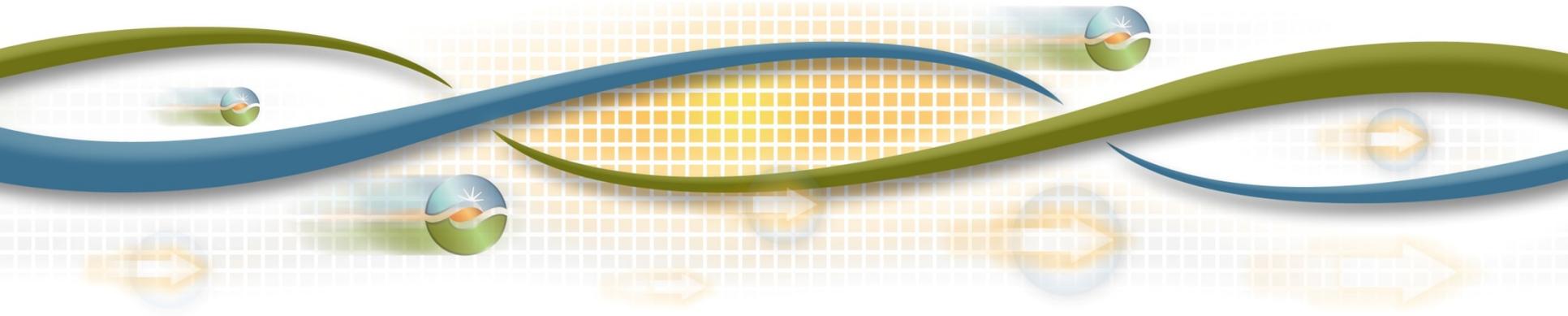




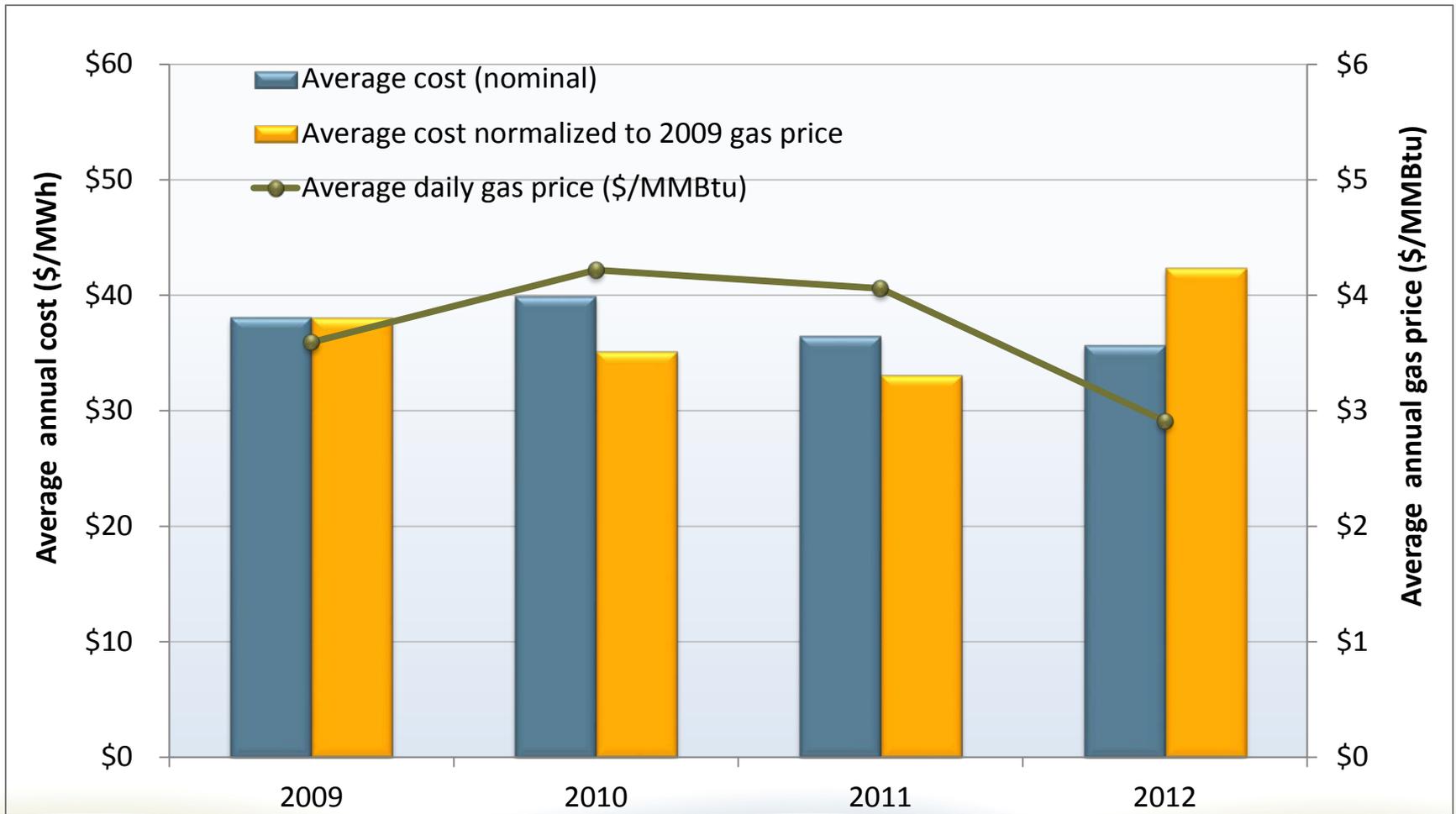
Briefing on 2012 Annual Report on Market Issues and Performance

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Total annual wholesale costs decreased 2% and remained consistent with a highly competitive market.



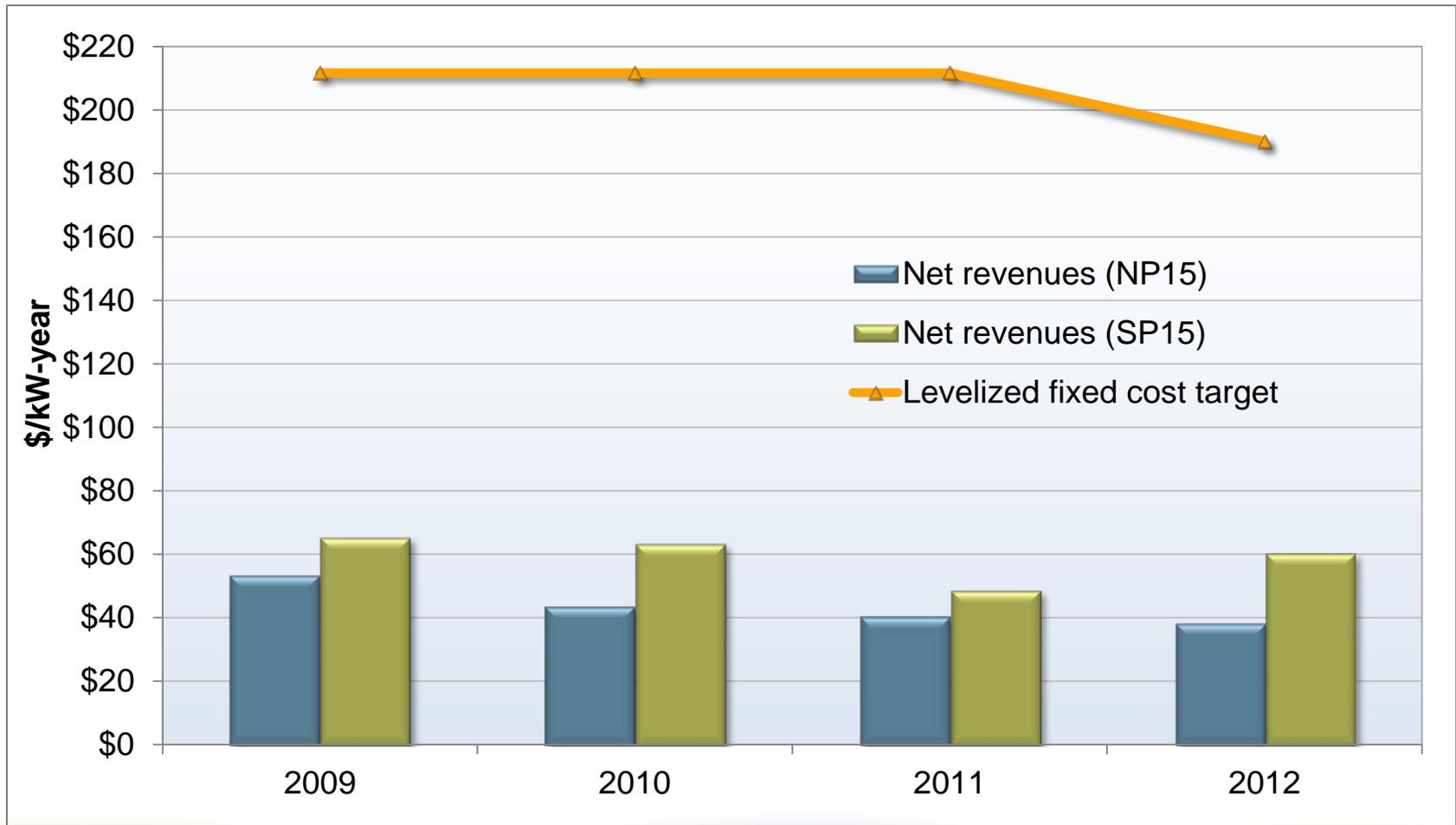
Other factors effecting overall wholesale costs.

- Real-time imbalance congestion offset costs increased from \$28 million to \$186 million (or about 2% of total wholesale costs).
 - Cost increase driven largely by high real-time congestion created by unscheduled flows.
 - ISO taking steps to improve modeling and management of transmission constraints.
 - Congestion offset costs down to about \$5 million in Q1 2013.
 - In May, FERC approved lowering of transmission constraint relaxation parameter from \$5,000 to \$1,500/MW, which may also help reduce congestion offset costs.

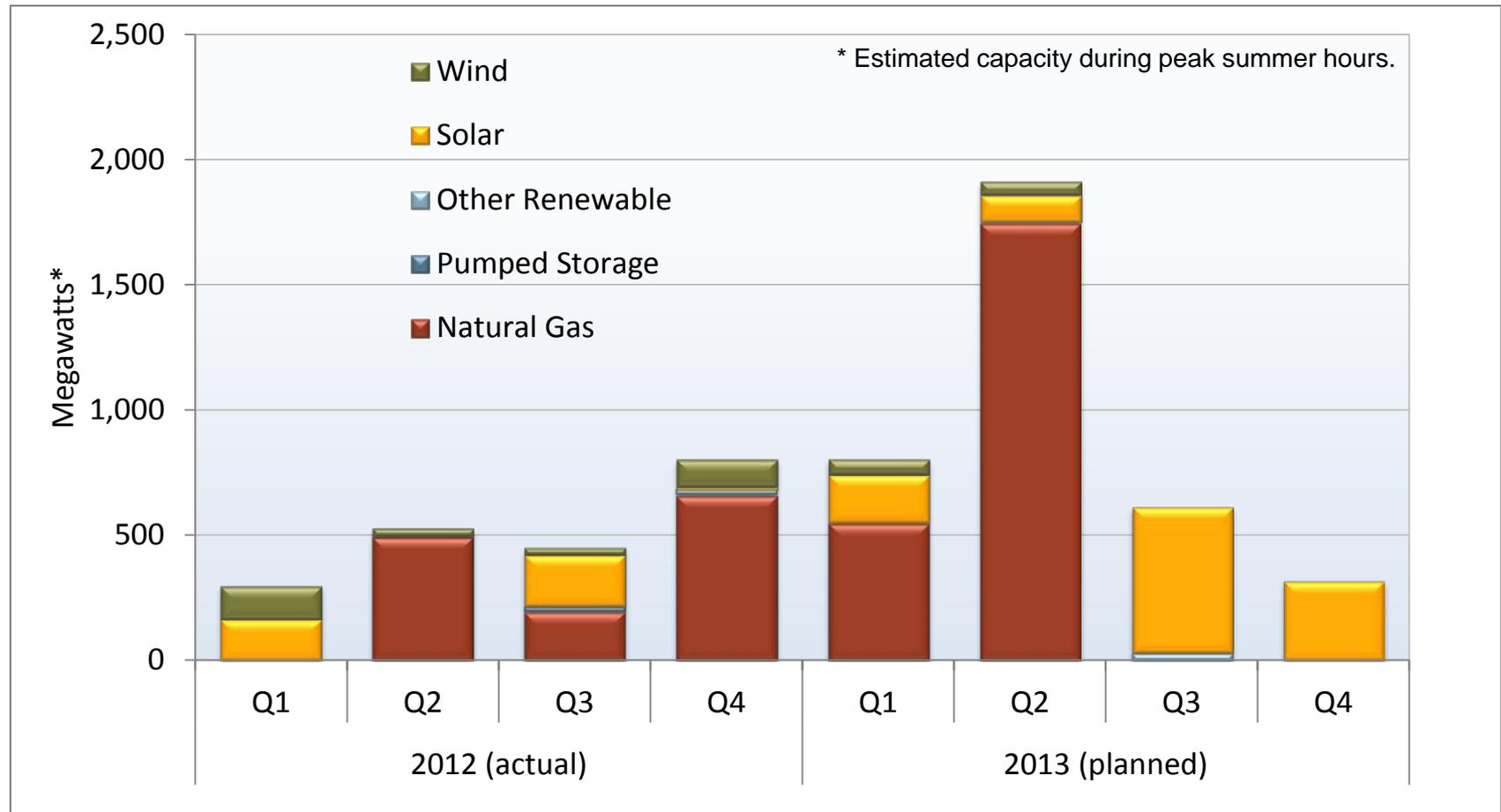
Other factors effecting overall wholesale costs.

- New automated local market power bid mitigation procedures very effective at mitigating local market power.
- Exceptional dispatch energy increased slightly to ~.4 % of system energy, but costs declined from \$43 million to \$34 million due to effective mitigation.
- Ancillary service costs dropped from about 2% to 1% of total wholesale costs.
- Bid cost recovery payments were down slightly to about 1.3% of total costs.

Net operating revenues earned by typical new gas units from the ISO energy market continue to fall well short of the fixed costs of new capacity.



Significant new generation has been built as a result of longer-term state procurement process.



Key recommendations

- Continue to focus on reducing real-time congestion offset costs through modeling improvements plus other market design and operational changes.
- Continue to work with the CPUC to develop forward capacity requirements which include effective flexibility requirements.
- Incorporate a clear link between forward procurement of flexible resources and an obligation to offer this capacity in the ISO markets at reasonable price.
- A well-designed mid-term capacity market (3-5 years) may be more effective at meeting different dimensions of capacity requirements than continued reliance on the current resource adequacy program.