NEM Grandfathering

February 19, 2014

PG&E's Grandfathering Proposal

- PG&E's **transition period** for current customers to move from existing program to NEM 2.0 is based on a reasonable payback period that:
  - Protects existing NEM customers' investment in their systems
  - Subjects non-participating PG&E customers to lower cost shifts
  - Gradually steps down to NEM 2.0 to mitigate a gold rush
  - Reflects AB327 direction to base transition period on reasonable payback period.

Interconnection From	Interconnection To	Customer Transfers to NEM 2.0*	Years on NEM 1.0
Start of NEM	*March 30, 2014*	*January 1, 2023*	*10 - 25*
April 1, 2014	December 31, 2015	January 1, 2020	5 - 7
January 1, 2016	*June 30, 2017*	*NEM 2.0 effective date*	*1 - 1.5*

* Transition occurs first true-up period following January 1, 2023

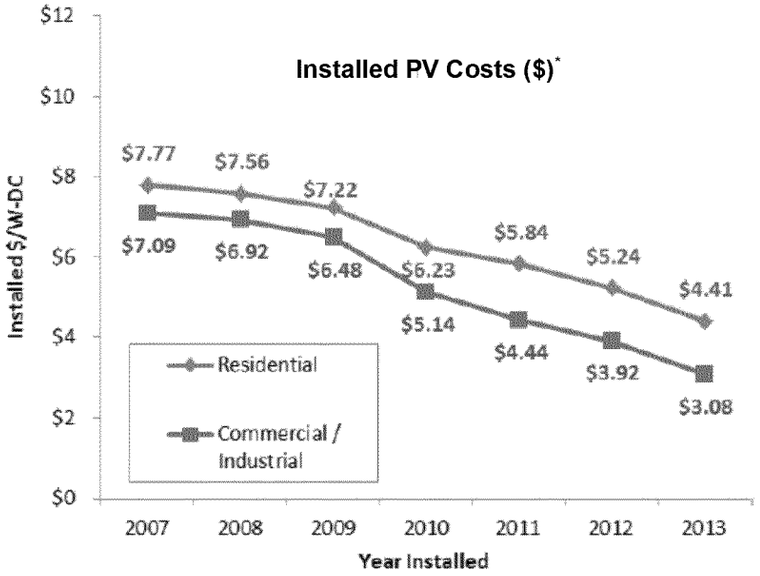
Solar Parties' Proposals Perpetuate the NEM Cost-Shift

Proposals for "life-of-system" significantly increase the potential cost-shift over proposals based on reasonable payback

	Years Post 2017	MWs Grandfathered[2]	Cumulative PG&E Cost-Shift During Proposed Grandfathering period ($ billions)[1]
TURN	*3*	*1,640*	*$1.3*
ORA	*5*	*1,640*	*$2.1*
PG&E, SDG&E	*7*	*1,310*	*$2.0*
SCE	*7*	*1,640*	*$2.9*
CCSE- & Most solar Parties	*20 -30*	*2,409*	*$12.3 - $18.4*
Other solar parties	*45*	*2,409*	*$27.7*

Notes:
1) Calculations rely on Cost-Shift per MW per year in 2017 of $255,000 from E3 work-papers;
2) Projected volumes are from E3 work-paper projections of year-end volumes, with partial year values interpolated. Proposals from CCSE and solar parties are set at PG&E's NEM Cap of 2409 MW due to expected "gold-rush" from lengthy grandfathering. PG&E and SDG&E's proposal is assumed to result in less megawatts grandfathered than SCE's because of the step-down in grandfathering proposed by the former.

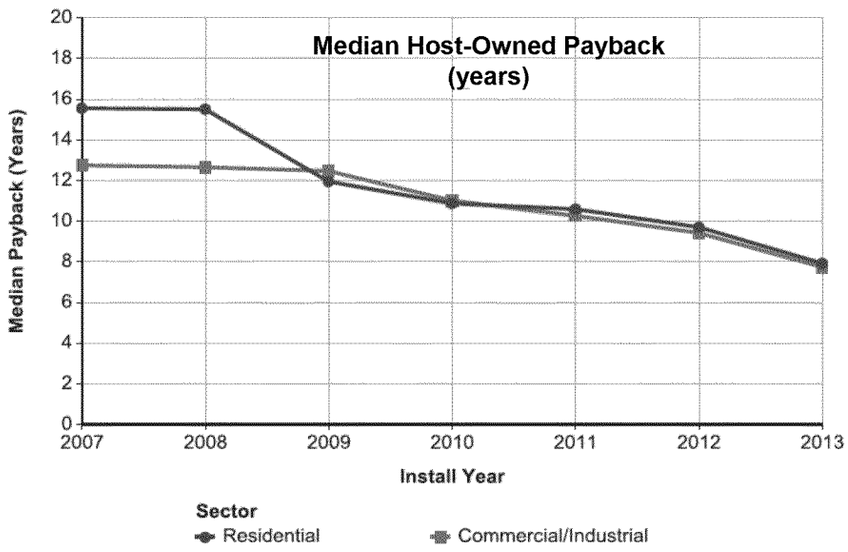
Basis for 7- to 10-Year Payback Period



1Source: PowerClerk Working Data, November 27, 2013

- System prices declined 40% over 4 years
- Costs are expected to continue declining (Germany~$2.35/Watt)

- Lower prices have led to declines in payback period
- This trend will continue to as costs continue to decline

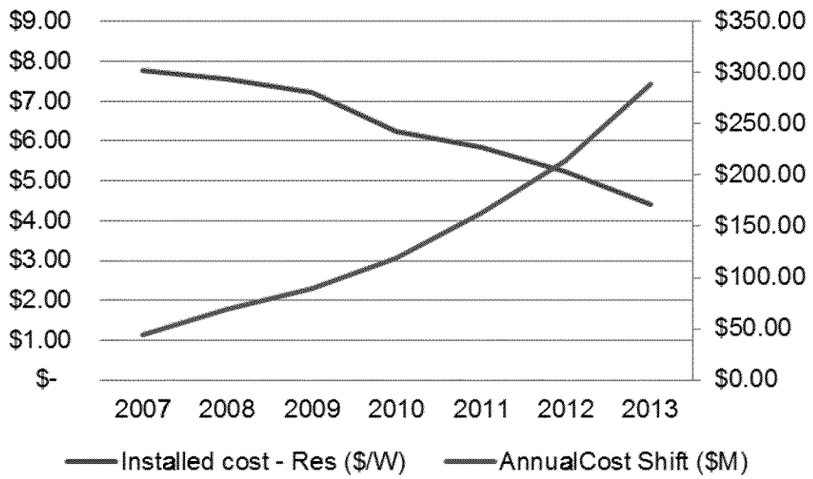


* Source: Navigant Consulting report submitted with PG&E reply comments on Grandfathering

Market Analysis

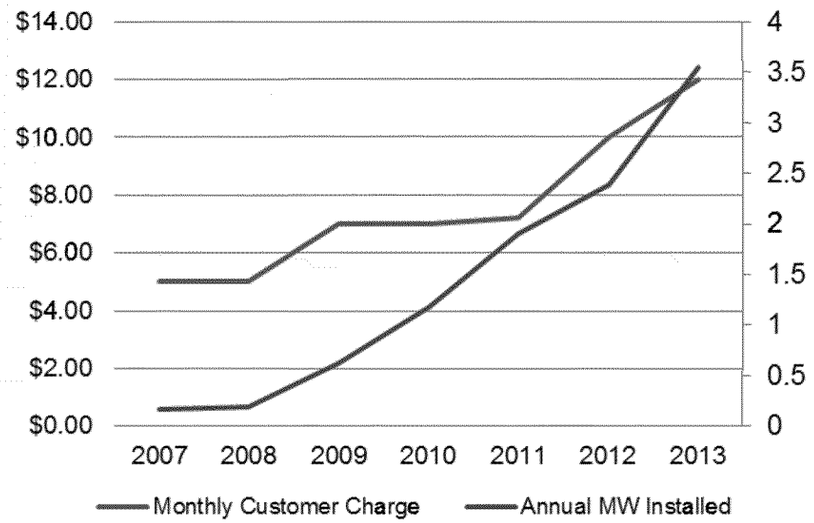
- Solar industry's previous claims of market disruption did not materialize
- Decreasing system costs mean it is possible to address cost-shift without market disruption
- It is understandable that solar market wants to preserve (increase) profits, but not at expense of utility customers

As cost of solar has decreased, no savings have reached nonparticipating customers



Source: Navigant Consulting & E3

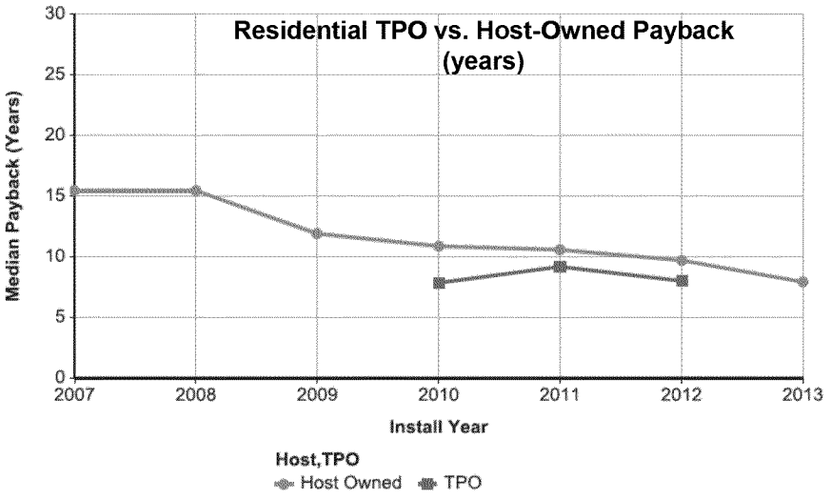
SMUD has increased customer fixed charge with no decrease in installation rates



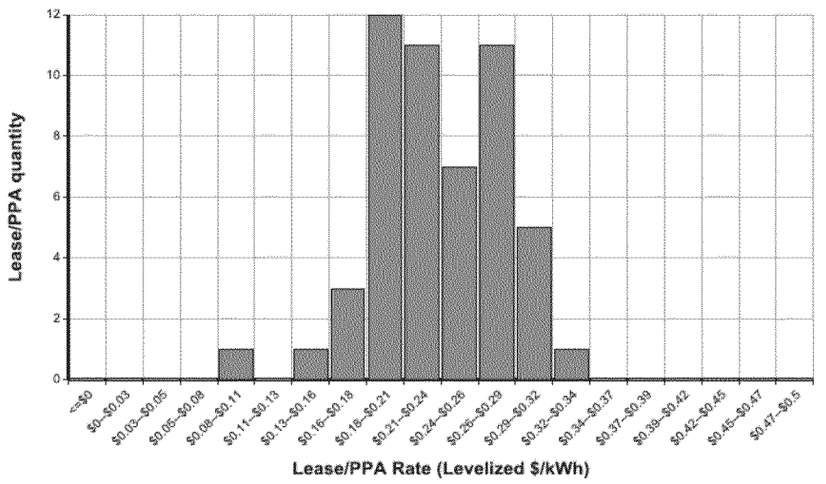
Source: Sacramento Municipal Utility District

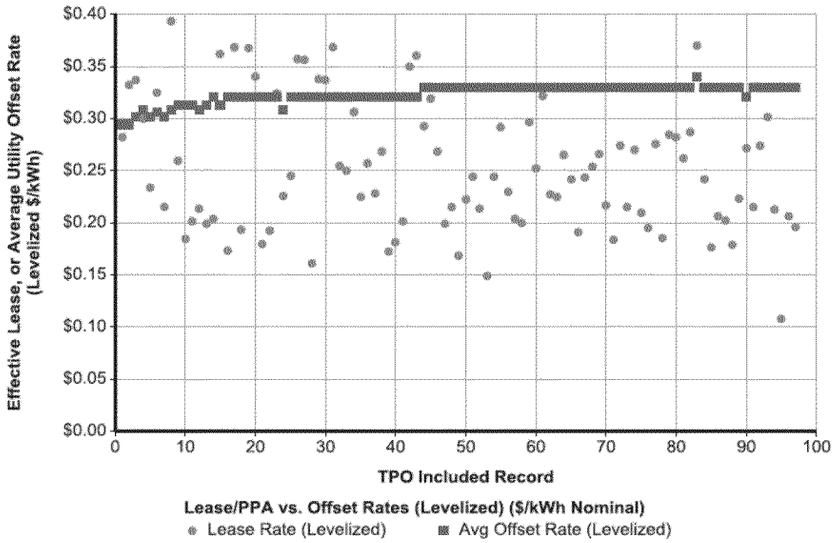
APPENDIX

Residential Third-Party Owned Analysis



- TPO payback lower than host-owned for residential; TPOs are able to monetize depreciation
- TPO arrangements provide immediate savings with little upfront payment
- Required conversion of the lease/PPA into terms that could translate into payback





Residential adoption is concentrated among high income customers