

Briefing on Market Performance

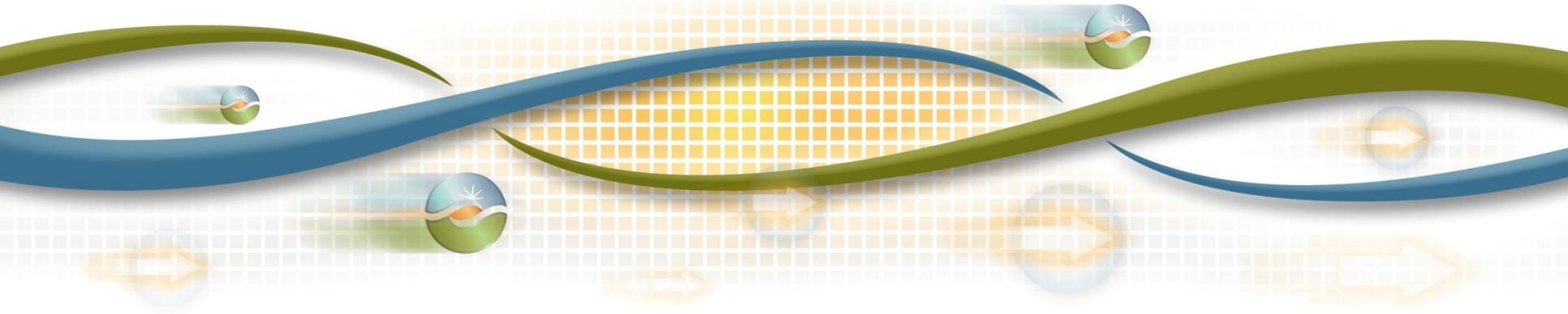
Mark Rothleder

Executive Director, Department Analysis and Development

Board of Governors

General Session

December 15-16, 2011



Market performance improved since August update in several areas.

- **Improved performance areas:**

- Hour ahead and real-time prices convergence
- Real-time imbalance energy offset reduces
- Bid cost recovery downward trends

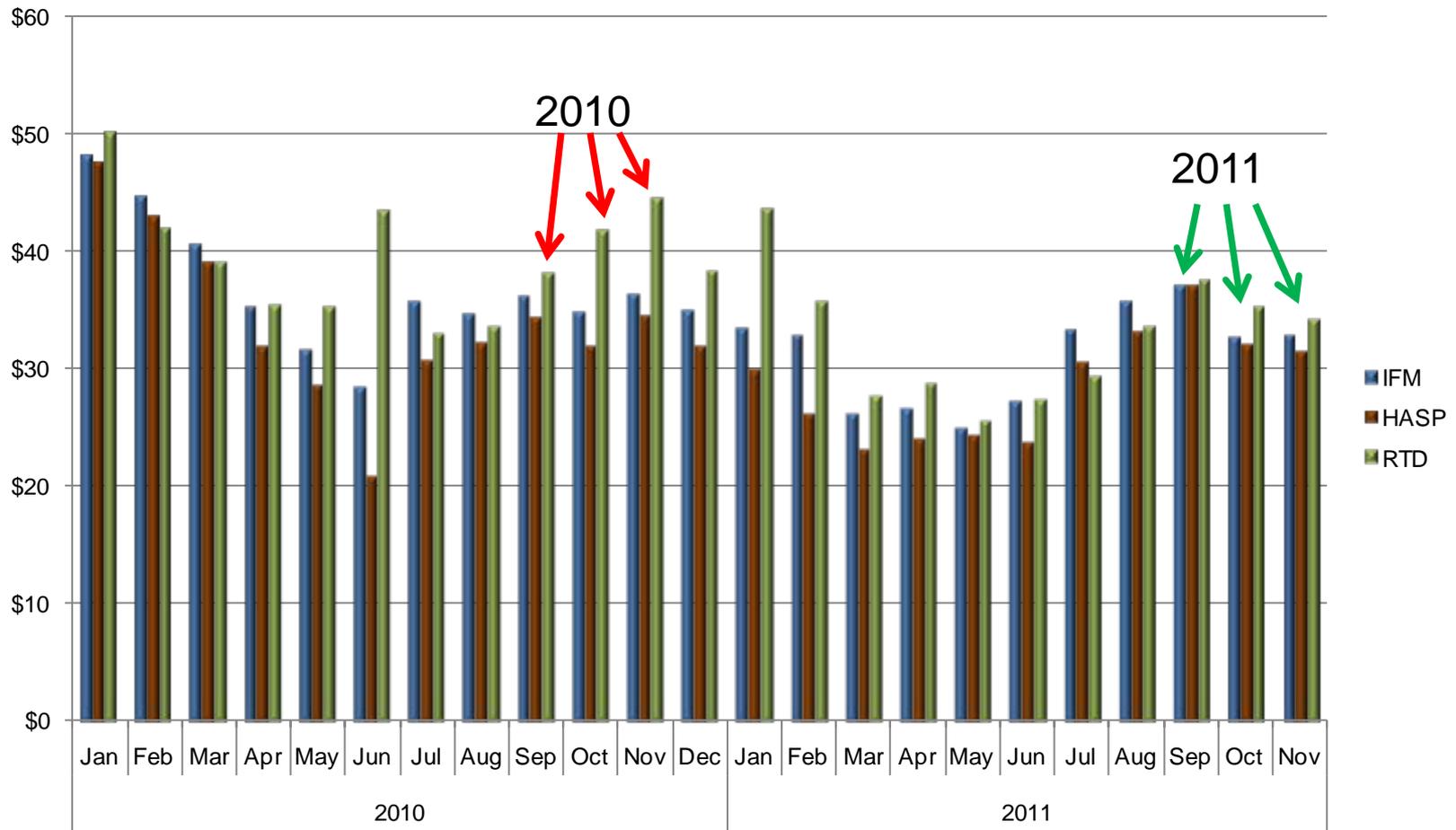
- **Opportunities for improvement:**

- Price corrections
- Exceptional dispatch

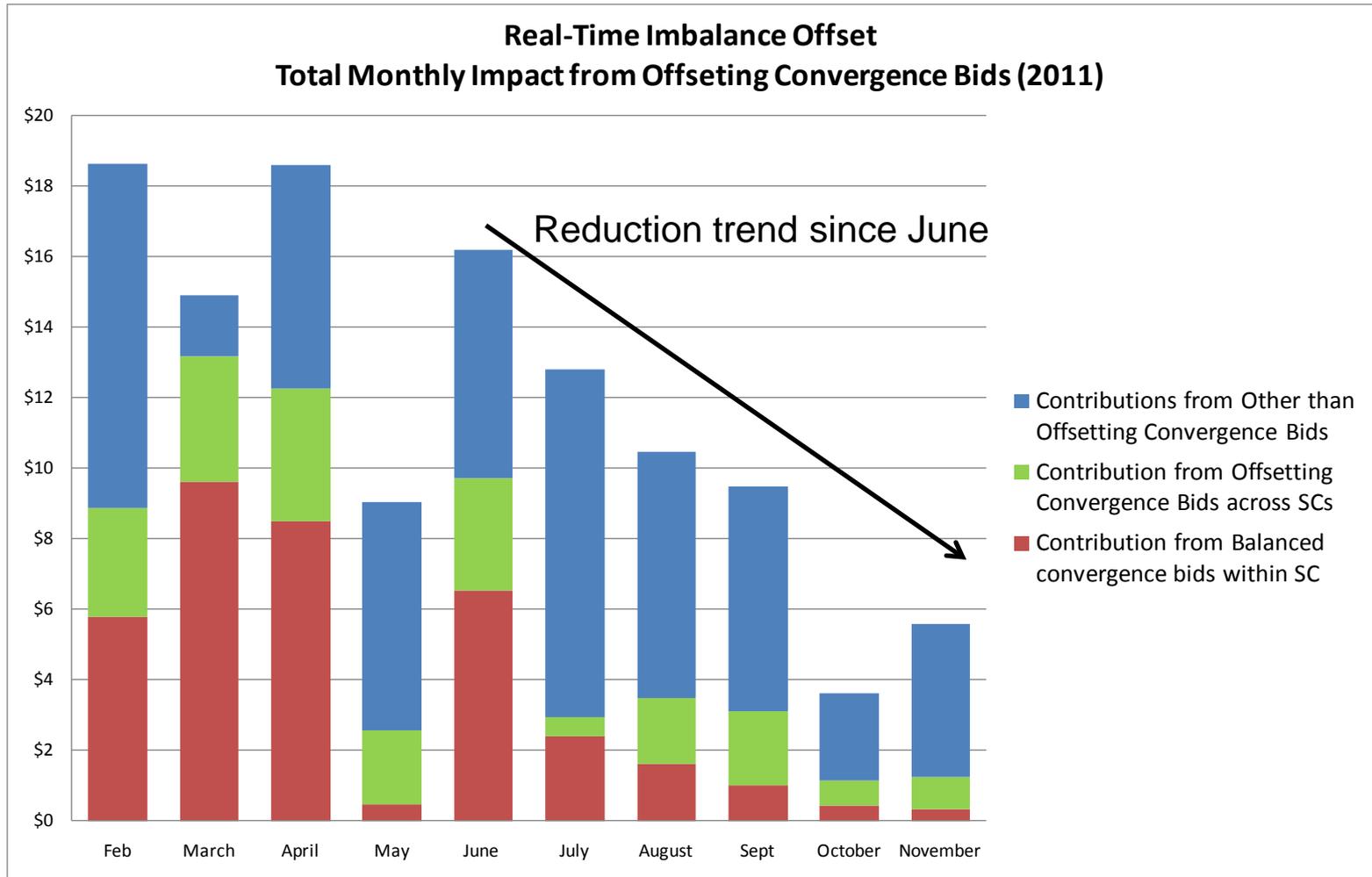
- **Recent changes:**

- Suspension of inertia convergence approved by FERC
- Flexible ramping approved by FERC and enabled
- Dynamic transfer policy approved by FERC
- Pilot intra-hour schedule for 200MW of northwest wind

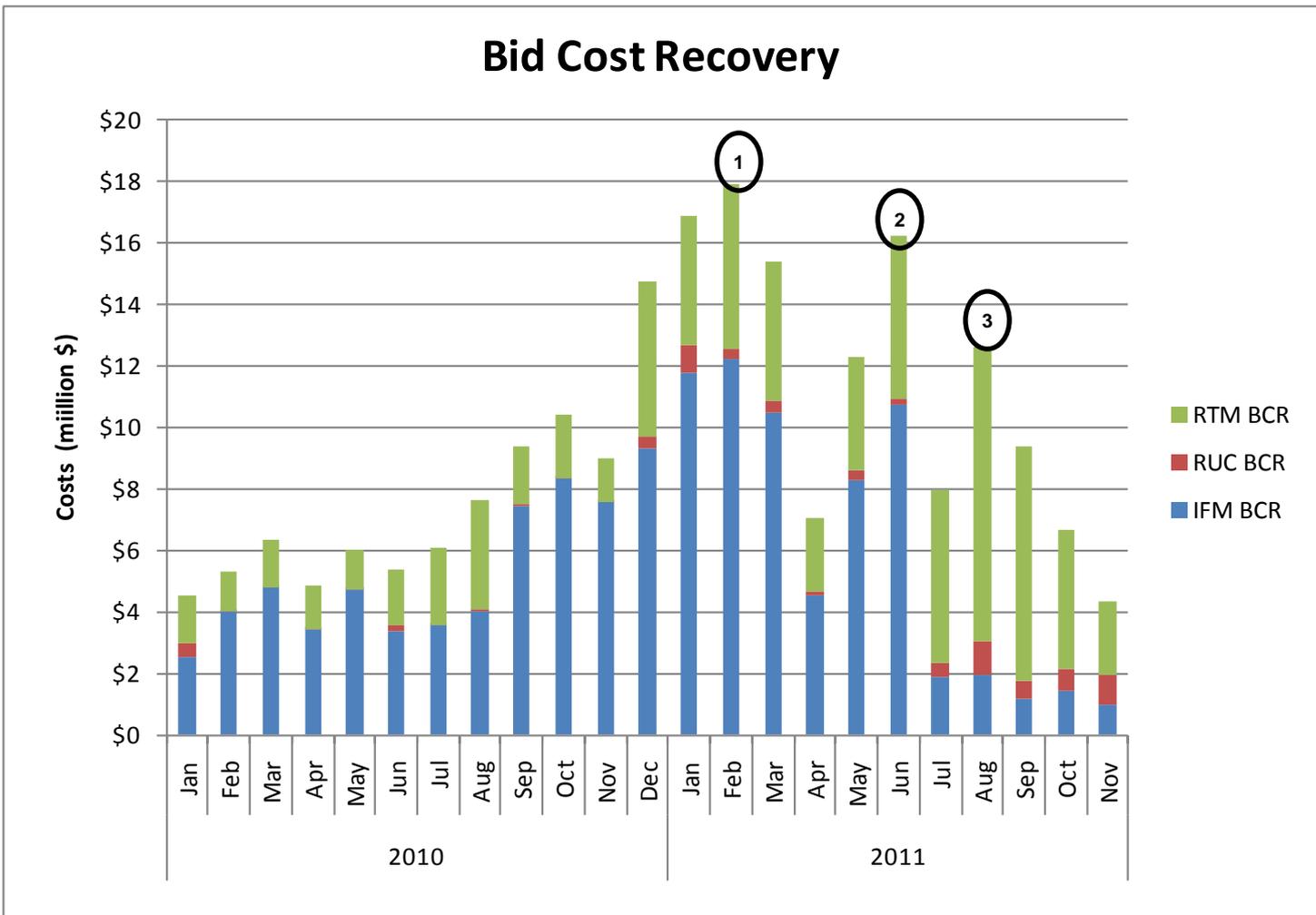
Hour-ahead and real-time price convergence improved significantly over the same period in 2010.



As hour-ahead and real-time price convergence improves, the impact on costs reduces.



Bid cost recovery continues downward trend.

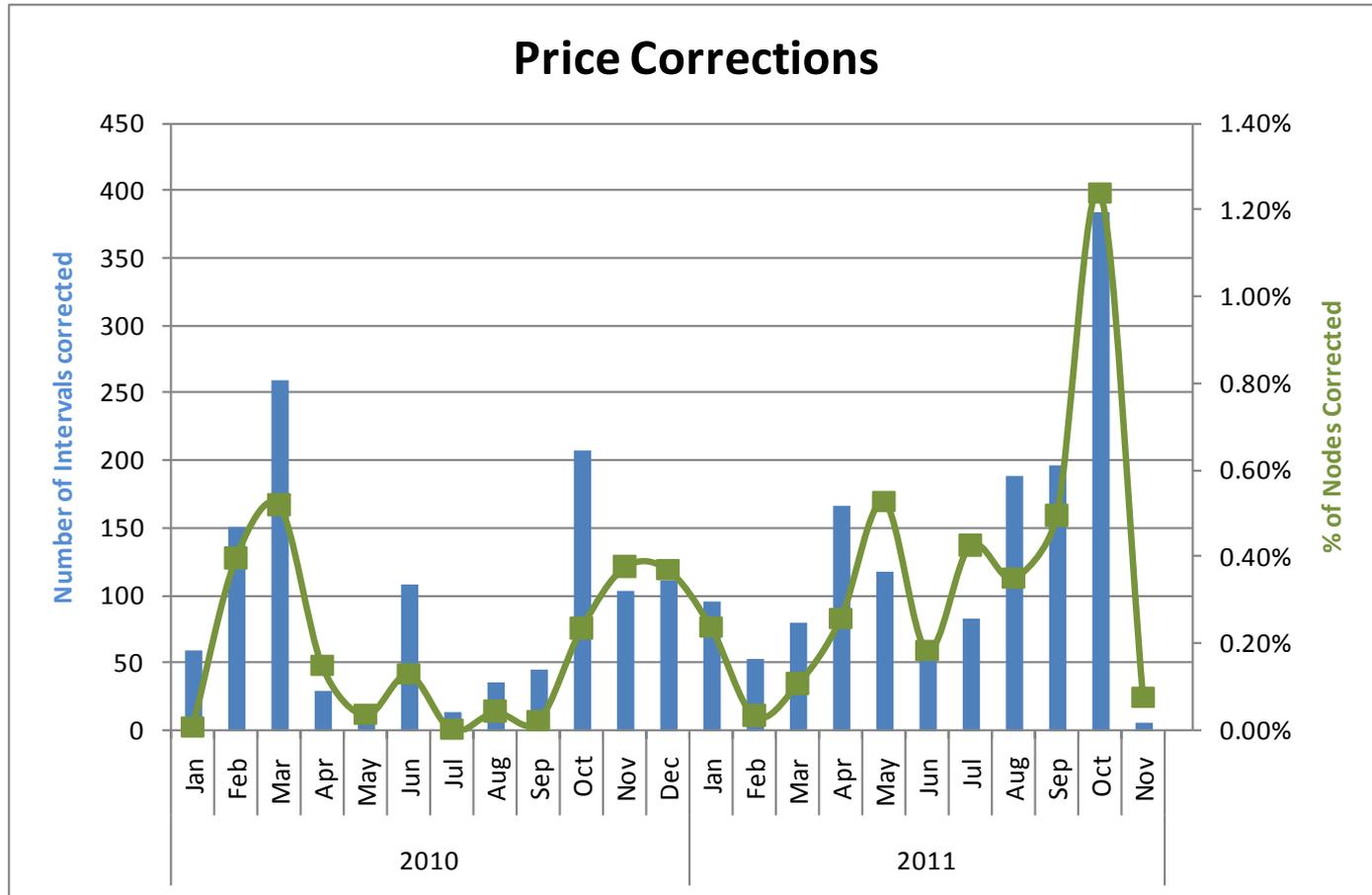


Note 1: Bid cost recovery increase due to bidding and scheduling practice related to March tariff filing

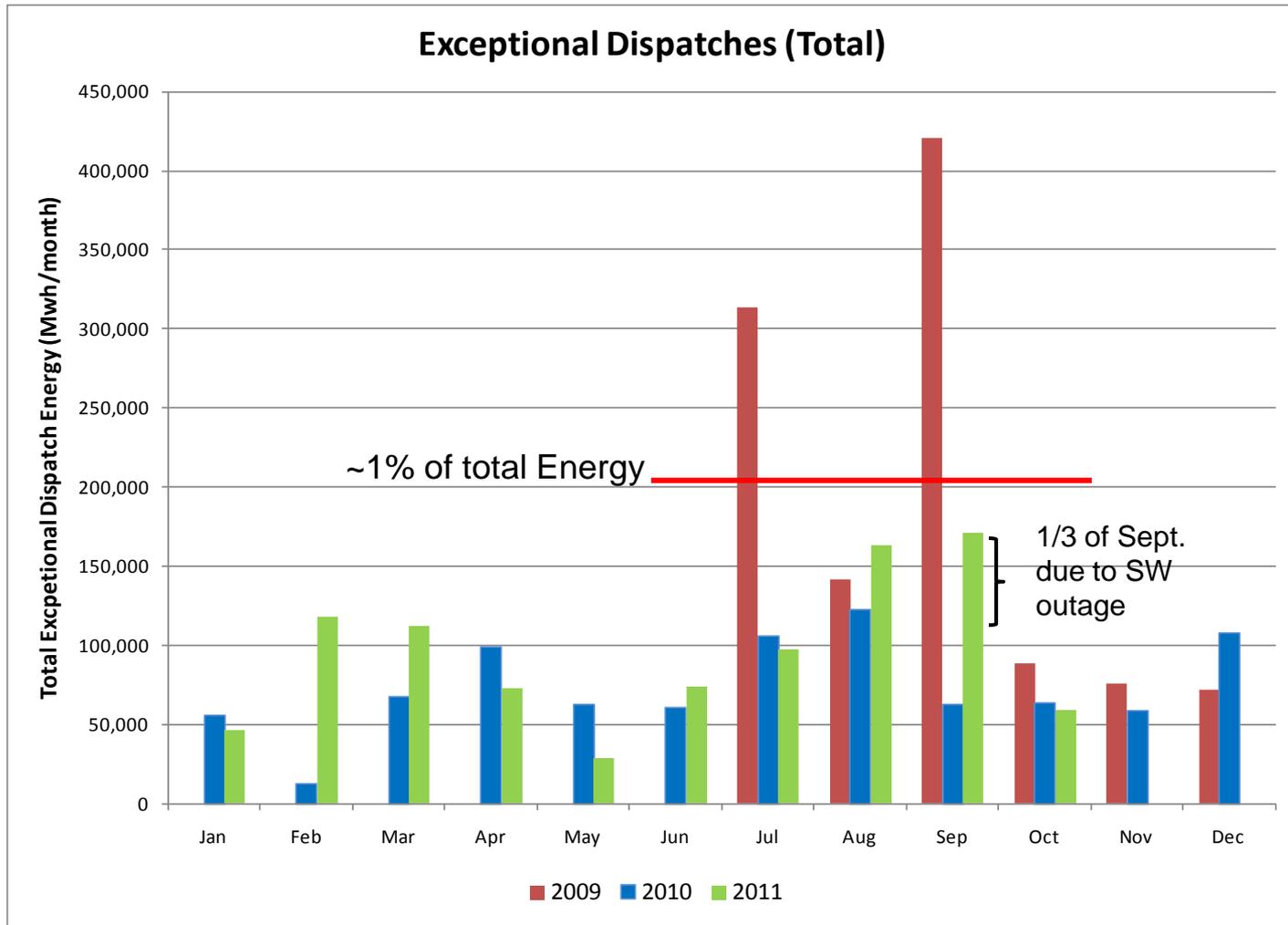
Note 2: Bid cost recovery increase due to bidding and scheduling practice related to June tariff filing

Note 3: August increase due to post day ahead reliability commitments

Price correction events increased October and declined in November.



Exceptional dispatch volumes remain at relatively low but increase for some months relative to 2010



The following future improvements are planned:

- Flexible ramping
 - Constraint implemented
 - Full product policy in development
- Enhance management of resource fleet
- Enhance price validation and correction process
- Expand intra-hour schedule pilot with Bonneville Power Administration
- Continue to address conditions leading to exceptional dispatch