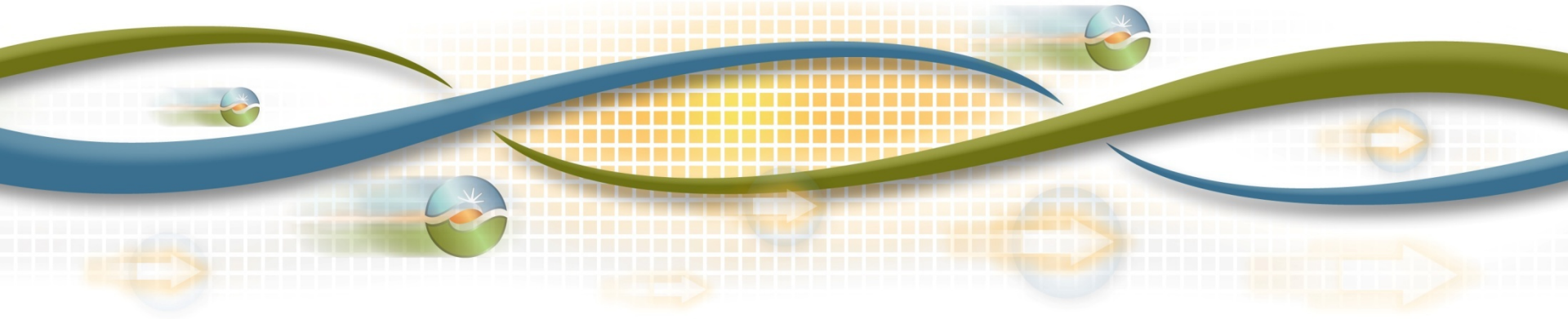


# Briefing on 2014 Summer Loads & Resources Assessment

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Board of Governors Meeting  
General Session  
May 28-29, 2014



## 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%

<b>On-Peak Resources (MW)</b>	<b>ISO</b>	<b>SP26</b>	<b>NP26</b>
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
<b>Total Resources</b>	<b>58,616</b>	<b>34,594</b>	<b>26,326</b>
<b>Peak Demand (1-in-2)</b>	<b>47,351</b>	<b>26,994</b>	<b>21,452</b>
<b>Operating Reserve Margin</b>	<b>23.8%</b>	<b>28.2%</b>	<b>22.7%</b>

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

<b>On-Peak Resources (MW)</b>	<b>ISO</b>	<b>SP26</b>	<b>NP26</b>
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
<b>Total Resources</b>	<b>56,369</b>	<b>32,832</b>	<b>24,083</b>
<b>Peak Demand (1-in-10)</b>	<b>49,601</b>	<b>28,522</b>	<b>22,377</b>
<b>Operating Reserve Margin</b>	<b>13.6%</b>	<b>15.1%</b> → <b>7.6%</b>	

# 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