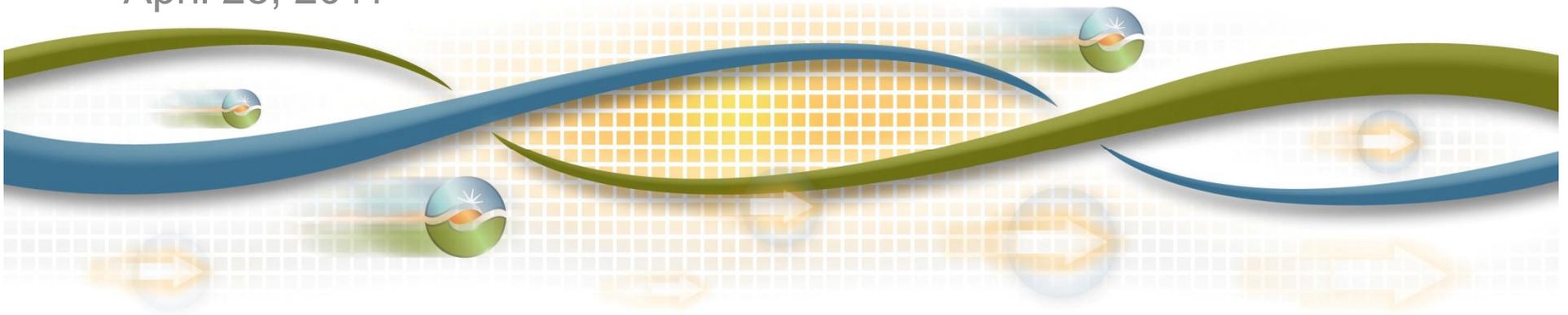


# Mitigation of exceptional dispatches

Eric Hildebrandt, Ph.D.  
Director of Market Monitoring

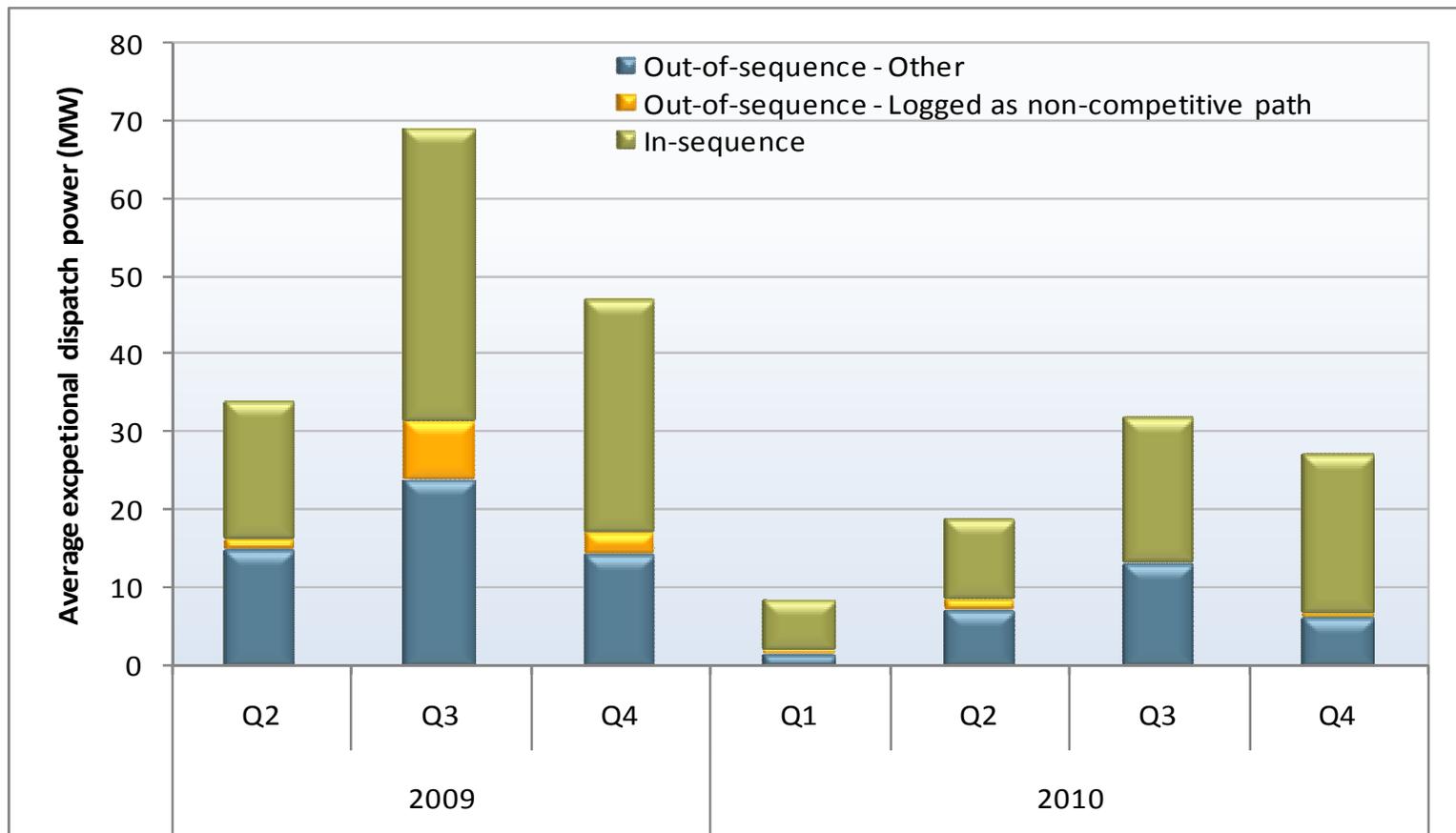
FERC Technical Conference  
April 28, 2011



# Overview

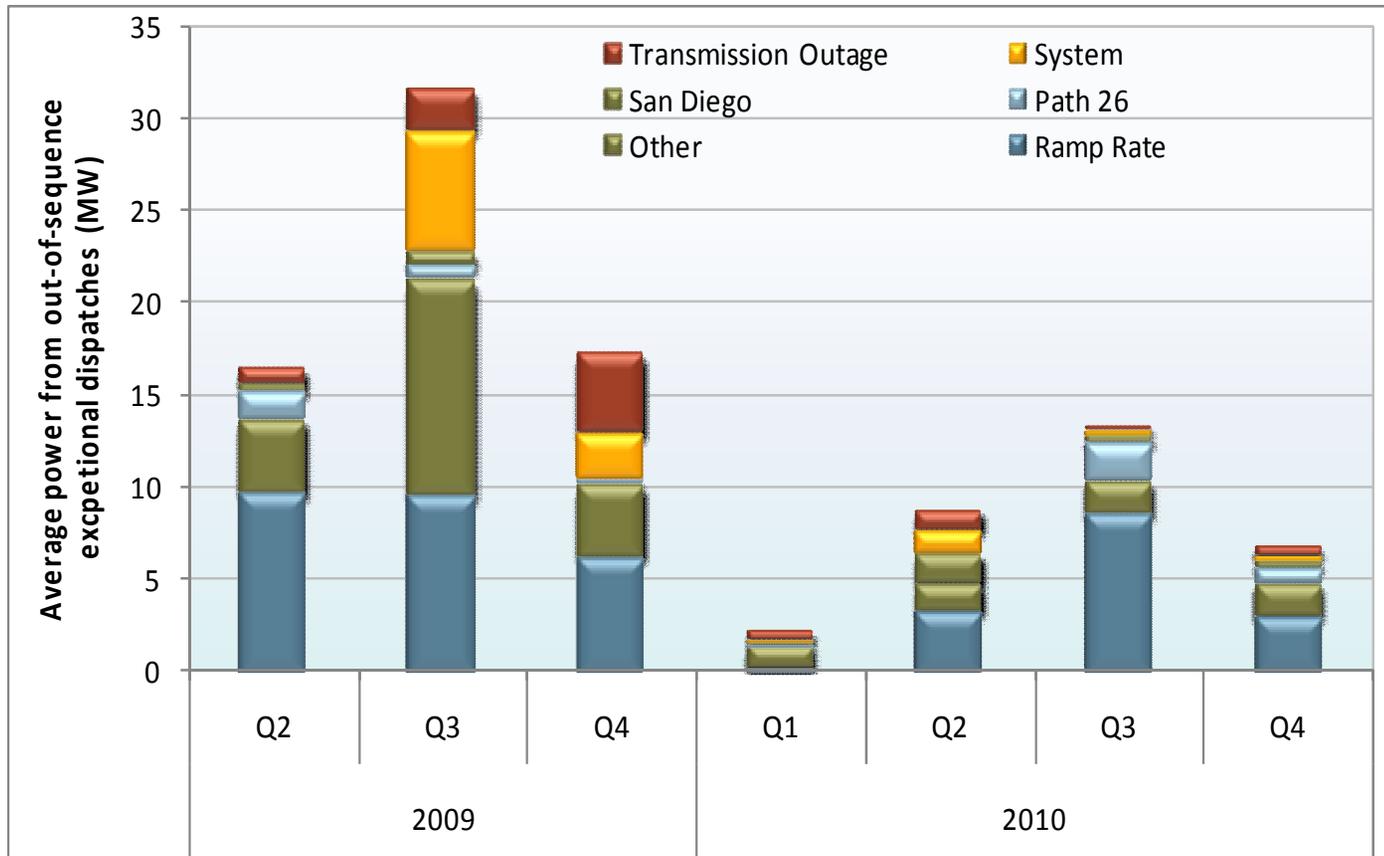
- Exceptional dispatches dramatically reduced in 2010.
- Only 9% of exceptional dispatches for energy logged by operators as being for non-competitive constraints.
  - Cost impact of mitigation only \$60K in 2010.
- Analysis shows that both competitive and uncompetitive constraints are often uncompetitive under actual real-time conditions.
  - When real-time congestion occurred on paths deemed to be non-competitive, one individual supplier was pivotal 37% of the time.
  - When real-time congestion occurred on paths deemed to be competitive, one individual supplier was pivotal 14% of the time.
- DMM is proposing dynamic assessment of constraint competitiveness based on real-time conditions for implementation in Q2 2012.
  - Would ensure that constraint designations reflect most recent system/market conditions when congestion occurred.

# Most bids dispatched via exceptional dispatches have cleared in merit order.

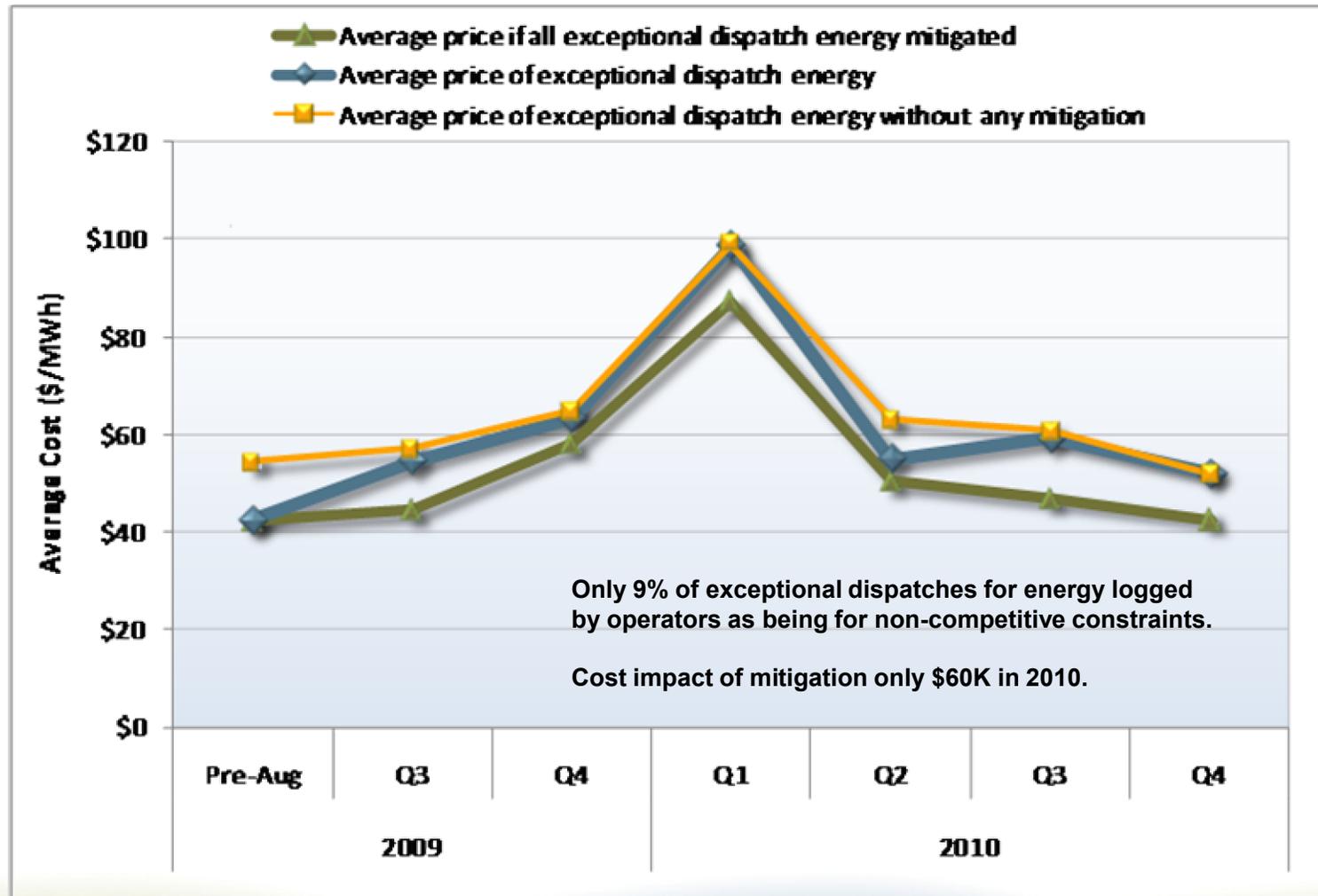


Total average exceptional dispatch energy in 2010 = 22 MW/hour.  
Exceptional dispatch energy clearing in sequence = 14 MW/hour.

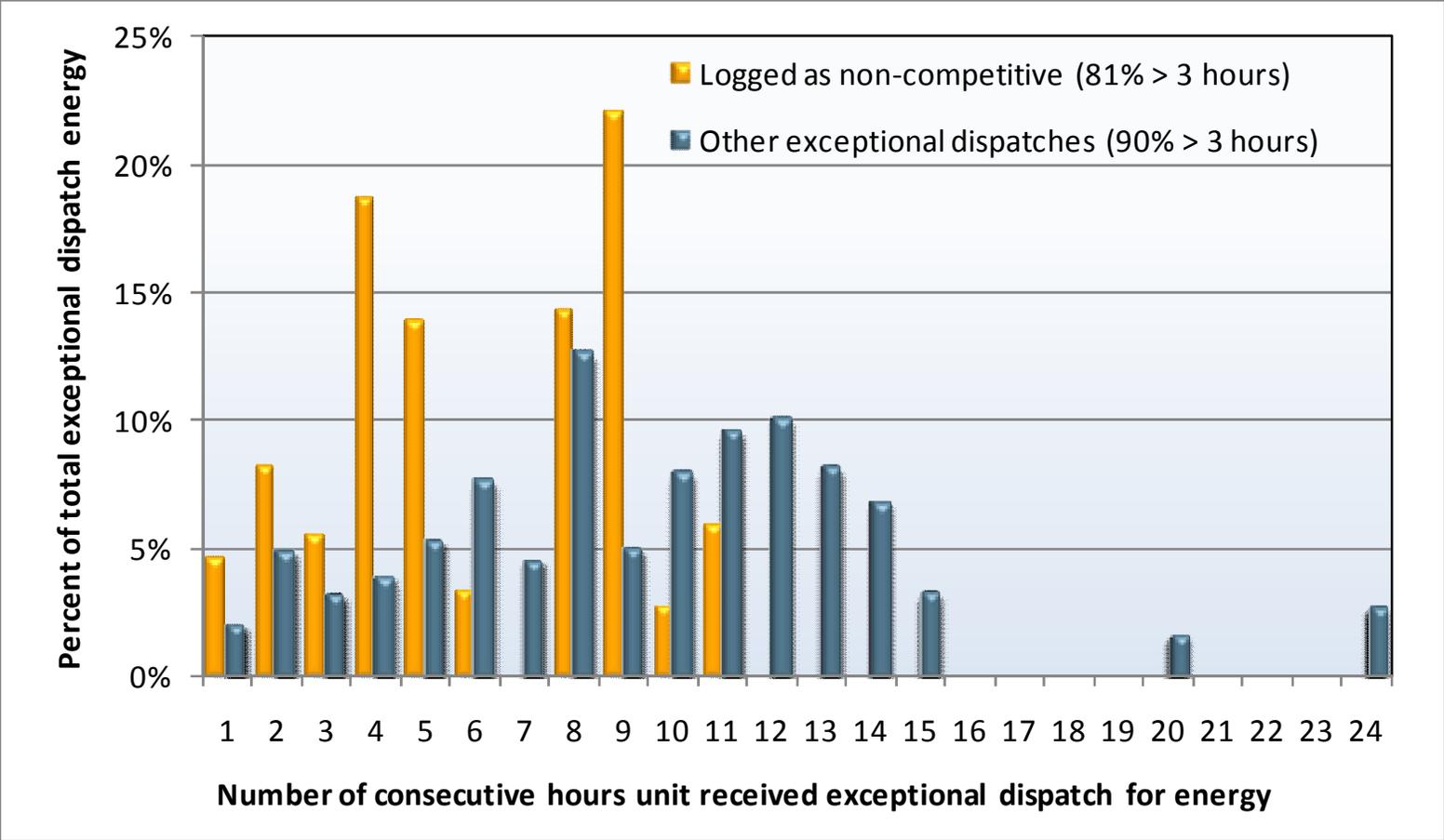
# Exceptional dispatches for energy out-of-sequence dropped to an average of 8 MW/hour in 2010.



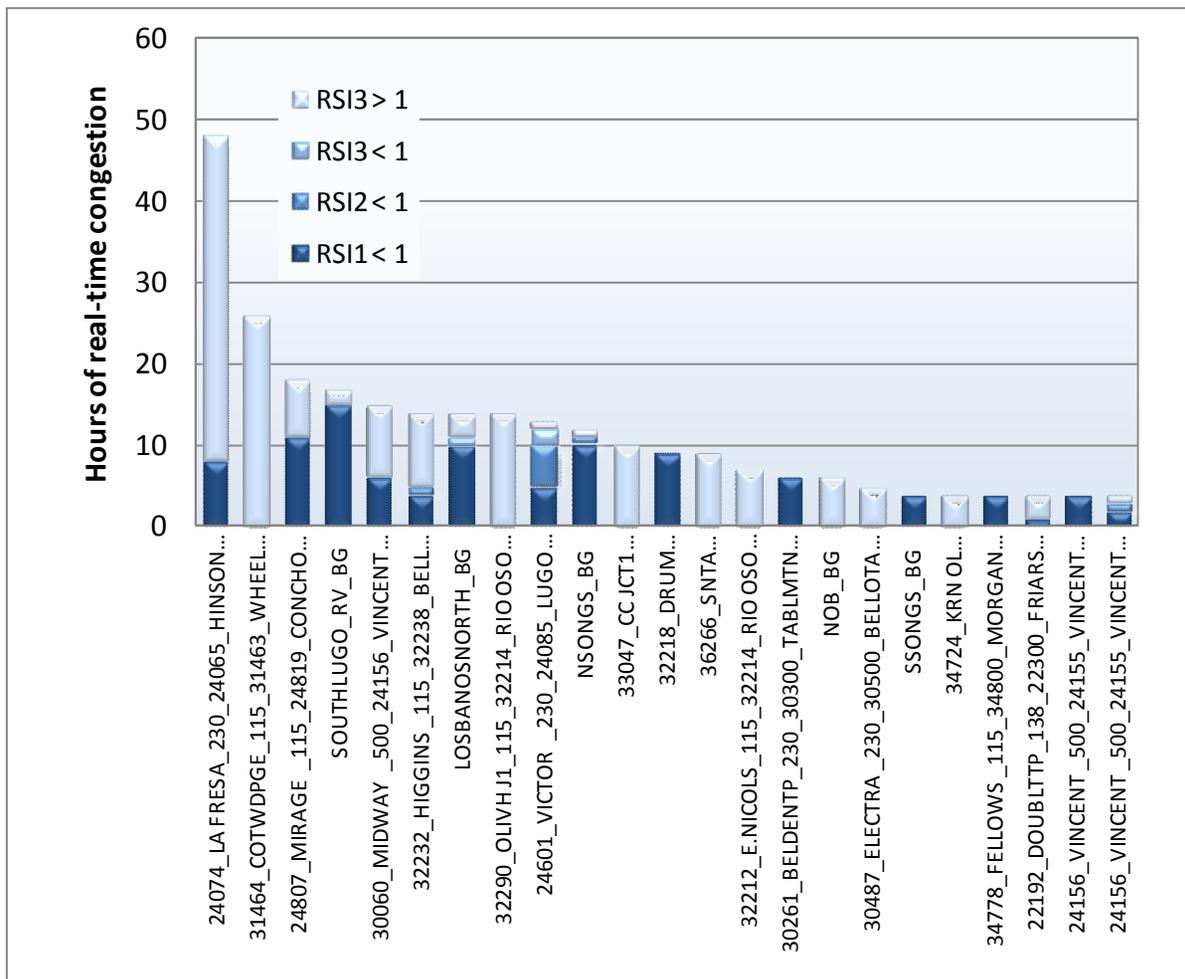
# Mitigation of exceptional dispatches for energy had minimal impact in 2010.



Most exceptional dispatches for energy are issued for more than 3 consecutive hours – allowing time for bids to be increased.

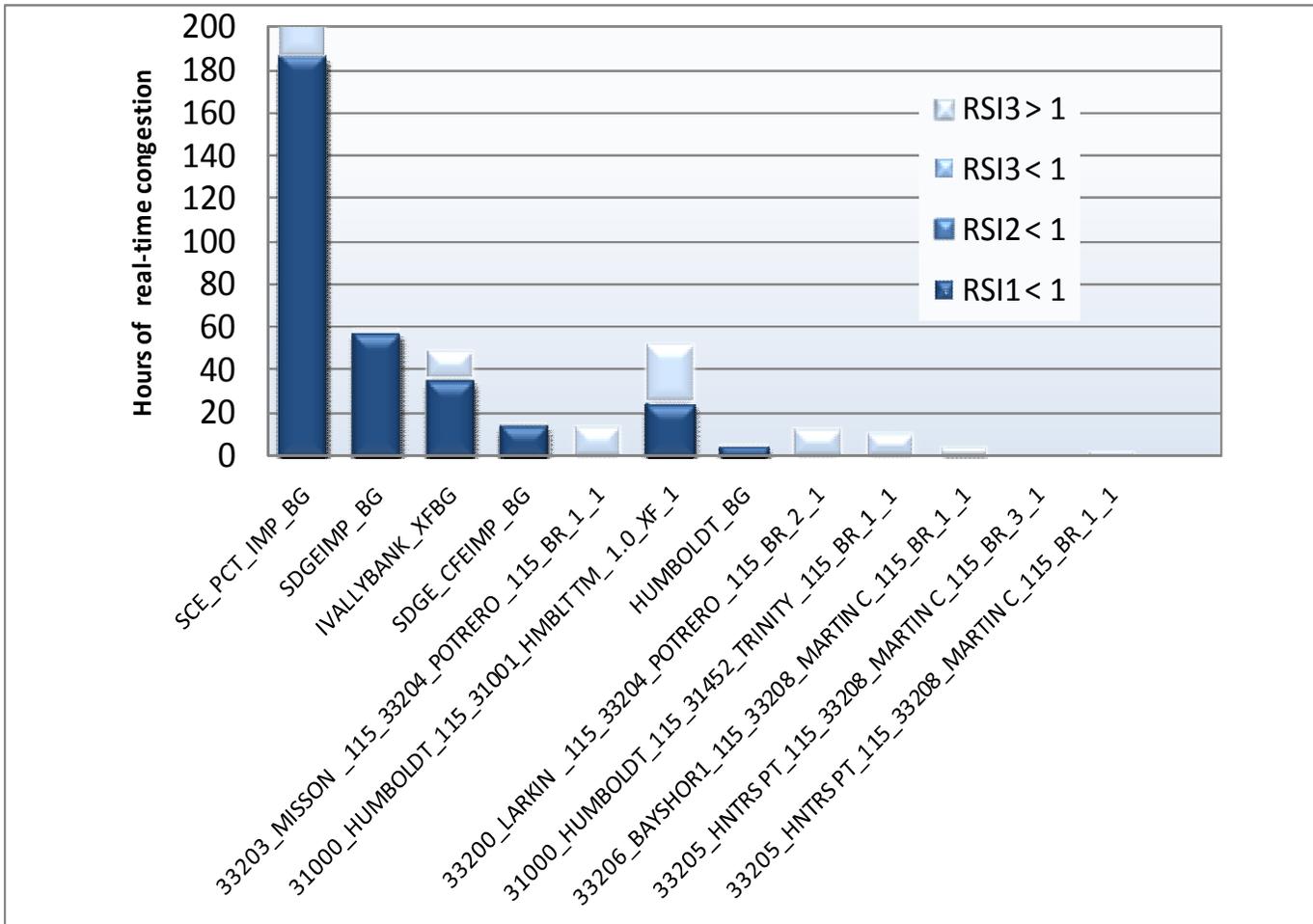


# Constraints deemed uncompetitive are most often structurally uncompetitive in real time.



When real-time congestion occurred on paths deemed to be non-competitive, one individual supplier was pivotal 37% of the time.

# Constraints deemed competitive also tend to be structurally uncompetitive in real time.



When real-time congestion occurred on paths deemed to be competitive, one individual supplier was pivotal 14% of the time.



## Dynamic assessment of constraint competitiveness

- DMM is proposing dynamic assessment of constraint competitiveness based on real-time conditions for implementation in Q2 2012.
  - <http://www.caiso.com/2b45/2b45e56d50fb0.pdf>
- Approach based on 3-pivotal player residual supply index using actual system/market conditions.
- Would ensure that constraint designations reflect most recent system/market conditions when congestion occurred.