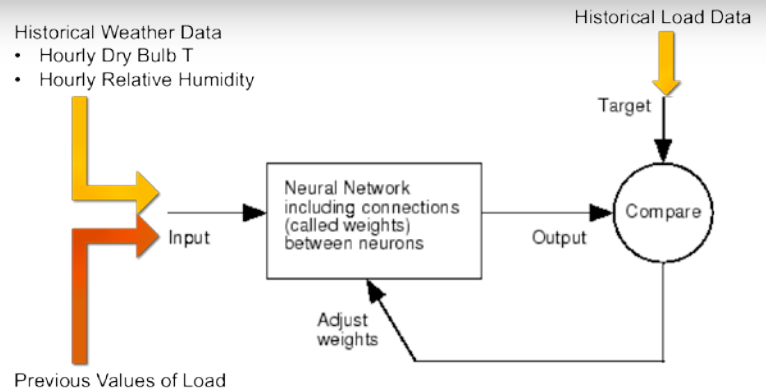


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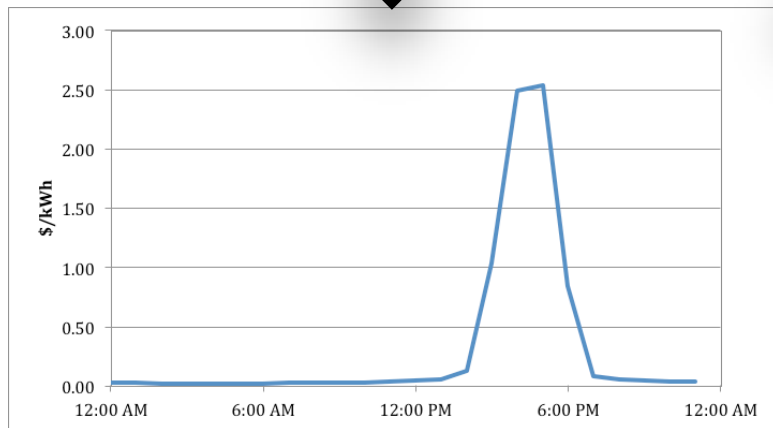
Peak Demand: Forecasting & Optimization



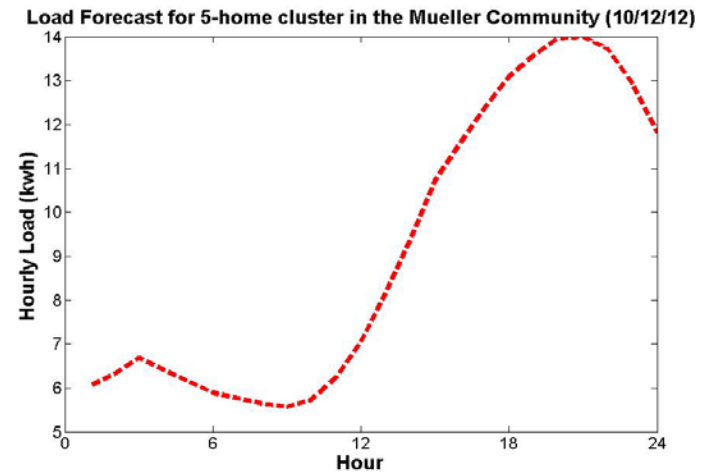
Peaking Power Plant owned and operated by Wolverine Power Co-op, MI



Nonlinear Autoregressive with Exogenous (NARX) Model

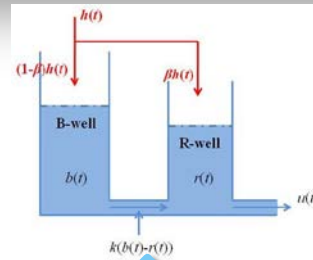


Electric Reliability Council of Texas
(ERCOT) Day-Ahead Settlement Point Prices (8/29/11)



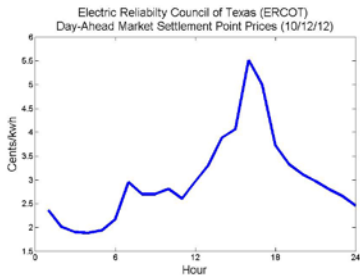
Akshay Sriprasad

Peak Demand: Forecasting & Optimization

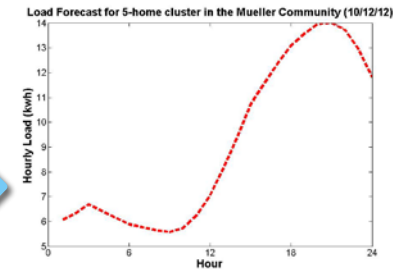


Kinetic Battery Model

ERCOT DAM SPP



24 hour load forecast



q_1



q_2



q_3



Dynamic Optimization

Energy Cost Savings----CES Scaling Optimization----PV Peak Value Analysis