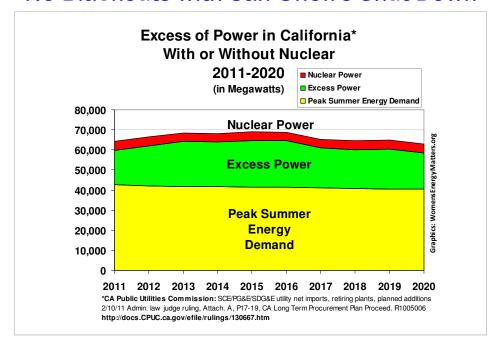
## No Blackouts with San Onofre Shut Down



## CALIFORNIA HAS EXCESS POWER without nuclear power plants.<sup>1</sup>

Includes power needed for peak summer demand, voltage and grid stability.<sup>2</sup>

## NUMEROUS OPTIONS DEVELOPED to avoid Southern California blackouts.

California Independent System Operator (ISO) recommendations to avoid SoCal blackouts:<sup>3</sup>

 Restart Huntington Beach (HB) gas-fired units 3 and 4. The Los Angeles area reserve is short by only 240 MW under heavy load conditions without San Onofre. This is mitigated by restarting HB units, thereby increasing import capability to San Diego by 450 MW.

Reserves (MW) without San Onofre	Without Huntington Beach 3 & 4		With Huntington Beach 3 & 4	
	Mild Conditions	<b>Heavy Load</b>	Mild Conditions	<b>Heavy Load</b>
Reserve available	710	266	1060	616
Reserve required	603	603	603	603
Reserve [excess] margin	107	-337	457	13

[Estimates for additional megawatts (MW) available through load management, renewable energy, conservation and energy efficiency were **NOT** provided in the ISO presentation, but can increase reserve margin significantly.]<sup>4</sup>

- Conservation and demand response will provide additional margin.
  - Fully fund Flex Alerts and restart CPUC 20/20 program. [SCE is planning a 10/10 program.]
  - Fully utilize available demand response (e.g., SCE air conditioner cycling). [SDG&E excludes San Clemente, Laguna Beach, Laguna Woods and Laguna Hills from air conditioner cycling]
  - Seek additional military and public agency demand response.
  - Take longer-term steps to increase available demand response system-wide.
- Accelerate Barre-Ellis transmission upgrade, accelerate completion of Sunrise and related outage planning.

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<sup>&</sup>lt;sup>1</sup> 2/10/2011 CA Public Utilities Commission: Administrative Law Judge Ruling Attachment A, Pages 17-19, CA Long Term Procurement Plan Proceedings R005006 http://docs.CPUC.ca.gov/efile/rulings/130667.htm

<sup>&</sup>lt;sup>2</sup> 2011-2012 ISO Transmission Plan http://www.caiso.com/Documents/Board-approvedISO2011-2012-TransmissionPlan.pdf

<sup>&</sup>lt;sup>3</sup> 3/22/2012 ISO Summer 2012 Operations Preparedness presentation, Neil Millar, Executive Director, Infrastructure Development http://www.caiso.com/Documents/BriefingSummer2012OperationsPreparedness-Presentation-Mar2012.pdf

<sup>&</sup>lt;sup>4</sup> SanOnofreSafety.org Energy Options http://sanonofresafety.org/energy-options