SRP Summer Preparedness 2019
Robert Olsen
Director, Supply Trading and Fuels
SRP’s Electric System

• Provide electricity to over 1 million power users in a 2,900 square-mile area in parts of 3 counties – Maricopa, Gila, and Pinal

• System Stats:
  • 320 Substations
  • 3,242 Transmission Line Miles
  • 20,311 Distribution Line Miles
  • 48 Generation Units
Summary

• Peak demand is expected to be higher than last year’s peak.

• Adequate resources have been secured to meet anticipated demand.
Peak Retail Load Forecast

2017 Actual: 7,219 MW
2018 Actual: 7,305 MW
2019 Forecast: 7,418 MW
Summer 2019 Outlook

9,385 MW  | Expected Need
---|---
1,062 MW  | Reserves
905 MW    | Other Sales
7,418 MW  | SRP Forecast Peak Retail Load

Total 9,385 MW

9,637 MW  | Expected Capability
---|---
Purchased Power
8,104 MW  | SRP Generation
1,533 MW

Total 9,637 MW
SRP 2019 Resources

Capacity (MW)

- 693
- 4,474
- 1,109
- 688
- 2,673

Total 9,637 MW

Energy (GWh)

- 2,254
- 14,236
- 1,744
- 5,558
- 7,336

Total 31,128 GWh

- Renewable Resources/Purchases
- Gas
- Other/Purchases
- Nuclear
- Coal
Purchased Power

- Purchased power portfolio is in place to meet demand.
- In the event of multiple forced unit outages additional purchases may be needed.
- Regional market conditions suggest that there will be sufficient capacity to meet the Arizona demand.
Fuel Status

- Nuclear
  - Full requirements under contract.
- Coal
  - Full requirements under contract.
  - Inventory at coal plants are at/above target levels or expected to be at target levels prior to summer run.
- Natural Gas
  - Full transportation requirements are under contract with two natural gas corridors, each with access to two gas basins.
  - Current supplies of natural gas are more than sufficient.
Major Resource Activities for Summer 2019

- CalEnergy Geothermal Capacity
  - Increase in purchased capacity from 18 MW to 80 MW
- Dorman Battery Project
  - 10 MW/40 MWh grid charged battery project, operational since January
Steve Cobb
Director, Transmission and Generation Operations
Transmission & Distribution Overview

• Transmission and Distribution Systems are prepared for summer operations.

• The system has sufficient capacity to serve forecasted peak demand.
Transmission Additions

- 1 Dedicated Industrial Substation
- 3 Distribution Bays to Support Load Growth
- 8 Circuit Miles
- 169 Poles to Support Load Growth
- 6 Breakers
- 5 Transformer Protectors for fault isolation
Proactive Replacements

- 4 Transformers
- 8 Upgraded Circuit Miles
- 405 Poles
- 17 Breakers
- 5 Transformer Protectors
- 2 Transformer Gas Monitors
Reliability and Planning

• Inter-Utility Coordination
• Grid Performance
• Grid Resiliency
• Operational Excellence
System Preparation

- Preventative Maintenance
- Emergency Operations Training
- Wildfire Coordination
- Vegetation Management
Vegetation Management
Transmission Tower Blowdowns – Summer 2018
Reliability Coordinators – Western Interconnection

• A Reliability Coordinator (RC) is the highest level of operating authority in the Bulk Electric System (>100kV)

• RC Responsibilities:
  • Maintains a wide-area view of overall system conditions
  • Issues guidance and operating instructions to operating entities within the RC’s footprint as required

• Peak Reliability and Alberta Electric System Operator are the current RCs in the Western Interconnect
Reliability Coordinators – December 3, 2019

- Peak Reliability will cease operations on December 3, 2019
- New RCs will begin operations this year:
  - RC West (California ISO)
  - Southwest Power Pool
  - BC Hydro
  - Gridforce

Boundaries are for illustrative purposes only. Gridforce LLC has applied to become an RC.
SRP – Outage Information Resources

- Conversational Interactive Voice Response System
  - Customers can easily report an outage with speech recognition or with an agent.

- SRP App and Online
  - Outage reporting and information.

- Proactive Outage Notifications Via Text or Email
  - 946,765 residential and 43,736 commercial customers enrolled.

- Outage Preparedness Training for Businesses
  - Expanded outage workshops for business customers.