



California Energy Commission



California Public Utilities Commission



California ISO  
Shaping a Renewed Future

# 2012 Summer Readiness

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# CEC statewide planning studies and ISO operational studies essentially agree.

- On a statewide and ISO system basis, supply is adequate to cover a broad range of potential peak demand conditions and contingencies.
- The absence of the San Onofre nuclear plant does not create system-wide issues but does create local reliability issues because of transmission constraints that limit imports into the Los Angeles Basin and San Diego areas.

## The ISO's longer-term studies start with the CEC demand forecast.

- Every year the ISO publishes studies looking out 10 years and five years, as well as seasonal studies throughout the year to determine reliability needs and challenges.
- The ISO must comply with federal reliability standards and more rigorous California supplemental standards by being constantly prepared for the loss of a single generator and various combinations of transmission system outages.
- Study work started in 2011 is being augmented in the 2012-2013 transmission plan to address possible long-term outages of the San Onofre and Diablo Canyon nuclear power plants.

# Reliability issues arise in the LA Basin and San Diego without the San Onofre nuclear power plant.

- Los Angeles Basin and San Diego areas must have local generation to serve all consumers
- The ISO already plans for the outage of one San Onofre generating unit
- ISO must plan for the major contingencies where San Diego loses eastern transmission and the largest generator



# San Diego and the Los Angeles Basin are at risk of outages under required planning standards.

## San Diego

Without both San Onofre units -

Import capability 

Total gen	+3,048
Import capability	+2,100
Largest generation outage	- 603
Load	-4,882
<b>Shortfall</b>	<b>= - 337</b>

## Los Angeles Basin

Without both San Onofre Units –

Total gen 

Total gen *	+9,418
Import capability **	+10,771
Largest generation outage ***	- 498
Load	-19,931
<b>Shortfall</b>	<b>= -240</b>

Notes:

\* Installed capacity, some of which is not under contract.

\*\* Transmission import capability is subject to change, as system conditions change from year to year.


\*\*\*Largest generating unit outage after both San Onofre units are out of service .

# Restarting existing, permitted generation is essential.

## San Diego

Without SONGS and with  
Huntington Beach 3 & 4 –


Import capability 

Total gen	+ 3,048	
Import capability	+ 2,450	
Largest generation outage	- 603	
Load	- 4,882	
<b>Surplus</b>	<b>= 13</b>	

## Los Angeles Basin

Without SONGS and with  
Huntington Beach 3 & 4 –

Total gen 

Total gen*	+ 9,870	
Import capability**	+10,771	
Largest generation outage	- 498	
Load	- 19,931	
<b>Surplus*</b>	<b>= 212</b>	

Notes:

\* Installed capacity, some of which is not under contract.

\*\* Transmission import capability is subject to change, as system conditions change from year to year.

\*\*\*Largest generating unit outage after both San Onofre units are out of service .

Conservation and demand response increase the margins.

# Energy conservation and demand response will increase the margin.

		Existing DR MWs
SCE	All demand response programs	1,700 MW
	Southern Orange County and South of Lugo	506 MW
SDG&E	All demand response programs	104 MW

- SCE and SDG&E proposals for additional MWs are awaiting Commission approval.
- The Commission has authorized \$10 million for the Flex Alert campaign, a mass media program that informs the general public on how to reduce their energy usage and alerts them to reduce when CAISO needs additional reductions.
- The education effort includes outreach to disadvantaged communities and foreign language speakers.
- In the event of an emergency, procedures include notification of the California Emergency Management Agency and affected utilities who manage local communication and urgent response processes.

# Actions are underway to mitigate the risk of outages.

- Return Huntington Beach units 3 & 4 to service
- Accelerate Barre-Ellis transmission upgrade
- Complete Sunrise transmission line and related outage planning
- Fully fund Flex Alerts
- Fully utilize available demand response
- Seek additional military and public agency demand response
- Ensure that existing generation is well-maintained and available