

Strategy 1.8 Energy Efficiency as a Clean Distributed Energy Resource

Utility Procurement

In 2013 the CPUC authorized SCE to launch an all-source bidding procurement framework that included the ability for energy efficiency resources to compete against conventional and renewable supply resources, as well as storage and demand management (Decision D.13-02-015). In that solicitation, SCE in 2015 selected 136.2 MW of energy efficiency from three successful lead bidders, to be accomplished across 32 contracts. The CPUC approved these contracts in 2015 and 2016. All the efficiency resources were required to be “incremental” to the amount of EE contained in the Energy Commission’s additional achievable EE per the IEPR forecast. (The total selected bids for all sources amounted to 2,220 MW of resources. Thus, efficiency comprised 6 percent of the selected resource offers.¹⁶)

PG&E’s proposed Diablo Canyon settlement includes the retirement of the Diablo Canyon nuclear power plant and plans for replacement energy resources. The settlement includes the procurement of 2,000 GWh of energy efficiency to be installed by January 1, 2025. PG&E’s proposed procurement will result in “new” efficiency efforts that are incremental to its ratepayer-funded efficiency programs and that use an existing conditions baseline and normalized metered energy savings estimates, where feasible and appropriate. Funding for this procurement activity, about \$1.3 billion, may be authorized in the Diablo Canyon Settlement Application proceeding.

Integrated Distributed Energy Resources

In its rulemaking R.14-08-013, the CPUC oversees the IOUs’ distribution grid needs assessments that determine upgrade requirements and alternatives. A second rulemaking (R.14-10-003) is establish a procurement framework for selecting alternative distributed energy resources (DERs), that may include energy efficiency, once the needs assessment determines that DERs may offer the potential to offset

traditional capital and operating expenditures for distribution upgrades. In 2016, the latter rulemaking embarked on developing a competitive solicitation framework focused on these distribution alternative solutions. A working group report with recommended approaches to the framework was submitted on August 1, 2016. It is expected that by the end of 2016 the CPUC will consider and/or modify the framework to be used, consistent with the needs assessment findings.

Several challenges and new business model considerations will face potential EE bidders, including:

- Proof that EE offerings are incremental to the Energy Commission’s IEPR forecast that forms the “baseline” of distribution grid planning.
- Ability to target resources to the distribution resource specifications of timing, place, duration, and value.
- The willingness of EE bidders to accept performance assurance requirements, nonperformance penalties, and other risk considerations.
- The ability to compensate EE providers for the full value of energy efficiency, including the avoided generation and transmission resources, if business models require an “all-in” compensation structure.

Once competition reveals parameters on price and value possibilities, the CPUC and utilities in the future may consider other forms of DER procurement, including bilateral contracts, tariffs, and/or “programs” with fixed compensation terms.

¹⁶ See contract award details at: Southern California Edison. “Local Capacity Requirements (“LCR”) RFO.” 2016. <https://www.sce.com/wps/portal/home/procurement/solicitation/lcr/>.

California’s Existing Buildings Energy Efficiency Action Plan – 2016 Update

Strategy	Metrics/Time Frame	Lead/Partners
<p>1.8 Energy Efficiency as a Clean Distributed Energy Resource: Treat efficiency as a clean distributed energy resource for which utilities contract in a fashion analogous to large-scale generation.</p> <p>1.8.1 Utility Procurement of Energy Efficiency: Further develop the utility procurement model for energy efficiency, building on the SCE Preferred Resources Pilot and the PG&E proposal for the Diablo Canyon settlement</p> <p>1.8.2 Market Transformation Program Portfolios: Evolve the energy efficiency program portfolios to focus more explicitly on market transformation activities in the upgrade marketplace.</p> <ul style="list-style-type: none"> • Understand the phenomenon of code shortfall in existing buildings and mobilize projects to close any gaps. • Revisit administration of market transformation efforts. 	<p><i>2016 and ongoing</i></p>	<p><i>CPUC, POU/IOUs, CEC</i></p> <p><i>CPUC/CEC, program implementers</i></p>