

TESLA load forecasts were nearly twice as accurate as the System Operator for September 2016

This report compares both the load forecasts provided by TESLA via EMS' em⁶ and the System Operations load forecast (at 2.5 hours ahead of real-time) against actual load observations. As does the report released by Transpower, this report aggregates conforming and non-conforming load.¹ Future reports released by Transpower may look to separate these components as EMS' report does. EMS provides a detailed load forecasting accuracy analysis to all Load Forecast users on a monthly basis.²

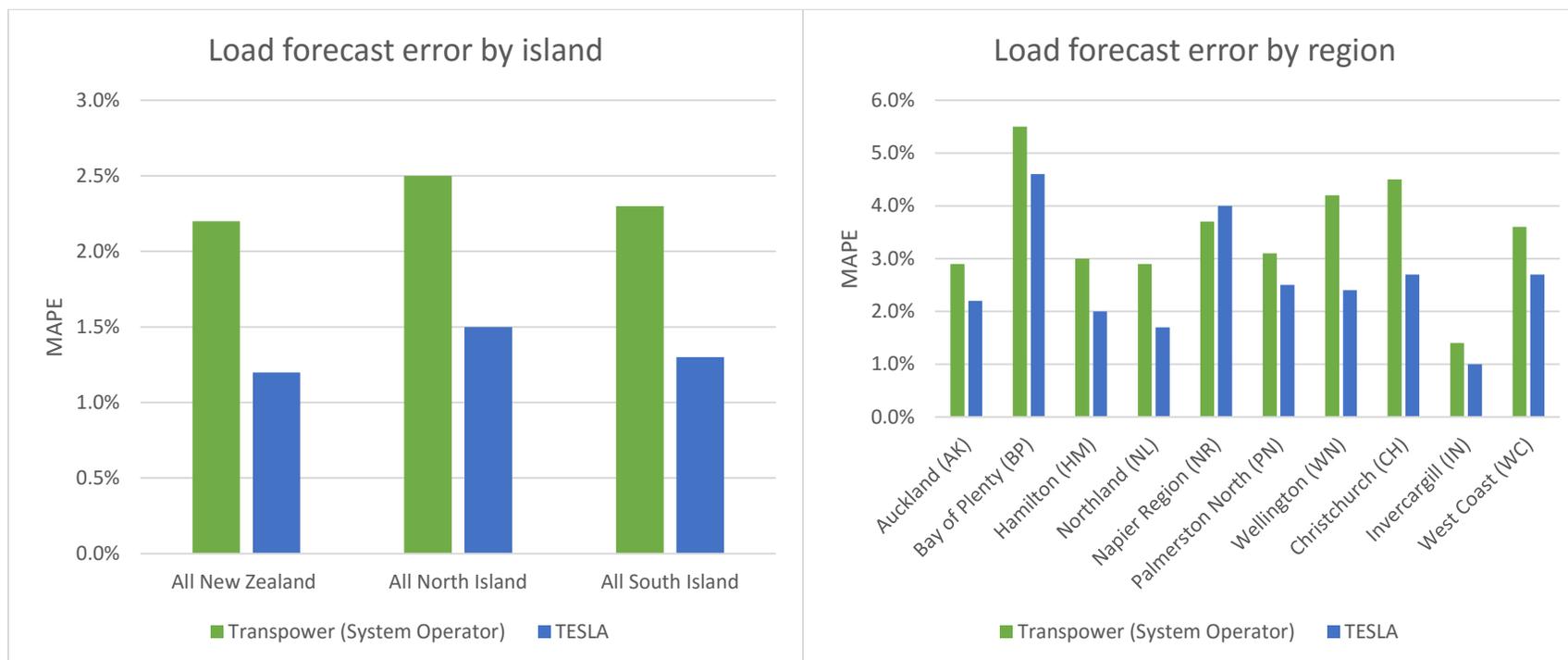
Load Forecast Accuracy

ALL TRADING PERIODS ACCURACY FOR SEPTEMBER 2016

	Transpower (System Operator)	TESLA
	MAPE (%)	MAPE (%)
All New Zealand	2.2%	1.2%
All North Island	2.5%	1.5%
Auckland (AK)	2.9%	2.2%
Bay of Plenty (BP)	5.5%	4.6%
Hamilton (HM)	3.0%	2.0%
Northland (NL)	2.9%	1.7%
Napier Region (NR)	3.7%	4.0%
Palmerston North (PN)	3.1%	2.5%
Wellington (WN)	4.2%	2.4%
All South Island	2.3%	1.3%
Christchurch (CH)	4.5%	2.7%
Invercargill (IN)	1.4%	1.0%
West Coast (WC)	3.6%	2.7%

¹ The System Operator's load forecast accuracy report can be found here: <https://www.transpower.co.nz/system-operator/operational-information/load-forecast-accuracy-reporting>

² For more information on the em⁶ Load Forecast: <http://ems.co.nz/portfolio/energy-information/loadforecast>



This report confirms that the TESLA load forecasts via em⁶ significantly outperform the load forecasts published by the System Operator. As these load forecasts both use the MetService’s weather forecasts, the deviation can be explained by differences in model error between the TESLA and System Operator systems.

The elevated forecast error in the Napier region was due to high variances within the non-conforming loads. TESLA’s 2.5 hour ahead MAPE was 2.6% for conforming loads and 17.6% for non-conforming loads within the Napier region in September 2016.

A free trial is available for industry participants to assess the added value of the TESLA load forecasts over the System Operator’s. Please contact TESLA Asia Pacific for more information: asiapacific@teslaforecast.com +64 (0) 9 551 5039