# Home Energy Audits Cal TF Tier 2 Presentation



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## Miscellaneous Category Measure Affirmation





"Cal TF affirms the subcommittee recommendations regarding 'Stage 1 Issues' for Miscellaneous Measures."

11.02, Home Energy Checkup

### eTRM Subcommittee Schedule





	29-Мау	2-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	2-0ct	9-0ct	16-0ct	23-Oct	30-0ct	voN-9	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			<b>2</b> a				2								
Commercial Refrigeration																		1							<b>2</b> a				2							20	0
Food Service							Ш		Ш									1				<b>2</b> a			2											15	0
Agriculture / Pumps	Ш			Ш	Ш		Ц		Ш	Ш	TO TC	Ш			Ш		Ц	Ш				1			<b>2</b> a	Ш			2					Ш		5	1
<b>E</b> ighting				Ш			Ш		Ш	Ш		Ш					то	TC	Ш																1	11	42
HVAC	Ш	Ш		Ш	Ш	Ш	Ш	Ш	Ш	Ш		Ш	Ш		Ш	Ш	Ц	Ш		Щ		Ш				Ш					Ш			Ш	1	2	50
Water Heating  Appliance /							Ш		Ш	Ш				T0 TC T0											1									Ш	2	22	0
Plug Load Building	Ш			Ш	Ш	Ш	Н	Ш	Н	Ш		Ш	Ш	TC	Ш	Ш		Н		Щ		Ш			1	Ш				Ш	Ш			Н	2		12
Envelope							Н		Н								Щ		Ш																	0	4
Bools				-	-		$\vdash$			H		H			$\vdash \vdash$		$\vdash \vdash$	Н	$\square$			1							2					$\square$		1	5
Brocess	H			Н	$\square$	H	$\vdash$	H	$\vdash \mid$	H	$\vdash \mid$	Н			$\vdash \mid$	H	$\vdash \mid$	Н	$\vdash \mid$				$\square$			$\vdash$			H	H				Н		0	7
Miscellaneous  Low Income	Н	H		${oxed{H}}$	$\vdash \vdash$	Н	$\vdash$	Н	Н	Н	$\vdash \vdash$	${oxed{H}}$	$\vdash \vdash$	H	$\vdash \vdash$	Н	${\mathbb H}$	Н	Н			1	Н	H	H	Н				Н	Н	Н	H	Н	2	2	4
Measures																																					

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

## Miscellaneous Category Measures





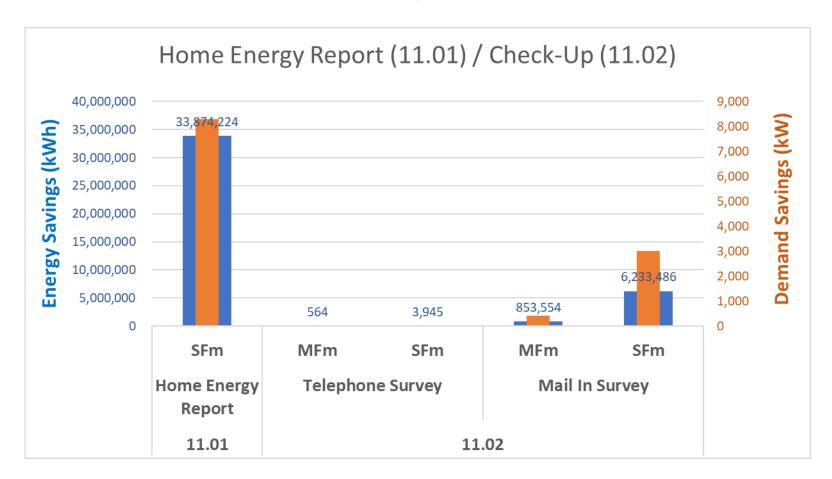
No.	Measure Names	PG&E	SCE	SDG&E	SCG	POU
11.01	Home Energy Reports					
11.02	Home Energy Check Up					
11.03	Whole House Upgrade Program					
11.04	3P Synergy Water Measures Mobile Home					
11.05	Water Energy Nexus					
11.06	DEER Measures					
11.07	Energy Star Manufactured Housing					
11.08	Low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

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## Home Energy Savings Perspective







## Measure Consensus 11.02 – Home Energy Checkup



- 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)
- Measure Extension
  - Added Measure for POUs
- Stage 2 Issues
  - Address potential overlap with Home Energy Reports
    - Evaluation suggests some diminishment
  - Updating savings based on Universal Audit Tool (UAT) evaluation methods and results
    - UAT evaluation did not include SCE
    - UAT does not provide savings for mail-in or telephone delivery methods
    - SCG is updating existing work paper to incorporate UAT findings

#### **Percent Change Within the Measure**

kW kWh Therms Cost

_			casa.		
	PGE	SCE	SDGE	SCG	Total
		0%			0%
		0%			0%
		111%			111%

#### **Absolute Change & Comparison**

			% of	DCE	CCE	CDCE	566
	Total	Measure	Cagegory	PGE	SCE	SDGE	SCG
kW	0.00	0%	0%	-	0.00	-	-
kWh	(0)	0%	0%	ı	(0)	ı	-
Therms	-		0%	ı	ı	ı	-
Cost	\$43,231	111%	0%	\$ -	\$43,231	\$ -	\$ -

## Input Consensus 11.02 – Home Energy Check-Up



#### 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
			CZ06,CZ08,CZ09,CZ10,CZ13		
BldgLoc	Any	Any	,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

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11.02, Home Energy Checkup

## **Next Steps**





- Any questions, feedback, or issues, please reach out!
  - Roger Baker (<u>Roger.Baker@futee.biz</u>)
  - Ayad Al-Shaikh (<u>Ayad.AlShaikh@futee.biz</u>)

## Thank You!

## Appendix (10)





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## Measure Consensus 11.01 – Home Energy Reports

#### 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
  - $\times$  EUL 1 yr in CA
- Exploring overlap issues with Home Energy Checkup
  - UAT evaluation suggests no double-counting
  - HER participation may reduce available savings for UAT users

#### 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
  - Considerable research as been done around the country that should be reviewed and reflected

