Briefing on 2014 Summer Loads & Resources Assessment

Robert Emmert
Manager, Interconnection Resources

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2014 Summer Loads & Resources Assessment includes:

- Forecasts of ISO system and Northern & Southern California zones
  - Peak demand
  - Generation resources
  - Imports
  - Demand response
- Drought impact scenarios developed and studied
- System and Northern & Southern California zone resource reserve margins
  - Planning reserve margins
  - Normal operating reserve margin scenario
  - Extreme operating reserve margin scenario

Key findings

- Hydro derates due to drought
  - 1,370 MW in “expected” scenario, 1,669 MW extreme scenario
- Adequate reserve margins for ISO system under expected and extreme conditions
  - Drought impacts adequately abated by generation additions and moderate load growth
  - Ample imports from outside California to provide capacity and energy support
- Minor drought impact in San Diego and Orange County local resource adequacy areas

Potential for fires in proximity of key transmission lines a more significant concern.

Normal scenario: ISO system operating reserve margin is above 23%

On-Peak Resources (MW)	ISO	SP26	NP26
On-Peak Generation	53,950	26,439	27,511
Hydro Derate	(1,370)	(281)	(1,089)
Generation Outages (1-in-2)	(5,030)	(2,105)	(2,921)
Moderate Net Interchange	9,000	9,200	2,100
DR & Interruptible Programs	2,066	1,341	725
Total Resources	58,616	34,594	26,326
Peak Demand (1-in-2)	47,351	26,994	21,452
Operating Reserve Margin	**23.8%**	**28.2%**	**22.7%**

Extreme scenario: ISO operating reserve margin is greater than 13%

On-Peak Resources (MW)	ISO	SP26	NP26
On-Peak Generation	53,950	26,439	27,511
Hydro Derate	(1,669)	(342)	(1,328)
High Generation Outages (1-in-10)	(6,478)	(3,406)	(4,126)
Net Interchange (Low)	8,500	8,800	1,300
DR & Interruptible Programs	2,066	1,341	725
Total Resources	56,369	32,832	24,083
Peak Demand (1-in-10)	49,601	28,522	22,377
Operating Reserve Margin	**13.6%**	**15.1%** →	**7.6%**

Plans for 2015 Summer Assessment

Utilize more robust modeling tools to:

- Assess issues and communicate concerns related to system flexibility needs
- More closely align import levels to modeled scenarios
- Model hourly conditions throughout the summer rather than just peak conditions