



El Paso Natural Gas Pipeline Summer 2015 Energy Preparedness

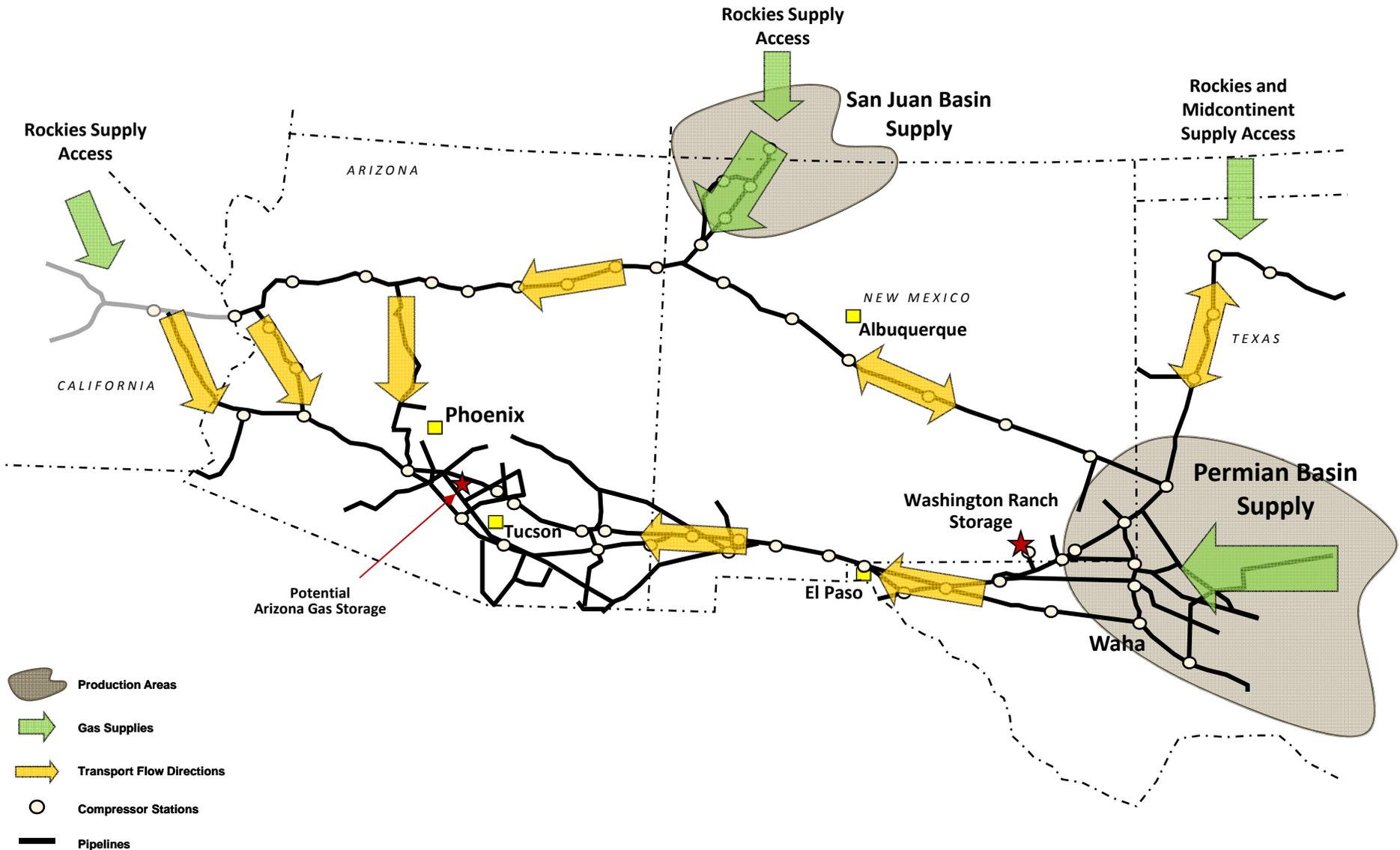
Presentation to the Arizona Corporation Commission
April 15, 2015

Kevin Johnson

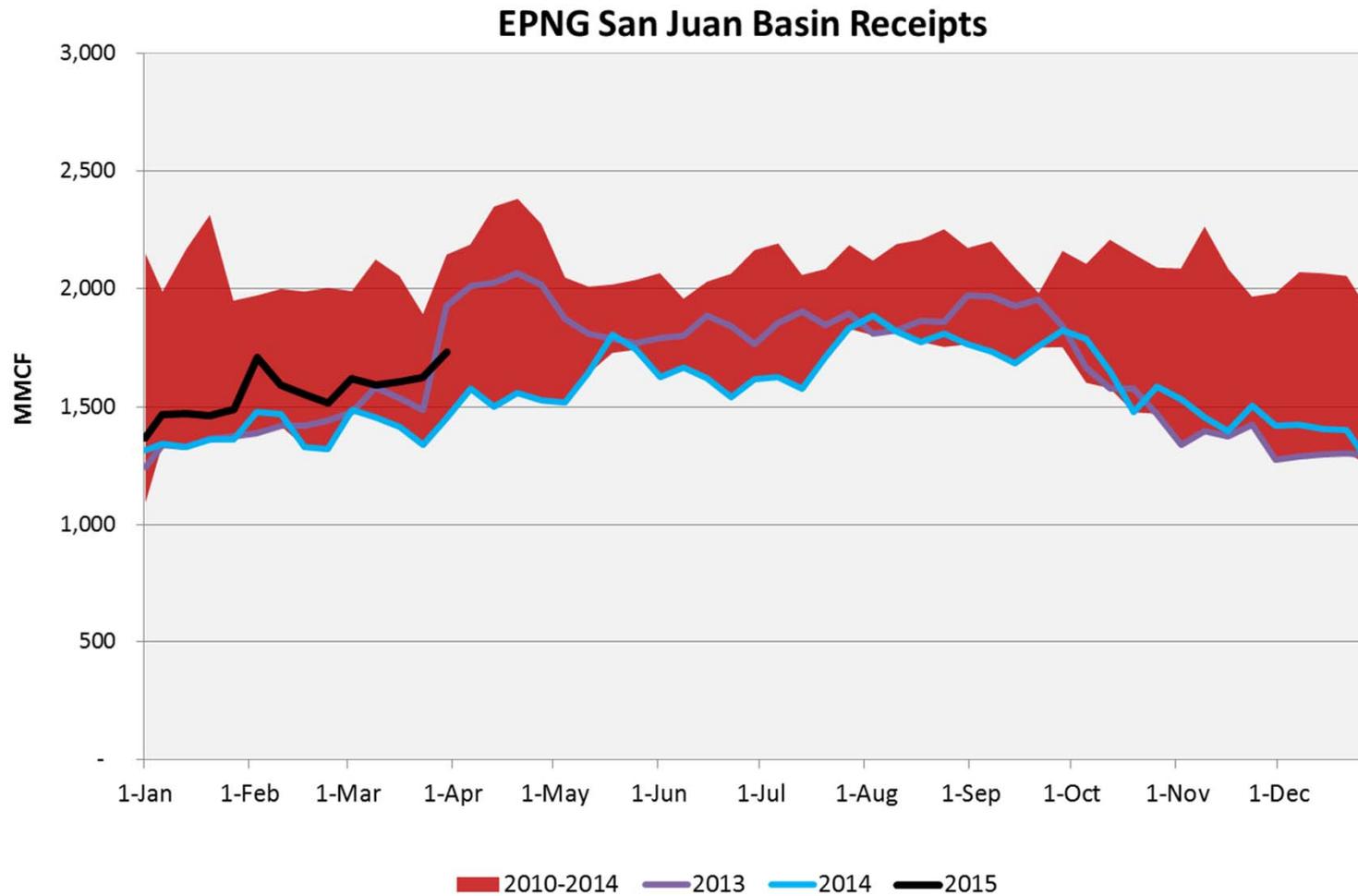
Director, Western Region Gas Pipeline Management (EPNG/Mojave)

EPNG System Overview

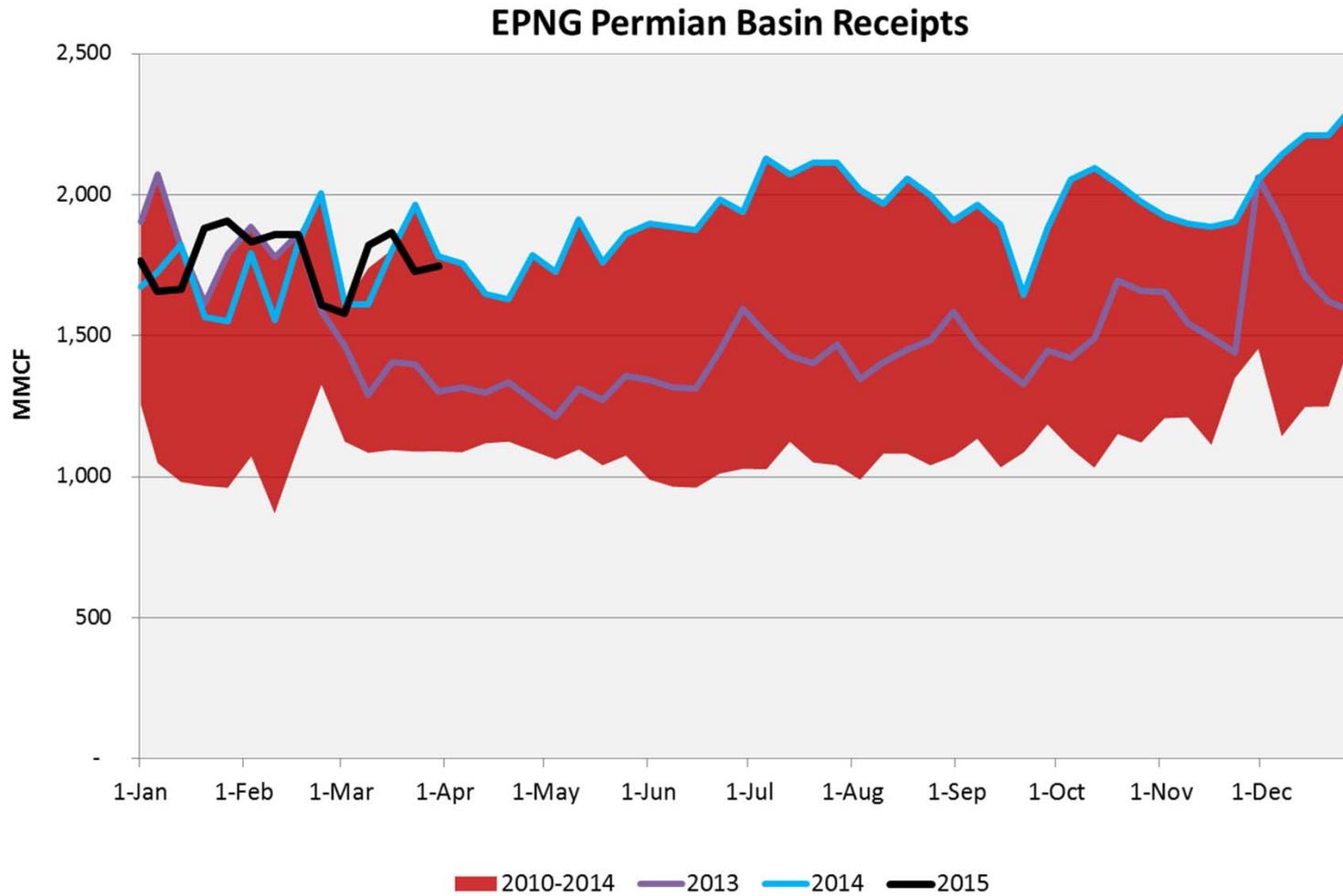
Supply Locations and Flow Direction



EPNG Supply San Juan Basin

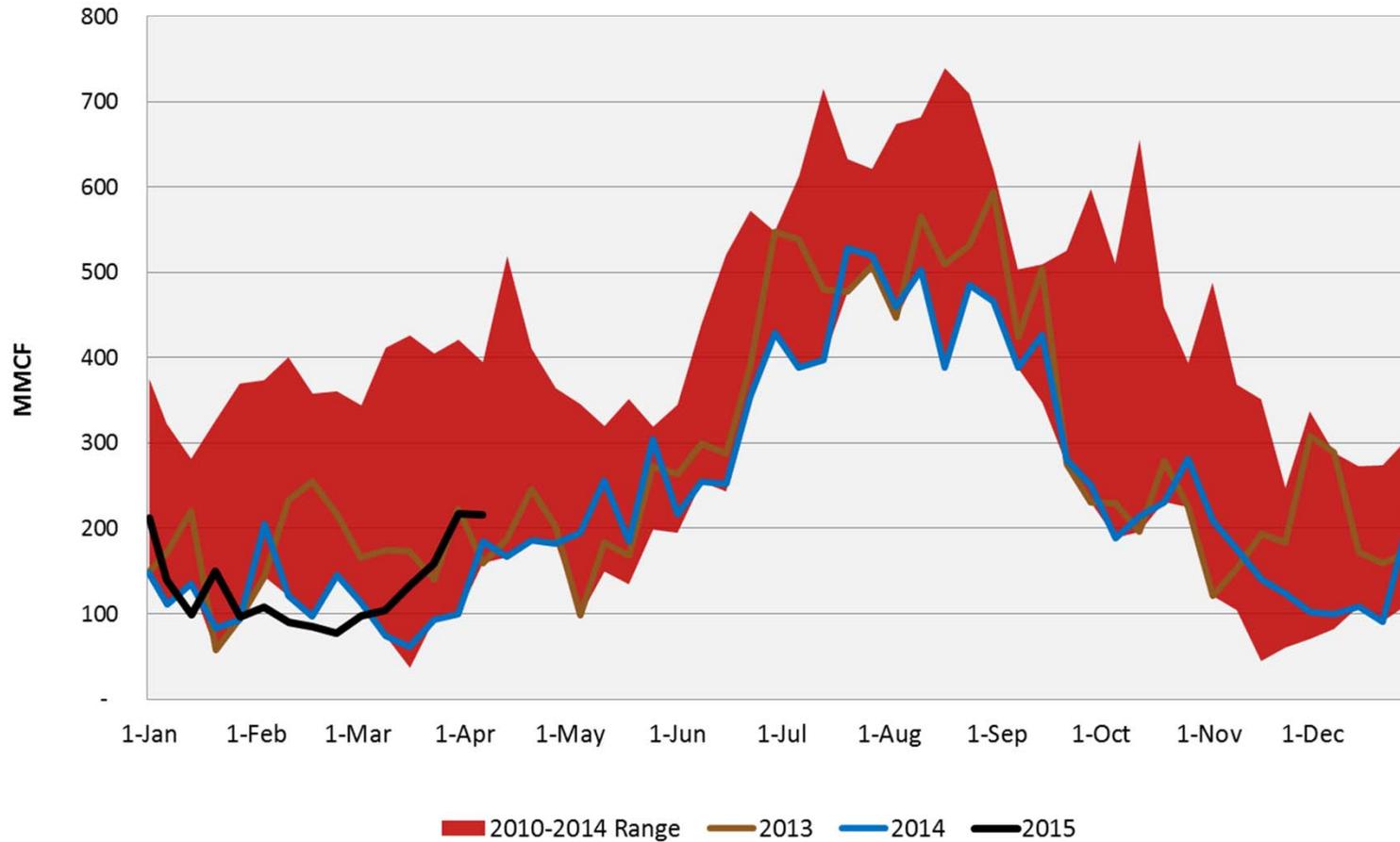


EPNG Supply Permian Basin



EPNG Throughput Arizona Power Generation

Arizona Power Generation Deliveries



Summer Preparedness

- **Maintenance Planning**
 - Schedule maintenance with a focus on minimizing impacts to available capacity.
 - Combine multiple maintenance activities, when possible, to minimize number of outages (days or volumes).
 - Coordinate customer-specific work with the customer.
- **Communication and Coordination**
 - Shipper and Stakeholder Mass Communication via EBB notices and text messages.
 - Shipper-Specific Communications.
 - Communication Protocols with Peak Reliability (Peak RC) and California ISO (CAISO).
- **Operational Response**
 - Multiple flow paths for supply to reach the market.
 - Access to supply area storage: Washington Ranch, Keystone Gas Storage and Merchant Ranch Storage.
 - EPNG has developed excellent working relationships with both affiliated and non-affiliated interconnecting pipelines which provide additional layers of contingency management in responding to emergency situations.

EPNG System Overview

Pipeline Capacity

EPNG's footprint and accessibility to multiple supply basins makes it ideally situated to expand its existing system at economic rates to meet additional natural gas demands for the state of Arizona.

• EPNG North Mainline

- EPNG currently has available winter and summer capacity on the north mainline.
- North-to-south connectivity to transport additional volumes into southern Arizona can be accomplished by adding some compression on the Maricopa lateral and adding compression on the new 36" Havasu lateral loop currently contracted to serve growing Mexican markets.

• EPNG South Mainline

- EPNG has limited available capacity on the South Mainline.
- Options for Expanding EPNG South Mainline.
 - EPNG could easily increase capacity west of El Paso, TX by adding compression.
 - New pipeline looping from the Permian Supply Basin west towards Arizona.

• Arizona Gas Storage

- Construct market area storage in the Phoenix area to provide no-notice service and hourly delivery variability.
- By converting the pipeline capacity that is currently reserved for premium hourly services to flowing capacity, EPNG might possibly provide additional capacity into Arizona markets.
- Would greatly enhance overall system reliability by mitigating effects of supply underperformance and fluctuations in demand.