

LTA Overview

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Reliable **Power**

Reliable **Markets**

Reliable **People**



Today's Objective

- LTA Background
- LTA Principals
- Review LTA recommendations
- Metrics Discussion
- Threshold Level Discussion
- Threshold Actions Discussion
- Next Steps

LTA Background



- DOE Policy Paper issued in 2005 ; LTA committee developed proposals for action
- Initial LTA recommendation paper issued in 2007; LTA workgroup refined Metrics, Threshold and Threshold Actions
- Revised LTA paper issued in February 2008

LTA Recommendations

- Publish six LTA Metrics quarterly
 - New Generation and Retirements
 - Reserve Margin
 - Supply Cushion
 - 2YRPSAS
 - Generation Signposts
 - Contribution to Costs of Notional Gas-Fired Peaking Unit
- Set Threshold based on 2YRPSAS model
 - Use Total Energy Shortfall as the measure to monitor
 - Use 1600 MWh as the Threshold level
- Propose three potential Threshold Actions if Threshold breached
 - Load Shed Service
 - Self-Supply and Back-up Generation
 - Emergency portable Generation

- Publish LTA Metrics quarterly or as required
- Core metrics monitor adequacy
 - New Generation and Retirements
 - Reserve Margin
 - Supply Cushion
 - 2YRPSAS
- Additional proposed metrics monitor the market
 - Generation Signposts
 - Contribution to Costs of Notional Gas-Fired Peaking Unit
- Industry concern regarding AESO publication of metrics to monitor market

LTA Threshold Purpose



Establish a Threshold based on the 2yrPSAS metric, which will provide an indication of the likelihood of involuntary load curtailments in a subsequent two year period. When this likelihood becomes too great, the AESO may implement certain previously agreed upon Threshold Actions as an interim measure until the market can provide adequacy for the system on its own.

Two Year Probability of Supply Adequacy Shortfall (2YRPSAS)

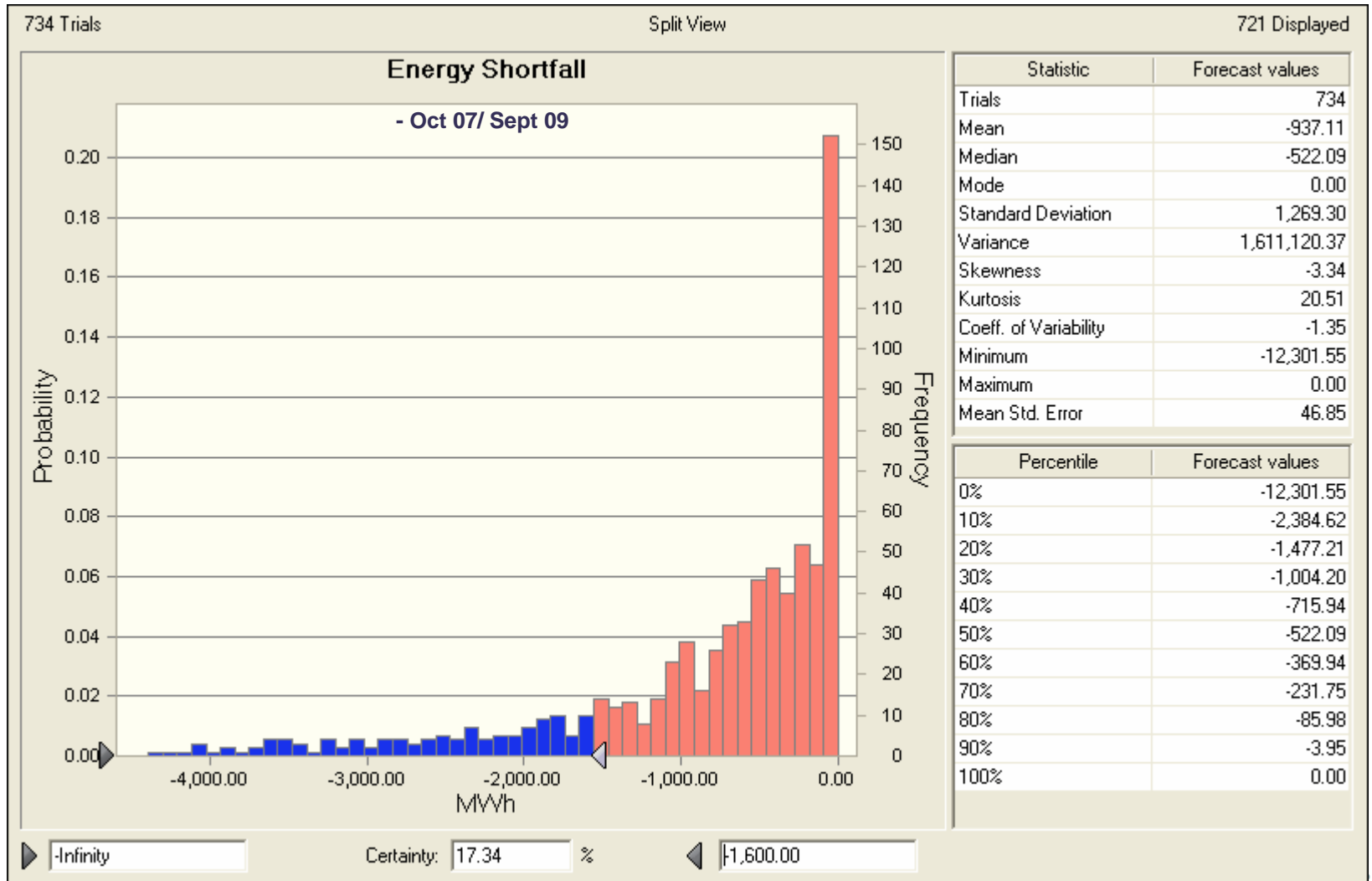


- Probabilistic assessment of an AES supply shortfall over a two year period
 - Builds upon the Supply Cushion metric incorporating a more complete representation of available daily supply. It differs from the Supply Cushion in that it:
 - Is comprised of multiple two year calculations each with different generation outage scenarios
 - Incorporates daily wind production and average import availability in shortfall definition
 - Reflects a distribution of outcomes for coal outages, large cogeneration output, hydro and wind

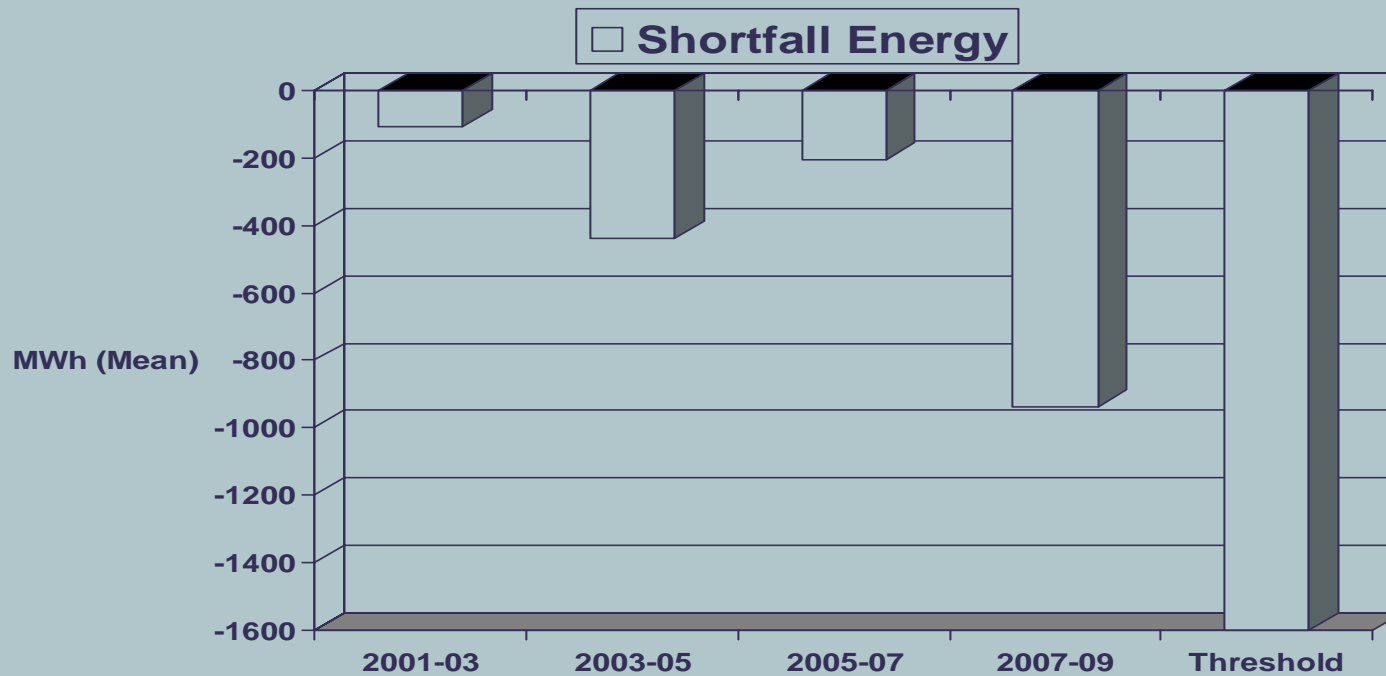
2 Year PSAS Run

Oct 07/Sept 09

Draft for Discussion Purposes Only



Threshold Level Recommendation



Threshold Action Rationale

- Expected can provide significant capacity at the time it is required, and relatively quickly
- Minimal impact on the market when they are procured and when they are dispatched
- Costs could be significant when procured (unsure of what offers will be), however overall cost should be much lower than most other options
 - Timeliness of procurement – purchased only when necessary
 - No long term capacity payments
- Load would pay for threshold actions since load would otherwise be curtailed (and pay through curtailment)

Threshold Actions

- Load Shed Service
 - Offer to curtail load
- Back-up Generation
 - Existing generators, not built with intention of offering into the market
 - Excess to onsite needs
- Emergency Portable Generation
 - Temporary addition offered by stakeholder
- Considered complementary services that would compete on similar terms

Next Steps

- LTA Recommendation paper released for broader stakeholder comment
- Recommendation paper comments received.
- Incorporate comments as appropriate into a draft of the LTA rules to be released as part of the rules process which would allow for further industry input.
- Submit final LTA rules to AUC