

2014 Nonresidential Downstream Deemed Plug Load PC Power Management Software ESPI Impact Evaluation Report

Appendices

Prepared for California Public Utilities Commission

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March 29, 2016

Appendix A

PCPMS In-Depth Interview Guides

This appendix includes four in-depth interview guides used to gather primary data about the installation of PCPMS during the 2013-2014 program cycle. The four interview guides are presented in sections A.1 through A.4 below and are as follows:

- In-Depth Interview Guide for Account Representatives of Customers who Installed PCPMS
- In-Depth Interview Guide for IOU Staff Specializing in PCPMS
- In-Depth Interview Guide for Vendors Selling PCPMS
- In-Depth Interview Guide for Customers who Installed PCPMS

Note that the in-depth interviews that were conducted to support this evaluation did not follow the scripts strictly. They were instead used as guides to elicit information that would be useful to the evaluation. Questions were sometimes asked in an order that differs from how they appear below. Note however, that the net-to-gross questions included in the customer interview guide were asked in the order in which they appear.

A.1 In-Depth Interview Guide for Account Representatives of Customers who Installed PCPMS

- 1. What is your knowledge and history in dealing with the customers who have installed PC power management software?
- 2. Did you actively promote the installation of PCPMS to your customers?
- 3. How did the projects come about? Did you initiate conversations with customers or did customers come to you about the rebates available for the installation of PCPMS? Or was this mainly a vendor-driven measure?
- 4. What is your understanding of the involvement of vendors in the process of getting customers interested in installing PCPMS?
- 5. What sort of discussions were held with the customers about the installation of the software and availability of rebates?
- 6. What seemed to be the main motivators for customers to install rebated PCPMS?

- 7. We noticed that the predominant sectors that have installed rebated PCPMS are health care and education. Were these sectors targeted or were the customers in these sectors the ones to show interest in installing PCPMS?
- 8. Do you know whether there was any resistance by the customer's IT department with regard to installing the software?
- 9. Installation of rebated PCPMS showed a large drop off in 2014 relative to 2013. Do you have any insight as to why this was the case?
- 10. What is going on with the measure today?

A.2 In-Depth Interview Guide for IOU Staff Specializing in PCPMS

- 1. Can you characterize PCPMS for us?
- 2. Was this considered a specialty measure that was targeted to certain sectors or was it considered a measure that would have broad appeal?
- 3. We noticed that the predominant sectors that have installed rebated PCPMS are health care and education. Do you have any insight as to why these two sectors showed the most interest in this measure?
- 4. Are you aware of the software vendors who promoted the rebated software? Did they get actively involved in the energy efficiency program or help account representatives understand the software?
- 5. How much of the cost does the IOU rebate cover?
- 6. Installation of rebated PCPMS showed a large drop off in 2014 relative to 2013. Do you have any insight as to why this was the case?
- 7. What is going on with the measure today?

A.3 In-Depth Interview Guide for Vendors Selling PCPMS

- 1. Does your company produce the software?
- 2. How is PCPMS packaged and sold? Is it offered as a standalone product or is it included as part of a software package?
- 3. How much of the cost does the IOU rebate cover?
- 4. How were customers pursued to sell the software?
- 5. We noticed that the predominant sectors that have installed rebated PCPMS are health care and education. Do you have any insight as to why these two sectors showed the most interest in this measure?

- 6. What was your working relationship with the utilities who offered rebates for the software? Did they steer you towards promoting the product with certain market sectors?
- 7. What strategies did you use to promote the product to customers?
- 8. What role did the rebate play in your marketing of PCPMS to customers?
- 9. Are IT departments resistant to installing or activating the software?
- 10. Do you follow up with the customers to see if they are still using the software?
- 11. What is going on with the measure today?

A.4 In-Depth Interview Guide for Customers who Installed PCPMS

- 1. How did you first hear about PCPMS and the availability of rebates offered by the IOUs?
- 2. What were your company's main motivators to install rebated PCPMS?
- 3. What role did your company's electric utility play here? Who was involved/who drove the process to make it happen?
- 4. What role did a vendor play a role in the decision to purchase and install the software?
- 5. Was there any sort of internal debate or justification process required before PCPMS was installed? For example, was a business case model developed?
- 6. Was there any resistance from your company's IT department to installing the software?
- 7. Did you do any piloting or testing of the software before making a decision to install it? What did the pilot show in terms of energy savings?
- 8. What settings were ultimately selected for operation?
- 9. Were any outside IT consultants involved in the installation of the software, or did your internal IT department handle it all?
- 10. What has been your level of satisfaction with the installation of PCPMS?
- 11. Have you noticed energy savings or changes in your company's electric bill since installing the software?
- 12. Do you still use the software to control PCs at your company? Do you plan to continue to use PCPMS?

NET TO GROSS

- 1. Had you ever heard of software before you were contacted by a vendor or utility? By whom were you contacted?
- 2. Was your organization already actively involved with energy efficiency rebate programs for other measures

(probably with your utility and probably not IT-related)?

There are usually a number of reasons why an organization like yours decides to participate in energy efficiency programs like the one that gave rebates for the PCPM software. In your own words, can you tell me why you decided to participate in this program?

AJ		
1	To gain more control over how the equipment was used	N2
2	Maintenance downtime/associated expenses for old equipment were too high	N2
3	To get a rebate from the program	N2
4	To reduce energy costs	N2

Did your organization make the decision to install this new equipment before or after you became aware of rebates/cost **N2** reduction available through the program?

	$\frac{1}{2}$	
1	Before	N3b
2	After	N3b
88	Refused	N3b
99	Don't know	N3b

Now I'm going to ask you to rate the importance of the electric utility's energy efficiency rebate as well as other factors that might have influenced your decision to install the PC power management software. Using a scale of 0 to 10 where 0 means not at all important and 10 means extremely important, how would you rate the importance of...

N3b Availability of the rebate/cost reduction

#	Record 0 to 10 score ()	N3bb
88	Refused	N3d
99	Don't know	N3d

IF N3b > 7, THEN ASK; ELSE SKIP TO N3d

N3bb Why do you give it this rating?

77	Record VERBATIM	N3d
88	Refused	N3d
99	Don't know	N3d

Recommendation from a PCPM software vendor—perhaps the

N3d one that sold you the product and/or installed it for you

I		• •	* *	
	#	Record 0 to 10 score	()	N3e
1				

DISPLAY

1 2

88	Refused	N3e
99	Don't know	N3e

Your previous experience with energy efficiency rebates and

N3e	projects	
#	Record 0 to 10 score ()	N3f
88	Refused	N3f
99	Don't know	N3f

Your previous experience with your electric utility's energy

TYPE officiency reduces and programs of a similar admity program	N3f	efficiency rebates and	programs or a similar utility program
---	-----	------------------------	---------------------------------------

#	Record 0 to 10 score ()	N3g
88	Don't know	N3g
99	Refused	N3g

Information gleaned from the vendor or your utility account

N3g	representative	
#	Record 0 to 10 score ()	N3gg
88	Refused	N3h
99	Don't know	N3h

IF N3g > 5, THEN ASK; ELSE SKIP TO N3h

N3gg What information was compelling to you?

77	Record VERBATIM	N3h
88	Refused	N3h
99	Don't know	N3h

N3h Information from the vendor or utility marketing materials

#	Record 0 to 10 score ()	N3hh
88	Refused	N3j
99	Don't know	N3j

IF N3h > 5 THEN ASK; ELSE SKIP TO N3j

N3hh What information was compelling to you?

77	Record VERBATIM	N3hhh
88	Refused	N3j
99	Don't know	N3j

PCPM software is considered standard practice in your

N3j	business/industry	
#	Record 0 to 10 score ()	N31
88	Refused	N31
99	Don't know	N31

N31 Endorsement or recommendation by your account rep?

#	Record 0 to 10 score ()	N3m
88	Refused	N3m
99	Don't know	N3m

Any sort of corporate policy or guidelines that would **N3m** encourage or require the use of software like this?

#	Record 0 to 10 score ()	N3n
88	Refused	N3n
99	Don't know	N3n

N3n The payback or return on investment

#	Record 0 to 10 score ()	N3o
88	Refused	N3o
99	Don't know	N3o

Improved computer operations, ability to control networked

N30	PCs in useful ways	
#	Record 0 to 10 score ()	N3r
88	Refused	N3r
99	Don't know	N3r

Any IT benefits that were met by the installation of the software (from the perspective of IT staff)? For example, **N3r** compliance with your organization's IT maintenance policies?

1131	compliance with your organization's 11 maintenance policies:	
#	Record 0 to 10 score ()	N3s
88	Refused	N3s
99	Don't know	N3s

Were there any other factors we haven't discussed that were **N3s** influential in your decision to install/ PCPM software?

1	Nothing else influential	P1

77	Record verbatim	N3ss
88	Refused	P1
99	Don't know	P1

ASK IF N3s = 77; ELSE SKIP TO PAYBACK BATTERY

Using the same zero to 10 scale, how would you rate the

N3ss influence of this factor?

#	Record 0 to 10 score ()	P1
88	Refused	P1
99	Don't know	P1

PAYBACK BATTERY

P1

What financial calculations does your company typically make before proceeding with the installation of IT equipment or software systems like you installed through the program?

1	Payback	P2A
2	Return on investment	P2B
77	Record VERBATIM	P3
88	Don't know	P3
99	Refused	P3

If P1 = 1 THEN ASK; ELSE SKIP TO P2B

What financial calculations does your company typically make before proceeding with the installation of energy efficientP2A equipment like you installed through the program? Is it....

1	0 to 6 months	P3
2	6 months to 1 year	P3
3	1 to 2 years	P3
4	2 to 3 years	P3
5	3 to 5 years	P3
6	Over 5 years	P3
88	Don't know	P3
99	Refused	P3

IF P1 = 2 THEN ASK; ELSE SKIP TO P3

P2B	What is your ROI?	
1	Record ROI;	P3

Did the rebate make the PCPM software fall within this

P3 acceptable range?

1	Yes	P4
2	No	P3a
88	Don't know	P3a
99	Refused	P3a

If P3 = 1 THEN ASK; ELSE SKIP TO P3a

On a scale of 0 to 10, with a 0 meaning Not At All and a 10 meaning Certainly, how likely is that your organization would have purchased and installed PCPM software without the rebate?

P4 rebate?

#	Record 0 to 10 score ()	P3a
88	Refused	P3a
99	Don't know	P3a

CONSISTENCY CHECKS ON N3b and P3

IF P3 = 1, AND N3b < 5, THEN ASK; ELSE SKIP TO N41

The rebate seemed to make the difference between meeting your financial criteria and not meeting them, but you are saying that the rebate didn't have much effect on your **P3a** decision, why is that?

77	Record VERBATIM	P3e
88	Don't know	P3e
99	Refused	P3e

IF P3 = 2, AND N3b > 5, THEN ASK; ELSE SKIP TO N41

The rebate didn't cause the installation of energy efficient equipment to meet your company's financial criteria, but you said that the rebate had an impact on the decision to install this **P3e** energy efficient equipment. Why did it have an impact?

77	Record VERBATIM	N33
88	Don't know	N33
99	Refused	N33

If you were given 10 points to award in total, how many points would give to the importance of the rebate and how many **DISPLAY** points would you give to all other factors?

How many of the ten points would you give to the importance

N41	of the rebate in your decision?	

#	Record 0 to 10 score ()	N42
88	Refused	N42
99	Don't know	N42

1142	And now many points would you give to an of other factors?					
#	Record 0 to 10 score ()	CHECK				
88	Refused	CHECK				
99	Don't know	CHECK				

N42	And how	manv	points	would	vou	give t	to all	of othe	r factors?
	1 1110 110 11	many	pomes		,00	51,01	io an	or our	1 14000101

IF N41 <> 88 AND N41 <> 99 AND N42 <> 88 AND N42 CHECK <> 99, COMPUTE N41 + N42. WHILE N41+N42 <> 10, DISPLAY:

We want these two sets of numbers to equal 10. <%N41> for Program influence and <%N42> for Non Program factors

Now I would like you to think about the action you would have taken with regard to the installation of this equipment if the **DISPLAY** program had not been available.

> Using a likelihood scale from 0 to 10, where 0 is Not at all likely and 10 is Extremely likely, if THE rebate had NOT BEEN AVAILABLE, what is the likelihood that you would have installed exactly the same PC power management N5 software?

#	Record 0 to 10 score ()	N5a
88	Refused	N5B
99	Don't know	N5B

LONG TERM INFLUENCE

IF N3f > 4 (PREVIOUS EXPERIENCE WITH UTILITY REBATES), THEN ASK; ELSE SKIP TO OTVEND1

Now I'd like you to think about your organization's experiences with your electric utility's energy efficiency programs and efforts over the longer term, for example, over the past 5, 10, or even 20 years.

In an earlier question, you indicated that your previous experience with utility energy efficiency programs was a factor that influenced your decision to implement PCPMS. I would like to ask you a few questions about this experience.

For how many y	years have you	been participating	in your electric
acompany's anang	afficiency na	o omore o o	

LT2	company's energy efficiency programs?	
# yrs	Record Number of Years	LT3
88	Refused	LT3
99	Don't know	LT3

During this time, how many times has your organization

L13	participated in these program(s)?	
1	7 to 10 times, or more	CA6
2	4 to 7 times	CA6
3	2 to 4 times	CA6
4	less than 2 times	CA6
88	Refused	LT6
99	Don't know	LT6

IF LT3(1||4);

TTO

CA6 What type of equipment did you install through this (these) program(s)? [READ RESPONSE CATEGORIES]

1	Indoor lighting	LT6
2	Cooling equipment	LT6
3	Natural gas equipment, such as water heater, furnace or appliances	LT6
4	Insulation or windows	LT6
5	Refrigeration	LT6
6	Industrial process equipment	LT6
7	Greenhouse heat curtains	LT6
8	Food service equipment	LT6
77	OPEN \SOMETHING OTHER (specify)	LT6
88	Refused	LT6
99	Don't Know	LT6

LT6 What factors led you to participate in these program(s)?

77	Record VERBATIM	OTVEND1
88	Refused	OTVEND1
99	Don't know	OTVEND1

ROLE OF CONTRACTORS

Did you use a contractor or vendor assistance to install the

OTVEND1	PCPM software?	
1	Yes	OTVEND2

2	No	ENDLOOP
88	Refused	ENDLOOP
99	[DO NOT READ] Don't know/No Answer	ENDLOOP

ASK IF OTVEND1 = 1

On a scale of 0 - 10, with 0 being very unimportant and 10 being very important. How important was the input from the contractor/vendor you worked with in deciding whether to **OTVEND2** purchase and install PCPM software? Was it ...

OI (LI (D L						
1	0-10 response	OTVEND3				
88	Refused	OTVEND3				
99	Don't know	OTVEND3				

IF OTVEND2(7||10)

Can you give me your contractor's/vendor's name? Do you have his/her email address? Do you have a phone number for him/her?

OTVEND3	Do you have a phone number for him/her?	
77	RECORD NAME, Phone, Email ETC	END
88	Refused	END
99	Don't know	END

Those are all of the questions we have for you today. Thank you for your time.

Appendix AA

Standardized High Level Savings

The tables in Appendix AA summarizing natural gas savings make use of the unit MTherms -1,000 Therms - rather than MMTherms -1,000,000 Therms - for formatting purposes.

Gross Lifecycle Savings (MWh)

	Standard				% Ex-Ante	
	Report	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Group	Gross	Gross	GRR	Through	GRR
PGE	PGE	5,477	1,405	0.26	0.0%	0.26
PGE	Total	5,477	1,405	0.26	0.0%	0.26
SCE	SCE	6,507	1,226	0.19	0.0%	0.19
SCE	Total	6,507	1,226	0.19	0.0%	0.19
SDGE	SDGE	6,111	1,568	0.26	0.0%	0.26
SDGE	Total	6,111	1,568	0.26	0.0%	0.26
	Statewide	18,095	4,198	0.23	0.0%	0.23

Net Lifecycle Savings (MWh)

РА	Standard Report Group	Ex-Ante	Ex-Post	NRR	% Ex-Ante Net Pass Through	Ex-Ante	Ex-Post	Eval Ex-Ante NTG	Eval Ex-Post NTG
1 / 1	uroup	net	net		1 m ougn	MIG	NIG	MIG	NIG
PGE	PGE	3,286	1,012	0.31	0.0%	0.60	0.72	0.60	0.72
PGE	Total	3,286	1,012	0.31	0.0%	0.60	0.72	0.60	0.72
SCE	SCE	3,904	882	0.23	0.0%	0.60	0.72	0.60	0.72
SCE	Total	3,904	882	0.23	0.0%	0.60	0.72	0.60	0.72
SDGE	SDGE	3,667	1,129	0.31	0.0%	0.60	0.72	0.60	0.72
SDGE	Total	3,667	1,129	0.31	0.0%	0.60	0.72	0.60	0.72
	Statewide	10,857	3,023	0.28	0.0%	0.60	0.72	0.60	0.72

Gross Lifecycle Savings (MW)

	Standard				% Ex-Ante	
	Report	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Group	Gross	Gross	GRR	Through	GRR
PGE	PGE	0.5	0.0	0.00	0.0%	0.00
PGE	Total	0.5	0.0	0.00	0.0%	0.00
SCE	SCE	0.1	0.0	0.00	0.0%	0.00
SCE	Total	0.1	0.0	0.00	0.0%	0.00
SDGE	SDGE	0.6	0.0	0.00	0.0%	0.00
SDGE	Total	0.6	0.0	0.00	0.0%	0.00
	Statewide	1.2	0.0	0.00	0.0%	0.00

Net Lifecycle Savings (MW)

	Standard	E A t	E Dt		% Ex-Ante		F D +	Eval	Eval
D۸	Group	Ex-Ante Not	EX-POST	NDD	Net Pass	EX-Ante	EX-POST	EX-Ante	EX-POST
IA	uroup	Net	Net	INININ	1 m Ougn	NIG	NIG	NIU	NIU
PGE	PGE	0.3	0.0	0.00	0.0%	0.60		0.60	
PGE	Total	0.3	0.0	0.00	0.0%	0.60		0.60	
SCE	SCE	0.0	0.0	0.00	0.0%	0.60		0.60	
SCE	Total	0.0	0.0	0.00	0.0%	0.60		0.60	
SDGE	SDGE	0.4	0.0	0.00	0.0%	0.60		0.60	
SDGE	Total	0.4	0.0	0.00	0.0%	0.60		0.60	
	Statewide	0.7	0.0	0.00	0.0%	0.60		0.60	

Gross Lifecycle Savings (MTherms)

	Standard				% Ex-Ante	
	Report	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Group	Gross	Gross	GRR	Through	GRR
PGE	PGE	0	0			
PGE	Total	0	0			
SCE	SCE	-9	0	0.00	0.0%	0.00
SCE	Total	-9	0	0.00	0.0%	0.00
SDGE	SDGE	0	0			
SDGE	Total	0	0			
	Statewide	-9	0	0.00	0.0%	0.00

Net Lifecycle Savings (MTherms)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Eval Ex-Ante NTG	Eval Ex-Post NTG
PGE	PGE	0	0						
PGE	Total	0	0						
SCE	SCE	-5	0	0.00	0.0%	0.60		0.60	
SCE	Total	-5	0	0.00	0.0%	0.60		0.60	
SDGE	SDGE	0	0						
SDGE	Total	0	0						
	Statewide	-5	0	0.00	0.0%	0.60		0.60	

Gross First Year Savings (MWh)

	Standard				% Ex-Ante	
	Report	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Group	Gross	Gross	GRR	Through	GRR
PGE	PGE	1,095	281	0.26	0.0%	0.26
PGE	Total	1,095	281	0.26	0.0%	0.26
SCE	SCE	1,627	245	0.15	0.0%	0.15
SCE	Total	1,627	245	0.15	0.0%	0.15
SDGE	SDGE	1,222	314	0.26	0.0%	0.26
SDGE	Total	1,222	314	0.26	0.0%	0.26
	Statewide	3,944	840	0.21	0.0%	0.21

Net First Year Savings (MWh)

	Standard Report	Ex-Ante	Ex-Post		% Ex-Ante Net Pass	Ex-Ante	Ex-Post	Eval Ex-Ante	Eval Ex-Post
PA	Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	PGE	657	202	0.31	0.0%	0.60	0.72	0.60	0.72
PGE	Total	657	202	0.31	0.0%	0.60	0.72	0.60	0.72
SCE	SCE	976	176	0.18	0.0%	0.60	0.72	0.60	0.72
SCE	Total	976	176	0.18	0.0%	0.60	0.72	0.60	0.72
SDGE	SDGE	733	226	0.31	0.0%	0.60	0.72	0.60	0.72
SDGE	Total	733	226	0.31	0.0%	0.60	0.72	0.60	0.72
	Statewide	2,367	605	0.26	0.0%	0.60	0.72	0.60	0.72

Gross First Year Savings (MW)

	Standard				% Ex-Ante	
	Report	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Group	Gross	Gross	GRR	Through	GRR
PGE	PGE	0.1	0.0	0.00	0.0%	0.00
PGE	Total	0.1	0.0	0.00	0.0%	0.00
SCE	SCE	0.0	0.0	0.00	0.0%	0.00
SCE	Total	0.0	0.0	0.00	0.0%	0.00
SDGE	SDGE	0.1	0.0	0.00	0.0%	0.00
SDGE	Total	0.1	0.0	0.00	0.0%	0.00
	Statewide	0.2	0.0	0.00	0.0%	0.00

Net First Year Savings (MW)

	Standard Report	Ex-Ante	Ex-Post		% Ex-Ante Net Pass	Ex-Ante	Ex-Post	Eval Ex-Ante	Eval Ex-Post
PA	Group	Net	Net	NRR	Through	NTG	NTG	NTG	NTG
PGE	PGE	0.1	0.0	0.00	0.0%	0.60		0.60	
PGE	Total	0.1	0.0	0.00	0.0%	0.60		0.60	
SCE	SCE	0.0	0.0	0.00	0.0%	0.60		0.60	
SCE	Total	0.0	0.0	0.00	0.0%	0.60		0.60	
SDGE	SDGE	0.1	0.0	0.00	0.0%	0.60		0.60	
SDGE	Total	0.1	0.0	0.00	0.0%	0.60		0.60	
	Statewide	0.1	0.0	0.00	0.0%	0.60		0.60	

Gross First Year Savings (MTherms)

	Standard				% Ex-Ante	
	Report	Ex-Ante	Ex-Post		Gross Pass	Eval
PA	Group	Gross	Gross	GRR	Through	GRR
PGE	PGE	0	0			
PGE	Total	0	0			
SCE	SCE	-2	0	0.00	0.0%	0.00
SCE	Total	-2	0	0.00	0.0%	0.00
SDGE	SDGE	0	0			
SDGE	Total	0	0			
	Statewide	-2	0	0.00	0.0%	0.00

Net First Year Savings (MTherms)

PA	Standard Report Group	Ex-Ante Net	Ex-Post Net	NRR	% Ex-Ante Net Pass Through	Ex-Ante NTG	Ex-Post NTG	Eval Ex-Ante NTG	Eval Ex-Post NTG
PGE	PGE	0	0						
PGE	Total	0	0						
SCE	SCE	-1	0	0.00	0.0%	0.60		0.60	
SCE	Total	-1	0	0.00	0.0%	0.60		0.60	
SDGE	SDGE	0	0						
SDGE	Total	0	0						
	Statewide	-1	0	0.00	0.0%	0.60		0.60	

Appendix AB

Standardized Per Unit Savings

Per Unit (Quantity) Gross Energy Savings (kWh)

РА	Standard Report Group	Pass Through	% ER Ex-Ante	% ER Ex-Post	Average EUL (yr)	Ex-Post Lifecycle	Ex-Post First Year	Ex-Post Annualized
PGE	PGE	0	0.0%		5.0	256.5	51.3	51.3
SCE	SCE	0	0.0%		5.0	112.4	22.5	22.5
SDGE	SDGE	0	0.0%		5.0	256.5	51.3	51.3

Per Unit (Quantity) Gross Energy Savings (Therms)

РА	Standard Report Group	Pass Through	% ER Ex-Ante	% ER Ex-Post	Average EUL (yr)	Ex-Post Lifecycle	Ex-Post First Year	Ex-Post Annualized
PGE	PGE	0	0.0%		5.0	0.0	0.0	0.0
SCE	SCE	0	0.0%		5.0	0.0	0.0	0.0
SDGE	SDGE	0	0.0%		5.0	0.0	0.0	0.0

Per Unit (Quantity) Net Energy Savings (kWh)

РА	Standard Report Group	Pass Through	% ER Ex-Ante	% ER Ex-Post	Average EUL (yr)	Ex-Post Lifecycle	Ex-Post First Year	Ex-Post Annualized
PGE	PGE	0	0.0%		5.0	184.7	36.9	36.9
SCE	SCE	0	0.0%		5.0	80.9	16.2	16.2
SDGE	SDGE	0	0.0%		5.0	184.7	36.9	36.9

Per Unit (Quantity) Net Energy Savings (Therms)

РА	Standard Report Group	Pass Through	% ER Ex-Ante	% ER Ex-Post	Average EUL (yr)	Ex-Post Lifecycle	Ex-Post First Year	Ex-Post Annualized
PGE	PGE	0	0.0%		5.0	0.0	0.0	0.0
SCE	SCE	0	0.0%		5.0	0.0	0.0	0.0
SDGE	SDGE	0	0.0%		5.0	0.0	0.0	0.0

Appendix AC

Response to Recommendations

EM&V Impact Study Recommendations

Study Title: 2014 Nonresidential Downstream Deemed ESPI Lighting Impact Evaluation Study Manager: CPUC

ID		Section	Conclusion	Recommendation	Disposition (Accepted, Rejected, or Other)	Disposition Notes (e.g. Description of specific program change or Reason for rejection or Under further review)
1	PG&E, SCE, SDG&E	3.1.1	Source studies utilized in the development of PCPMS deemed savings assumptions were scant and very dated. The studies were also inconsistent in design, execution and documentation, leaving only a global "average of averages" approach for ex ante deemed savings assumptions development.	There was no evidence that UES values would differ from one IOU service territory to the next. The IOUs should work together to ensure that basic variables and inputs needed for work paper assumptions are confirmed and collaborate to develop a statewide UES value.		
2	PG&E, SCE, SDG&E	2.1; 4.2.3	PCPMS is a non-standard measure that does not conform to the characteristics of typical energy efficiency equipment for which the CA IOUs offer rebates.	The IOUs and the CPUC should consider more explicit and industry- specific metrics and indicators in the development of deemed assumptions for IT-related measures.		
3	PG&E, SCE, SDG&E	2.1; 4.2.3	PCPMS is a non-standard measure that does not conform to the characteristics of typical energy efficiency equipment for which the CA IOUs offer rebates.	Because of the unique and malleable characteristics of the PCPMS measure, the IOUs should consider undertaking additional participant-specific data collection as part of the application and approvals process.		
4	PG&E, SCE, SDG&E	2.1.2	Vendors played an important role in the promotion and sales of PCPMS and its adoption through the CA IOU energy efficiency programs.	CA IOUs still need to actively manage the PCPMS measure, even if it is largely vendor-driven and those vendors are the most effective way to reach and influence potential participant IT decision-makers.		
5	PG&E, SCE, SDG&E	4.3	Significant savings reductions were applied due to the gap between the ex ante savings assumption that both PC CPUs and monitors undergo power management control, while in fact some participants chose to manage only monitors.	Going forward, any PCPMS measure eligibility criteria should be modified to explicitly require that the entire PC, including both CPU and monitor(s) need to be controlled for rebate eligibility purposes.		
6	PG&E, SCE, SDG&E	3.2.3	UES values used to estimate kWh energy savings are assumed to be constant over the effective useful life (EUL) of the measure for lifecycle savings calculation purposes. However, PCPMS savings are following a predictable decline that stems back to the initiation of the measure in the mid-2000s period.	IT-related measures like PCPMS need an updated UES every year, not less often at each program or funding cycle. If a technical degradation factor (TDF) cannot be applied to account for continuously shrinking savings over the lifetime (EUL) of the measure, then adjustments to the EUL are required to compensate for this (as described in Section 4.8.1.		
7	PG&E, SCE, SDG&E	4,6; 4.7	An Eligibility Factor (EF) was applied to savings for 2014.	Very precise and measure-specific eligibility definitions need to be developed in advance of rebate offerings for IT-related equipment or software or combinations.		
8	PG&E, SCE, SDG&E	6	IT security policies and provisions either prevent or strongly complicate on-site verification.	Ensure that IT-related measures can be adequately verified, including on-site, after installation.		