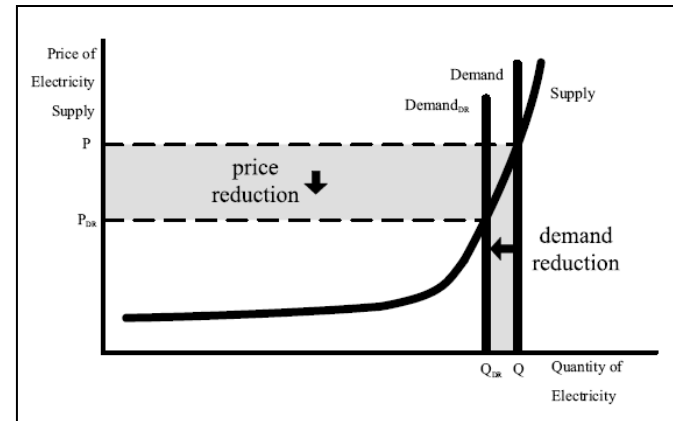


Modeling Demand Response and the Smart Grid

Akshay Sriprasad

- Research Goals
 - To model and optimize the pricing and behavioral aspects of energy consumption
 - To study demand response, dynamic pricing models
- Techniques
 - Real Time Optimization (RTO)
 - Statistical Analysis
- Tools
 - MATLAB/Simulink
 - Smart meters, controllers, and appliances



Demand Response- Electricity price reduction as an output of decreased load
Figure Credit: Pecan Street Project



Current generation home energy controller, this one produced by Cisco Systems, Inc.