

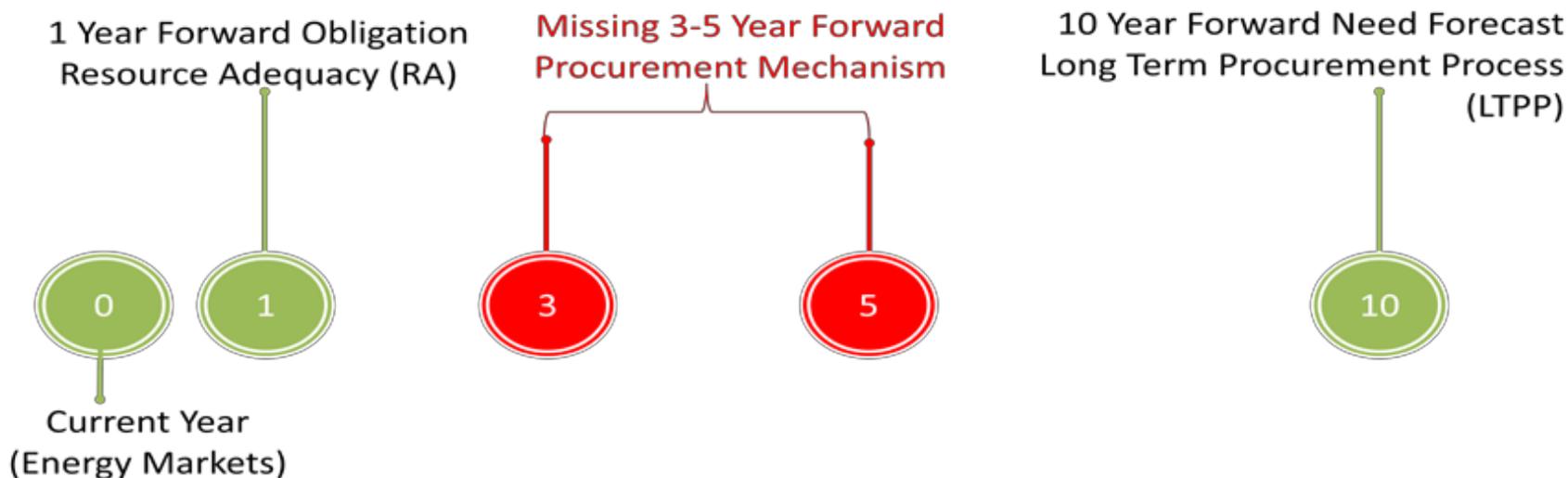
Presentation Slides
for Planned Remarks
on behalf of The Utility Reform Network
by Kevin Woodruff, Principal, Woodruff Expert Services

prepared for the
Federal Energy Regulatory Commission
*Technical Conference on Flexible and Local Resources Needed for
Reliability in the California Wholesale Electric Market*
Docket No. AD13-5-000
July 31, 2013



Figure 1

An Incomplete and Misleading Model



Missing Intermediate-Term Procurement Mechanism addresses new issues:

- 1) Providing needed revenues to existing flexible resources to assure that they remain online
- 2) Addressing additional need for flexible resources caused by high amount of intermittent renewables

Source: California Independent System Operator, *Comprehensive Forward Capacity Procurement Framework*, February 26, 2013, page 2.

Figure 2

An Incomplete and Misleading Model, in Two Dimensions

NOTE: FIGURE HIGHLY-STYLIZED AND NOT TO SCALE

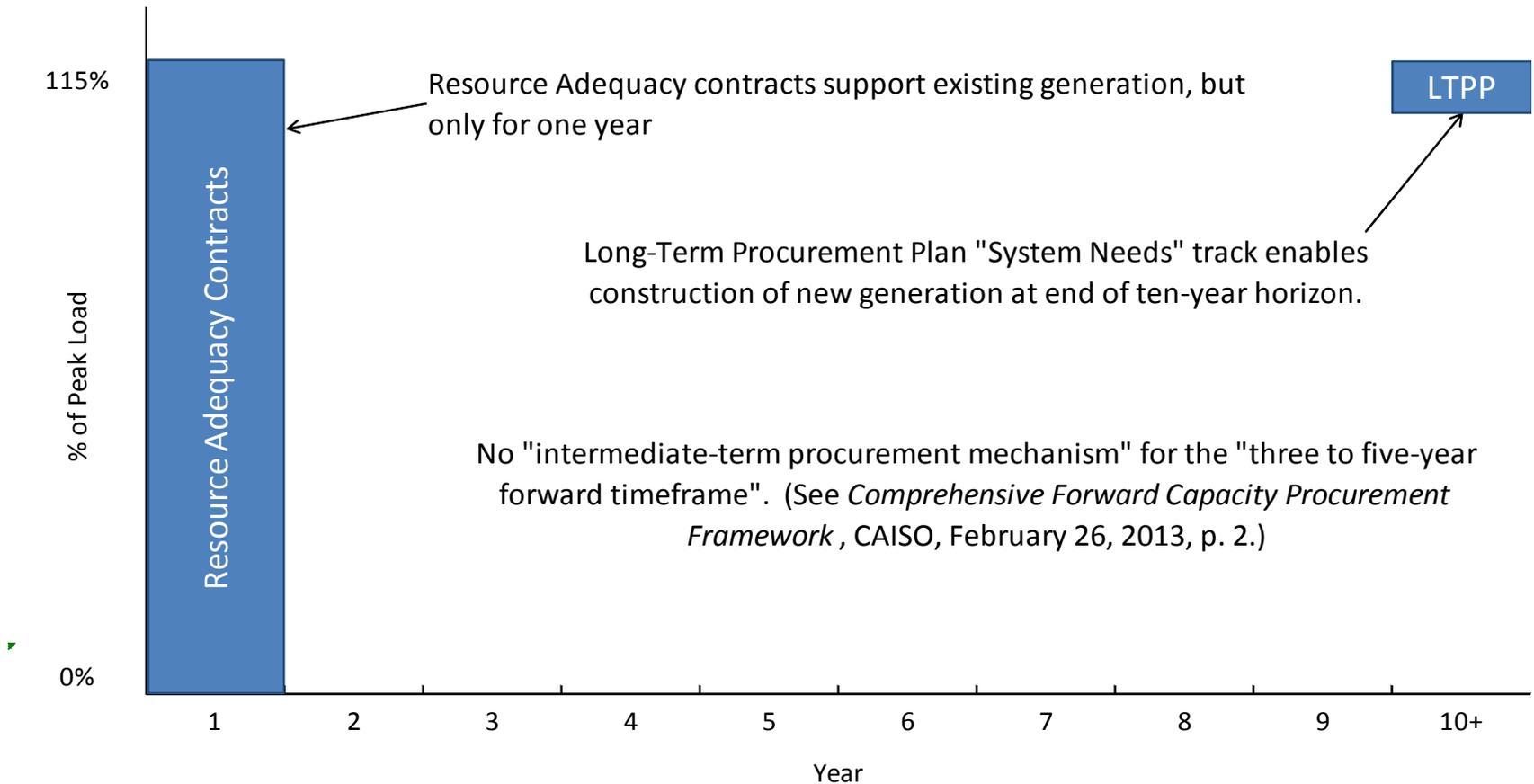


Figure 3 The More Complete “Multi-Part, Multi-Year” Model

NOTE: FIGURE HIGHLY-STYLIZED AND NOT TO SCALE

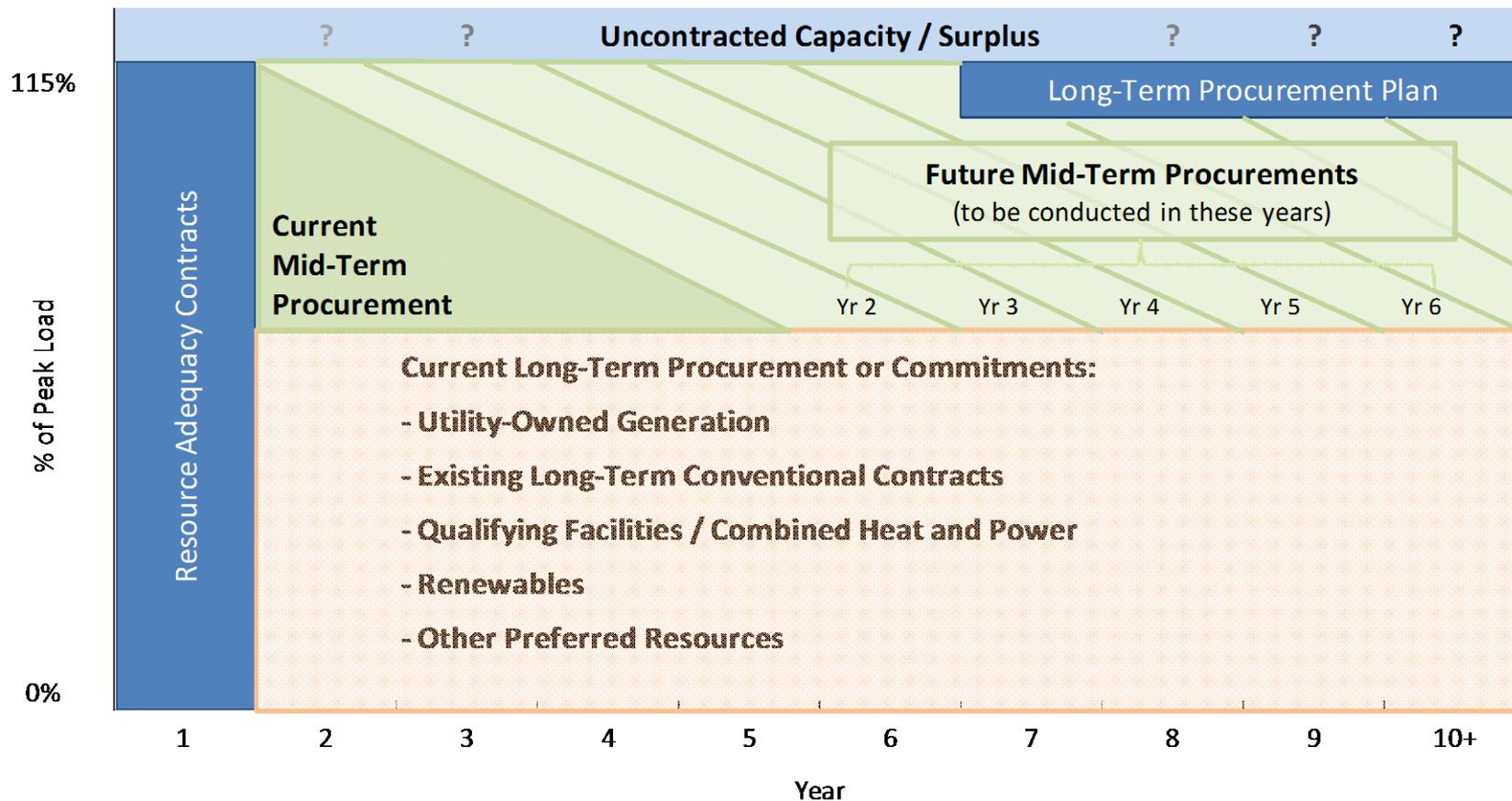
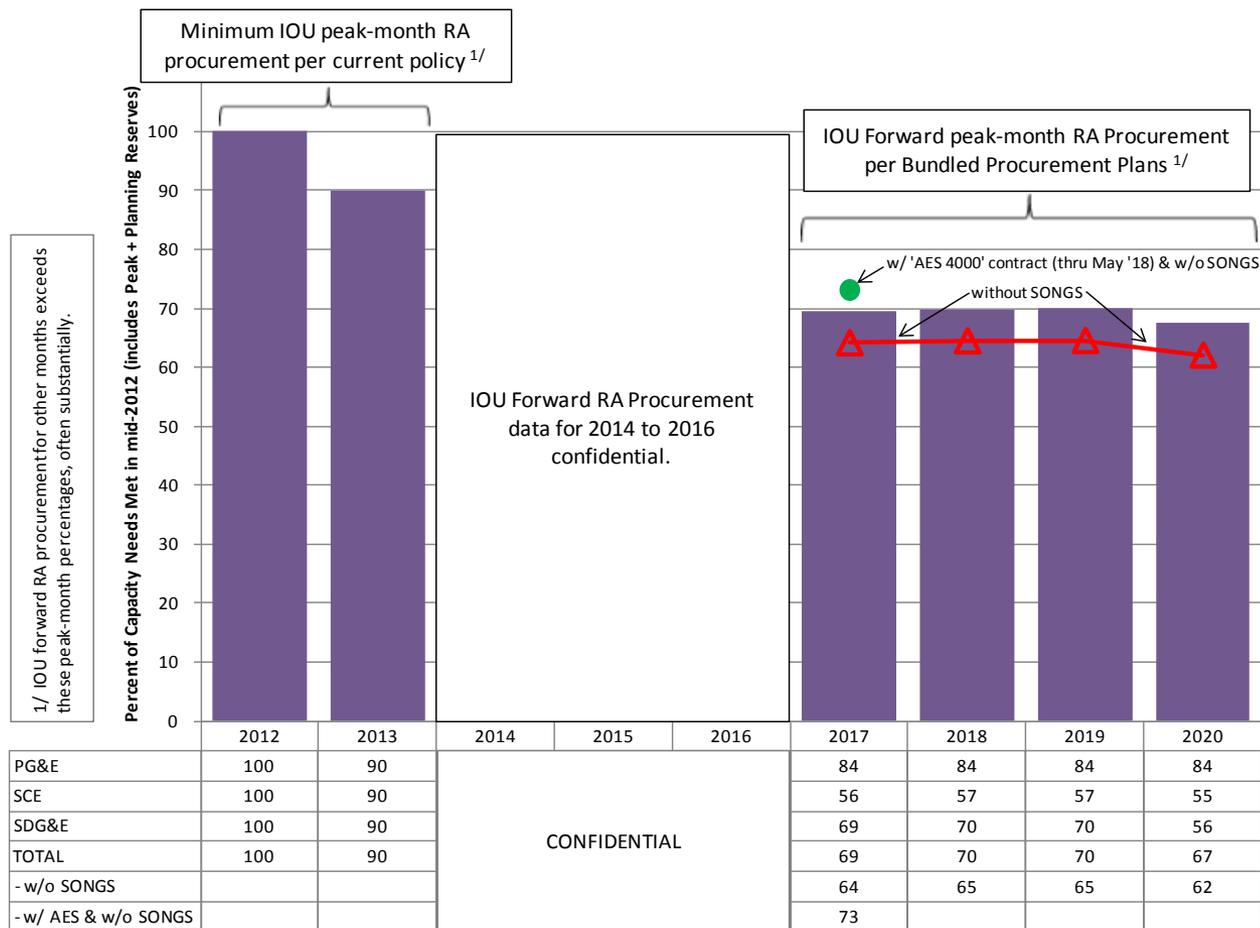


Figure 4

IOUs' Peak-Month RA Procurement through 2020, as of 2012



Sources:

- 2012-2013: CPUC Resource Adequacy policy.
- 2017-2020: IOUs' final Bundled Procurement Plan filings.
- SONGS Capacity (2,246 MW): CAISO 2013 Net Qualifying Capacity List.
- AES Contract Capacity (3,818 MW): SCE Advice Letter 2853-E.

Notes:

- Expected Demand Response, Energy Efficiency and some customer generation deducted from load.
- Capacity of PG&E Qualifying Facility contracts not included due to confidentiality limits.

Figure 5 Forward Procurement of Capacity Capable of Meeting “Three-Hour Ramp”

