Ahead-of-time National Electricity Market information produced by the Australian Energy Market Operator: an open-source tool and case studies

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Real time outcomes in power systems and their associated market overlays are, to some degree, dependent on decisions made ahead of real time. These decisions are often made when considering resource or portfolio constraints in light of the best available ahead-of-time information, which includes demand, renewable energy generation and price forecasts.

In the absence of binding ahead-of-time mechanisms in the Australian National Electricity Market, the Australian Energy Market Operator (AEMO) runs several ahead-of-time processes to generate system and market information that participants can use to inform operational decisions/market participation, and that AEMO uses to assess the need for emergency measures.

This presentation will provide a brief overview of these ahead-of-time processes, an open-source tool that can be used to obtain data from AEMO and examples of how ahead-of-time information can be used to better understand real time outcomes and model decision making under uncertainty.