

Wind Power Forecasting Pilot Project

Event Analysis

Nov. 26, 2007

Reliable **Power**

Reliable **Markets**

Reliable **People**



Operations and Reliability

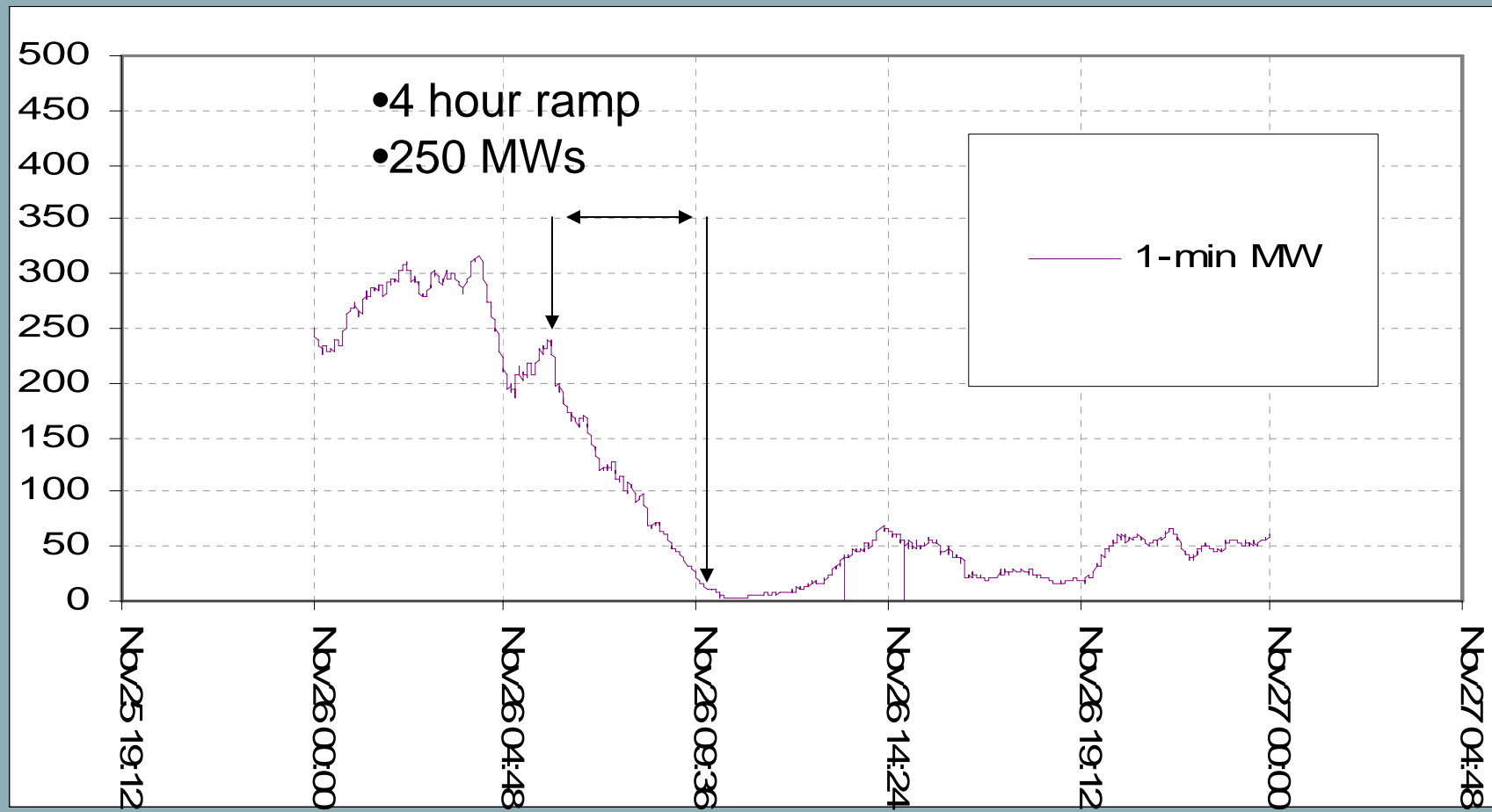
aeso

ALBERTA
ELECTRIC
SYSTEM
OPERATOR

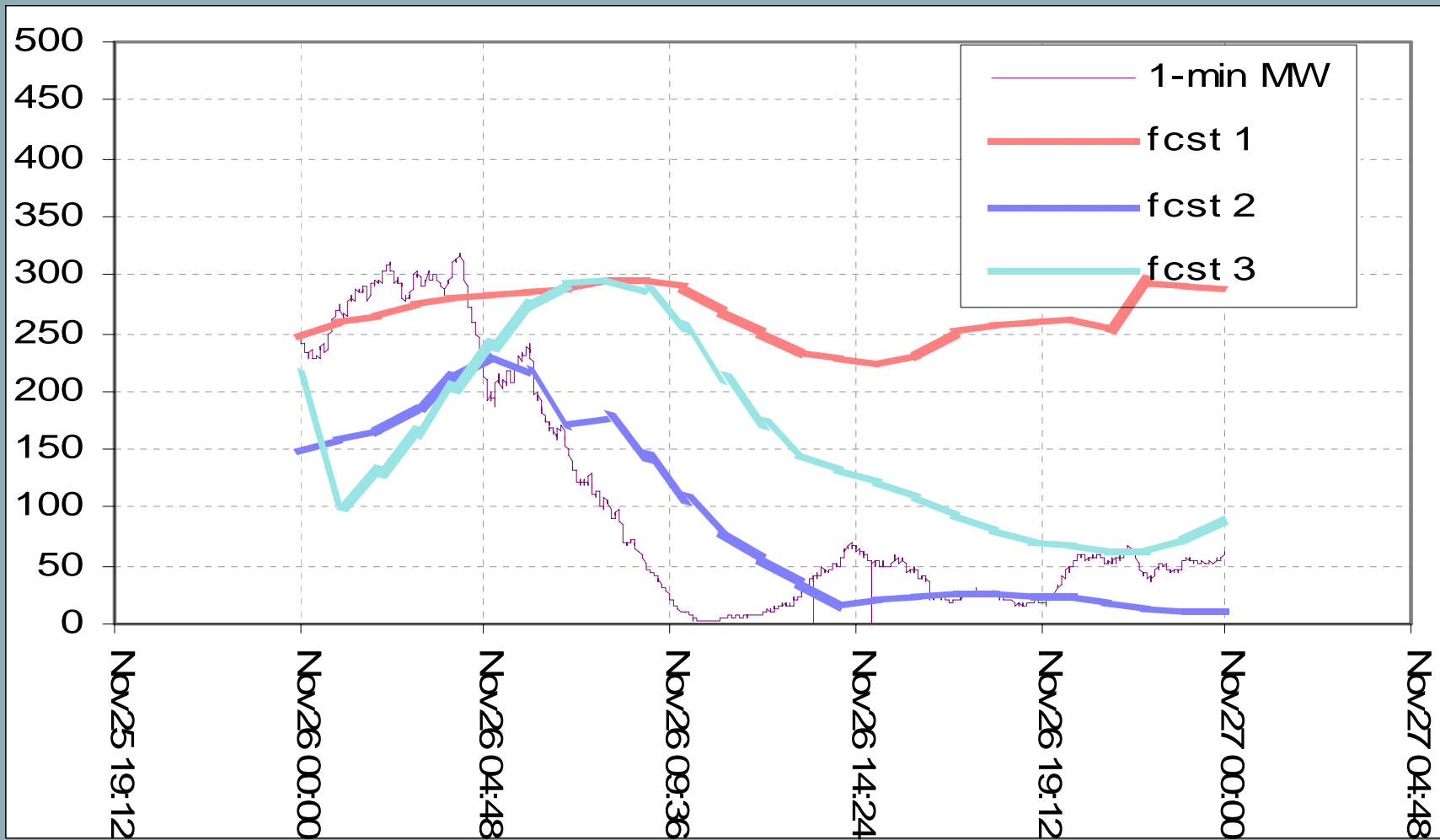


Event Description

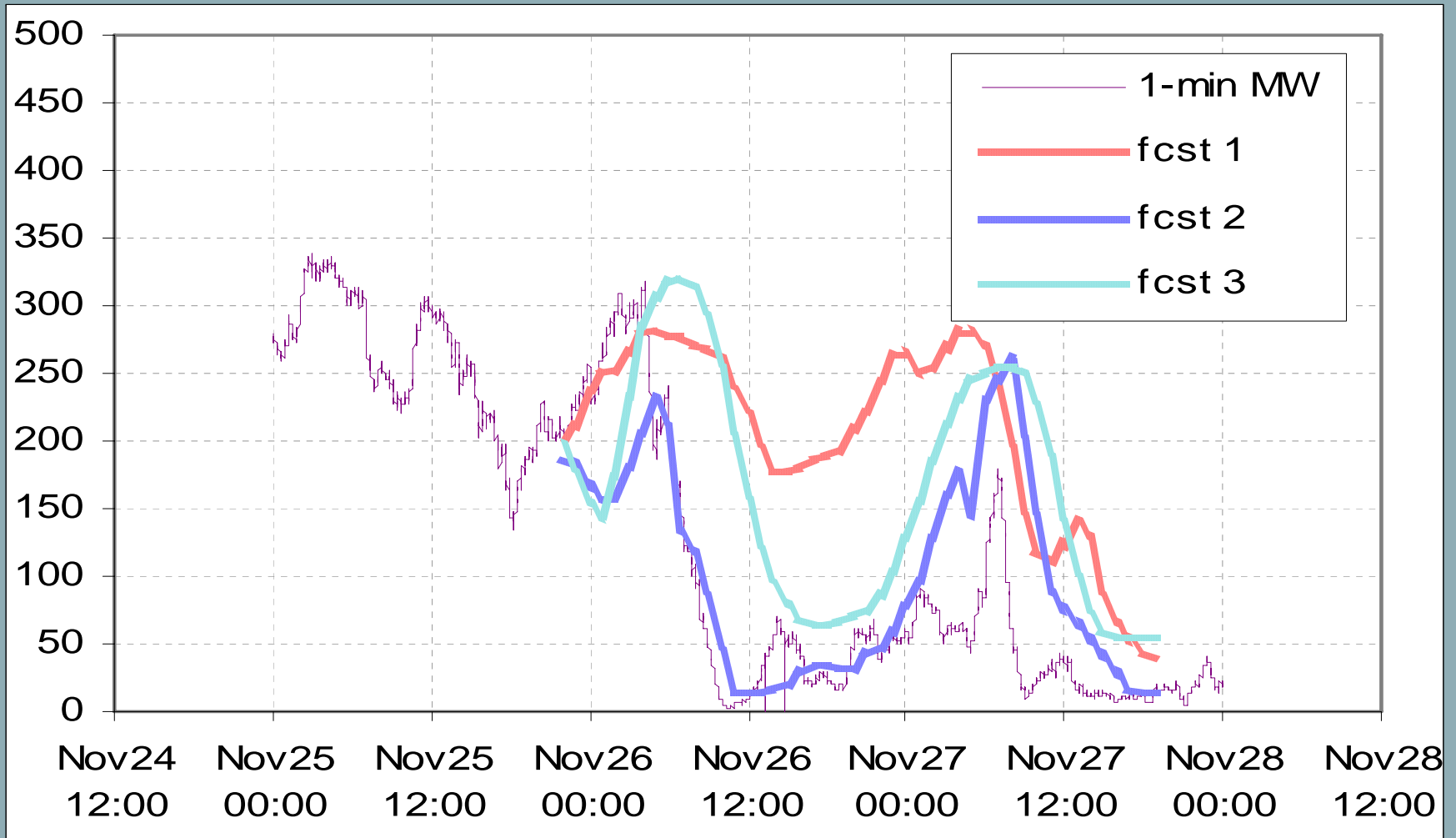
- Total Wind MCR 353 MW, Not including Kettles Hill/Taber



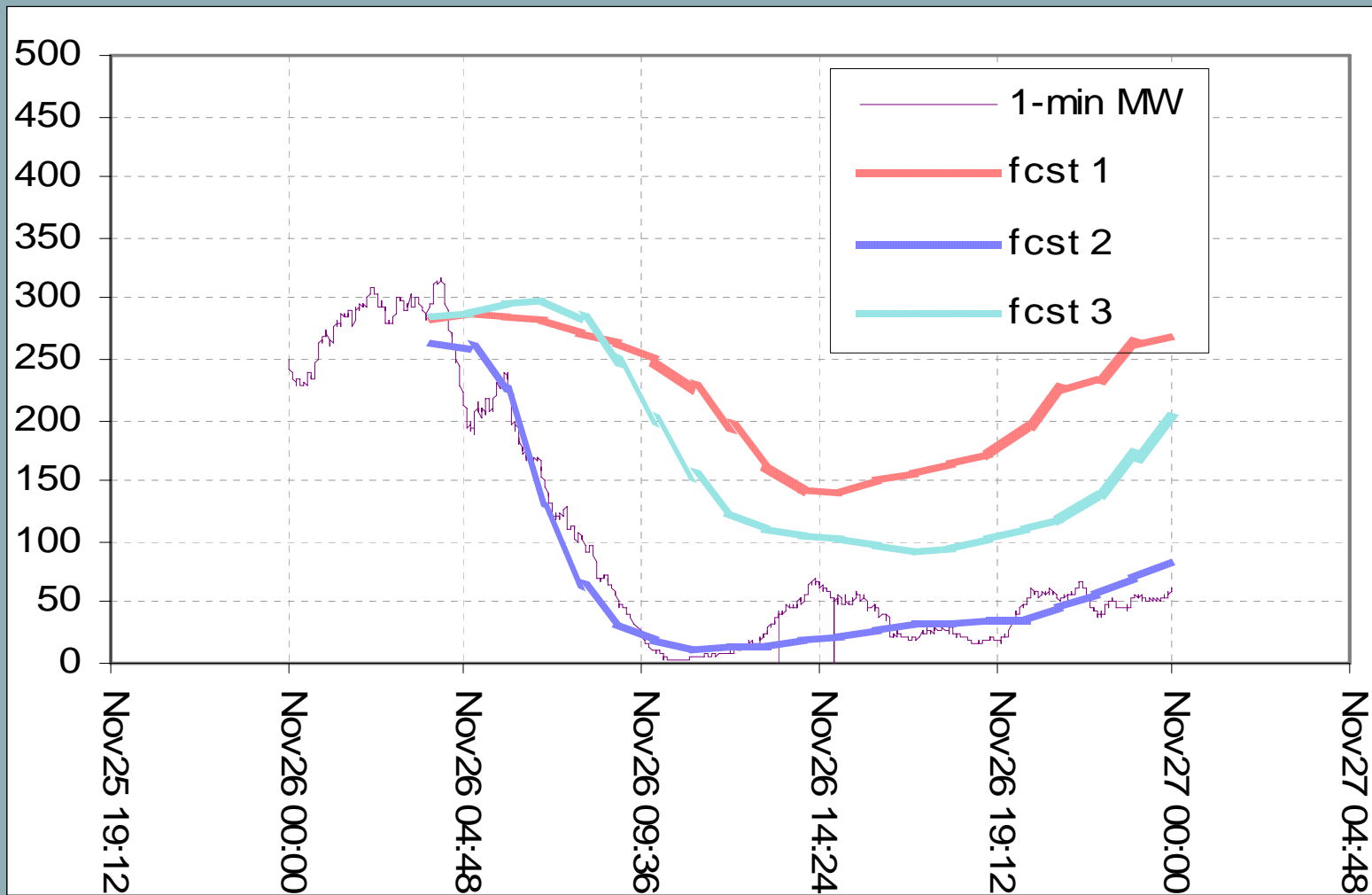
Day-Ahead Forecasts for Nov 26 (delivered Nov 25 at 7am)



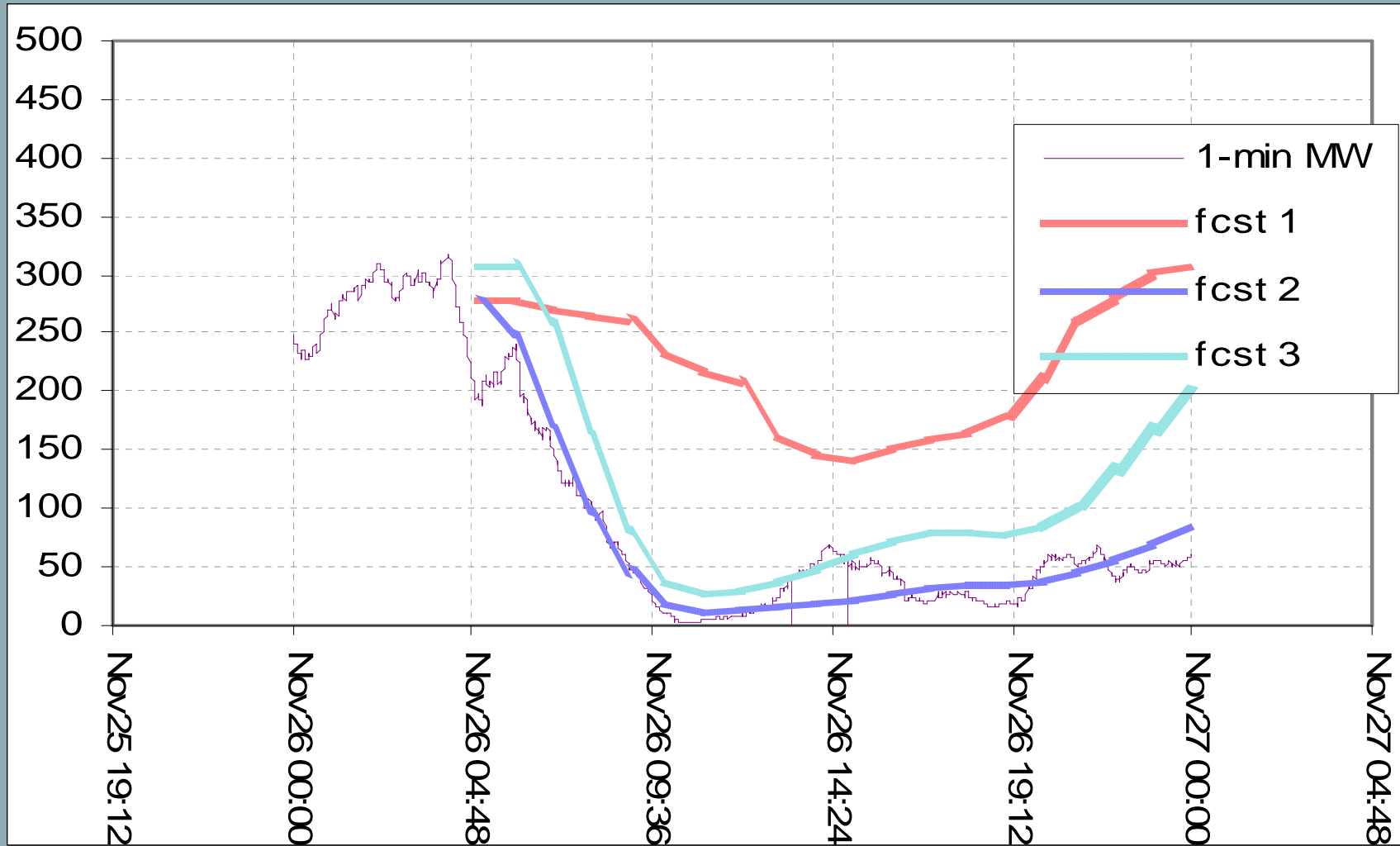
48 Hr Forecast delivered at 2100 on Nov. 25



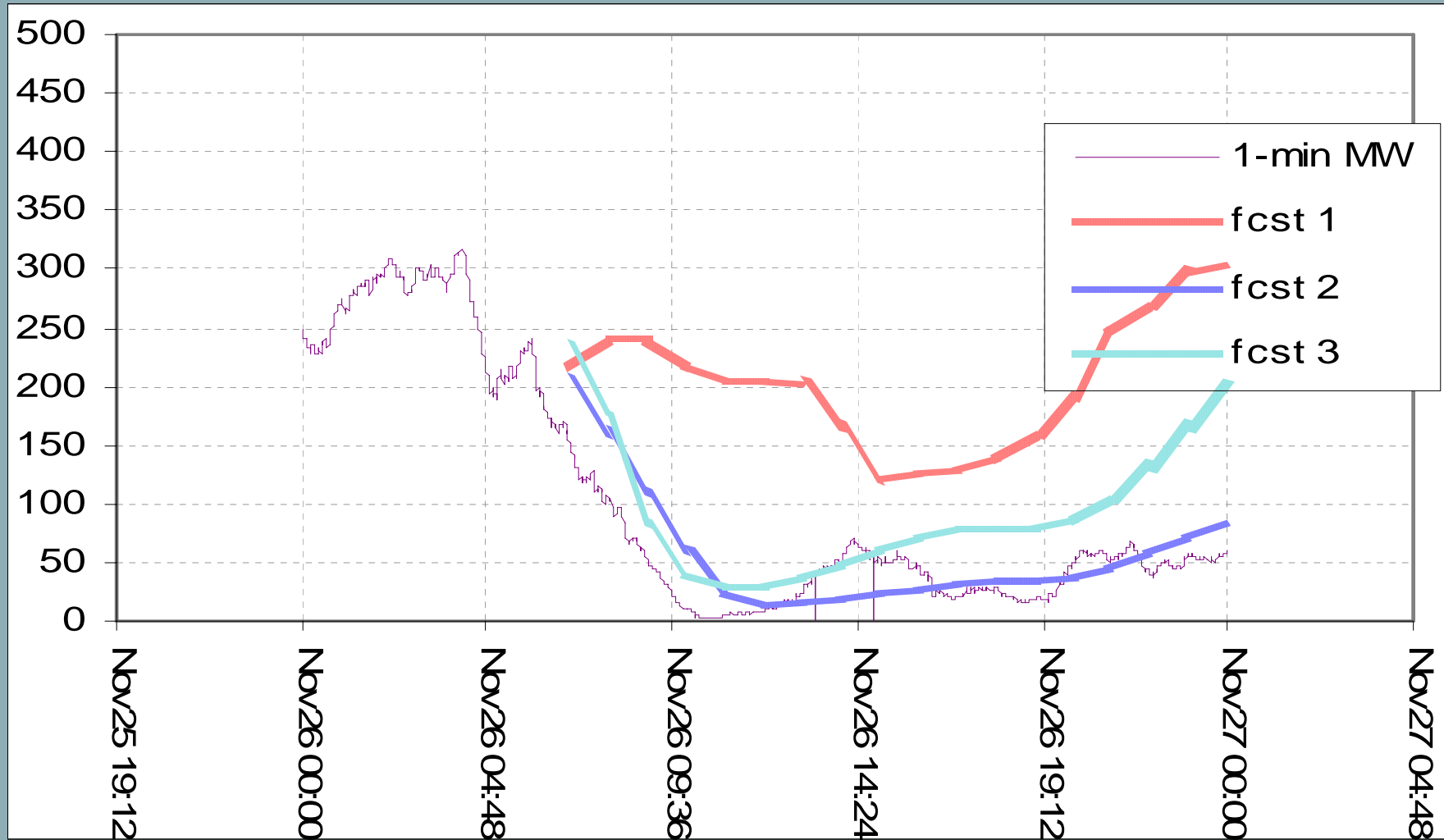
48 Hr Forecast delivered at 3am on Nov. 26



48 Hr Forecast delivered at 4am on Nov. 26



48 Hr Forecast delivered at 6am on Nov. 26



Forecaster Comments

- For F1 and F3, this event was seen by at least one of their single model outputs, but statistical corrections based on past weather patterns and low resolution NWP inputs in time and space resulted in little weight to these model outputs
- However, as a result of the single models that did see the event, they could have forecasted that there was a substantial possibility of a large forecast error
- Better use of local area measurements could assist in making up for low resolution NWP data, but this may not provide much benefit beyond the 4 hour timeframe because the measurements only cover a small geographic area
- As more of these events are experienced, the models should learn and the statistical outputs and corrections should become more accurate.
- The less historic data that you have to enhance your statistical outputs and corrections, the higher resolution data inputs you may require for accuracy