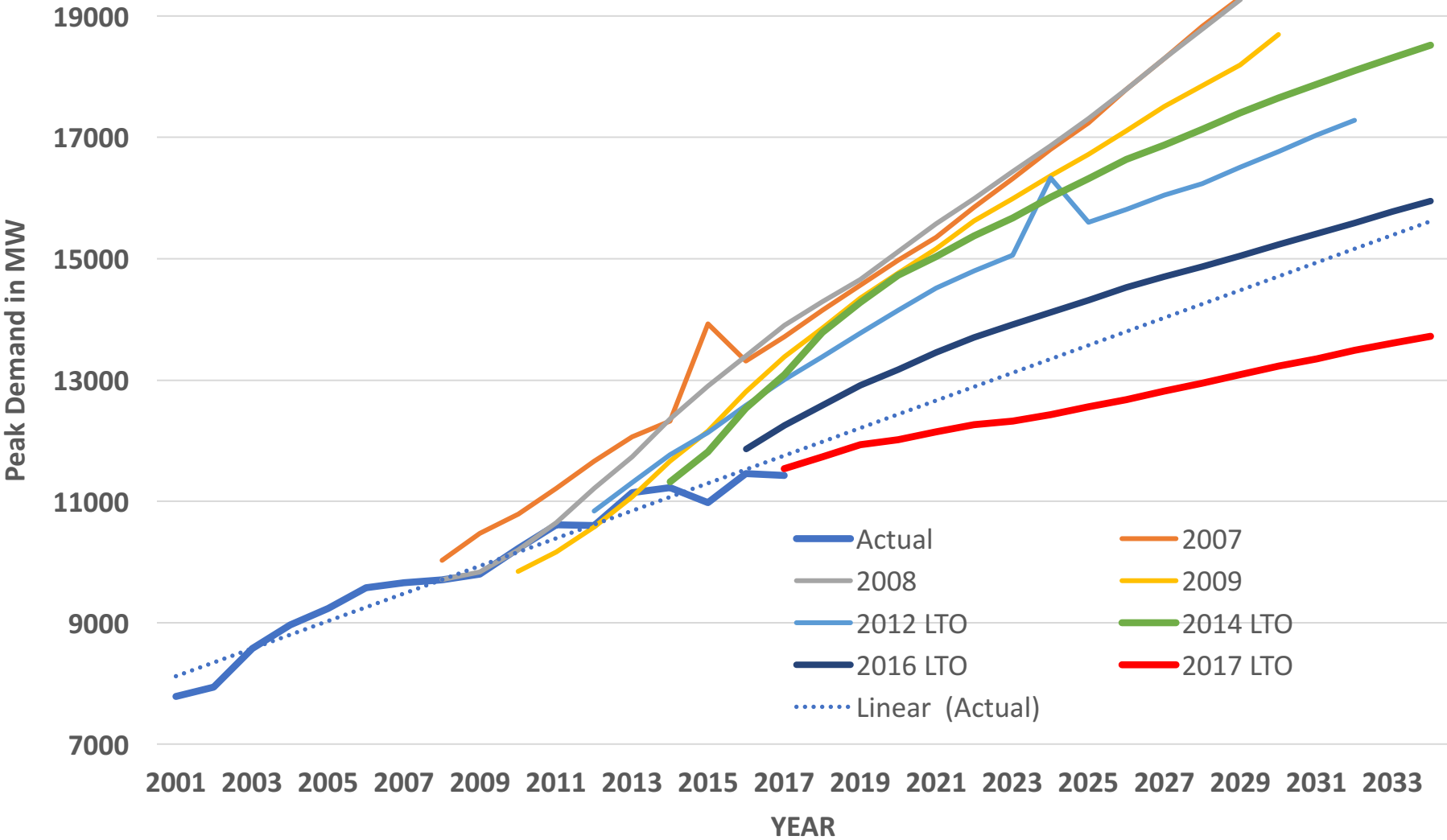


AESO Demand Forecast Comparisons

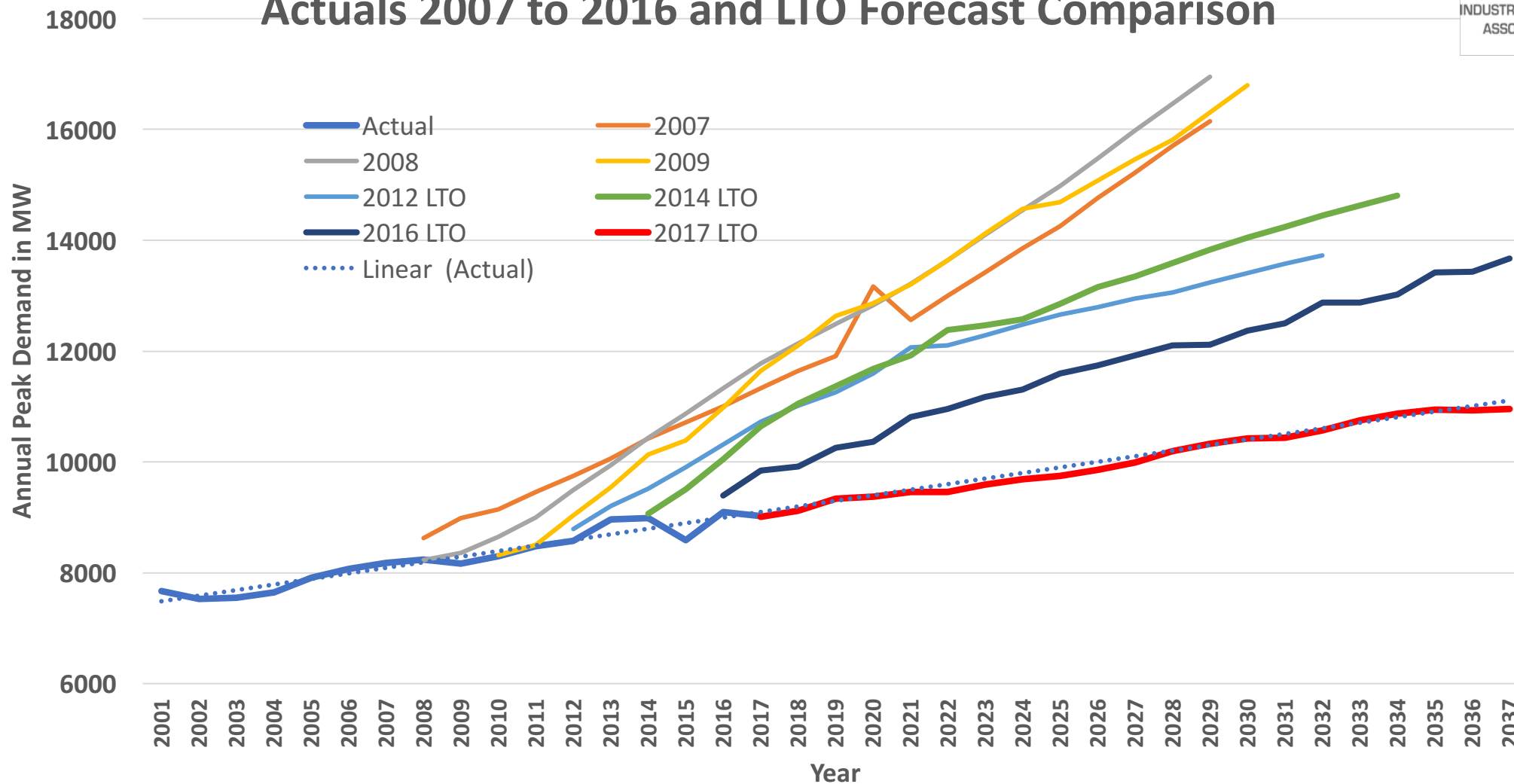
- Extracted from the AESO Long-Term Outlook Reports
- 2012 to 2017 AIL forecast error is 1570 MW
- 2012 to 2017 System Load forecast error is 1700 MW

TOTAL AIL PEAK LOAD

Actuals from 2001 to 2016 and Forecasts in LTO



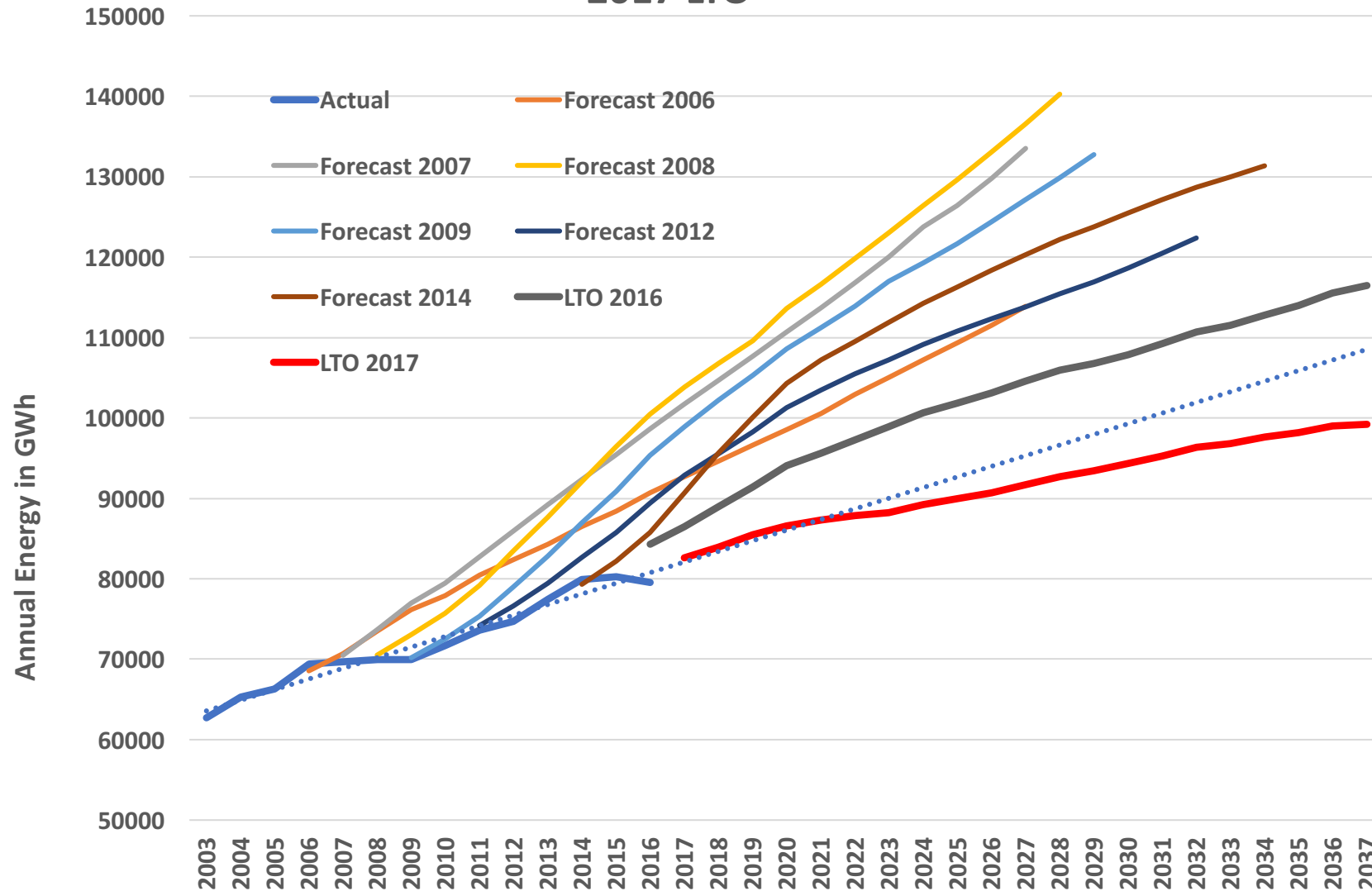
IPCAA
INDUSTRIAL POWER CONSUMERS
ASSOCIATION OF ALBERTA



AESO Energy Forecast Comparisons

- Extracted from previous AESO Long-term outlooks
- Latest 2017 LTO is following slope of historical actuals
- 2012 to 2016 AIL forecast error is 9,887 GWh (12.4 % error)
- 2012 to 2016 System Load forecast error is 10,438 GWh (16.8 % error)

AIL Actual Annual Energy versus forecast from 2006 through 2017 LTO



System Load Annual Energy versus forecast from 2006 through 2017 LTO

