#### Arizona Public Service Company 2013 Summer Readiness

Before the Arizona Corporation Commission April 25, 2013



## Presenters

# Jim Wilde Director: Resource Planning

#### Donna Easterly Director: Statewide Energy Delivery

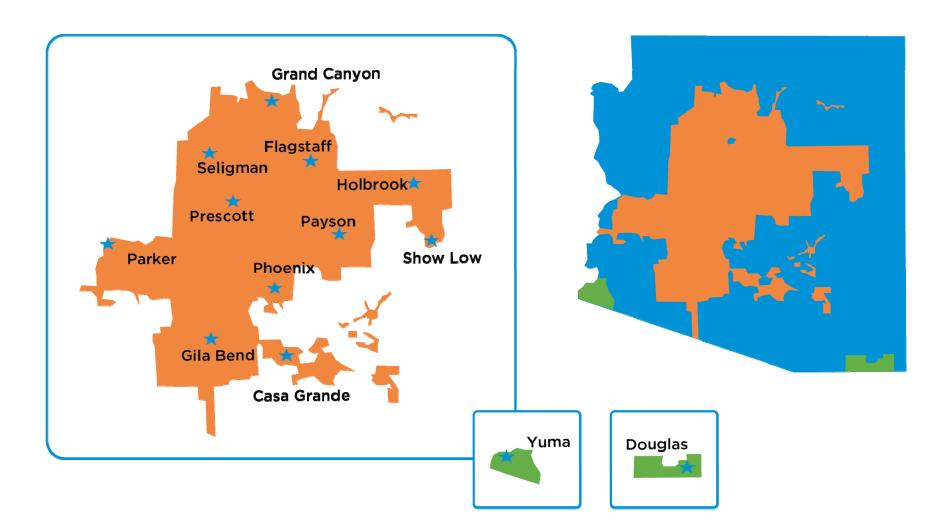


# Agenda

- Loads and Resources
- Fuel Supplies
- Planned Maintenance Activities
- Emergency Preparedness & Customer Outreach
- Conclusions



# **APS Service Territory**





# **APS Service Statistics**

- 11 counties
- 34,645 square miles CC&N area
- 1.1 million customers
- 424 substations
- 28,937 distribution line miles
- 5,434 transmission line miles
- 54 generation units



# **2013 Total Generation Resources**

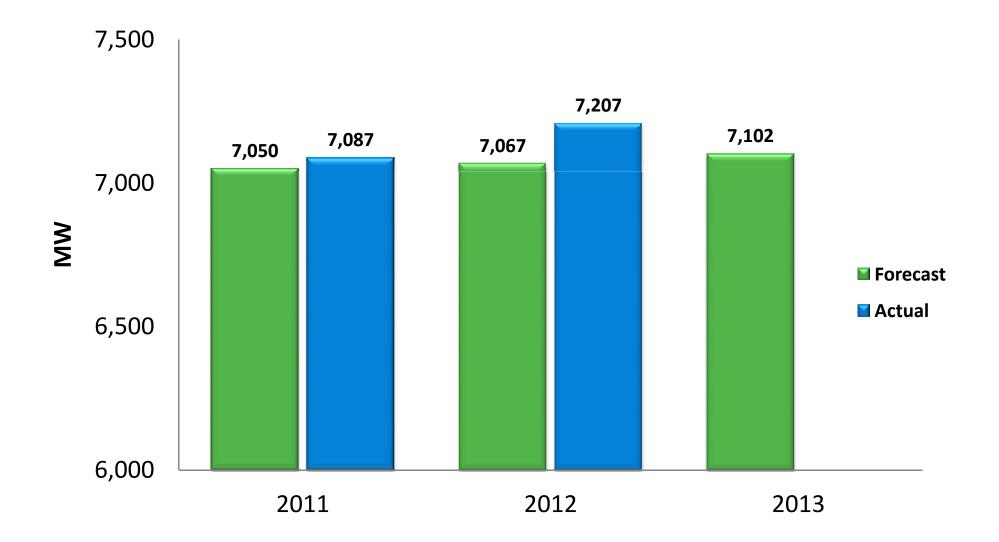
Fuel Source	Capacity at Peak (MW)
Nuclear	1,146
Coal <sup>1</sup>	1,932
Gas Combined Cycle	1,898
Gas/Oil CT, Steam	1,464
Long-Term Contracts	2,397
Renewables (nameplate 434 MW)	161
Total	8,998

Notes:

1) Assumes APS purchases SCE's 48% share of Four Corners Units 4 & 5, and shutdown of Units 1,2, & 3



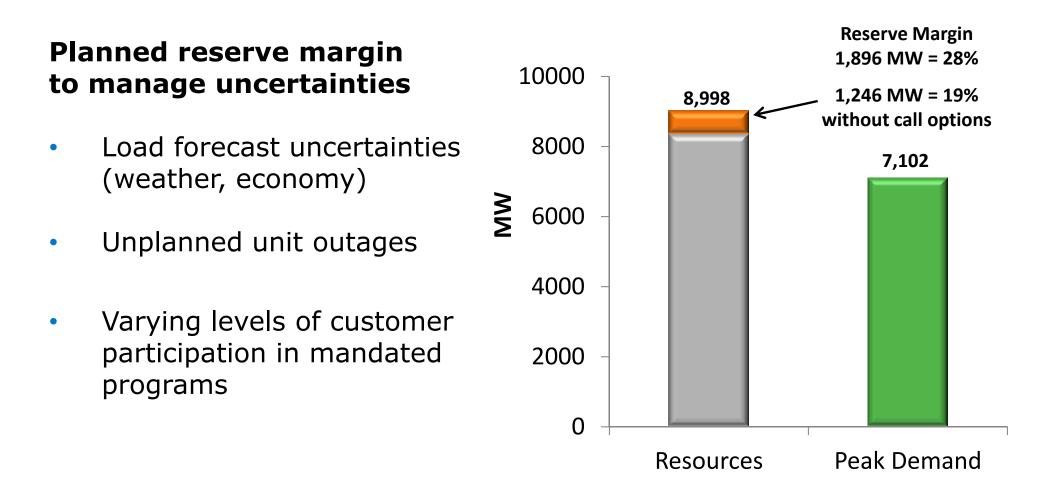
### **APS System Peak Demand**



Forecasts are weather normalized



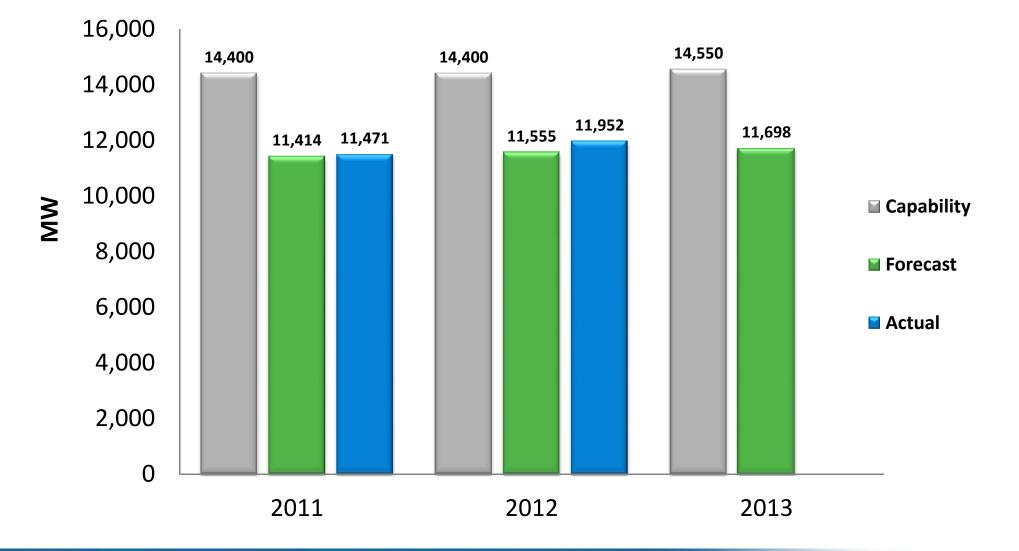
### 2013 Peak Generation Resources and Demand



Current minimum reserve margin is 15%, or roughly 1,000 MW

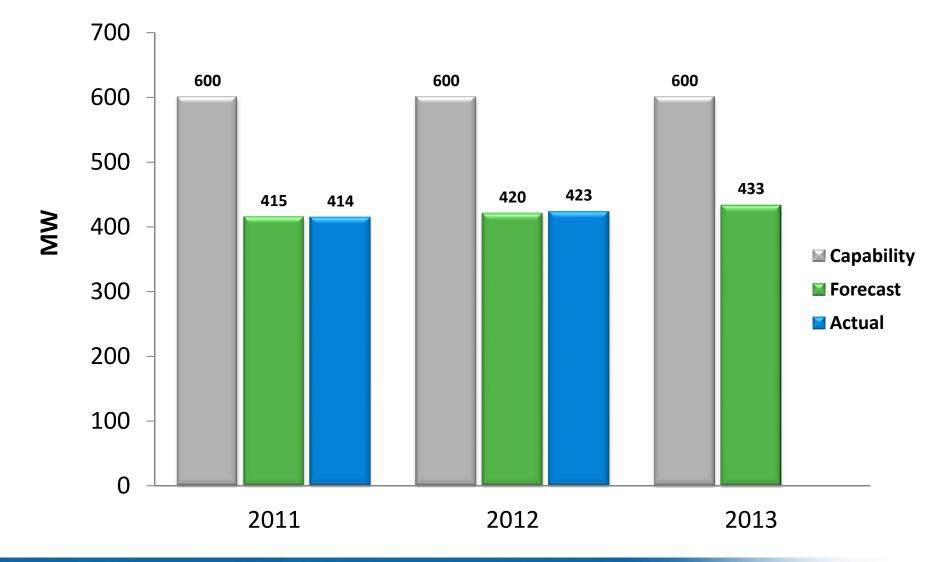


### **APS/SRP Valley Maximum Load Serving Capability**





# Yuma Area Maximum Load Serving Capability





# **Nuclear: Palo Verde**

- Fuel sourced from multiple suppliers
- 100% of 2013 fuel inventory in place
- 100% of fuel requirements contracted through 2017
- Overall station capacity factor at 92.3% in 2012
- 2012 was Palo Verde's best production year ever





# **Coal Supply**

#### **Four Corners Power Plant**

- Mine mouth plant with BHP Navajo Mine
- Contract term currently
  runs through 2016
- 60-70 days of reserves

#### **Cholla Power Plant**

- Fuel Source: El Segundo mine near Grants, NM
- Contract commitments in place through 2024
- 60-70 days of reserves

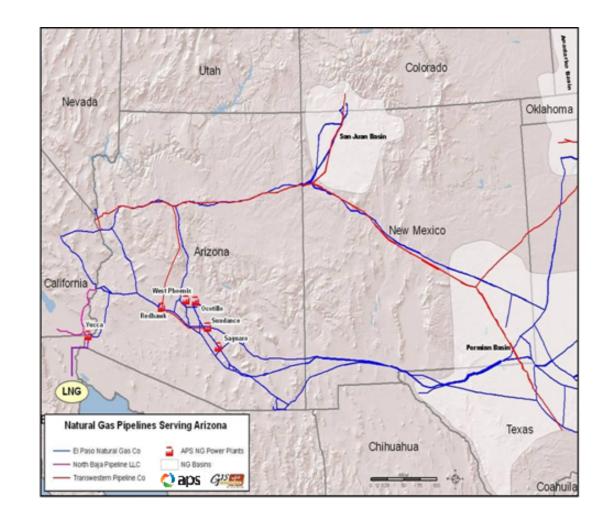






# **Natural Gas Supply**

- APS has sufficient pipeline transportation and supply under contract to meet peak system needs
- El Paso Natural Gas supplies all APS natural gas plants
- Transwestern Pipeline also supplies the APS Redhawk and Sundance power plants
- North Baja Pipeline also supplies Yucca units 5 & 6





# **Planned Reliability Activities**

- Transmission / Distribution Maintenance & Monitoring:
  - Substation Equipment Health
  - Real Time Monitoring Equipment Critical Assets
  - Substation, Predictive & Preventative
    Maintenance Initiatives
  - Annual Transmission and Distribution Line
    Patrols



# **Planned Reliability Activities**

- Vegetation Management & Wildfire Planning
  - Annual Wildfire Academy in Prescott
  - Pre-wildfire season meetings with five National Forests
  - Prepare APS personnel for fire season
  - Vegetation Management Program
    - Patrol Transmission & Distribution ROW



# **Emergency Preparedness & Response**

- Coordination & Communications with Emergency Managers
  - AZ Dept of Emergency Management, county & municipal emergency managers, & public safety personnel
  - Cross Industry Partners: SRP, TEP, Southwest Gas
- Planning & Training Exercises
  - Statewide exercises and mock drills
  - 2013 Statewide Emergency Exercise
  - Incident Command Coordination & Training
  - Tours of critical facilities



# **APS Customer Outreach**

- Targeted communications for customers, emergency managers & public safety personnel, and community leaders
- Coordination with local emergency management organizations to establish temporary shelters and/or provide outreach for vulnerable populations (need for shelters determined by emergency managers.)
- Purchase or reimburse of dry ice and/or bagged ice (for residential customers' refrigerators and freezers)
- Medical Care Preparedness Program (life support/medical monitoring)



# **APS Customer Outage Information Sources**

- Call Center staffed with live agents 24hrs, 7 days/week
  - Automated, up-front recorded outage messages updated regularly
  - Outbound customer calls when power is restored
- News media
  - APS media hotline monitored 24hrs, 7 days/week
  - Access to Arizona DPS media alert system
- Social Media (Facebook, Twitter)
  - ETR's (estimated time of restoration)
  - General area affected
  - Outage cause if known



# Summary

- Generation resources, fuel supplies and transmission capacity in place to meet customer demand and reserve requirements
- Maintenance efforts on track
- On going coordination, integration with external emergency planners
- Strong customer communication channels in place

