

From: Andres Fergadiotti
To: [Casco, Lake](#); [Casco, Lake](#)
Cc: [Mangalekar, Dhananjay](#)
Subject: [EXTERNAL] FW: (External):RE: (External):SCT Workpaper Plan - Next Steps
Date: Thursday, June 4, 2020 10:07:21 AM
Attachments: [image001.png](#)
[image002.png](#)
[image005.png](#)

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Lake, please find final numbers for downstream. Is there a way to get a revise version of the wp by Friday COB? At a convenient time please advise of solution codes and implementation IDs that I need to request on this. Thank you Lake.

Thanks,
Be safe and sustainable

Andres Fergadiotti, PE, LEED AP
Engineer | Engineering Review & Analysis
Customer Programs & Services | Engineering Services
1515 Walnut Grove Ave. | G05 3rd Floor 3C8-07 | Rosemead, CA 91770



From: Agnew, Ken <Ken.Agnew@dnvgl.com>
Sent: Thursday, June 4, 2020 10:01 AM
To: Shannon Dracup <sdracup@ers-inc.com>; Andres Fergadiotti <Andres.Fergadiotti@sce.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>
Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; paula.gruendling@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>; Gary Barsley <Gary.Barsley@sce.com>; Murray, Rachel <Rachel.Murray@dnvgl.com>
Subject: RE: (External):RE: (External):SCT Workpaper Plan - Next Steps

Andres,
Here are the savings values we recommend using for downstream program smart thermostat purchases. These are population-weighted, CZ-level average electric and gas savings that are valid for all building types. Zone 1 savings are based on zone 3 values. Electric savings values, which include electric heat savings, are applicable regardless of the presence of gas.

Let me know if you have further questions.

Ken

Climate Zone	Recommended CZ-level SCT Savings	
	Electric (kWh)	Gas (therms)
1	0	9

2	43	11
3	0	9
4	54	3
5	0	0
6	42	5
7	0	2
8	27	0
9	52	0
10	73	1
11	195	0
12	81	15
13	190	4
14	199	33
15	168	0
16	166	5

Best regards,

Ken Agnew
Principal Consultant, Madison

DNV GL Energy Insights USA, Inc.
ken.agnew@dnvgl.com
 Mobile +1-608-630-2287 | Direct 608-259-9152,,,,,70207
dnvgl.com | [LinkedIn](#)



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From: Shannon Dracup <sdracup@ers-inc.com>
Sent: Thursday, June 4, 2020 10:58 AM
To: Andres Fergadiotti <Andres.Fergadiotti@sce.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>
Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruendling@cpuc.ca.gov; Biermayer, Peter <Peter.Biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>; Gary Barsley <Gary.Barsley@sce.com>; Murray, Rachel <Rachel.Murray@dnvgl.com>
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Hi Andres,

Thanks for following up. Below are the NTG values to be used.

NTG_ID	Version	StartDate	ExpiryDate	NTG_Elec	NTG_Gas	Desc	SavMethod	Applic	Delivery
Res-sAll-mHVAC-	DEER2021	1/1/2021		0.90	0.90	Smart Communicating Thermostat, per	Deem-WP	NR	DnDeemDI

SCT-di						2018 Impact Evaluation			
Res-sAll-mHVAC-SCT-dn	DEER2021	1/1/2021		0.55	0.55	Smart Communicating Thermostat, per 2018 Impact Evaluation	Deem-WP	NR	DnDeemed

Best,
Shannon

Shannon Dracup

ERS | Project Consultant
120 Water Street, North Andover, MA 01845
978-521-2550 x689
www.ers-inc.com | sdracup@ers-inc.com

From: Andres Fergadiotti <Andres.Fergadiotti@sce.com>
Sent: Thursday, June 4, 2020 11:47 AM
To: Shannon Dracup <sdracup@ers-inc.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhra <Ajay.Wadhra@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>
Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruending@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>; Gary Barsley <Gary.Barsley@sce.com>
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Shannon,

I would like to follow up on updated measure savings from Ken (#1 below). If possible, please facilitate NTG IDs as well (#4 below). Note that we are trying to have a workpaper submission by 6/15, which still requires some coordination with IOUs. Thank you for supporting.

Thanks,
Be safe and sustainable

Andres Fergadiotti, PE, LEED AP

Engineer | Engineering Review & Analysis
Customer Programs & Services | Engineering Services
1515 Walnut Grove Ave. | G05 3rd Floor 3C8-07 | Rosemead, CA 91770



From: Andres Fergadiotti
Sent: Tuesday, June 2, 2020 9:26 AM
To: Shannon Dracup <sdracup@ers-inc.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhra <Ajay.Wadhra@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>
Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruending@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>; Gary Barsley <Gary.Barsley@sce.com>

Subject: RE: (External):RE: (External):SCT Workpaper Plan - Next Steps

Shannon and commission staff team,

Thank you for taking the time to discuss workpaper plan and guidance on workpaper update. A few meetings notes below (please feel free to adjust and/or clarify as needed).

1. **Ken to facilitate to IOUs revised measures savings including population-weighted savings for overlapping climate zones (ETA 6/3/2020).**
2. Final electric savings can be applied to both central DX and HP systems.
3. IOU should use program implementation tracking data for improving evaluation of measure cost opposed to 2018 PY Impact Evaluation surveyed data. Given the timing, this will not be addressed as part of this workpaper update. However, measure cost will be updated/revised using latest approved methodology and online cost.
4. **Shannon please provide NTG IDs for DI 0.89 and Downstream 0.55 (Res Default?)**
5. Commission staff is in the process of further evaluating measure savings estimates including “self-selection bias” impacting savings estimates. Results from this work is expected sometime next year.
6. SCE to document within “Inquiry Form” all communications and engagement with 3rd Party Vendors (NEST/ecobee).
7. There may be challenges on the reporting and/or risk from the review/approval process when having a single workpaper addressing two offerings (DI vs. Downstream); however, IOUs are opting for supporting a single workpaper update (as done with some of the lighting workpapers) for consolidation of offerings and easy maintenance.

Thanks,

Be safe and sustainable

Andres Fergadiotti, PE, LEED AP

Engineer | Engineering Review & Analysis

Customer Programs & Services | Engineering Services

1515 Walnut Grove Ave. | G05 3rd Floor 3C8-07 | Rosemead, CA 91770



From: Shannon Dracup <sdracup@ers-inc.com>

Sent: Tuesday, June 2, 2020 5:32 AM

To: Andres Fergadiotti <Andres.Fergadiotti@sce.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>

Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruending@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>

Subject: RE: (External):RE: (External):SCT Workpaper Plan - Next Steps

Good morning Andres,

Just confirming that the invitation was sent out yesterday for this morning at 8:00am PST.

Best,
Shannon

Shannon Dracup

ERS | Project Consultant

120 Water Street, North Andover, MA 01845
978-521-2550 x689
www.ers-inc.com | sdracup@ers-inc.com

From: Andres Fergadiotti <Andres.Fergadiotti@sce.com>
Sent: Monday, June 1, 2020 8:00 PM
To: Shannon Dracup <sdracup@ers-inc.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>
Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruendling@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>
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Shannon,

Just wondering if we have a meeting invite for tomorrow's call. I can provide one if needed. Thank you.

Thanks,

Be safe and sustainable

Andres Fergadiotti, PE, LEED AP

Engineer | Engineering Review & Analysis

Customer Programs & Services | Engineering Services

1515 Walnut Grove Ave. | G05 3rd Floor 3C8-07 | Rosemead, CA 91770



From: Andres Fergadiotti
Sent: Friday, May 29, 2020 9:41 AM
To: Shannon Dracup <sdracup@ers-inc.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>
Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruendling@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>
Subject: RE: (External):RE: (External):SCT Workpaper Plan - Next Steps

Thank you Shannon,

Indicated date/time work for SCE.

Per workpaper plan, we are updating the cost maintaining methodology from latest approved version of the workpaper. One of the asks in the workpaper plan, is for CPUC to facilitate Impact Evaluation surveyed thermostat make/model to weight the measure case cost. This is not critical but It would align cost update with the impact evaluation. Please refer to workpaper plan for details.

Looking forward going over the workpaper plan and commission staff guidance during the meeting.

Thanks,

Be safe and sustainable

Andres Fergadiotti, PE, LEED AP

Engineer | Engineering Review & Analysis

Customer Programs & Services | Engineering Services

1515 Walnut Grove Ave. | G05 3rd Floor 3C8-07 | Rosemead, CA 91770



From: Shannon Dracup <sdracup@ers-inc.com>

Sent: Friday, May 29, 2020 8:56 AM

To: Andres Fergadiotti <Andres.Fergadiotti@sce.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>

Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruending@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>

Subject: (External):RE: (External):SCT Workpaper Plan - Next Steps

CAUTION EXTERNAL EMAIL

Hi Andres,

Thank you for your comments and questions. I will proceed with scheduling a meeting to discuss further. **Does Tuesday, 6/2 from 8am – 9am PST work for all IOUs?**

I will circle back on the NTG IDs at the meeting. Do you anticipate having data on costs available at the meeting? Do you anticipate any difference in methods from the previous workpapers?

During the meeting, we will plan to answer the outstanding questions in the workpaper plan that must be answered in order to proceed with the workpaper.

Best,
Shannon

Shannon Dracup

ERS | Project Consultant

120 Water Street, North Andover, MA 01845

978-521-2550 x689

www.ers-inc.com | sdracup@ers-inc.com

From: Andres Fergadiotti <Andres.Fergadiotti@sce.com>

Sent: Thursday, May 28, 2020 6:38 PM

To: Shannon Dracup <sdracup@ers-inc.com>; Paek, Chan U <CPaek@socalgas.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>; Cassie Cuaresma <Cassie.Cuaresma@sce.com>

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Subject: RE: (External):SCT Workpaper Plan - Next Steps

Shannon,

Thanks on provided guidance. A few comments/questions below.

- Yes, a coordination meeting between CPUC and IOUs to go over workpaper plan and recommendations would be ideal. Tuesday 6/2 from 8 am to 9 am would work.
- Having two versions of the same workpaper is not recommended. Not ideal supporting and maintaining multiple versions of the same workpaper. We can accommodate CPUC direction in a single workpaper (recommended) – by creating specific solution codes, measure savings sets, and expiration dates for Downstream and DI.
- FYI - for Downstream, the offering is expected to be non-cost effective for most climate zones when using 2018PY impact evaluation data.
- Are there NTG IDs available for recommended NTGs?
- Is there additional guidance/recommendation expected from commission staff on last bullet below? Should SCE wait on this guidance prior submission of the workpaper to avoid potential resubmissions of the same?

Thank you and the whole commission staff team for collaborating with us and taking the time to assess the workpaper plan and provided recommendations. Please advise if immediate comments/questions.

Thanks,

Be safe and sustainable

Andres Fergadiotti, PE, LEED AP

Engineer | Engineering Review & Analysis

Customer Programs & Services | Engineering Services

1515 Walnut Grove Ave. | G05 3rd Floor 3C8-07 | Rosemead, CA 91770



From: Shannon Dracup <sdracup@ers-inc.com>

Sent: Thursday, May 28, 2020 1:53 PM

To: Paek, Chan U <CPaek@socalgas.com>; Andres Fergadiotti <Andres.Fergadiotti@sce.com>; Liu, Henry <hfl3@pge.com>; Voong, Tai <TXV0@pge.com>; Reynoso, Ed <EReynoso@semprautilities.com>; Ajay Wadhera <Ajay.Wadhera@sce.com>

Cc: Susan Haselhorst <shaselhorst@ers-inc.com>; Kerri-Ann Richard <krichard@ers-inc.com>; Agnew, Ken <Ken.Agnew@dnvgl.com>; paula.gruendling@cpuc.ca.gov; Biermayer, Peter <peter.biermayer@cpuc.ca.gov>; McWilliams, Jennifer <Jennifer.McWilliams@dnvgl.com>

Subject: (External):SCT Workpaper Plan - Next Steps

CAUTION EXTERNAL EMAIL

Hello all,

The CPUC is prepared to make recommendations regarding the SCT Thermostat workpaper plan. Key elements of the recommendation are summarized below. Please let us know as soon as possible if you would like to schedule a PA-wide meeting to discuss.

We request that SCE submit two workpapers: one for smart thermostat rebate programs and one for direct install (DI) programs. Each workpaper should include both gas and electric savings.

- Use 2018 EM&V results to update savings estimates for individual smart-thermostats rebate programs.
- Keep savings estimates from existing workpaper for DI programs as not studied in 2018; the 2019 EM&V will study DI programs.
- Update net-to-gross (NTG) values for both individual smart-thermostats and DI programs with 2018 EM&V findings as both offering types covered in the study.
 - DI program use 0.89
 - Rebate program use 0.55
- Once results of 2019 EM&V are available, consider updating DI program workpaper in 2021.

- There are still issues to resolve including Climate Zone 1, building type, and costs.

Below is our updated schedule for the SCT workpaper:

Date	Milestone	Notes
May 25	CPUC reviews scoping memo	
June 2	Meeting with PAs	Discuss workpaper plan and recommendations.
June 2-15	Workpaper reviews by PAs	
June 15	Workpaper submissions (Rebate and DI)	Target date for ABAL input.
July 10	Dispositions issued	25 days from workpaper submission.
January 1, 2021	Workpapers becomes effective for 2021 cycle	DI will remain effective through December 31, 2021.

Best,
Shannon

Shannon Dracup

ERS | Project Consultant
120 Water Street, North Andover, MA 01845
978-521-2550 x689
www.ers-inc.com | sdracup@ers-inc.com

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