

Pool Covers and Home Energy Cal TF Tier 1 Presentation



ROGER BAKER & AL LUTZ
AYAD AL-SHAikh
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eTRM Subcommittee Schedule

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	29-May	5-Jun	12-Jun	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	31-Jul	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	18-Sep	25-Sep	2-Oct	9-Oct	16-Oct	23-Oct	30-Oct	6-Nov	13-Nov	20-Nov	27-Nov	4-Dec	11-Dec	18-Dec	25-Dec	1-Jan	8-Jan	15-Jan	22-Jan	2017	2018	
Cal TF Meeting				6/22					7/27									9/28				10/26			11/16				12/14						1/25			
Governance / TPP																						1			2a				2									
Commercial Refrigeration																		1							2a				2							20	0	
Food Service																		1				2a			2											15	0	
Agriculture / Pumps											TO TC											1			2a				2								5	1
Lighting																	TO TC																		1	11	42	
HVAC																																				1	2	50
Water Heating													TO TC												1										2	22	0	
Appliance / Plug Load													TO TC												1										2	10	12	
Building Envelope																																					0	4
Pools																						1							2								1	5
Process																																					0	7
Miscellaneous																						1														2	2	4
Low Income Measures																																						

Green numbers = Number of Measures; **Blue** numbers: **1**=First Review / **2** = Affirmation.

Pool Category Measures

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No.	Measure Names	PG&E	SCE	SDG&E	SCG	POU
9.01	Commercial Pool Cover					
9.02	LED Pool and Spa Lighting					
9.03	DC Circulation Pool Pump					
9.04	Residential Variable Speed Spa and Wading Pool Pump					
9.05	Residential Variable Speed Swimming Pool Pump					
9.06	Commercial Variable Speed Pool Pump Replacing Pump, <3HP					
9.07	Variable Speed Pool Motors					
9.08	Robotic Pool Cleaners for Residential Pools					
9.09	Commercial Pool and Spa Heater					
9.10	SF Pool Heater					
9.11	SF Spa Heater					

Measure Consensus

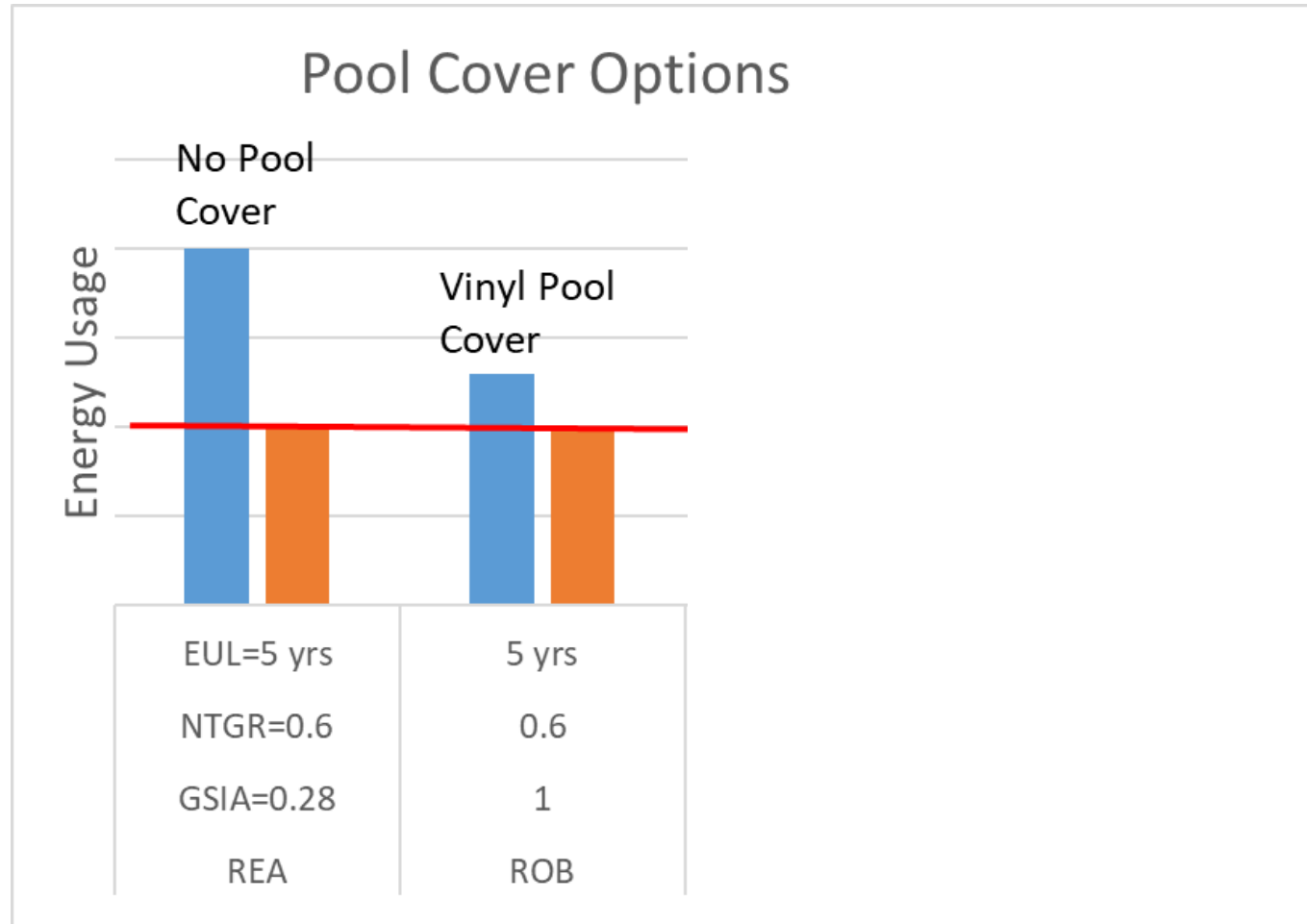
9.01 – Commercial Pool Covers

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- Disposition for Commercial Pool Covers
 - Dated: March 1, 2013
 - Based on Google Earth imagery – mainly PG&E sites
 - NTGR
 - ✦ “Staff does not agree with the assumption that, once pool covers become non-functional, that customers will not replace them without IOU incentives”
 - Regressive Baselines / Installation Rate
 - ✦ “With such short payback values, staff believes that a regressive baseline is not a reasonable assumption”
 - Summary
 - ✦ NTGR = 0.60 (all IOUs)
 - ✦ GSIA (specifically, Installation Rate)
 - PG&E – IR = 0.28
 - SDG&E and SCG – IR = 0.38

Pool Category Measures

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Measure Consensus

9.01 – Commercial Pool Covers

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- Offering

- ❑ Existing pools only with no cover or unusable cover
- ❑ Indoor / Outdoor

- Stage 1 Issues

- ❑ *Savings methodology*
- ❑ *GSIA treatment for ROB*
- ❑ *Cost components (reel)*

- Measure Extension

- ❑ Added measure for gas POU's (not electric POU's or SCE)

- Stage 2 Issues

- ❑ *Embedded Energy in Water and Water Savings*
- ❑ *Extend to all Commercial Buildings or lodging facilities only (discussing)*

Blue text = First time that item is mentioned
Italics text = Item that has not been completed

Input Consensus

9.01 – Pool Covers

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- Measure Permutations

	eTRM Measure Value	PG&E	SCE	SDG&E	SCG
BldgType	Com,CRe,ECC,EUn,Fhc, MFm,Ese	Any	No Value	All	Com,CRe,ECC,EUn,Fhc ,MFm
BldgVintage	Ex	Ex	No Value	Any	Any
BldgLoc	CZ01,CZ02,CZ03,CZ04,CZ05, CZ06,CZ07,CZ08,CZ09,CZ10, CZ11,CZ12,CZ13,CZ14,CZ15, CZ16,IOU	CZ01,CZ02,CZ03,CZ04,CZ0 5,CZ11,CZ12,CZ13,CZ16	No Value	CZ04,CZ05,CZ06,CZ07,CZ0 8,CZ09,CZ10,CZ13,CZ14,CZ 15,CZ16,IOU	CZ01,CZ02,CZ03,CZ04,CZ0 5,CZ06,CZ07,CZ08,CZ09,CZ 10,CZ11,CZ12,CZ13,CZ14,C Z15,CZ16,IOU
BldgHVAC	cUnc	cUnc	No Value	Any	Any

- Measure Implementation

	eTRM Measure Value	PG&E	SCE	SDG&E	SCG
MeasureAppType	REA	REA	No Value	REA	ROB
NormUnit	Area-ft2	Area-ft2	No Value	Area-ft2	Area-ft2
EUL ID	OutD-PoolCover	OutD-PoolCover	No Value	OutD-PoolCover	OutD-PoolCover
NTGR	Com-Default>2yrs	Com-Default>2yrs	No Value	Com-Default>2yrs	Com-Default>2yrs
DeliveryType	PreRebDown	PreRebDown	No Value	PreRebDown	PreRebDown
GSIA	Pool-Cover-Com ROB = N/A	Pool-Cover-Com	No Value	No Value	Pool-Cover-Com Def-GSIA

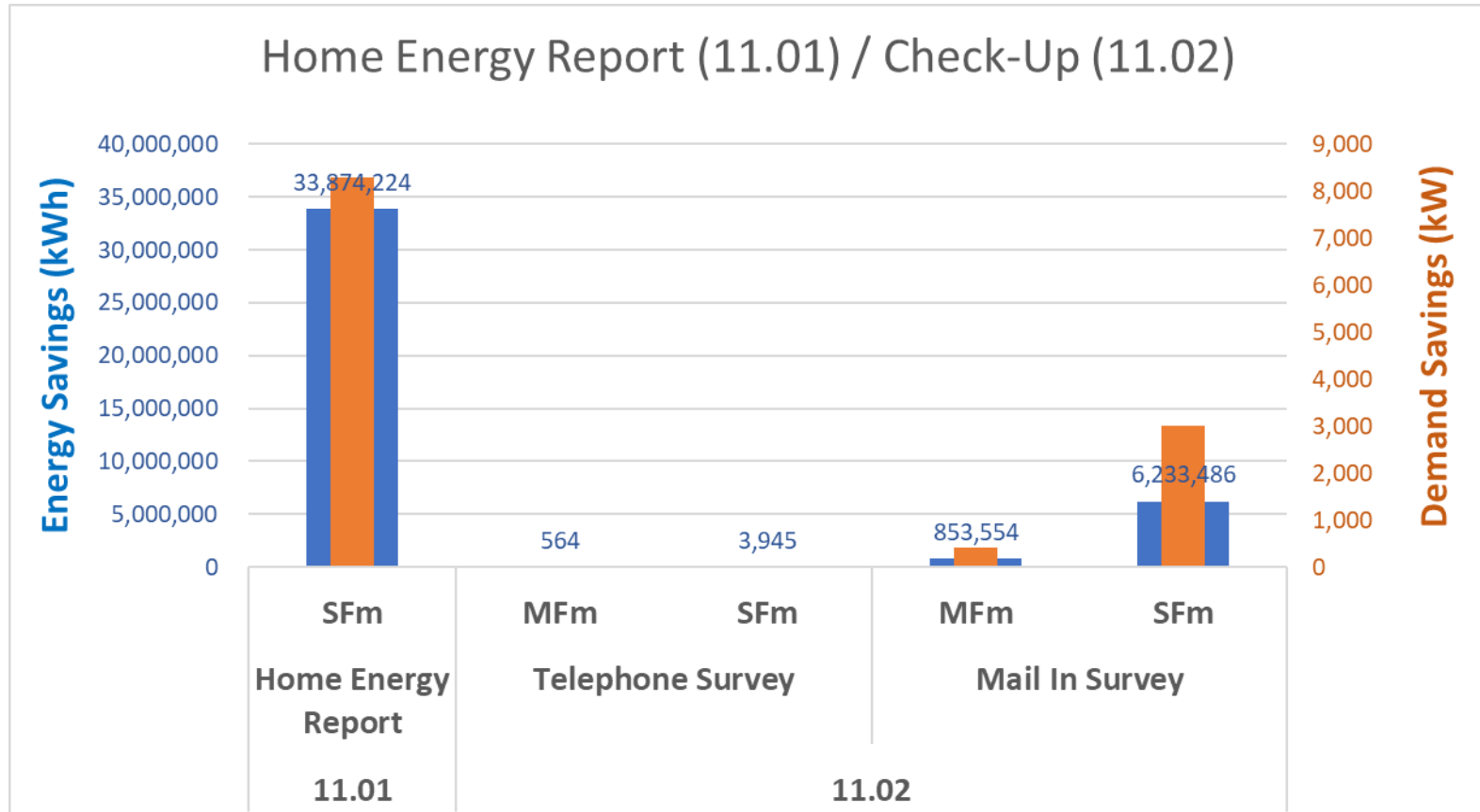
Miscellaneous Category Measures

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No.	Measure Names	PG&E	SCE	SDG&E	SCG	POU
11.01	Home Energy Reports					
11.02	Home Energy Check Up					
11.03	Whole House Upgrade Program					
11.04	3P Synergy Water Measures Mobile Home					
11.05	Water Energy Nexus					
11.06	DEER Measures					
11.07	Energy Star Manufactured Housing					
11.08	Low Income M&V Study					

Home Energy Savings Perspective

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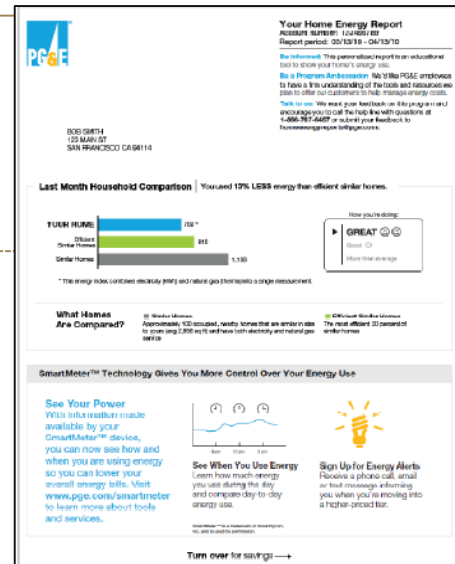


Measure Consensus

11.01 – Home Energy Reports

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- Offering
 - Provide periodic energy reports to customers on opt-out basis
 - ✦ Report includes comparison of energy use with peer group of similar customers
 - ✦ Also includes customized tips for energy savings
- Stage 1 Issues
 - Savings are claimed on ex post basis
 - *Comparing with similar programs elsewhere*
 - ✦ *TRM methodology – looking at other states' TRMs*
 - ✦ *EUL - POU (1 yr); IOU (20 yr)*
 - ✦ *Cost – IOU / POUs determining cost*
 - *Exploring overlap issues with Home Energy Checkup*
 - ✦ *Double counting issue*
- Measure Extension
 - POU TRM has provisional measure, 1.48% deemed electric savings, 0.6% deemed gas savings (subject to ex post results of randomized control trial), 1 year EUL
- Stage 2 Issues
 - *Review EUL/Cost methodology and measure life/decay rate approaches used elsewhere in country for applicability and transferability*
 - *Workpaper completed in March 2013; Considerable research as been done around the country that should be reviewed and reflected*



Measure Consensus

11.02 – Home Energy Checkup

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- Offering
 - Provides tailored energy usage analysis based on customer inputs
 - Offered historically via on-line, mail, phone or site visit
 - Moved toward on-line only, using Universal Audit Tool (UAT)
- Stage 1 Issues
 - *Updating savings based on UAT evaluation methods and results*
- Measure Extension
 - Added Measure for POUs
- Stage 2 Issues
 - *Address potential overlap with Home Energy Reports*
 - ✦ *Evaluation suggests some diminishment*

Blue text = First time that item is mentioned
Italics text = Item that has not been completed

Input Consensus

11.02 – Home Energy Check-Up

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- Measure Permutations

	eTRM Measure Value	PG&E	SCE	SDG&E	SCG
BldgType	Any	Any	Dmo, MFm, SFm	No Value	No Value
BldgVintage	Ex	Any	Ex	No Value	No Value
BldgLoc	Any	Any	CZ06,CZ08,CZ09,CZ10,CZ13 ,CZ14,CZ15,CZ16	No Value	No Value
BldgHVAC	rWtd	No Value	rWtd	No Value	No Value

- Measure Implementation

	eTRM Measure Value	PG&E	SCE	SDG&E	SCG
MeasureAppType	ROB	ROB	REA	No Value	No Value
NormUnit	Household	Each	Household	No Value	No Value
EUL ID	Service-ResEnergyAu	No Value	Service-ResEnergyAu	No Value	No Value
NTGR	Res-Default>2	Res-Default>2	Res-Default>2	No Value	No Value
DeliveryType	PreRebDown	No Value	PreRebDown	No Value	No Value
GSIA	No Value	No Value	No Value	No Value	No Value

Pools Disposition Support Public Market

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- “Staff does not agree with the assumption that , once pool covers become non-functional, that customers will not replace them without IOU incentives”
 - ❑ Public K-12 schools do not operate like a commercial business; instead, they are more politically and socially focused.
 - ❑ Purchasing of pool covers is often initiated from negative experiences (filter clogging, cover sinking, safety concerns)
 - ❑ There is no financial incentive for the Maintenance group to act.
 - ❑ Budgets are separated so that a Utilities group pays the bills, but they do not talk to the Maintenance group that is responsible for deploying the pool cover nightly and replacing it if issues occur.
 - ❑ When issues begin occurring, it is easier to roll it up and leave it beside the pool because this is less work.
 - ❑ Maintenance departments have also been stretched through budget cuts over the years, so it can be difficult for the maintenance staff to take responsibility.
 - ❑ To value this measure and sell it correctly, savings must be quantified to the district, board and public.
 - ❑ Salesmen are viewed as having a biased perspective, so additional input is valued. Utility endorsement is valued (incentive put behind statements).
 - ❑ A comparison is typically made against other EE project where several factors play a significant role
 - ✦ Those other measures will get incentives to buy them down.
 - ✦ Most other measures serve the larger student body and bring supplemental benefits core to the district like better lighting/conditioning to improve the classroom for learning.
 - ❑ Education responsibilities should be the priority from the School Board, an elected group.
 - ✦ The argument between spending dollars on a pool cover (which we have already and we will have to replace in 3 yrs) or new text books changes people’s minds quickly.
 - ❑ Other capital priorities may be mandated by the state.