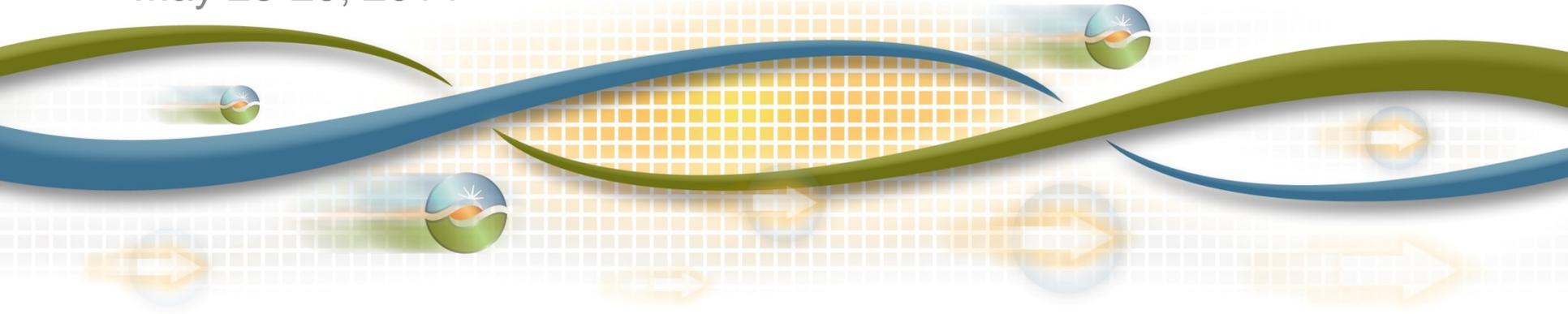




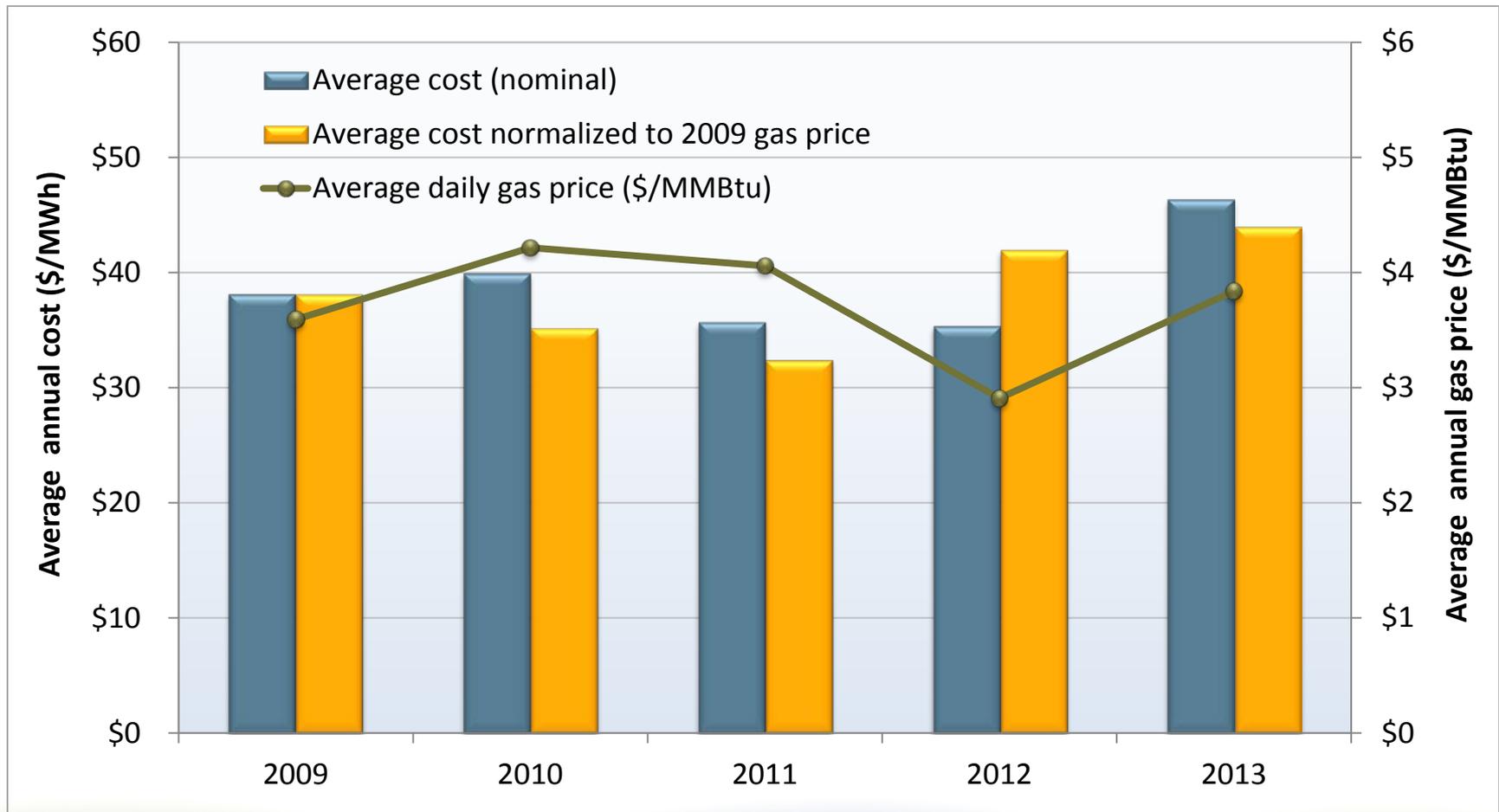
Briefing on the 2013 Annual Report on Market Issues and Performance

Keith Collins
Manager, Monitoring and Reporting
Department of Market Monitoring

Board of Governors
General Session
May 28-29, 2014



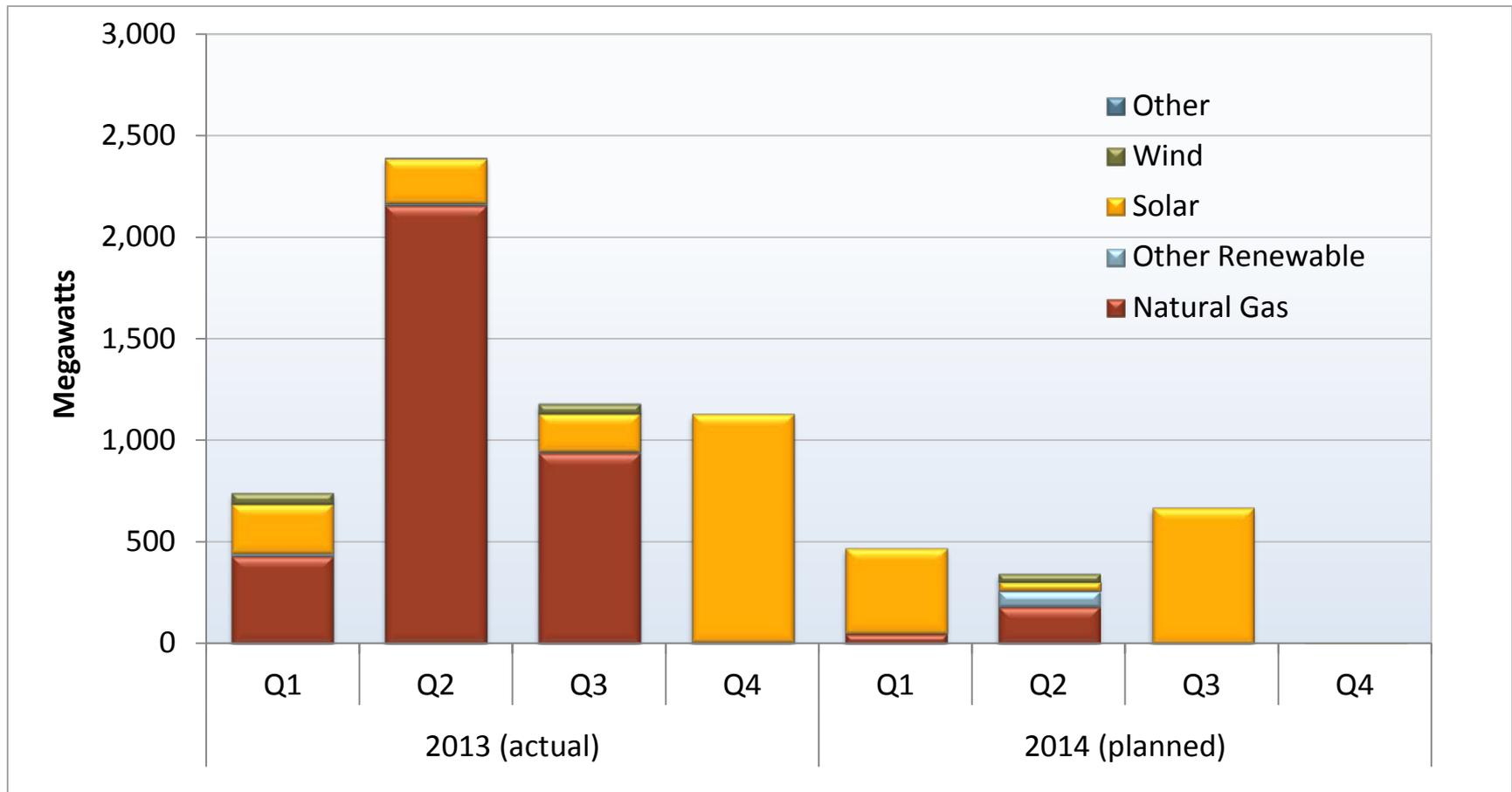
Total annual wholesale costs increased 30 percent primarily because of natural gas price increases



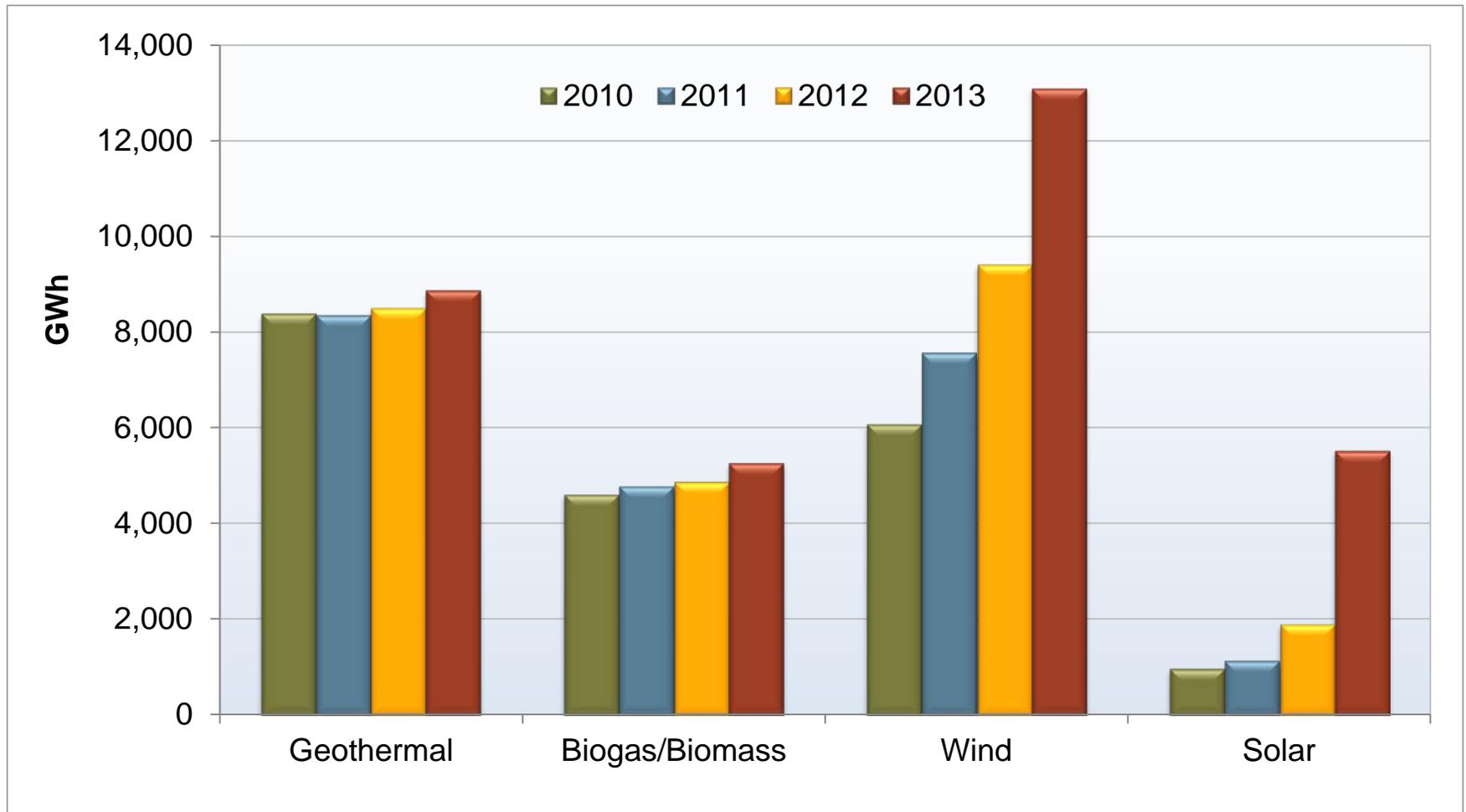
Other factors affecting wholesale costs

- Ancillary service costs dropped from about 1% to 0.5% of total wholesale costs.
- Bid cost recovery payments were around 1% of total costs, about the same as 2012.
- Real-time imbalance offset costs decreased from \$235 million to \$176 million (or about 1.6% of total wholesale costs).
- Exceptional dispatch energy halved to about 0.25% of system energy, and costs declined from \$34 million to \$18 million.

Significant new summer capacity was added as a result of the state's longer term procurement process



Wind and solar generation increased significantly in 2013 compared to previous years



Key areas of focus going forward:

- Market redesign related to order 764 implementation;
- Expansion of network model to regional level;
- Energy imbalance market; and
- Procurement of flexible capacity multiple years in advance.