

#### Briefing on 2009 Annual Report on Market Issues and Performance

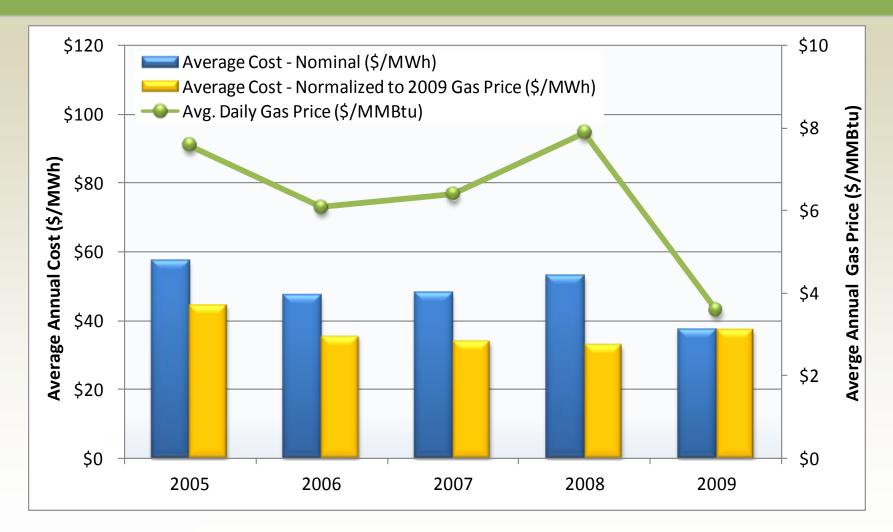


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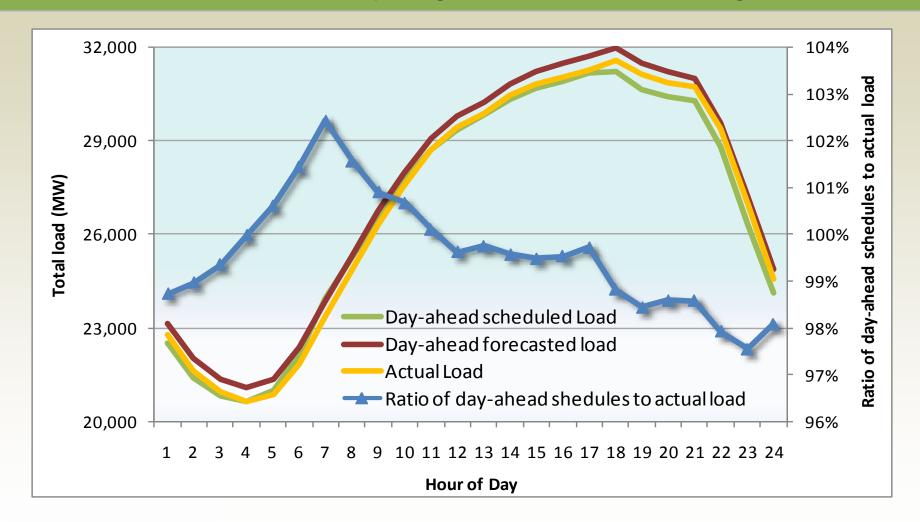
Board of Governors Meeting General Session May 17-18, 2010

#### Total wholesale costs have decreased primarily due to drop in gas prices – but the new market design also lowered costs.



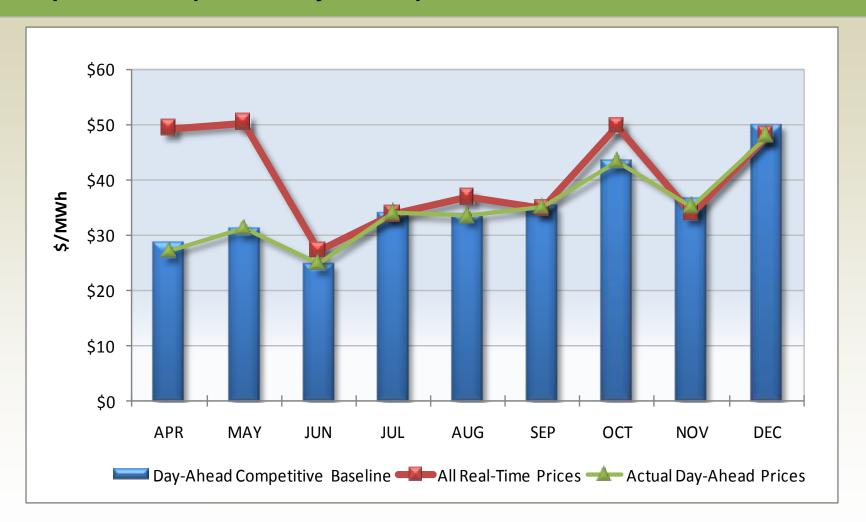


## Load and generation scheduled in day-ahead market has been very high – but not too high.



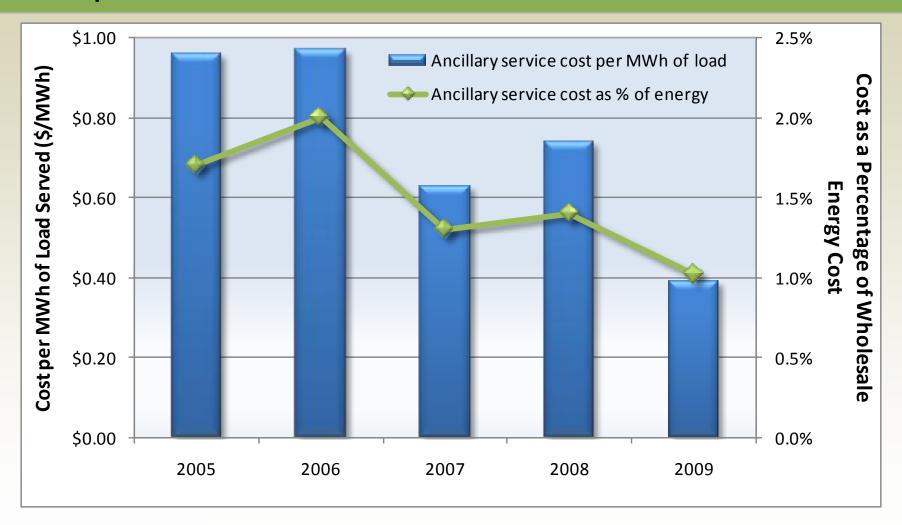


## Day-ahead and real-time prices have been about equal to a perfectly competitive baseline.



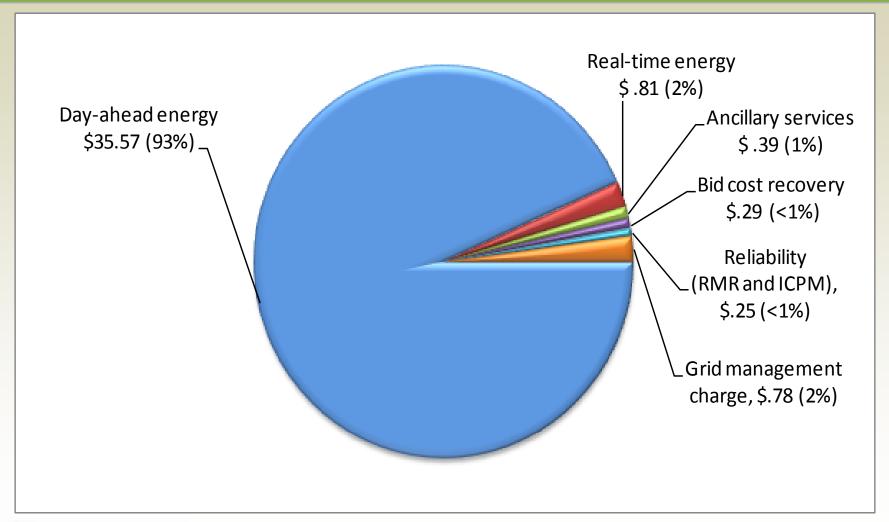


### Ancillary service costs have decreased due to co-optimization.



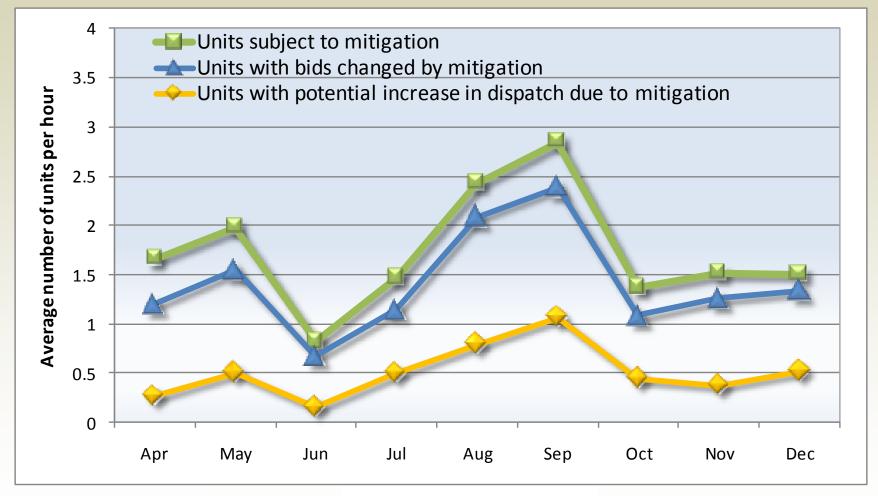


#### Bid cost recovery uplift payments were relatively low and compared favorably with other ISOs.





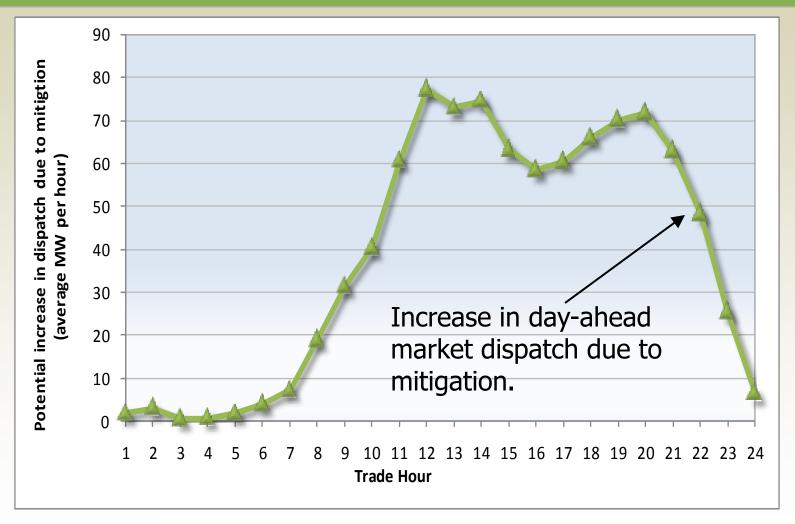
# The number of units impacted by local market power mitigation procedures has been relatively low.





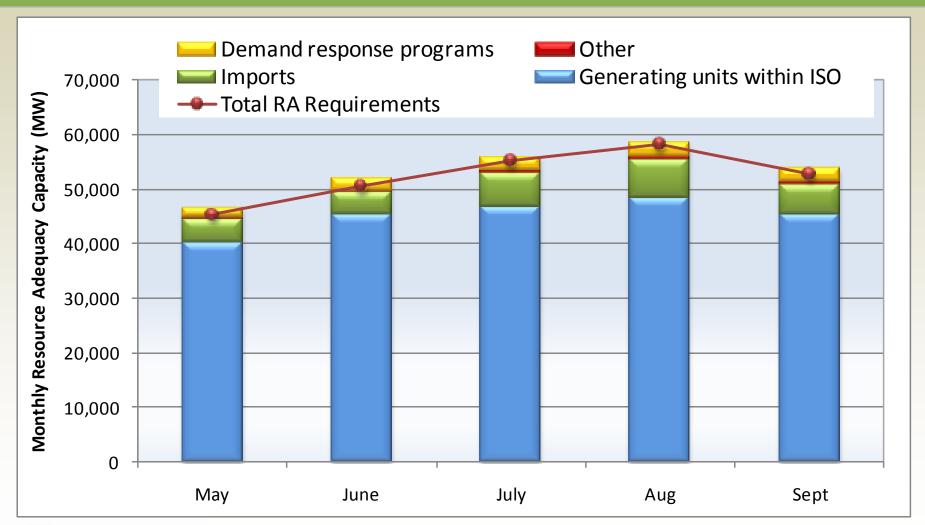
Day-ahead market

# When bids are lowered due to mitigation, the market impact has usually been relatively low.



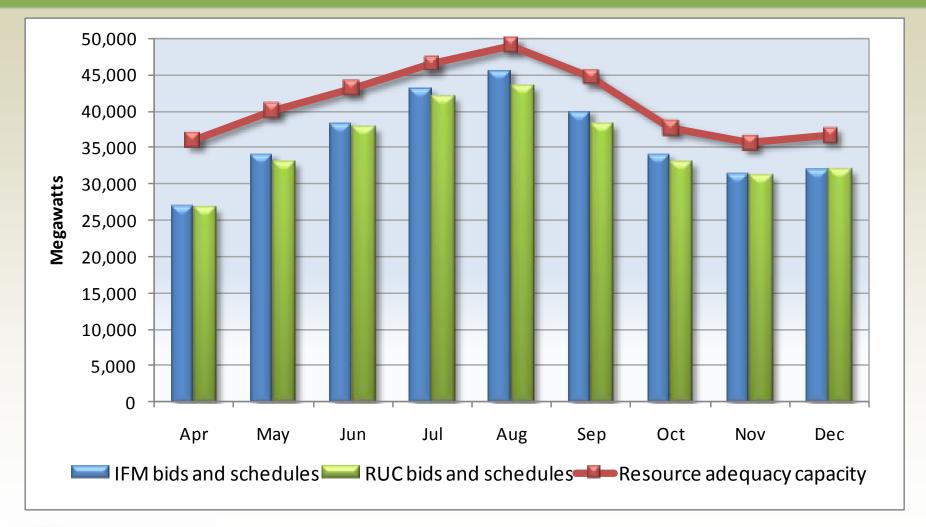


### Month ahead resource adequacy capacity showings exceeded system and local requirements.



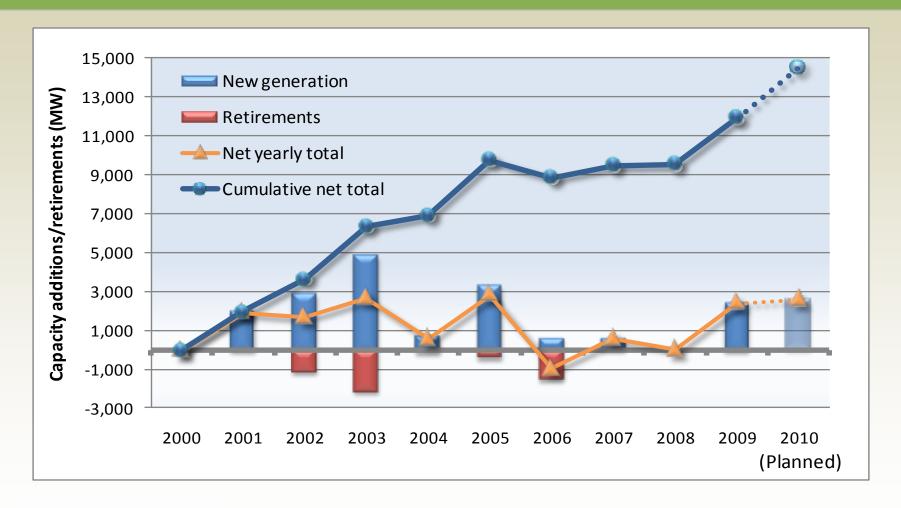


#### About 91% of resource adequacy capacity was available in the day-ahead market during very high load hours.



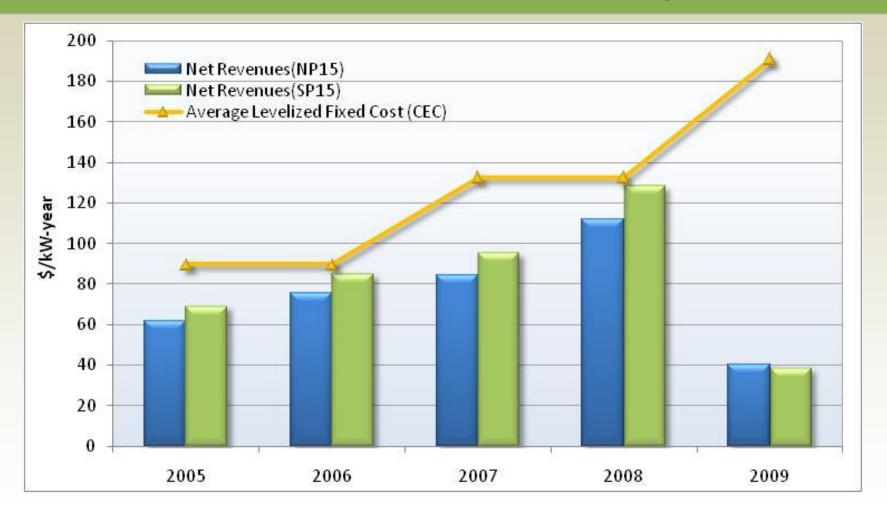


# Over 2,400 MW of new generation capacity was added in 2009, including 86 MW of renewables.



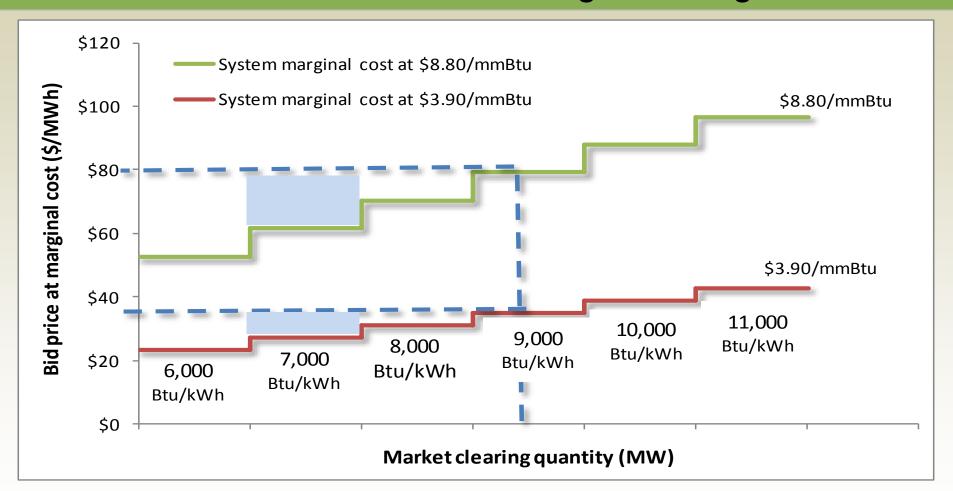


#### Estimated net revenues earned by a hypothetical new combined cycle unit from the ISO spot market dropped significantly.





### The drop in gas prices accounts for most of the decrease in net revenues of new gas-fired generation.





#### Recommendations: Market power mitigation

- Continuation of CPUC policies encouraging high level of forward energy contracting.
- Maintain current local market power provisions in 2010, while developing refinements:
  - Complete review of modifications previously proposed by DMM in convergence bidding design process.
  - Consider how to "relax" test for competitiveness of constraints once tool allowing more dynamic testing is completed.
  - Improve processes to ensure proper implementation of all aspects for local market power mitigation procedures.



#### Recommendations: Market design issues

- Develop capability to monitor proxy demand resource program taking effect in 2010 and adjust program as needed.
- Work with CPUC to develop requirements for proxy demand resources developed by non-utility demand service providers to provide resource adequacy capacity.
- Continue to work with CPUC to refine resource adequacy capacity counting criteria and performance standards for cogeneration, wind and solar resources.

