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To the Austin Generation
Resource Planning Task Force
May 21, 2014

LSAC Members 2012

Jose Beceiro	Greater Austin Chamber of Commerce	Colin Meehan	Environmental Defense Fund
Mark Begert	Meridian Solar	Tuan Q Pham	PowerFin Partners
Bernie Bernfeld	Electric Utility Commission	Stan Pipkin	Lighthouse Solar
Monica De La Rosa	Lava's Energy Efficient Supply Stores	Varun Rai	University of Texas at Austin
Ron Van Dell	SolarBridge Technology	Tom “Smitty” Smith	Public Citizen
Gabe Flores	National Electrical Contractors Association	BJ Stanbery	HelioVolt
Joseph Hawkins	A New Thing	John Sutton	Building Owners and Managers Association (BOMA)
Christine Herbert	Resource Management Commission	Steve Wiese (Chair)	Texas Renewable Energy Industries Association (TREIA)
Michael Kuhn	Solar Austin/Imagine Solar	Roger Wood	CCARE
Sunshine Mathon	Foundation Communities	Salvador (Sal) Valdez	RZ Communications

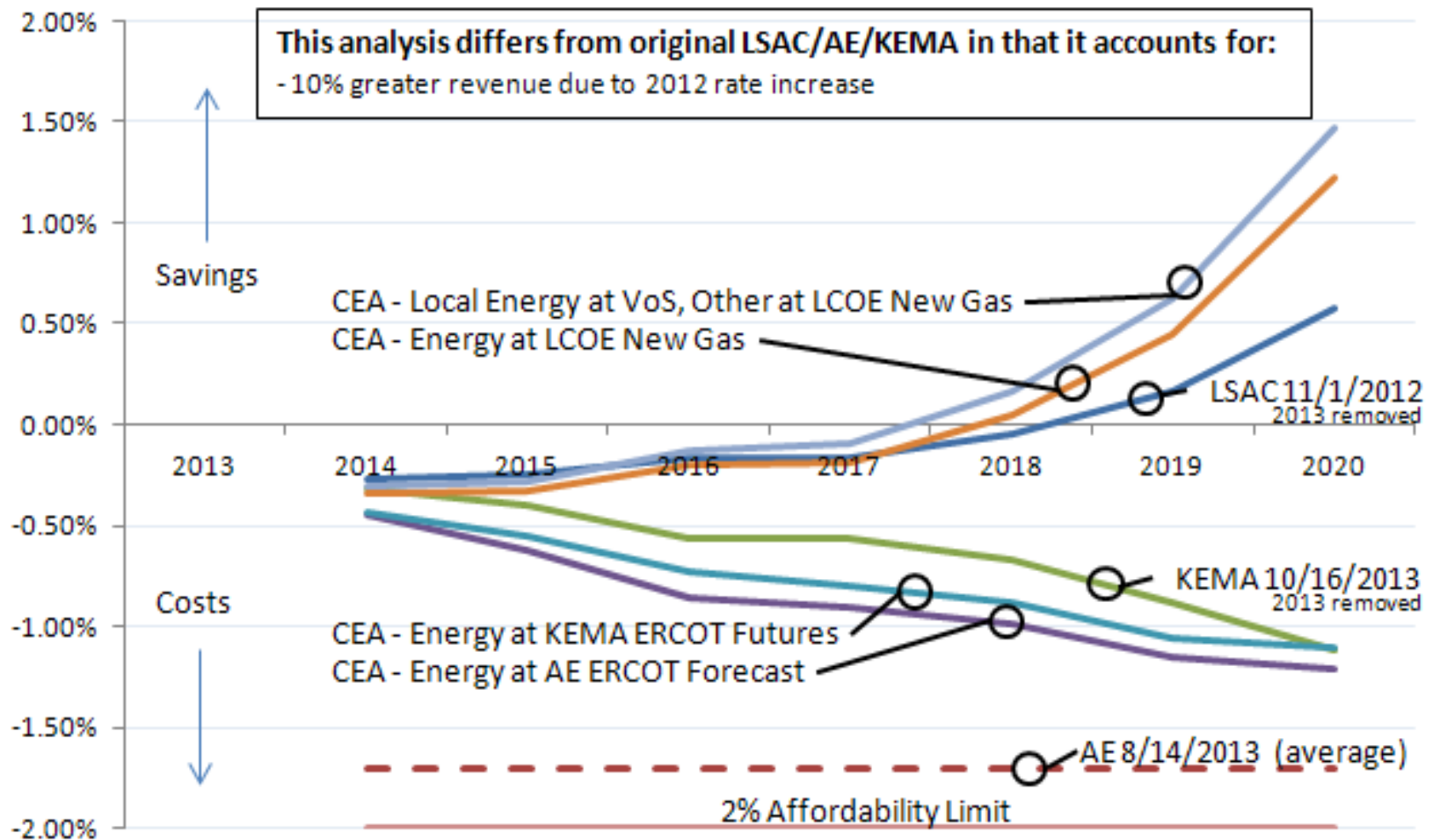
LSAC's 2012 Strategic Plan

“Local solar provides local benefits regardless of whether it is directly controlled by utility customers or the utility itself... As solar approaches retail grid parity here in Austin, a key challenge is to optimize solar's benefit to the community while reducing or mitigating conflicts between, or ideally, aligning, the interests of our community-owned utility and its customers.”

Local Solar		Today	2016	2020
	Residential	6.4	20	45
	Commercial	1.4	20	55
	Large Local	31	45-80*	100
Other Solar		0	50-80*	200
Total Recommended Solar Goal		38.8	135-200*	400

*Costs and economic benefits were calculated based on the minimum of this range.

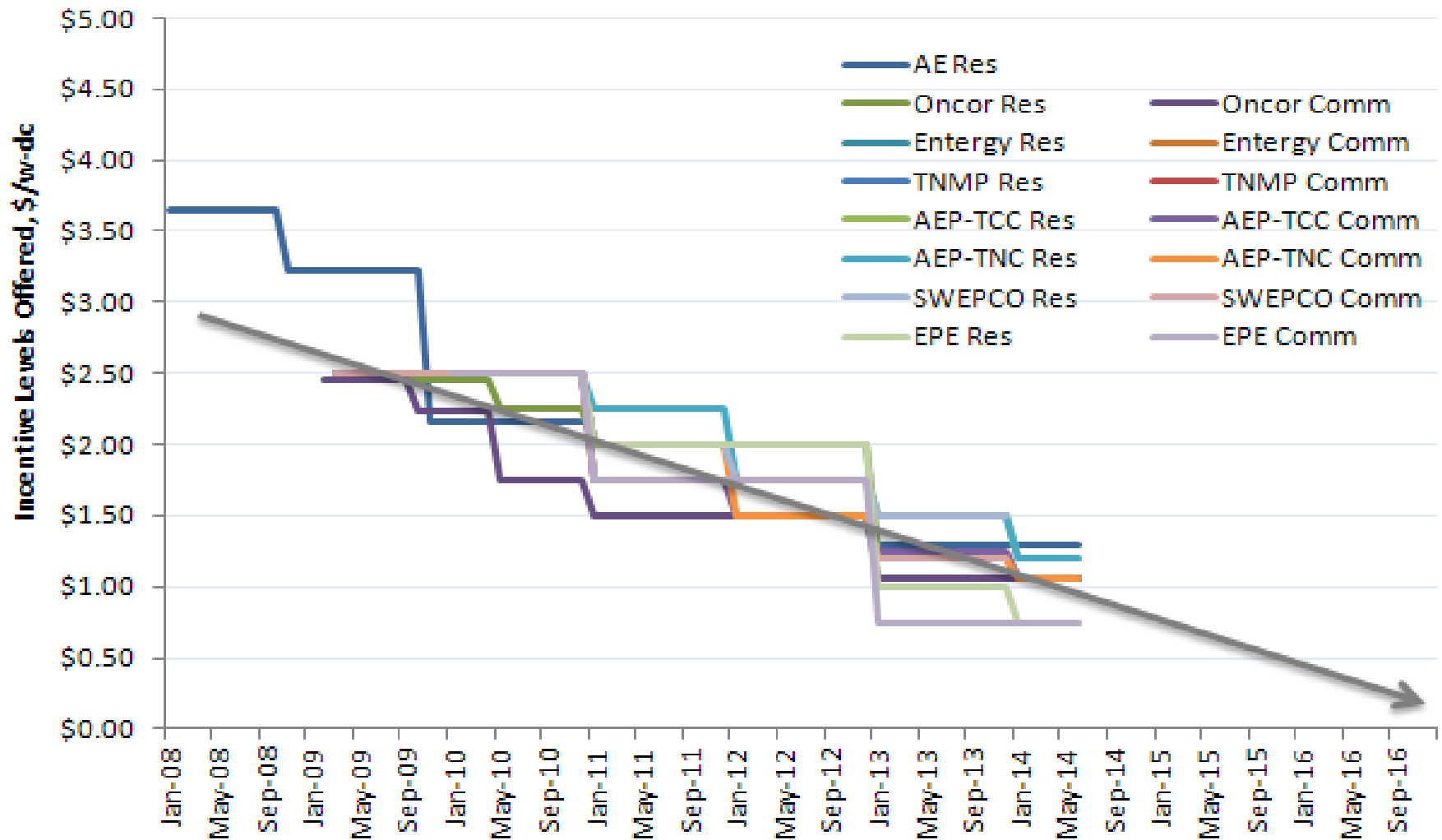
2013 Annual Rate Impact of LSAC Goals (1 of 2)



2013 Annual Rate Impact of LSAC Goals (2 of 2)

1. **This analysis was completed by CEA for the City Council's Emerging Technology and Telecommunications (ETT) working group in late 2013, about a year after the LSAC's work.** It attempts to reconcile differences between the LSAC's estimate of net costs associated with its recommended goals, versus estimates produced by Austin Energy and KEMA.
2. **Upward trending lines show estimated annual rate impact of LSAC-recommended solar goals with avoided costs valued at the levelized cost of building new gas generation (~8c/kWh) or local solar at the VoS rate (~10.7c/kWh) and all other valued at the levelized cost of new gas. Net savings generated by utility scale solar investments more than offset net costs of meeting local distributed solar goals.** Downward trending lines show annual rate impact when avoided costs are assumed at current and forecasted ERCOT market prices over the next 6-7 years.
3. **Costs of utility-scale solar have decreased since the assumptions that went into this model (7.5c/kWh assumed in 2014 vs ~5c/kWh recently announced). All models would be more cost-effective if we updated the model.**

Texas Solar Incentives, 2008-2014 (1 of 2)



Texas Solar Incentives, 2008-2014 (2 of 2)

1. **Costs of distributed solar are declining more rapidly than were modeled in 2012** (LSAC projected average installed residential cost at \$3.41/w in 2012, actual costs are in the range of \$2.25-\$2.75/w, with some even lower).
Reexamining the estimated net cost of meeting the LSAC's goals using currently realized installed costs for local solar should further reduce cost estimates.
2. We are rapidly approaching a period when **incentives for distributed solar are only marginally relevant.**
3. Instead, **focusing on the rate structure that applies to customers with distributed generation is now crucial.**
 - Rates should never be justified, in whole or in part, by any assertion about the generosity of rebates offered by the utility.
 - It won't be long before the vast majority of a utility's solar customers never received any up-front rebate or incentive.
 - Rebate and incentive structures last for a year (or sometimes less). Rates can last for decades.

Key Points (and a question)

- **Local solar provides unique values** - Local solar is the only generation resource that significantly and directly affects local employment.
- **Solar costs less** - Prices of both utility-scale and distributed solar have declined more rapidly than anyone modeled in 2012. Any new analysis of meeting (or exceeding) the LSAC's goals will predict lower net costs.
- **Up front incentives/rebates** – Their future is limited, but it's important to provide a stable set of expectations regarding how these will diminish over the next several years.
- **Rates structures are critical** – Rates last for decades, and won't interplay with incentives like they used to.
- **What's the utility's distributed/local solar business model?** – The utility's strategic posture toward distributed solar development is critical. Is solar only a threat? How can it be an opportunity? How will the utility play a value-added role?