Ratesetting

10/~~1~~22/2015 Item 4

Decision **PROPOSED DECISION OF ALJ EDMISTER** (Mailed 8/18/15)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.	Rulemaking 13-11-005 (Filed November 14, 2013)

DECISION RE ENERGY EFFICIENCY GOALS FOR 2016 AND BEYOND AND ENERGY EFFICIENCY ROLLING PORTFOLIO MECHANICS

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~~Appendices~~ **APPENDICES**

DECISION RE ENERGY EFFICIENCY GOALS FOR 2016 AND BEYOND AND ENERGY EFFICIENCY ROLLING PORTFOLIO MECHANICS

Summary

In this decision, we:

1) adopt "aggressive yet achievable" energy savings goals for ratepayer-funded energy efficiency (EE) program portfolios (portfolios) for 2016 and beyond;
2) establish a "Rolling Portfolio" process for regularly reviewing and revising portfolios; and
3) update various ~~energy efficiency~~EE program portfolio metrics, including Database of Energy Efficient Resources values, effective January 1, 2016.

This decision does *not* conclude Phase II of this proceeding. There are additional details still to work out on the review process for which additional time and/or record development are needed. A second decision on remaining Phase II issues will follow ~~early~~ next year. It will provide additional guidance on 2016 portfolio changes and on the "Rolling Portfolio" review process.

Looking ahead to Phase III of this proceeding, many important policy issues remain before us. Energy savings goals continue to go up, while we are to some extent a victim of our own success: the low-hanging fruit has largely been harvested. ~~Energy efficiency~~EE portfolios as we know them are on the verge of no longer being cost effective. Program Administrator expenditures on costs other than customer rebates appear excessive, as they have come to represent approximately half of portfolio expenditures. The rate of observed savings compared to forecast savings is distressingly low in some market sectors. *Ex ante* review continues to be a source of controversy.

We will take these issues, and more, up in Phase III of this proceeding. Critical issues include: implementing new legislation, restatement of baseline

treatments and provisions for savings from behavioral interventions, any associated adjustments to goals, and the role of utilities in ~~energy efficiency~~EE. These are interrelated, highly technical issues. Addressing them will be neither quick nor easy, but we are in this for the long haul.

This proceeding remains open.

1. Procedural Background

Pursuant to Cal. Pub. Util. Code § 381 *et seq*., and § 454.5,[1] we fund and oversee ratepayer-funded energy efficiency (EE) programs with a combined budget of roughly $1 billion per year. Program Administrators (PAs) use these ratepayer funds for portfolios of ~~energy efficiency~~EE programs subject to our oversight. We have generally funded ~~energy efficiency~~EE spending for a three-year cycle.[2] The three-year process paralleled the Commission's statutory responsibility to report to the legislature "triennially . . . on the ~~energy efficiency~~EE and conservation programs it oversees."[3]

Rulemaking (R.) 13-11-005 contemplated moving away from triennial review towards a "rolling" review of ~~energy efficiency~~EE program portfolios. Consistent with that vision, D.14-10-046 provided ongoing funding for ~~energy efficiency~~EE programs from 2015 onward, and concluded Phase I of this proceeding.

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1 All statutory citations are to the California Public Utilities Code, unless otherwise noted.

2 In addition to the standard triennial funding, the Commission sometimes approved ~~'~~"bridge~~'~~" funding between triennial cycles to allow regulatory processes to be completed. *See, e.g.,* Decision (D.) 12-11-015 (approving energy efficiency funding for two years rather than for three).

3 Cal. Pub. Util. Code § 384.2.

We conducted a Phase II prehearing conference (PHC) on January 28, 2015, for which parties filed PHC statements.[4] On February 24, 2015, the ~~Assigned~~assigned Commissioner and the assigned Administrative Law Judge (ALJ) issued a joint "Ruling and Scoping Memorandum Regarding Implementation of ~~Energy Efficiency~~EE 'Rolling Portfolios' (Phase II of Rulemaking ~~(R.)~~ 13-11-005)" (Phase II scoping memo). The Phase II scoping memo delineated the scope and procedural schedule for Phase II of Rulemaking (R.) 13-11-005. "The scope [was] as broad as we could manage while still deciding critical-path issues by early 2016."[5]

The procedural schedule set out in the Phase II scoping memo contemplated "potentially *two* decisions in connection with Phase II."[6] This is the first of those two decisions.

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[4] The following entities served PHC statements:

1. The Bay Area Regional Energy Network jointly with the Local Government Sustainable Energy Coalition
2. Center for Sustainable Energy
3. California Energy Efficiency Industry Council
4. Marin Clean Energy (MCE)
5. National Association of Electric Service Companies
6. Natural Resources Defense Council (NRDC)
7. The Office of Ratepayer Advocates (ORA)
8. Pacific Gas and Electric Company (PG&E)
9. San Diego Gas and Electric Company (SDG&E) jointly with Southern California Gas Company (SoCal Gas)
10. Southern California Regional Energy Network
11. Southern California Edison Company (SCE)
12. The Utility Reform Network (TURN)
13. The University of California

[5] Phase II scoping memo at 2.

[6] *Id*. at 3.

2. Issues before the Commission

As the Phase II scoping memo anticipated, this first Phase II decision addresses:

1) revised energy savings goals for 2016 and beyond;
2) the "Rolling Portfolio" review process;
3) initial[7] guidance on 2016 portfolio changes; and
4) updates to other program metrics, including the Database of Energy Efficiency Resources (DEER) and Efficiency Savings and Performance Incentive (ESPI) coefficients, to keep portfolios on a steady course forward.

3. Discussion and Analysis

3.1. Revised Savings Goals

3.1.1. Introduction

Public Utilities (Pub. Util.) Code Sections (§) 454.55 and 454.56[8] require the Commission, in consultation with the California Energy Commission (CEC), to identify all potential achievable cost-effective electricity and natural gas efficiency

[7] As contemplated in the Phase II Scoping Memo, we will provide two rounds of guidance on portfolio changes for 2016. The first round will concern matters that we can address *prior* to adopting new energy savings goals and technical updates. The second round will address changes *in response* to the new energy savings goals and technical updates that we are adopting here.

[8] Cal. Pub. Util. Code § 454.55: "The commission, in consultation with the State Energy Resources Conservation and Development Commission, shall identify all potentially achievable cost-effective electricity efficiency savings and establish efficiency targets for an electrical corporation to achieve pursuant to Section 454.5."

Cal. Pub. Util. Code § 454.56: "(a) The commission, in consultation with the State Energy Resources Conservation and Development Commission, shall identify all potentially achievable cost-effective natural gas efficiency savings and establish efficiency targets for the gas corporation to achieve."

savings and "establish efficiency targets"[9] for electrical or gas corporations to achieve. To this end, Commission Staff manages the development of a potential and goals study that provides the technical analysis for assessing the cost-effective energy savings potentially available in the state's residential and commercial building stocks, residential and commercial equipment and processes, industrial sector, and agricultural sector. We use this study to set energy savings goals, which in turn feed into various actors' planning activities.

In D.14-10-046, the Commission established energy savings goals for 2015. The Commission needs to adopt goals for 2016 and thereafter. To update Investor -Owned Utility (IOU) goals, we conducted a series of activities, many under the auspices of the Demand Analysis Working Group (DAWG).[10] On February 17, 2015, there was a DAWG potential and goals calibration webinar. On March 17, 2015, we conducted the potential and goals model release and draft results ~~workshop (workshop~~Workshop (Workshop 2). At ~~workshop~~Workshop 2, Navigant Consulting, Inc. (Navigant)[11] presented initial results from its Commission-directed study of ~~energy efficiency~~EE potential (Navigant Study). On April 10, 2015, several parties submitted to Commission Staff informal comments on the Navigant Study. On April 21, 2015, Commission Staff conducted a webinar regarding the comments on the Navigant Study. On May 15, 2015, the assigned ALJ put a revised version of the Navigant study (Revised

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[9] *Id.*

[10] The DAWG is "a collaborative stakeholder forum established in 2009 by the CEC and the Commission to address technical issues associated with aligning CEC demand forecasting and the Commission's energy efficiency goals modeling efforts." D.14-10-046 at 12.

[11] The Commission's Energy Division contracted with Navigant to conduct an energy efficiency potential and goals update study.

Navigant Study) out for formal comment.[12] Parties filed comments in response to the ruling on June 8, 2015.[13]

3.1.2. Summary of Energy Savings Goals

Today's decision adopts goals for the IOU territories based on the Revised Navigant Study, with some additional changes. The Navigant Study period and the goals we adopt here cover nine years. However, we expect these goals will be updated with new values by 2018 using the process for updating goals for 2018 and beyond that we establish in section 3.2.2.3 below.

Compared to the goals we adopted in D.14-10-046, the goals we adopt here are very similar overall. There are differences in the details, however, with the net result being that for 2016, gigawatt hours (gWh) goals are 10% higher, megawatt (MW) goals are 20% higher, and gas goals are 12% lower.

On the electric side, most notably, the forecast savings from Codes and Standards (C&S) are roughly 20% higher than the Navigant's 2013 California ~~Energy Efficiency~~EE potential and goals Study (2013 Study) forecast. Savings from rebate programs, in contrast, are modestly lower than the 2013 Study

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[12] http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=151726019.

[13] The following parties submitted comments on the Revised Navigant Study:

1. FirstFuel Software, Inc. (FirstFuel)
2. Opower
3. NRDC
4. ORA
5. PG&E
6. SCE
7. SDG&E
8. SoCal Gas
9. TURN

forecast. These changes essentially cancel out, leaving overall savings numbers relatively unchanged.[14]

On the gas side, we see a similar phenomenon. Potential savings available from rebate programs dropped, while potential from C&S increased. "The net effect of both changes is an overall minimal change to the total potential over the 2016-2024 period." [15]

Data limitations continue[16] to require us to develop goals by IOU service territories, rather than by PAs. This means that we have not established separate goals for regional energy networks (RENs) or Community Choice Aggregators (CCAs). Their expected savings are embedded within the savings for the service territories of the IOUs.

Figure 1- IOU Territory Annual Savings Goals

Table 1. Annual ~~GWh~~gWh

	PG&E			SCE			SDG&E		
Year	**IOU Programs**	**Net C&S[17]**	**Total**	**IOU Programs**	**Net C&S**	**Total**	**IOU Programs**	**Net C&S**	**Total**
2016	625	611	1,236	674	631	1,304	181	143	324
2017	637	506	1,144	694	522	1,216	185	119	304
2018	507	408	916	528	421	949	141	96	236
2019	511	401	912	542	414	955	144	94	238
2020	519	381	900	553	393	946	147	89	236

14 Revised Navigant Study at xiii and 60-62.

15 Revised Navigant study at xiii. For a fuller comparison between the 2013 study results and the Revised Navigant study results, *see* tables ES-6 through ES-8, and 4-6 through 4-8 in the Revised Navigant study.

16 D.14-10-046 at 10.

17 For explanation of why C&S are separated from other savings, *see* 3.1.4.8.

2021	524	326	850	542	337	879	147	76	223
2022	541	295	836	559	304	863	151	69	220
2023	558	254	812	573	262	835	154	59	214
2024	581	240	821	593	247	840	158	56	214

Table 2. Annual MW

	PG&E			**SCE**			**SDG&E**		
Year	**IOU Programs**	**Net C&S**	**Total**	**IOU Programs**	**Net C&S**	**Total**	**IOU Programs**	**Net C&S**	**Total**
2016	85	141	226	122	145	267	24	33	57
2017	87	105	193	123	108	231	26	25	50
2018	69	103	172	99	106	206	20	24	44
2019	70	103	173	103	107	210	20	24	44
2020	71	101	173	107	104	211	21	24	45
2021	74	94	169	103	97	201	21	22	43
2022	80	90	170	109	92	201	22	21	43
2023	86	84	171	113	87	200	23	20	43
2024	92	82	173	119	84	203	25	19	44

Table 3. Annual MMTherms

	PG&E			**SoCal Gas**			**SDG&E**		
Year	**IOU Programs**	**Net C&S**	**Total**	**IOU Programs**	**Net C&S**	**Total**	**IOU Programs**	**Net C&S**	**Total**
2016	12.9	5.5	18.4	17.3	11.7	29.1	2.6	0.6	3.2
2017	12.9	5.7	18.6	18.1	12.2	30.3	2.7	0.6	3.3
2018	14.8	6.1	20.9	16.6	12.7	29.4	3.2	0.7	3.9
2019	14.9	6.2	21.1	18	12.6	30.6	3.2	0.7	3.9
2020	15.5	6.2	21.7	18.4	12.2	30.6	3.3	0.7	4
2021	15.9	5.9	21.8	17.7	10.9	28.6	3	0.7	3.7
2022	16.7	5.7	22.4	18.2	10.3	28.5	3.1	0.6	3.7
2023	17.5	5.6	23.2	18.6	9.6	28.2	3.2	0.6	3.8
2024	18.6	5.3	23.9	19	9.1	28.1	3.2	0.6	3.8

Tables updated on 9-23-15.

3.1.3. Overarching Considerations in Setting 2016 (and beyond) Goals

In our ~~energy efficiency~~EE proceedings, we allocate roughly $1 billion per year to specific ~~energy efficiency~~EE programs. One of our statutory obligations is setting savings "targets," [18] i.e., goals, for PAs. Goals feed into various planning processes:[19]

1. Portfolio planning;
2. Transmission and procurement planning efforts of the Commission, the CEC, and the California Independent System Operator (CAISO);
3. Assembly Bill (AB) 32 greenhouse gas reduction planning;
4. The Commission's Energy Efficiency Strategic Plan (Strategic Plan) update.[20]

For the Revised Navigant Study, Navigant's modeling methodology remains the same as that used in Navigant's 2013 California ~~Energy Efficiency~~EE potential and goals Study (2013 study).[21] We adopted the results of the 2013 study in D.14-10-046. For the latest study, Navigant's work was largely "to

[18] Cal. Pub. Util. Code § § 454.55 and 454.56.

[19] Goals do not, however, have a direct impact on PA earnings, and have not since we changed the shareholder incentive mechanism from the Risk/Reward Incentive Mechanism (RRIM) to the ESPI. We established the RRIM in D.07-09-043. We established the ESPI in D.13-09-023. Under the RRIM, shareholder incentives related directly to goals: "[shareholder] earnings begin to accrue only as the utilities reach to meet and surpass the Commission's kilowatt-hour (kWh), Kilowatt (kW) and therm savings goals." D.07-09-043 at 4. Under the ESPI, in contrast, goals play no role in setting shareholder incentive awards.

[20] More information on the Strategic Plan can be found at: http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/eesp/.

[21] Revised Navigant Study at i (citing the 2013 Study). The 2013 Study is available at http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Energy+Efficiency+Goals+and+Potential+Studies.htm.

review and incorporate the latest available data into the study."[22] Put colloquially, the modeling under here (what Navigant calls "Stage 1" of the potential and goals study) was a "turning of the crank" using updated data, not a ground-up re-examination of modeling assumptions and methodology. A broader re-examination of the modeling approach is set for the next iteration of the potential and goals study ("Stage 2" of the potential and goals study).

Economic vs. Market Potential

There are infinite permutations possible within Navigant's model. However, zero effectively bounds choices at the low end (no possible further savings). Technical Potential bounds the high end.[23]

The Navigant study defines "Technical Potential" as "the amount of energy savings that would be possible if the highest level of efficiency for all technically applicable opportunities to improve ~~energy efficiency~~EE were taken," exclusive of behavior programs, whole building programs, and codes and standards.[24] "Economic Potential" is a subset of Technical Potential including "energy efficiency potential available when limited to only cost effective measures."[25] Finally, "Market Potential" is a subset of Economic Potential

[22] Revised Navigant Study at iii.

[23] Some parties dispute that the revised draft Navigant study represent a true upper or lower bound of energy efficiency potential, and contend foundational methodological changes are required. SCE comments at A9-A10. Navigant acknowledges "this study may not capture the upper bound on the total amount of energy efficiency that can be achieved." Revised Navigant Study at v. It nonetheless provides a *practical* upper bound.

[24] Revised Navigant Study at iv-v.

[25] *Id*. Generally speaking, "programs" are made up of "measures," which are often grouped together at a jobsite into a "project." Measures savings and incentive calculations break down into "custom" (i.e., site-specific) and "deemed" (i.e., the savings are consistent

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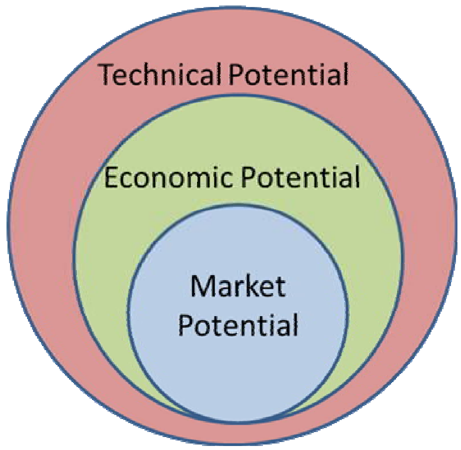
including "energy efficiency savings that could be expected in response to specific levels of incentives and assumptions about policies, market influences, and barriers."[26] In Venn diagram terms, Navigant's categories look something like this (not to scale):



Some stakeholders have questioned the use of Market Potential to establish energy savings goals for the IOU territories. They favor using something closer to Economic Potential as a reach goal. We further explore this issue below.

"Economic Potential" considers all, and only, the costs included in the Total Resource Cost (TRC) test[27] in determining whether a measure is "

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in similar implementation scenarios). A "project" may be made up of a combination of types of measures. "Custom measures and projects are energy efficiency efforts where the customer financial incentive and the *ex ante* energy savings are determined using a site-specific analysis of the customer's existing and proposed equipment, and an agreement is made with the customer to pay the financial incentive upon the completion and verification of the installation." D.14-10-046 at 47, n.40.

[26] Navigant Study at v.

[27] The TRC test measures costs and benefits from the combined perspective of the ~~program administrator~~PA (usually a utility) and the program participant, who are jointly investing in efficiency. As such, it includes both utility and participant costs and benefits. Rebates are not included in the TRC calculation because they are a *cost* to the utility and a *benefit* to the participant, and therefore cancel out. *See* Energy Efficiency Policy Manual, v.7 at 17, n.37. In

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economic." Essentially, this means incremental measure cost, administrative cost, marketing education and outreach cost, and potentially installation cost. Economic potential assumes immediate 100% installation rates of all measures with TRC > 0.85 and a select few below 0.85 that some PAs are already rebating (e.g., the threshold for emerging technologies is a TRC of 0.5).

Thus, as Navigant puts it: "Although economic potential has a financial basis, it does not have a market basis."[28] Many factors in addition to those in the TRC drive real-world decisions about whether to undertake a measure. These do not factor into the Economic Potential calculation.[29]

To see what this means in practice, consider a hypothetical factory with older but still functioning machinery. Assume further that, using the study assumptions, replacing the older machinery with new high-efficiency machinery saves enough energy for the savings value to offset the incremental measure cost.

As far as the study is concerned, replacing that equipment is "economic." However, from the factory owner's perspective the replacement may be nowhere near economic for numerous reasons that Economic Potential does not

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sum, the TRC "quantifies the costs and creates a ratio of all the costs and the benefits of the energy efficiency portfolio as compared to the supply-side resource. The results provide an estimate of cost-effectiveness recognizing the avoided costs of comparable supply-side investments." D. 09-05-037 at 51. For a lightbulb replacement, for example, the included costs in TRC would generally be the difference in cost between the LED bulb and a baseline e.g., basic compact fluorescent (CFL~~)~~) bulb, a share of marketing and administration costs, and installation cost if the replacement happened before the CFL burned out.

[28] Revised Navigant Study at A-7.

[29] *See* Golove and Ito, Market Barriers to Energy Efficiency: A Critical Reappraisal of the Rationale for Public Policies to Promote Energy Efficiency, Lawrence Berkeley National Laboratory (1996) at 13-17 (positing various reasons other than market failures for the existence of a gap "between a consumer's actual investments in energy efficiency and those that appear to be in the consumer's own interest").

capture. The factory owner may have to deal with the downtime while machinery is
off-line. During that time, the factory owner may have to continue paying labor or layoff costs. The factory owner also faces other business disruption costs, including the potential to lose customers forever, disruption of a longstanding logistics chain, changes to operations and maintenance practices, and software and retraining costs associated with the new machines. Economic Potential does not capture any of these considerations.[30]

In addition to such practical concerns, customers may have different views than PAs (and each other) on what constitutes a "cost-effective" measure or project. Customers seek a certain return on investment (ROI) (*i.e.*, payback period). This is reflected in a customer's implied discount rate. The higher the implied discount rate, the higher the ROI, and the shorter the payback period the customer wants. The research underpinning the potential and goals study shows that customers have implied discount rates approximately ranging from 14% to

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[30] Many noneconomic factors can enter the decision-making process, particularly in a consumer, as opposed to factory or commercial, setting. Golove and Ito, *supra note 28* at 17-18 (noneconomic variables – psychological considerations such as commitment and motivation, membership in trade groups, status considerations, and expressions of personal values all play key roles in consumer decision making). Technical Potential does not account for these variables either.

70% depending on the customer type.[31] These are significantly higher than the discount rates used in the TRC test.[32]

Economic Potential also assumes 100% of "cost effective" measures are installed. The reality is that a measure having a TRC of 1[33] does not mean all customers will find the measure cost effective, as some customers will be looking for a much quicker payback than the model assumes for purposes of setting Economic Potential. The market will always have some participants with a higher implied discount rate than modelers used to determine Economic Potential.

Economic Potential, like Technical Potential,[34] also assumes *immediate* adoption of any economic measure by all potential users, regardless of how long it actually takes users to actually adopt a measure. This is what Navigant means by Economic Potential not accounting for the "turnover of stock, or time scale of diffusion for different classes of technologies."[35]

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[31] Navigant March 17, 2015 2015 California potential and goals Study, Draft Results Presentation to DAWG, slide 6. http://www.cpuc.ca.gov/NR/rdonlyres/1D3525C7-7145-4AD5-80A8-55515B066223/0/2015PGStudyMarch17DAWGPublicWorkshop.pdf

[32] The TRC test evaluates "cost effectiveness" from the regulatory perspective, and uses an implied discount rate equivalent to each IOU's weighted cost of capital (approximately, 8.5% pre-tax; the exact value varies by utility).

[33] Economic Potential assumes 100% installation rates of all measures with TRC > 0.85, and a select few below 0.85 for which the IOUs are already providing incentives (ET threshold is 0.5). We use the example of 1 in the text for simplicity's sake.

[34] "Technical potential refers to a hypothesized, instantaneous or 'overnight' implementation of an energy-efficient technology, device, or appliance." Golove and Ito, supra note 27 at 17-18.

[35] Revised Navigant Study at A-7. For a detailed discussion of adoption rates, *see* Commission Staff's Industry Standard Practice Guide, v.1.2A at 5-7. http://www.cpuc.ca.gov/NR/rdonlyres/9F18A591-1D11-43D5-977A-343F3A51D754/0/ISPGuideBookv12_A_livingfinal.docx ("In the early stages, a technology has only limited adoption, where only a few early adopters will risk implementing the technology. If the technology does

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One further complication in bridging from economic to market potential is the shift in investment perspectives from a long-term utility avoided cost of energy (*e.g*. 20-30 year investment time horizon, and using utility or asset-based finance and cost of capital), to the short-term consumer or end-user expectations for return on investment. The latter range from as short as 18 months for many commercial businesses (using lines of credit and cash flow savings to pay for efficiency measures), and 2-3 years for industry (tapping capital budgets that primarily are deployed for business expansion), to perhaps as long as five years for residential home owners (relying upon home improvement finance or consumer credit cards). This effectively means that market potential estimates are constrained by the lack of capital frameworks and borrowing terms for ~~energy efficiency~~EE investments that can mirror the longer term and lower cost of capital for the benchmark avoided energy supplies.

In sum, then, neither Technical Potential nor Economic Potential provides a realistic basis for setting savings goals for PAs. Accordingly, the Revised Navigant Study endorses using Market Potential (and not Technical or Economic Potential) "to inform [PA] ~~energy efficiency~~EE goals." [36]

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not prove to have any benefit, it will not gain momentum or grow; essentially a flat line - represented by Technology Y in figure 1. If the technology proves to have a valued incremental benefit, it will gain more adoption and start to grow exponentially. Eventually it will reach a take-off point where it becomes imminent that it will achieve near "universal" adoption; represented by Technology X in figure 1. The time when near universal adoption is reached does not indicate when Technology X has become industry standard practice.").

[36] This example also points up one of the most significant challenges in getting people to adopt energy efficiency measures: energy costs are not necessarily the primary driver behind capital investment decisions.

Navigant's use of the word "inform" signals that Market Potential is just a waypoint on the journey to goals, not the terminus. Within Market Potential are numerous possible "cases" to choose from, depending on the chosen modelling assumptions. "These include assumptions about the manner in which efficient products and services are marketed and delivered, the level of customer awareness of ~~energy efficiency~~EE, and customer willingness to install efficient equipment or operate equipment in ways that are more efficient."[37]

Consistent with D.14-10-046, and as recommended by Commission Staff, we are adopting the "mid-case" scenario in setting goals. We will not adopt higher goals that represent a stretch that may not be realistically achievable. As Lawrence Berkeley National Laboratory researchers said almost twenty years ago, "there are compelling justifications for ~~energy efficiency~~EE policies. Nevertheless, in order to succeed, they must be based on a sound understanding of the market problems they seek to correct and a realistic assessment of their likely efficacy."[38]

A Single Set of Realistic Goals

We see no value to setting goals that PAs cannot reasonably be expected to achieve. Unrealistic goals may lead to incentives to inflate results falsely. In addition, unrealistically high goals affect more than just Commission-jurisdictional programs. The CEC and the California Air Resources Board (CARB), among other agencies, oversee significant programs relating to reducing energy use (and carbon emissions more generally). Many

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[37] Revised Navigant Study at v.

[38] *See generally* Golove and Ito, *supra note 27* at v (emphasis added).

municipalities have their own ~~energy efficiency~~EE programs as well. All have a role to play in reducing energy use and greenhouse gas emissions; and some or all of these actors rely on our savings estimates in their planning activities (e.g., when the CEC prepares the Integrated Energy Policy Report (IEPR)). Setting unrealistic goals for ratepayer-funded programs gives other governmental entities and market actors bad information for use in their own ~~energy efficiency~~EE activities. Misplaced reliance on overoptimistic forecasts can lead to misallocated resources and reduced activity by other actors, to ratepayers' and to the environment's detriment. It can also compound the internal and external pressure to claim success regardless of real-world program impact. Finally, it can lead other actors to discount the validity of the Commission's ~~energy efficiency~~EE savings forecasts in their planning activities, thereby rendering the Commission's goal-setting far less useful than if the Commission is realistic in the first instance.

Accordingly, as in D.14-10-046, we will set a single set of goals. That single set of goals will be "aggressive yet achievable," [39] and will rest on data-based assumptions. This translates into the goals set forth above.

3.1.4. Comments on the Draft Study and Goals

We received comments on the Revised Navigant Study from all the following: FirstFuel, NRDC, ORA, PG&E, TURN, SDG&E, SCE, and SoCal Gas. In today's decision, we adopt limited changes to the revised draft Navigant study in response to party comments. We include a discussion of key issues below as many warrant consideration in future updates to the potential and goals study.

[39] *See* D.07-09-043 at 107-108.

Calibration

Calibration is the systematic adjustment of model parameter estimates so that model outputs more accurately reflect external benchmarks. Generally speaking, calibration means the modeler will:

- find one or more recent periods for which actual results are available (i.e., a prior year or years);
- see if running the model for that period yields results that match the actual observed results;
- if the model results do not match actual results, adjust model parameters until they do.

Navigant explains calibration generally as follows:

> Calibration provides both the forecaster and stakeholders with a degree of confidence that simulated results are reasonable and reliable. Calibration is intended to achieve three main purposes:
>
> - Ground the model in actual market conditions and ensure the model reproduces historic program achievements
> - Ensure a realistic starting point for future projections
> - Account for varying levels of market barriers across different types of technologies and end uses.[40]

This generalized description implies that one could rewind the process to an uncalibrated model, and several parties (ORA, NRDC, and TURN) ask that we do just that. These parties have expressed concern that "the use of 'calibration' unduly limits the market potential based on previous program achievements and should not be applied when setting long-term goals.[41]

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[40] Revised Navigant Report at A-1.

[41] Comments of NRDC on Energy Efficiency and Goals and DEER Updates, June 8, 2015 at 4 (" Calibration is the process whereby the potential model is altered for the purpose of having final results of efficiency potential be closer in line with the amount of efficiency historically achieved.

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In fact, calibration is effectively built into the model, and cannot be feasibly disentangled. Navigant performed much of its calibration on an end-use/sector basis. This means that there is no "uncalibrated" model as such. While "[i]t may be tempting to 'relax' the calibrated parameters back toward the average to measure the effect of what could be possible[,] the uncalibrated results can be difficult to interpret and almost certainly would not produce feasible results for certain end uses." [42]

Moreover, we have recognized the value of calibration in modeling in diverse contexts, including gas and telecommunications.[43] Conversely, *not* calibrating a model when the option to do so exists is bad practice.[44]

The point of calibration is to set the model at a level that is, initially, right for today.[45] One can then make assumptions about tomorrow as one chooses (and as available data will support). As a matter of good modeling practice, modelers

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In practice, this artificially suppresses the amount of future potential to be more in line with past achievements, ensuring our future looks more like our past, and makes it difficult if not impossible to use innovative approaches to scale up savings that will be required to reach Governor Brown's goal of doubling projected energy efficiency from existing buildings by 2030. ").

42 Revised Navigant Study at A-3.

43 *Cf.* D.01-01-037 (for a telecom pricing model "[s]ome 'calibration' with actual data will be helpful in assessing our decision model and its effects on the overall plan, and we will order a calibration period to occur . . . before the trial period begins."); *See also* D.01-12-018 (requiring SoCal Gas to "develop a rule-based model re-calibration process" for its Daily Load Forecasting Model).

44 Of course, it is not always possible to calibrate or benchmark a model, in which case a modeler has to take another approach to model validation.

45 As noted above, a reason to calibrate is to "ensure a realistic starting point for future projections."

should explicitly layer predictions about how the future will depart from the past atop a calibrated model, not bake them into the model *ab initio.*

The upshot of the TURN and NRDC argument is, in effect, that tomorrow will be much different from yesterday, and so adjusting a forward-looking model by fitting it to past performance actually makes the model less rather than more predictive. This misses the point of calibration. Calibration is to ensure that yesterday's inputs yield yesterday's results, regardless of what one expects tomorrow will bring. This is why ORA et al.'s arguments against calibrating the model *at all* are unpersuasive.

As for the particular changes Navigant made during the calibration process, Navigant states that:

> The PG model is calibrated by reviewing portfolio data from 2006 up through 2012 to assess how the market has reacted to program offerings in the past. The Navigant team used ex-post EM&V data from 2006-2012 as the calibration data and also compared results to the 2013-2014 compliance filing data.[46]

The particular parameters that calibration showed needed adjustment were those relating to consumer adoption rates; specifically, consumer awareness of measures, and consumer willingness to adopt measures. Potential per end use or sector decreased or increased depending on the calibration.

What NRDC and TURN characterize as an uncalibrated model's assumptions are equivalent to the Navigant mid-high case.[47] We decline to adopt a "mid-high" case over the mid-case for setting savings goals. As discussed at

[46] Revised Navigant Study at A-1.

[47] Use mid case assumptions for housing stock and energy prices, but high case assumptions about policy levers, technology, and customer behavior.

length above as well as in D.14-10-046, we will stay within the realm of the realistic rather than setting goals based on desired changes in customer behavior and (as discussed more below) technology.

SCE has a different issue with calibration. Currently, the Navigant model calibration uses program results from 2006-2012, and omits reported 2013, 2014, and 2015 program savings. SCE notes that its programs have changed significantly since 2006, and contends that using old data to calibrate a model designed to forecast future savings yields results that are *higher* than the EE programs are able to capture. In other words, SCE contends that calibration leads to overestimating future savings rather than underestimating them (as TURN and NRDC contend). SCE recommends that model adjustments based on recent year adoptions be made to the "Applicability," "Awareness," and "Willingness" parameters of the current model to better calibrate the aforementioned measures to more accurately reflect customer program adoption, in particular for " residential refrigerator recycling and pool pump measures.[48]"

We decline to adopt SCE's proposed changes. In addition to the reasons to favor calibration already discussed, we note that Navigant used 2006-2012 program savings to calibrate the model because the savings have been reviewed and vetted through the Evaluation, Measurement, and Verification (EM&V) process. While 2013-2015 program savings data may be available, those data are self-reported by PAs, and have not gone through the EM&V process.[49]

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[48] SCE's Comments on Ruling Regarding Post-2015 Energy Efficiency Potential and Goals, and Database for Energy Efficient Resources Updates, June 8, 2015 at 4-5.

[49] SCE has raised a related issue around the data quality in the Revised Navigant Study generally. SCE contends that it is inappropriate for the potential and goals study to use measure-level DEER savings while EE programs use approved workpapers. SCE further asserts

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Emerging Technology

Closely related to the calibration debate is the debate over how to treat emerging technologies (ETs). ETs are "new energy efficiency technologies, systems or practices that have significant energy savings potential but have not yet achieved sufficient market share to become self-sustaining or commercially viable. Emerging technologies include early prototypes of hardware, software, design tools or energy services." [50]

ORA takes issue with the potential model's use of prior measures and market saturation rates. According to ORA, this approach leads to the model underestimating future market potential of early strategies and measures that may have not reached mass commercialization, and overestimates potential for measures that are no longer producing effective returns. Therefore, ORA argues that this overemphasis on past measures without adequate consideration for new and innovative strategies is problematic when using the results of Revised

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that the potential model fails to use best available data on Industry Standard Practice. SCE's Comments on Ruling Regarding Post-2015 Energy Efficiency potential and goals, and Database For Energy Efficient Resources Updates at 3. In fact, Commission Staff-reviewed workpapers, dispositions, and approved workpapers *are* inputs into the Potential Model. Moreover, the Revised Navigant Study includes among its inputs Commission Staff-approved and stakeholder vetted industry standard practices. SCE's issue seems to be with the omission of available but not fully vetted and reviewed workpapers and industry standard practices. Workpapers (as with much in the world of *ex ante* review; *see* 3.2.3.4) have proven controversial. Industry standard practice likewise. We are not prepared to mandate inclusion of unvetted, unreviewed workpapers, or industry standard practices in the potential and goals study.

[50] Energy Efficiency Policy Manual, v. 5 at 6.

Navigant Study for future ~~energy efficiency~~EE planning and meeting savings goals.[51]

NRDC requests that we include a more thorough assessment of potential from technologies in the plug-in equipment categories. NRDC characterizes plug-in equipment (plug load) as the fastest growing source of energy consumption in California.[52]

SoCal Gas contends that the Revised Navigant Study fails to fully capture all market achievable ~~energy efficiency~~EE potential. SoCal Gas notes that only six of the thirty ETs modeled in the Revised Navigant Study are natural gas efficiency measures, and points to "many natural gas emerging technologies, such as smart valve insulating jacket and shower drain heat recovery that SoCal Gas is actively investigating as viable ~~energy efficiency~~EE measures."[53] These areas, as well as the combined heat and power pilot we authorized in D.14-10-046, are not currently modeled in the Revised Navigant Study.

With respect to emerging ~~energy efficiency~~EE technologies generally, we have seen (and the goals incorporate) some discouraging results of late from the emerging technologies that were supposed to produce major savings in the near future. Specifically, LED savings estimates have been revised downwards in response to post-2013 research. Costs for LEDs, meanwhile, have been revised

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[51] These arguments blend emerging technology and calibration issues, as already mentioned in the calibration discussion at section 3.1.4.1. We therefore address them in both the calibration discussion and here in the emerging technologies discussion.

[52] Comments of NRDC on Energy Efficiency potential and goals and Deer Updates, June 8, 2015 at 5.

[53] Comments of SoCal Gas on Energy Efficiency potential and goals and Deer Updates, June 8, 2015 at 3.

upwards in response to recent market survey data and California lighting quality standards. While presumably performance will improve, and costs will drop, both may happen less rapidly than we and others had hoped based on earlier information.

In addition to modeling and data adequacy issues (*e.g*. emerging technologies, operation and maintenance impacts, and behavioral approaches), there are more additional uncertainties to ponder. It remains to be seen how new finance mechanisms such as Property Assessed Clean Energy loans and the Commission-approved finance pilots[54] will impact market activity. Relatedly, it remains to be seen how expanded private market offerings such as energy services agreements and performance guarantees might affect ~~energy efficiency~~EE adoption rates.

For the time being, we can do little more than speculate about the promise of the technologies called out by commenters. When adequate data become available, the potential and goals study can and should integrate them. We will manage the inherent uncertainty around emerging technology by updating goals regularly with the best available data. Thus, we can capture and reflect technological developments and trends, including the rate of technological improvement generally.

[54] *See* D.13-09-044.

Use of Smartmeter Data

Both FirstFuel[55] and ORA[56] note that the potential model does not use smartmeter data. They encourage its use in future iterations of the model.

These proposals are certainly something to explore in future goal-setting exercises. They are, though, (as FirstFuel itself notes) outside the scope of the present decision. As noted already, what we are doing here is an update to an existing model and methodology, rather than a wholesale redesign of our approach. A harder look at more fundamental aspects of the model should happen between now and 2017.

More generally, ORA's comment implicates several larger issues. First is the question of what data is "best" for purposes of use in the potential and goals study. Smartmeter data may inform unit energy savings values. However, we cannot say that smartmeter data can (or ever will) inform incremental cost, measure life, and appliance saturation. Availability of smartmeter data, and aggregation and disaggregation of the data for purposes of the potential and goals study, remain issues. The upshot of all of this is that it continues to be appropriate to rely on EM&V data, DEER, and other Commission-vetted studies as much as possible. R.13-11-005~~'s~~ placed data issues in the preliminary scope Phase III.

55 Firstfuel Comments on Administrative Law Judge's Ruling Regarding Post-2015 Energy Efficiency potential and goals, and Database For Energy Efficient Resources Updates at 1-6, June 8, 2015.

56 ORA's Responses to the ALJ's Ruling Regarding Post-2015 Energy Efficiency Goals, June 8, 2015 at 1-10.

Behavioral Programs

FirstFuel encourages us to state "operational savings are real and that the Commission includes them as countable under the Commission's current policy rules."[57] We lack the record to understand, much less make, such an assertion.

Opower contends that there are effectively no technical limitations on the number of households that can be enrolled in its behavioral programs, as utilities have the technical capability to send mail to 100% of their customers. Therefore, Opower posits that the Technical Potential from behavior programs is the total number of residential customers in a given service territory, multiplied by a given kWh or percent-of-use reduction. Opower then argues that, for behavioral programs, Technical Potential is calculated by determining how many customers can be enrolled in a behavior program cost-effectively, taking into account the fact that higher usage households generally yield greater savings than lower usage customers. Finally, OPower equates Economic Potential with Market Potential. OPower does not identify what the Market Potential numbers should be, were we to agree with this line of argument. Exploration of OPower's arguments will be something to consider in the next iteration of the goals and potential study.

SCE, for its part, "questions [the] reasonableness of the drastically increased [behavioral program] participation rate (23%), as participation is planned to remain at 5.1% in 2016. SCE pilot studies indicate that a participation rate of 5.1% with savings ranging from 19 ~~GWh~~gWh to 24.8 ~~GWh~~gWh is cost-effective reliable and achievable, while maintaining a diverse residential

[57] Firstfuel Comments on ALJ's Ruling Regarding Post-2015 Energy Efficiency Potential and Goals, and Database For Energy Efficient Resources Updates, June 8, 2015 at 5.

portfolio."[58] SCE further contends that "Although the total population in behavior programs for 2016 is projected to be three times the size of the 2013 Opower Wave 1 population, simply multiplying the validated 2013 savings by three constitutes an upper bound for expected savings for 2016, because the 2013 participants were unusually high users."[59] The upshot of this is that SCE would have us assume lower participation rates in behavioral programs than Navigant did, and, further, assume lower savings rates per participating customer than Navigant did.

SCE's concerns relate to an earlier version of the Navigant report. In the revised Navigant report, Navigant used a participation rate for SCE behavioral programs of approximately 5%, as documented in Table 3-14. Accordingly, the revised Navigant study and the goals we adopt already reflect this lower participation level.

Building Retrofits

A draft Commission staff memo dated April 20, 2015, titled "Commission staff responses to IOU comments on draft updates to Retrofit Add on Guidance Document" (April 20, 2015 memo) details approaches to claimable energy savings for "retrofit add-on" (REA)[60] measures.

According to SCE, the proposed savings goals do not capture the alleged impact of the April 20, 2015 memo. SCE asserts that modifications to what

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[58] SCE's Comments on Ruling Regarding Post-2015 Energy Efficiency Potential and Goals, and Database for Energy Efficient Resources Updates at A-9.

[59] *Id.*

[60] The acronym here comes for DEER, "Measure Application Types: Codes and Definitions," ~~http://www.deeresources.com/index.php/21-ex-ante-guidance~~http://www.deeresources.com/index.php/21-ex ante-guidance.

constitutes an REA measure, as defined by the April 20, 2015 memo will likely reduce participation in programs that currently offer REA measures. SCE states that it experienced a reduction in program participation when documentation was required for early retirement measures. SCE anticipates a higher reduction in program participation for REA measures because it applies to both calculated and deemed measures.

PG&E raises similar concerns. Further, PG&E asserts that it has received several custom project *ex- ante* dispositions that limit its ability to pursue comprehensive retro-commissioning opportunities.

It does not appear that the potential and goals model needs to change in response to the April 20, 2015 memo, which follows existing policy by recognizing that existing equipment baselines are permissible in instances of program-induced early retirement. The April 20, 2015 memo treats REA measures in the same manner as other program-induced early retirements when all the requirements for early retirement measures are met.

The concern here appears to lie with the Commission's baseline policy, not with the potential and goals model's reflection of baseline policy.

Recent legislation (SB~~350, AB802) passed by the Legislature and awaiting the Governor's disposition would require~~350[61] and AB802[62]) requires changes to how we measure savings. Until this legislation becomes law and we can respond

[61] "Clean Energy and Pollution Reduction Act of 2015" Full text is available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350

[62] Full text is available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB802

to its requirements, and since model development and completion predated this legislation, we will go forward with pre-legislation assumptions on baseline.

There is always a lag between the end of a modelling exercise and Commission adoption of a model and/or its results. Real-world events often overtake a model's assumptions in that interregnum. This phenomenon presents an inherent challenge for much of what the Commission does in the ~~energy efficiency~~EE space and in many other areas.

The long-term approach to this problem is the "bus stop" approach we adopt below for numerous technical aspects of ~~energy efficiency~~EE work (e.g., DEER updates, EM&V, and, of course, goals). At a fixed point, the bus pulls up to the stop, and our analysis will go forward based on the information on hand at that time. Anything that shows up after the bus leaves the station will get picked up the next time the bus comes to the stop (i.e., annually for DEER and EM&V, biannually for goals). To do otherwise risks trapping us in an endless loop: a model is finished and pending adoption, an outside event leads to holding a decision adopting the model, and then a second outside event occurs while the revisions to address the first outside event are pending, taking us back to the start of the cycle. This is the sort of issue that the "bus stop" approach to many aspects of ~~energy efficiency~~EE oversight will, we hope, minimize.

With the set of goals now before us, we have seen two major events since the "final" draft goals were issued for comment in May. The delay in codes and standards is one such event. ~~In addition, on September 11, 2015, the Legislature passed SB350~~[~~61~~]Approval of Senate Bill (SB) 350[63] and AB~~802.~~[~~62~~] 802 is another.[64]

~~61~~63 "Clean Energy and Pollution Reduction Act of 2015" Full text is available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350

These ~~bills are currently awaiting action by the Governor. They~~statutory changes have potentially significant ramifications for ~~energy efficiency~~EE generally, and for the Commission's goal-setting work in particular. In pertinent part, AB802 states:

> Recognizing the already underway 2015 commission work to adopt efficiency potential and goals, the Energy Commission work on its 2015 energy demand forecast, and the need to determine how to incorporate meter-based performance into determinations of goals, portfolio cost-effectiveness, and authorized budgets, the commission, in a separate or existing proceeding, shall, by September 1, 2016, authorize electrical corporations or gas corporations to provide financial incentives, rebates, technical assistance, and support to their customers to increase the energy efficiency of existing buildings based on all estimated energy savings and energy usage reductions, taking into consideration the overall reduction in normalized metered energy consumption as a measure of energy savings. . . . The commission may adjust the energy efficiency goals or targets of an electrical corporation and gas corporation to reflect this change in savings estimation consistent with this subdivision and subdivision (d).

Relatedly, SB 350 includes various requirements regarding how the Commission and the CEC set savings goals.[~~63~~65]

In sum, AB 802 would require that we establish by September 2016 a different baseline for measuring savings, for some or all portions of the portfolio,

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[~~62~~64] Full text is available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB802

[~~63~~65] *See*, e.g., SB 350, Section 6 (amending Section 25310 of the Public Resources Code to identify sources of energy efficiency savings and demand reduction that count towards achievement of savings goals) and Section 16 (requiring the Commission to "review and update its policies governing energy efficiency programs funded by utility customers to facilitate achieving the targets established pursuant to subdivision (c) of Section 25310 of the Public Resources Code").

than we use currently. AB 802 invites, but does not require, the Commission to revise its savings goals before then. SB 350, meanwhile, would require that the CEC, with input from the Commission, establish new savings goals by November 1, 2017.

Given this shifting landscape, is it worthwhile to go forward with the current goal setting process in this decision? On balance, we conclude that it is. We still need to establish goals for 2016. The CEC is going forward with the IEPR update this year, and needs new savings goals from us now. Current goals expire at year's end. Thus it is appropriate to adopt goals now that include assumptions pre-dating SB 350 and AB 802. AB 802 appears to expressly contemplate our doing so in "[r]ecognizing the already underway 2015 Commission work to adopt efficiency potential and goals."

AB 802 also provides, assuming it becomes law, that we may provide a goals update sooner than we ordinarily would under the "Rolling Portfolio" schedule we adopt later in this decision. The object of the update would be to "adjust the ~~energy efficiency~~EE goals or targets of an electrical corporation and gas corporation" to reflect legislative changes in time to inform the programs that we are ultimately to approve in alignment with the Legislative changes. It ~~will be~~is up to the assigned Commissioner and ALJ to determine whether to move such an update forward and on what timeframe, balancing the priorities of other work that must be completed in this proceeding.

Capturing Temporal and Locational Aspects of Savings

NRDC asks that we improve the temporal and locational aspects of the potential and goals study. According to NRDC, this will allow for a better valuation of ~~energy efficiency~~EE's impacts. By extension, incorporating these values may increase the cost effectiveness of some ~~energy efficiency~~EE activities. It may reduce the cost-effectiveness of others, of course, but in any event should allow for more targeted activity.

This will be something to consider in the next iteration of the potential and goals study.

Assorted Other Measure-Specific Issues

PG&E objects to the continued inclusion of "strip curtains" in potential. PG&E contends that strip curtains are no longer a cost-effective measure, citing to a Commission Staff workpaper disposition for "Strip Curtains for Doorways to Refrigerated Storage" issued February 27, 2013.

Continued inclusion of strip curtains is a consequence of this iteration of goals utilizing the pre-existing modeling approach. Producing revised goals in time for adoption this year meant being strategic about which measures to update. Navigant did not update data for strip curtains because they represented approximately 1/10~~th~~ of 1% of total portfolio savings. Now that PG&E has brought the issue to our attention we will direct that strip curtain values be updated in the next iteration of the potential and goals study, but we will not require re-running of the model this time for such a small value.

PG&E identifies for further study a number of measures that it contends the Commission should evaluate more closely in the next iteration of the potential and goals study:

- Use of Industrial Assessment Center Data
- Machine Drive End Use
- Commercial Behavioral Savings
- Computers and displays
- Evaporative Cooling

- LED Potential
- Lighting C&S Code Change

All of these issues bear consideration in the next iteration of the potential model. Data availability will be a critical consideration in taking on these issues.

In SCE's ~~Energy Efficiency~~EE potential and goals Model Stage 1 Comments, SCE highlighted what it characterized as significant issues with the Potential Study's conclusions regarding the residential refrigerator recycling and pool pump adoptions and savings, street lighting savings, behavioral savings, and whole building savings,[~~64~~66] and the treatment of residential recycling and pool pump measure adoptions in the Revised Navigant Study. Navigant has addressed SCE's concerns about measure savings values[~~65~~67] in the most recent iteration of the study, which show significantly less savings per participant than before, for these measures. The goals above reflect reductions from the proposed goals, to account for these changes.

Navigant changed refrigerator values in the May 2015 model release. The model projects an annual average number of units over the 2016-2024 period to be approximately 32,000 per year with higher values in the early years and lower values in the later years. Navigant also adjusted pool pump unit energy savings per SCE's comment.

SoCal Gas notes one large, allegedly unexplained change to its goals. SoCal Gas's savings potential dropped by 29% between the draft results released in March to those released in May. SoCal Gas identifies the cause of this drop as a

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[~~64~~66] SCE Response to First Draft of the 2015 Energy Efficiency Potential Study at 4-10.

[~~65~~67] SCE concerns remain around measure uptake rates for refrigerators and pool pumps, as discussed in connection with calibration, above.

single change to the oil and gas sector. SoCal Gas asserts that it has committed to projects with oil and gas customers in 2016 exceeding 10 million therms; whereas the May 2015 Draft Revised Navigant Study includes potential of just 3.2 million therms for 2016.

The question SoCal Gas raises is what to do about allegedly foreseeable "lumpy" changes in savings. Potential forecasts generally appear "smooth" with drastic changes generally the result of changes to C&S. In reality, certain industries are much more "lumpy" in their annual participation in programs. The oil and gas sector may be one of those.

In sum, then, SoCal Gas can indeed have actual projects proposed that demonstrate that there are greater savings than the potential model predicted, and those savings will allow them to exceed their goals in a given year. That SoCal Gas expects a large departure from the regression line so early in the planning horizon makes it tempting to adjust the forecast upwards, but a single point value that is a *planned* value rather than an observed value is not a good basis on which to modify model results.

Codes and Standards

"Codes and Standards" (C&S) refers generically to local, state and federal standards that mandate minimum efficiency levels (e.g., Cal. Code. Reg., Title 24, Part 6). "Each of the utility portfolios support[s] statewide program activities in the areas of . . . support for codes and standards." [~~66~~68] We refer to such support activities as C&S "advocacy programs." [~~67~~69] "Using ratepayer

[~~66~~68] D.05-09-043 at 5.

[~~67~~69] D.05-09-043 at 6.

dollars to work towards adoption of higher appliance and building standards may be one of the most cost-effective ways to tap the savings potential for ~~energy efficiency~~EE and procure least-cost energy resources on behalf of all ratepayers. ” [~~68~~70]

As Navigant noted in the Revised Navigant Report, C&S reduces the Unit Energy Savings ~~(UES)~~ for rebated measures, thus decreasing the savings claimable by IOUs. Conversely, IOUs can claim a portion of savings from C&S that come into effect through the IOU C&S advocacy programs, thus increasing the savings claimable by IOUs.[~~69~~71] We have historically been concerned about avoiding double-counting of savings between C&S and programs. That is, we seek to avoid IOUs claiming C&S advocacy savings for measures, and then also claiming savings credit for those measures in connection with a program. In D.14-10-046 we directed Commission Staff to work with CEC staff to investigate this issue. Double-counting will be an issue to consider as we reexamine our policies concerning baseline in 2016, including reflecting legislative direction, to allow savings credit for "to and through code" activities.

We have historically set goals for C&S advocacy savings as separate from the balance of a PA's portfolio. This practice originates in part from the fact that under the RRIM, we initially treated C&S advocacy savings differently than other savings for purposes of awarding shareholder incentives. We only "credit[ed] 50% of the energy and peak savings resulting from those programs towards the 2006-2008 savings goals" on the premise that "these savings [are] a hedge

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[~~68~~70] D.05-09-043 at 123.

[~~69~~71] Revised Navigant Report at 35.

against inherent risks that other programs may not meet their performance goals." [~~70~~72] This provided the utilities with an incentive to push mature measures into code. We subsequently allowed IOUs to count 100% of verified savings towards savings goals for purposes of awarding shareholder incentives.[~~71~~73]

Even with the elimination of the RRIM, we have continued to set C&S goals separately. As the Commission stated in D.12-05-015:

> We continue to believe it is prudent to develop and hold utilities accountable for separate codes and standards and IOU program goals. The utility role in and programmatic approach towards these two types of efficiency-generating activities are wholly different from one another. It is important that we continue to encourage the utilities to develop the market for new technologies through both emerging technology and mainstream incentive programs. It is equally important that measures are not pushed through to code before they are market ready, and that we do not incent the utilities to do so. For these reasons, we adopt in this decision separate codes and standards advocacy and IOU program goals.

TURN would have PAs keep C&S savings segregated in the savings forecast, caveat them heavily, and not allow PAs to claim them as savings at all. According to TURN, the problem with setting goals that are heavily reliant on C&S savings – 46% of projected portfolio ~~GWh~~gWh savings, 55% of projected portfolio MW savings, and 36% of projected MMTherms savings in 2016 – is that the reliability of savings from recent code updates is highly uncertain. TURN

[~~70~~72] D.05-09-043 at 6. For the 2006-2009 portfolio cycle, allowing full credit for C&S savings would have created a mismatch with the goals we had set for the 2006-2008 portfolios, which did not contemplate C&S savings.

[~~71~~73] D.07-10-032 at 119-120; D.10-04-029 at 46.

recommends that, if the Commission adopts the proposed C&S goals, it do so only with the following caveats: (1) an acknowledgement that the C&S goals are significantly uncertain, (2) a prohibition on counting the C&S goals as savings accomplishments in the ~~energy efficiency~~EE portfolios, at least in the near term pending further data collection and/or EM&V, and a related prohibition on using the C&S goals to buttress portfolio cost-effectiveness, and (3) a warning that the C&S goals may be adjusted based on the Commission's investigation of possible policy changes in Phase III.

TURN further recommends that the Commission explicitly anticipate that it may be appropriate to update the 2016 and 2017 PA Programs goals in Phase III of this proceeding, should the Commission determine that a change in baseline policy is appropriate. As noted above in TURN's discussion of the proposed C&S goals, such a change in baseline policy could trigger a decrease in the C&S goals and an increase in the PA Programs goals.

SoCal Gas, in contrast, recommends that the Commission represent the ~~energy efficiency~~EE portfolio goal as a single goal, instead of disaggregating goals into distinct elements for C& S and for other programs. The gist of SoCal Gas' argument is that savings are savings and the Commission ought not be overly prescriptive about how PAs obtain those savings.

We see no reason at present to depart from the policy of establishing separate goals for C&S. The reasons for this policy that we rearticulated in D.12-05-015 remain valid today. Further, the goals are not prescriptive. They reflect expectations, but do not *mandate* any particular actions, as we discuss next.

In comments on the proposed decision, several commenters note that C&S goals include anticipated Title 20-related savings that were expected to be in effect, but will no longer be realized in 2016 due to delayed adoption at the CEC.

Commenters recommend modifications to the goals to reflect the most recent Codes and Standards adoption timeline. This we decline to do, as we will address this change in circumstances at the next goals "~~bust~~bus stop."

Aligning Goals and Policies

Though TURN differs from SoCal Gas on segregating codes and standards separately from other program savings, TURN echoes SoCal Gas's request that we not be overly prescriptive as to whether portfolio designs track goals. TURN urges the Commission to clarify that the ~~energy efficiency~~EE goals for PA Programs are not intended to serve as a specific template for how the PAs are to capture the ~~energy efficiency~~EE savings, despite that they were derived from a bottoms-up potential analysis. We clarify here that we are not requiring adherence to any particular portfolio structure.

Several parties raised baseline issues in their comments. For the time being, it is appropriate for the potential model to extrapolate current baseline policy into the future. As previously discussed, recent Legislation awaiting the Governor's disposition would impose various requirements for the baseline used for savings calculations. We will revisit baselines in Phase III, likely on an accelerated timeframe, and will not incorporate any assumptions about a departure from current policy into the potential model now. Further, baseline is only one among many policy areas that ongoing discussions outside this agency could considerably alter. Other areas include the CEC's contemplation of enhanced codes & standards compliance strategies articulated in the CEC's Existing Building EE Action Plan (Assembly Bill 758) document. Some of these strategies may lead to changes in PA portfolios.

Finally, in assessing the SDG&E 2016 and beyond market potential which will serve as the basis for determining the final 2016 and beyond ~~energy~~

~~efficiency~~EE goals, SDG&E recommends that the Commission ensure that the increase in the 2015 goal and the allowance for ramping up to achieve the 120% of annual savings claims for commercial whole building retrofit programs is calibrated and accounted for appropriately in the 2015 P&G Study. The Ruling Appendix A Table 1 provides a 2016 ~~GWh~~gWh goal of 183 ~~GWh~~gWh (PA Programs) compared to the 2015 ~~GWh~~gWh goal of 173.6 ~~GWh~~gWh (PA Programs).[~~72~~74] It is not clear to SDG&E if the increase of approximately 20 ~~GWh~~gWh includes rolling over from 2015 or this is a pure incremental increase over and above the 2015 ~~GWh~~gWh goal.

In response to SDG&E, we clarify that the 20 ~~GWh~~gWh increase is "pure incremental increase." Goals are stated as incremental potential for each year. The 2016 goal does not "roll over" unrealized savings from 2015.

As to whether the goals in the proposed decision included the "ramp up" authorized for SDG&E in D.14-10-046,[~~73~~75] the goals in the proposed decision did not. They should have. Commission Staff has provided corrected numbers, which we have incorporated into Figure 1 above. This correction results in a slight reduction to SDGE's goals compared to what was reflected in the proposed decision.

[~~72~~74] D.14-10-046 at 11.

[~~73~~75] D.14-10-046, at 16-17 ("we have adjusted SDG&E's 2015 goal to reflect 120% of SDG&E's recent annual savings claims for commercial whole building retrofit programs. This considers (but does not require) a linear, five-year ramp up to the level of savings the draft 2013 Study forecasts for SDG&E.").

3.2. The "Rolling Portfolio" Review Process

3.2.1. Introduction

As we noted earlier, we allocate roughly $1 billion per year in ratepayer funds to ~~energy efficiency~~EE programs. In D.14-10-046, we authorized that level of funding for the next ten years. Tempting as it is to jump right into substantive changes to ~~energy efficiency~~EE portfolios, it is critical to attend to process now. Even – especially – in the face of potentially major changes to ~~energy efficiency~~EE policies in Phase III of this proceeding. Those policy changes, whatever they may be, will take some time to implement. We need a revised portfolio review process in place starting in 2016, so that portfolios can remain up-to-date.

In preparation for this decision, the Assigned Commissioner invited parties to work on a Phase II proposal during Phase I. Once Phase II was under way, at a March 9-10, 2015 ~~workshop~~Workshop (Workshop 1), a collection of parties[~~74~~76]

[~~74~~76] Joint Parties include:

1. San Francisco Bay Area Regional Energy Network
2. California Energy Efficiency Industry Council
3. Local Government Sustainable Energy Coalition
4. MCE
5. NRDC
6. ORA
7. PG&E
8. SDG&E
9. SCE
10. SoCal Gas
11. Southern California Regional Energy Network
12. TURN

(Joint Parties) made a largely[~~75~~77] unified presentation on how Rolling Portfolios could work (joint proposal). Parties submitted post-~~workshop~~Workshop 1 comments on

March 27, 2015.[~~76~~78] Building from that foundation, Commission staff prepared a white paper on rolling portfolio mechanics, which the assigned ALJ put out for public comment on May 19, 2015.[~~77~~79] Parties submitted comments on the white paper on May 26, 2015.[~~78~~80]

[~~75~~77] There were instances where individual joint party members diverged from the joint proposal. We will not catalog those divergences here, but will discuss them in the text as needed.

[~~76~~78] The following parties submitted post-workshop 1 comments:

1. 1.San Francisco Bay Area Regional Energy Network
2. Local Government Sustainable Energy Coalition
3. Center for Sustainable Energy
4. PG&E
5. NRDC
6. ORA
7. SDG&E jointly with SoCal Gas
8. EnerNoc, Inc.
9. TURN

[~~77~~79] http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=151794292.

[~~78~~80] The following parties submitted comments on the Commission Staff white paper on rolling portfolio mechanics:

1. California Technical Forum Staff
2. SCE
3. Association of Bay Area Governments
4. PG&E
5. MCE
6. National Association of Energy Service Companies

Footnote continued on next page

The joint proposal contemplates a "business plan"[~~79~~81] filed with the full Commission every five years. Beyond that, Commission Staff would see annual budgets filed as ministerial (i.e., Tier 1) advice letters, effective without further action by Commission Staff. Everything else, like reports and implementation plans, would happen informally either internally with PAs, in stakeholder processes outside the Commission, or in informal Commission Staff processes. Many current processes would continue, but be trimmed down and coordinated through a stakeholder-led "coordinating committee". PAs would set their own program goals and metrics, subject to our review.

Commission Staff, in its white paper following the joint proposal, " generally found the Joint Parties' proposal to provide a solid foundation for a " Rolling Portfolio" cycle framework. . . . The overall structure of the joint party proposal, with its business plans, implementation plans, and "bus stops" is reflected [in the white paper]." Staff's white paper recommendations did " depart from the joint party proposal in certain particulars," principally in adding

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7. SoCal Gas jointly with SDG&E
8. ORA
9. Southern California Regional Energy Network
10. NRDC
11. TURN
12. Local Government Sustainable Energy Coalition

[~~79~~81] "[Business plans] are major, new documents developed by each PA to describe its overarching strategy to support the State's EE goals & objectives and plans for each customer sector, and to seek EE funding approval." Joint Parties' Proposal: Portfolio Review Process, presented at Workshop 1, session 1, slide 8.

various filing requirements and Commission oversight not present in the joint proposal.

What we will adopt here is a blend of the joint proposal and the Commission Staff white paper proposal (recognizing that the Commission Staff white paper itself adopted much of what the Joint Parties proposed). Our concerns with the joint proposal lie with some of the joint proposal's details.

Thus, we largely adopt the joint proposal's overall structure. The approach we adopt follows a hierarchy, with the strategic plan at the top, guiding business plans, which in turn guide budgets and implementation plans. To summarize:

1. Strategic Plan – Commission developed, provides overarching guidance to PAs.
2. Business Plan – PA and stakeholder developed, PAs file periodically via application for Commission review; explains at a high level of abstraction how PAs will achieve the goals of the Commission's strategic plan; leads to a Commission guidance decision adopting the business plan and setting budget expectations to be more fully developed in annual budget filings.
3. Annual Budget – PA and stakeholder developed, PAs file annually via advice letter; provides a budget for the programs/implementation strategies described in the business plans.
4. Implementation Plan – PA and stakeholder developed, not formally filed with the Commission; uploaded onto a Commission-maintained website as (and a PA website also, at each PA's discretion); provides detail on programs/implementation strategies.

Before we delve into the details, a note on our overarching reasons for departing from aspects of the joint proposal is in order.

The joint party view seems to be that the joint proposal is trading a black box (Commission process) for a transparent box (stakeholder process). However, *from the Commission's perspective*, the joint proposal moves much that decision makers can currently see behind a curtain, or even off-stage altogether. In a twist on the maxim that "where you stand depends on where you sit," the joint party reliance on PA discretion and stakeholder processes in place of formal regulatory processes actually makes many ~~energy efficiency~~EE activities more opaque for Commissioners and possibly for other stakeholders who do not have time or ability to participate in multiple detailed stakeholder processes.[~~80~~82] It also raises due process issues.

This is true even with Commission Staff participation in stakeholder processes. The joint parties seem to conflate Commission Staff activities with Commission review under the rubric of "regulatory events." However, Commission Staff's participation in an informal process is not equivalent to *Commission* participation. Moreover, a stakeholder process, even with Commission Staff participation, is not necessarily an adequate substitute for Commission review of an application or advice letter. Open meeting laws and the Commission's ex parte rules may be in effect as concerns some or all issues covered in stakeholder processes. Commission Staff may not become an improper "conduit" for extra-record information. The Commission may be hard-pressed to perform its statutory responsibilities to protect ratepayers and

[~~80~~82] The joint proposal states that full Coordinating Committee meetings would be publicly noticed. However, the joint proposal also provides for topic-specific subgroups to review the PAs' sector and sub-sector activities. The joint proposal is silent on whether subcommittee meetings would be public; the implication is that they would be limited to topic area experts, as with past Project Coordination Groups (PCGs) such as the water-energy nexus PCG prior to that PCG's absorption into R.13-12-011.

authorize all cost-effective ~~energy efficiency~~EE if so much depends on a process into which the Commission has such limited visibility.

The Commission has generally weighed in biannually with guidance decisions and/or funding decisions. Baseline changes, cost-effectiveness methodology changes, changes in administrative structure; all of these things require Commissioner, not just Commission Staff, involvement. The Commission needs more opportunities to weigh in via decisions and/or resolutions than the joint proposal contemplated.

There are workarounds for these concerns. However, they tend to look much like current filings, hearings, and ~~workshops~~Workshops. These procedural mechanisms provide the Commission with a record, and allow decision makers to interact with stakeholders in ways they otherwise could not, albeit at a cost in terms of responsiveness and time.

Finally, the joint proposal raised timing concerns. The review schedule must allow everyone concerned adequate time to accomplish their work.

Our departures from the joint proposal flow largely from these considerations. We support the joint proposal's goals of moving towards informal processes in order to facilitate innovation and to make portfolios and the PAs that administer them more nimble. However, we must continue meaningful oversight of ~~energy efficiency~~EE spending, and insure due process for everyone concerned with the disposition of ~~energy efficiency~~EE funds.

With those considerations in mind, the sections below discuss how we will proceed with Rolling Portfolio Cycle mechanics.

3.2.2. Rolling Portfolio Mechanics

Commission Policy Guidance

The Commission will provide ongoing high-level strategic guidance via a "policy track" in an ~~energy efficiency~~EE proceeding. The policy track will run in parallel with more granular portfolio review activities.

In addition to dealing with discrete policy questions through the policy track, we anticipate adopting a revised strategic plan. We last adopted a strategic plan in 2008.[~~81~~83] We revised it in limited part in 2011.[~~82~~84] Commission Staff is working on a revised strategic plan, which will then undergo a public review and comment process.

Phase III of this proceeding will fulfill the role of the policy track beginning in 2016. We anticipate leading off Phase III with an examination of ~~energy efficiency~~EE baseline issues, followed by an examination of the role of the utility in ~~energy efficiency~~EE. Remaining items will follow. The emphasis in Phase III will be on strategic guidance.

Program Administrator Business Plan Applications

Each PA will file an initial business plan in 2016, as an application. Business plans will explain at a relatively high level of generality how PAs will effectuate the strategic plan.[~~83~~85] PAs will divide business plans into market sectors and subsectors as discussed below.

[~~81~~83] D.08-09-040.

[~~82~~84] D.10-09-047 (updating the chapter on lighting).

[~~83~~85] As discussed below, we are re-defining sectors versus those in the 2011/2008 Strategic Plan. Hence we are not directing here that the business plans precisely track the strategic plans sectors.

After the initial filing, PAs *must* file revised business plans only when a "trigger" event happens; PAs *may* also file revised business plans whenever they choose to do so. Business plan filings will generally be untethered to the calendar except that PAs will need to apply for an extension of funding – that is, a restarting of the ten-year clock -- no less than one year before funding is set to end.

There will be a stakeholder process associated with business plan preparation. Participants in that stakeholder process may be eligible for intervenor compensation, as we elaborate below. Commission staff may participate in the stakeholder process subject to parameters to be decided.

Business plans shall contain the following.

1. Portfolio summary and description of applicable intervention strategies;
2. A chapter for each of six sectors (residential, commercial, industrial, agriculture, public, cross-cutting) providing;
    - A description of each PA's overarching goals, strategies and approaches; near-, mid- and long-term strategic initiatives;
    - Sector-specific intervention strategies;
    - Description of how each sector approach advances the goals, strategies and objectives of the strategic plan.
    - Description of which and how strategies are coordinated statewide and regionally among PAs and/or with other demand-side options;
    - Description of how cross cutting 'sectors' are addressed.
        - Leveraging cross-cutting activities for success for particular customer groups.
        - Minimizing redundancy.
        - Avoiding working at cross purposes with other PAs.

- A description of any pilots contemplated or underway for the sector.

3. Portfolio and sector level metrics for regulatory oversight (~~GWh~~gWh, MW, therms, cost-effectiveness, and other metrics where applicable), including performance metrics for non-resource programs;
   - Statement of evaluation "preparedness" in terms of:
     - data collection strategies embedded in the design of the program or intervention to ensure ease of reporting and near term feedback, and
     - internal performance analysis during deployment.
4. Portfolio and sector-level budgets[~~84~~86] that meet portfolio savings and cost effectiveness requirements (note that the Commission will address budgets at a general level in response to business plans, but the Commission will give funding authorization in response to a subsequent PA budget advice letter);
5. Separate milestones with associated timelines to track PA programs in a sector, that are not formally reported (proposed only by some parties);

The joint proposal contemplated the business plans providing a "comprehensive vision outlining long-term strategic initiatives, intervention strategies, budgets and funding justification." Business plans would "focus on customer-oriented approaches."[~~85~~87] As Commission Staff pointed out in the white paper: "The challenge is striking the right balance between being specific

[~~84~~86] For the portfolio cost effectiveness showing, only cost calculator outputs need to be filed; the full-fledged cost calculator submittals will be in the subsequent budget filing.

[~~85~~87] Joint Parties' Proposal: Portfolio Review Process, presented at Workshop 1, session 1, slide 14.

enough to be strategic, but general enough not to end up duplicating implementation plans." [~~86~~88]

We adopt many aspects of the joint proposal plus some (but not all) of the Commission Staff's recommendations. We will focus our discussion below on where we depart from one or both of the joint proposal and Commission Staff White Paper.

Sector Definitions

The first departure from the joint proposal involves the sector organization. The question before us here is what to do about measures or strategies or interventions that do not cleave neatly along sector boundaries. An example of a cross-cutting intervention is lighting. Lighting plays a role in many sector-specific programs (e.g., residential retrofits). It also cuts across multiple sectors (e.g., lighting rebates for bulbs found in commercial, industrial, and residential buildings). Hence, "cross-cutting." Finance, marketing education and outreach (ME&O), workforce education and training (WE&T), codes and standards, and emerging technologies all can be considered cross-cutting. [~~87~~89]

Cross-cutting items by definition can be divided into sectors and/or be treated as standalone. The joint parties favor treating cross-cutting as a standalone sector "to reduce redundancy, increase clarity, and provide the 'full

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[~~86~~88] Commission Staff white paper, at 7.

[~~87~~89] In comments, some parties requested a definitive list of what falls under the definition of "cross-cutting," or at least a more refined definition. We lack the record here to offer more than an exemplary list.

picture'" for these activities." ~~88~~90 TURN, in contrast, "recommends that the various 'Cross-Cutting' activities be included as intervention strategies within each of the other sectors proposed by the Joint Parties, as appropriate." ~~89~~91 Commission Staff expressed concern that "the joint parties' specific program structure seems like it will create a new source of confusion, since cross-cutting is not actually a sector, and many of the programs in it are very distinct and not closely related." ~~90~~92

Sector assignment is a substantive issue, not merely semantic. The sector to which a program is assigned can determine who administers it, who controls its budget, how effectively it achieves savings, and who is accountable for the program's success or failure. Consider, for example, the Commission's ~~energy efficiency~~EE finance decision, D.13-09-044, and the Commission's ME&O decision, D.13-12-038. In both instances, the Commission shifted funds and operational responsibility for cross-cutting interventions from incumbent PAs~~91~~93 to other entities.~~92~~94

We will treat cross-cutting as a separate sector, as (most) joint parties propose. Segregation makes it easier to coordinate interventions, budgets and responsibility for cross-cutting activities across different administrators, or to move those activities to a single administrator if/when appropriate.

~~88~~90 Commission Staff Rolling Portfolio White Paper at 7.

~~89~~91 TURN comments on Commission Staff Rolling Portfolio White Paper at 2.

~~90~~92 Commission Staff Rolling Portfolio White Paper at 9.

~~91~~93 *See, e.g.*, D.13-12-038 at 59 ("We should reduce IOU funding for administrative staffing if it no longer adds value to statewide marketing.").

We recognize this approach might reduce tailoring of cross-cutting activities to particular service territories/sectors/programs/intervention strategies. Note that ultimately we still expect individual PAs to engage in cross-cutting activities where and when needed. It may, for instance, make sense to have a WE&T activity associated with a particular sector (e.g., residential duct sealing) and also have WE&T activities that cut across sectors (e.g., heating, ventilating, and air conditioning (HVAC) installation). The same is true for ME&O. We are not precluding PAs from engaging in ostensibly cross-cutting activities as part of that PA's sector approach. For example, a PA's residential retrofit program will include HVAC measures, even though HVAC is cross-cutting, as it does today. When treading into cross-cutting territory, PAs should minimize redundancy, and should avoid altogether working at cross-purposes. This will require coordination with whoever oversees a cross-cutting activity in a PA's service territory, if it is not the PA, and hence we are requiring documentation of the long-term strategy for the cross cutting activities in the customer sector plans.

Metrics

Joint parties intend the business plans to "provide *portfolio and sector-level* metrics to be used to assess PAs' progress towards goals." [~~93~~95] The joint parties ask "that the Commission clearly state that the existing program performance metrics (PPMs) and market transformation indicators (MTIs) will no longer be

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[~~92~~94] The other entities are the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA) for finance and Center for Sustainable Energy for ME&O.

[~~93~~95] Joint Parties' Proposal: Portfolio Review Process, presented at Workshop 1, session 1, slide 8 (emphasis added).

used past 2015, which will provide clarity and free up resources to work on other priorities." ~~94~~96 The Joint Parties propose to have PAs submit PPM/MTI reports annually instead of monthly, and for PAs to no longer report on and/or complying with existing PPMs and MTIs while PAs fashion new metrics.

The Commission Staff White paper calls for more granular metrics in the business plans.

Generically speaking, we use metrics to gauge portfolio and/or program performance. For resource programs, savings and spending are two possible metrics. For non-resource programs like workforce education and training, tracking measure installation quality over time might be a metric.

PPMs and MTIs are special kinds of metrics. They "measure and track whether a specific ~~energy efficiency~~EE portfolio program—e.g., incentives for high efficiency air conditioners—is advancing our market transformation goals." ~~95~~97

> In D.09-09-047 we directed IOUs to develop Program Performance Metrics (PPMs) to serve as objective, quantitative indicators of the progress of a program toward the Strategic Plan's short and long-term market transformation goals and objectives. . . . Given the extensive effort that has been invested by IOUs and Commission staff to develop the PPMs, we [were] confident that process will result in metrics that can be efficiently brought to bear to assess our progress toward the

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~~94~~96 NRDC comments on Commission Staff White Paper at 8-9. This is more than a little discouraging given the effort we put into establishing a collaborative process for developing PPMs in D.09-09-047 at 89-93. Once again, here is an experience that calls into question how effective collaborative processes can be where energy efficiency is concerned.

~~95~~97 D.09-09-047 at 88.

> market transformation objectives detailed in the Strategic Plan.[~~96~~98]

Resolution E-4385 approved an exhaustive set of PPMs and MTIs. Current practice is to set PPMs at, as their name implies, the *program* level.[~~97~~99] MTIs track combinations of programs rather than a specific program. PAs file monthly reports on PPMs. MTI progress is reported on a cycle basis.

In a more recent exploration of market transformation policy, Commission Staff recommended revisiting the role of MTIs:

> Measuring Progress Toward Market Transformation Goals: Review the role of MTIs. If the other policy changes suggested in this paper are made, then the current broad MTI framework might be best replaced by detailed program theories (and associated market effects indicators) for only those programs that are viewed as true market transformation initiatives.[~~98~~100]

With those definitions and that history in mind, here is how we will proceed.

PAs must establish up-front expectations for their activities. To that end, business plans shall contain sector-level metrics (not necessarily PPMs or MTIs).

PAs will still need to set more granular metrics than just sector-level metrics, but they will do so in implementation plans, not business plans. It is in the implementation plans that we want to see *at least* one metric for each

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[~~96~~98] D.10-10-033 at 36-37 (citing D.09-09-047 at 89).

[~~97~~99] D.09-09-047, Appendix 2.

[~~98~~100] *See* "Building a Policy Framework to Support Energy Efficiency Market Transformation in California" at 37. http://www.energydataweb.com/cpucFiles/pdaDocs/1207/MT_Policy_White_Paper_final_Dec%209%202014.doc.

program/strategy/sub-sector/intervention strategy; more than one where appropriate. The business plan is not the place for that additional level of detail.

The metrics PAs adopt can be PPMs or MTIs (defined terms, per D.09-09-047), but do not have to be. They will just be metrics –appropriate benchmarks against which to measure program/strategy/intervention performance, and should be designed to be valuable to implementers as well as other stakeholders to improve the chances of longevity of the metric and associated perspective of measuring it over time. In the business plans, we want to know what a PA intends to accomplish in a given sector in the short term and the long term. For example, we want to be able to tell that for investment of Y dollars we can expect to see X achievement(s) towards Strategic Plan objectives from Z programs/strategies/interventions in a sector. On subsequent review, we want to know where those programs/strategies/interventions fall on the continuum of success through failure. The same is true for both the general metrics in the business plans and for the more granular metrics in the implementation plans.

We are not going to require any particular number of metrics, such as Commission Staff's requested three metrics per sector. Requiring any number other than a non-zero one would be arbitrary. PAs will have to tie their metrics back to the Strategic Plan. As with so much that we do here, there is going to be an element of trial and error in determining the right type of, number of, and level of abstraction for metrics. This is an excellent place for stakeholder involvement, via the Coordinating Committee that we discuss more in section 3.2.2.2 below. The past experience in developing the PPM and MTIs should not be lost. The principles and frameworks for considering and developing the metrics and discussed in ~~workshops~~Workshops and meetings are still relevant today, even if the metrics themselves may need to be updated. In addition, experts in EM&V should contribute their expertise on process and impact evaluations to development of metrics.

Turning to the PPMs and MTIs now in place, we relieve PAs from their reporting requirements for both PPMs and MTIs under resolution E-4385. The joint parties' request was unopposed by any parties, including those that originally supported adoption of PPMs and MTIs. It appears that time has overtaken the utility of the specific PPMs and MTIs as currently adopted by the Commission. However, we encourage the PAs to utilize experience and possibly some actual metrics from the PPMs and MTIs, where warranted and logical.

A final word about metrics. Metrics complement EM&V but they do not displace it. As we observed as recently as 2013, "the PPM process, however, is not yet mature enough for use as an effective program evaluation tool. . . ." [~~99~~101] EM&V is still required to see whether and how effectively PAs achieve their metrics.

Showing of PA Staff Resources for Sectors

Commission Staff recommended that PAs identify who would work on sectors, and provide a PA organization chart. This seems of a piece with our other efforts to reduce administrative costs. We conclude, however, that tracking staffing levels, or even individual employee activities, is more detail than appropriate for the business plans. Commission Staff can ask for organization charts via data requests as necessary.

[~~99~~101] D.13-09-023 at 80.

Business Plan Budgets

Some commenters on the proposed decision expressed confusion about the interaction of the business plan budgets and the annual advice letter budget filings.

To clarify, the business plans are to provide *general* information on the expected levels of annual spending for the duration of the business plan (i.e., "under the business plan, we expect spending to be $X per year for up to ten years"). The decision on the business plan will provide guidance for PAs on funding levels to use in developing the more detailed annual budgets that PAs will file via advice letter. The decision on the business plan will also provide guidance to Commission Staff in reviewing those annual filings.

The decision on the business plans will not establish a particular amount for cost recovery (for IOUs) or for transfers from IOUs (for CCAs) or for contracting purposes (for RENs). It will establish a "ballpark" figure for spending for the life of the business plan. The annual advice letter filings, not the business plans, will propose detailed budgets for cost recovery, transfer, and contracting purposes.

The goal is to give flexibility to PAs to adjust spending during the life of the business plan. Giving PAs this flexibility necessarily entails some discretion for staff in reviewing the annual advice letters. Hence those advice letters are properly Tier 2 rather than Tier 1, as discussed later in this decision.

Business Plan Schedule

PAs will file *full* business plans, for all sectors, including cross-cutting, during 2016. In the second Phase II decision, we will set a filing date; it will be no later than September 1, 2016, consistent with our discussion of the implementation plans and business plan "triggers." We agree with TURN that

"The State would benefit from having this document sooner rather than later," but it is premature to set a date now when we have not fully addressed portfolio changes to make in 2016.[~~100~~102]

Once PAs file their initial business plans, PAs will not file business plans again until either (1) a trigger mechanism requires a subsequent application, or (2) a PA elects to file a new business plan. Triggers are:

1. A PA is unable to adjust its portfolio in response to goal, parameter, or other updates to:
   a. meet savings goals,
   b. stay within the budget parameters of the last-approved business plan, or
   c. meet the Commission-established cost effectiveness (excluding Codes and Standards and spillover adjustments)
2. The Commission calls for a new application as a result of a decision in the policy track of the proceeding (or for any other reason);
3. The affected PA must file a business plan not less than one year prior to the end of funding. As noted above, ~~energy efficiency~~EE funding is in place for ten years. We expect to extend funding well before those ten years run, in response to business plan filings, and on a rolling basis as business plans come in thereafter. However if we have not otherwise extended funding and a funding cliff is approaching, PAs shall file for extended funding.

[~~100~~102] Relatedly, some commenters on the proposed decision recommended setting different filing dates for different classes of PAs (e.g., MCE requests direction for CCAs to file before IOUs, while PG&E recommends that RENs and CCAs file budgets only bi-annually). We decline to require different filing timing for particular classes of PAs. RENs and CCAs should work informally with IOUs where IOUs need information from RENs or CCAs for concurrent filings.

Some parties expressed concern over vagueness in the triggers. These triggers are actually as close as we can get to a bright-line set of requirements. The obvious objective for PAs will be to frame the business plans as strategically as possible to minimize the need for re-filings.

A more detailed list of what a business plan shall contain is set forth in Appendix 4. We delegate to Commission Staff responsibility for developing additional business plan guidance. Commission Staff should balance the need for information from PAs with the need to keep business plans compact and focused, and to reduce PA administrative costs.

In comments on the proposed decision, parties asked for additional detail on business plan contents (and on the process for determining such contents). Commission Staff ~~is requested to~~shall prepare a white paper further detailing what business plans should contain. Commission Staff shall circulate the white paper to the service list in this proceeding, and take informal comments on the white paper. Commission Staff shall then prepare a guidance document detailing what business plans shall contain, with a template for PA use.

Annual Budget Advice Letter Filings

Our overarching goal with the budget filing requirement is to ensure meaningful budget review without turning the triennial fire drill under the existing review process into a series of annual fire drills. The rolling nature of the portfolio should afford an opportunity to stabilize the flow of information, improve access, and enable review and analysis by stakeholder groups to support compliance. The debate here is over the form, content, and level of review of annual PAs annual budgets. The joint parties have proposed a Tier 1 advice letter filing. A Tier 1 advice letter is effective pending disposition; no Commission or even Staff action is required.[~~101~~103]

Commission Staff would have each PA file a budget proposal as a Tier 2 advice letter whenever it files its business plan, and every calendar year by the first business day in September thereafter, if the PA has not filed a business plan that year. In addition, Commission staff would have each PA list in its budget advice letter changes it made to implementation plans in the prior year. Along with the budget advice letter, each PA would upload to a centralized web page (~~Energy Efficiency~~EE Statistics[~~102~~104])detailed cost and savings information in support of its budget filing in a standardized format across administrators.

The joint party proposal would reduce budget review to a ministerial task. This proposal, however well intentioned, provides the Commission with an inadequate level of oversight. Conversely, the Commission Staff proposal seems much closer to a full-blown application filing than needed.

With those concerns in mind, here is how we will proceed.

On the first business day in September, each PA will file a Tier 2 advice letter for continued collection of ~~energy efficiency~~EE funding from ratepayers, consistent with the last Commission-approved business plan.[~~103~~105]

[~~101~~103] General Order 96-B.

[~~102~~104] Historically Commission Staff has maintained a webpage for submission of energy efficiency data from the Program Administrators. This ensures public access and tracking by all stakeholders with the exception of private information. The site has been updated on an ongoing basis to meet the needs of parties. It is funded through the EM&V budget and is external to the Commission web page. Energy Efficiency Statistics is the current web page maintained by Commission Staff: http://eestats.cpuc.ca.gov/.

[~~103~~105] If a PA has a new business plan awaiting approval before the Commission when the budget filing is due, the PA should file a budget consistent with the last approved business plan. If the Commission approves a business plan close to September, (e.g., the Commission issues a

Footnote continued on next page

The advice letter will contain:

1. **Portfolio Cost Effectiveness statement**; only cost calculator outputs will be filed in paper; the detailed cost-effectiveness calculator data will be submitted electronically in an online tool and be referenced in the advice letter;
2. **Application summary tables** with forecast budgets and savings by sector and program/intervention; filed in paper, with an electronic query output available in an online tool; and,[~~104~~106]

The joint parties proposed to report on portfolio changes, update sector level forecasted budgets and savings, report on fund shifting and disclose annual spending in PAs' Annual Reports instead of in an advice letter. We want this information for use at the same time we receive budgets, and we want it submitted formally via the same advice letter that contains the PA's budget. That way, Commission Staff can use it when reviewing budgets and, if needed, drafting a corresponding resolution. Since the joint proposal already contemplated providing this information, this requirement should not impose much, if any, burden beyond what joint parties already contemplated.

The annual review we contemplate here *should* be relatively ministerial. However, if a PA departs in significant ways from that PA's most recent budget, the PA can expect a higher degree of scrutiny from Commission Staff, and

decision approving a PA's business plan in August) , then the Commission may also need to set a new filing date for that PA's business plan as part of the decision approving the business plan.

[~~104~~106] PAs will provide the specific details on implementation changes in the online tool we describe in the implementation plan section of this decision. PAs will provide more general descriptions of implementation plan changes in their annual advice letters.

possibly a suspension of the advice letter.~~[105]~~[107] In comments on the proposed decision, some commenters asked what happens if the calendar year ends before disposition of the advice letter with the budget for the next calendar year. In that case, the prior year's budget shall remain in place until disposition of the pending advice letter. IOUs shall continue to recover costs, and make transfers to CCAs and RENs, based on the prior year's authorized budget. The idea is that a budget remains in place until superseded by Commission or Commission Staff action on the new budget.

Cost and savings information comprises the bulk of budget filings as they form the core justification for the proposed expenditures. The claims submissions and evaluation outputs have already been standardized to be submitted through the online tool. As commenters on the proposed decision noted, the application data are fundamentally prospective, while claims are retrospective. Nonetheless, the portfolio application data should be structurally similar to the claims data, as both will draw from the same underlying sets of measure savings data (e.g., DEER). This will be something for Commission Staff to address when setting up the business plan template.~~.~~

SDG&E and SoCal Gas, in comments on the proposed decision, ask that PAs only provide cost-effectiveness and savings forecast data with business plans, and not with budgets. We *do* want cost-effectiveness and forecast data filed with budgets. These data are essential for evaluating whether the budgets will achieve the business plan metrics. These data assist Commission Staff to determine whether a "trigger" for a new business plan is warranted.

~~[105]~~[107] *See* General Order 96-B, 7.5.2 (Initial Review Period; Suspension; Status Report).

Ideally, Commission staff ~~shall~~will provide the filing tool in time for an annual budget submission in 2016. Failing that, we will have to defer budget filings to 2017 (which may happen in any event, depending on how long it takes the Commission to review and approve business plans).

We delegate to Commission Staff responsibility for developing additional annual filing guidance and the tools to track compliance, simplify submission, and ensure transparency. Commission Staff should balance the need for information from PAs with the need to keep business plans compact and focused, as well as the principles noted at the beginning of the section. Commission Staff shall use the following guidance in defining the specifics of the submission:

1) Consistency and stability of the information over time;
2) Access to common information by all stakeholders;
3) Level of detail that allows aggregation (rather than multiple submissions customized for a particular piece of information) ;
4) Incremental changes are clear, transparent, and tracked; and,
5) Notification to stakeholders when changes to the online tool are made.

Several commenters on the proposed decision expressed concern about seeming redundancy between the business plan budgets and the annual budget filings. The discussion in the business plan section of this decision should allay that concern. To reiterate:

- The business plan contains high-level budget estimates, and will result in a decision providing Commission guidance for PAs in preparing and Commission Staff in reviewing annual budget filings.
- The annual budget filing is more detailed, and will result in spending authorization (for all types of PAs) and revenue

requirement for rate recovery purposes (for the IOU subset of PAs).

Some commenters also expressed concern about the level of work required for the annual budget filing creating the annual end-of-year time crunch that we seek here to avoid. To clarify, the annual budget filings and their associated review should be relatively ministerial. The question for Commission Staff in reviewing a budget advice letter should be "does this conform to the approved business plan?" The annual budget filings are *not* designed to create a forum for debating the merits of particular programs; that is for the business plan proceeding. Neither are the annual budget filings supposed to create a forum for debating the merits of how PAs implement particular programs; we address the process for implementation plans below. We acknowledge that the first filing and review under a business plan will likely take more time and effort to prepare and review than subsequent filings/reviews, which we expect will in large part be able to re-use a prior year's budget. We are looking to information technology solutions to keep that filing tractable.

Implementation Plans

As just discussed, PAs will submit implementation plans and all associated cost and savings data to a Commission-maintained online system. The output of the online system will provide that each program can be displayed as its own webpage, complete with ex ante data, and links to files and other non-data documents such as logic models, program manuals and other relevant narrative. The system will control versioning, making it clear when PAs change implementation plans. As tracking data comes in, it will be shown in summary format on the program's page to enable comparison with the application.

Each PA will maintain current implementation plans on the publicly available web page as described in the preceding section. PAs can change the implementation plans as needed without further review, and the version on the publicly available web page will always be current. PAs will catalog any changes, or it will be automated, and file a list of the changes annually as noted above. The current system of maintaining PDF copies of implementation plans with tracked changes is not sustainable in a rolling portfolio environment.

We will not require replacement of all existing program implementation plans (PIPs)[~~106~~108] with new implementation plans. That is, we see no value in requiring PAs to immediately reformat all of their current PIPs into the implementation plan format. We will "grandfather" existing PIPs. ~~EEStats~~EE Stats will allow for upload of both current PIPs and future implementation plans. The difference will be in the upload format. PIPs will only be uploadable as documents. Implementation plans will be submitted in electronic form in an online tool. The implementation plans will have greater functionality than PIPs, so we encourage PAs to migrate from PIPs to implementation plans over time for evergreen programs, even though we do not require the migration on any particular timeline.

There will be a stakeholder process associated with implementation plan preparation, as discussed in detail in section 3.2.2.2. This should be the first

[~~106~~108] PIPs are what we historically required PAs to file with their applications to describe individual programs. Joint parties have asked that we drop the word "program," since much of what they propose to undertake will not be "programs" as commonly understood, but instead will be "intervention strategies," We will adopt "implementation plan" here to distinguish what we are going to require of PAs going forward from what we have required previously to describe the specifics of PA activities.

forum for addressing any aspect of the implementation plans. Such issues could range from the detail needed to track changes as discussed in section 3.2.2.3 above, through appropriate metrics and information collected, to much more macro issues such as the adequacy of a proposed implementation strategy, coordination and standardization of program design across PAs.

Implementation plans will contain metrics, as already discussed. PAs are free to start with a clean slate in developing metrics and associated reporting requirements, but for *all* programs will continue to provide monthly cost reports, and for *resource* programs will provide monthly savings data as well.

The submission tool will allow for tracking incremental changes to the PA proposals, and notifying parties when a change has happened. The details of addressing this functionality are delegated to Commission staff.

As part of the implementation plans, PAs are to provide (and keep current) PA-designed manuals and rules that provide guidance to customers and implementers with respect to program delivery, including measure and participant eligibility requirements. The manuals and rules must follow Commission policy and guidance as provided in past decisions and rulings, as well as guidance provided by CPUC Staff as a result of *ex ante* and ex post activities.

If (alleged) non-compliance with Commission/Commission Staff direction is identified in the implementation plans, manuals, and/or rules, the dispute resolution process we previously approved for ex post evaluation disputes in D.13-09-023~~[107]~~[109] may be invoked. A party may file a "Motion for

~~107~~109 D.13-09-013 at attachment 4.

Implementation Plan Dispute Resolution" in this docket (R.13-11-005) or in the relevant PA's most recent business plan application docket. This formal procedure ~~should~~may only be invoked after informal attempts to resolve disputes have been exhausted.

Stakeholder Processes for Business Plans and Ongoing Programmatic Evolution

We have promoted many ~~energy efficiency~~EE stakeholder processes over the years. Currently, we are aware of the following stakeholder processes:

Stakeholder Group Title	Outcomes/ objectives
Demand Analysis Working Group (DAWG)	Pertinent to Commission ~~energy efficiency~~EE activities, the DAWG vets energy savings goals before formal issuance/adoption
EM&V Stakeholder Quarterly Meetings and Project Coordination Groups (~17 Total)	Prioritizing research, commenting on methods, reviewing results, follow-up on 60 day reports, satisfying webinar requirements. (See Version 5 of Joint EM&V Plan for List of Coordination Groups and structure[~~108~~110])
Western HVAC Performance Alliance (WHPA)	Inform the development and implementation of efficiency policy and programs focused on topics such as HVAC workforce education and training, HVAC system specifications, code compliance, proper installation, system commissioning, operation, service, and maintenance, and emerging HVAC technologies.
Emerging Technology Coordinating Council	Share research, coordinate research, vehicle for submitting new research ideas
IDEA365 Peer Review Group (PRG)	Review proposals for new programs
CalTF (and CalTF advisory	Peer review of energy savings impact workpapers

[~~108~~110] Joint EM&V Plan V5: http://www.cpuc.ca.gov/NR/rdonlyres/2B9A7A84-E787-4023-89C3-F376B0CF018B/0/EMVEvaluationPlan20132015.pdf.

group)	
ME&O stakeholder group	Discuss communication plans, collaborate
Home Upgrade Program working group	Program compliance and implementation, best practice sharing
Compliance Improvement Advisory Group	Inform the IOU C&S Compliance Improvement subprogram activities and produce white papers shared publically via their website
SoCal Gas Program Advisory Group	Stakeholder and local government partner updates of IOU or CPUC ~~energy efficiency~~EE developments
Local Government Advisory Groups/ Project Coordination Groups (PCGs)	Various, including two advisory groups for EM&V activities.

Not listed above are the ~~energy efficiency~~EE Peer Review and Program Advisory Groups (PRGs and PAGs) that ~~Decision~~ D.05-01-055 established. The PAGs and PRGs were (apart from SoCal Gas's) short-lived endeavors. In D.07-10-032, we eliminated ~~energy efficiency~~EE PAGs in favor of other processes for considering strategic deployment of ~~energy efficiency~~EE programs and measures. In
D.09-09-047, we eliminated mandatory PRGs. PAGs have continued since then on a voluntary basis for SoCal Gas, but are otherwise a thing of the past.

Also not listed is the evaluation PCG we established in D.12-05-015 to " review, deliberate, and provide feedback on IOU proposals for changing the Market Transformation Indicators adopted in the upcoming Ruling."[~~109~~111] This PCG appears to be inactive.

Faced with this plethora of participation opportunities, the Joint Parties complain simultaneously of too many stakeholder processes, and not enough

[~~109~~111] D.12-05-015 at 357.

opportunities for meaningful stakeholder input.[~~110~~112] In many respects, these complaints echo those that led us away from PAGs and PRGs.[~~111~~113] The Joint Parties' proposed solution for what they characterize as dysfunctional stakeholder processes is the "Coordinating Committee."

The joint parties propose stakeholder processes to obviate the need for most Commission-directed processes in managing ratepayer-funded ~~energy efficiency~~EE programs:

> Furthermore, the [joint parties] fully support the Commission initiating Rulemaking proceedings when necessary, but emphasize that it is in the best interest of Staff and parties to first rely on collaborative efforts to address matters that do not necessarily require such formal endeavors. For example, while the Commission may need to provide high level Portfolio Guidance from time to time, the [joint parties] recommend that such guidance not come in extensive decisions issued as part of the Policy Track. Any relevant specifics should instead be left to informal collaborative forums to avoid challenges experienced in the past where formal decisions provided specific directions regarding how to design programs for forthcoming Applications.[~~112~~114]

The Joint Parties assert that the Coordinating Committee will:

[~~110~~112] *See*, *e.g.*, TURN Workshop 1 comments at 3 ("[W]e do not have a meaningful opportunity to engage with the IOU PAs and discuss the real portfolio challenges and opportunities, and most importantly, to have this dialogue in a substantive way and in time to potentially influence what the IOU PAs bring to the Commission.").

[~~111~~113] D.07-10-032 at 105 ("We take seriously the concerns of many parties regarding the PRGs and PAGs, especially the comments that these are more often forums for the utilities to present decisions already made rather than to seek input in a collaborative manner. We also share the utilities' concerns that advisory groups are not effective ways to provide useful information on the details of utility program management or administration. ").

[~~112~~114] NRDC comments on Commission staff's rolling portfolio white paper at 30 (emphasis added).

1. Provide an ongoing forum for stakeholders to bring ideas for consideration (e.g., new ideas) that could be referred to the appropriate topic specific subgroup;[~~113~~115]
2. Leverage what is working;[~~114~~116]
3. Identify and aim for resolution and/or propose recommendations for CPUC consideration on timely and critical issues;[~~115~~117]
4. Seek to find efficiencies in the process (e.g., review opportunities for combining meetings, prioritize key issues for stakeholders to discuss, etc.);
5. Coordinate activities important to implementing a "rolling portfolio.[~~116~~]"[118]

There is a striking similarity between the Coordinating Committee proposal and the (unrealized) vision we had for the PAGs and PRGs (as well as for a broader scope for PAGs and PRGs that we rejected in D.05-01-055). The obvious question, already addressed to some extent in the introduction at 3.2.1

[~~113~~115] *Compare* D.05-01-055 at 98 ("[Advisory groups] create the forum for an open and informative exchange of information among Program Administrators, industry experts and stakeholders").

[~~114~~116] *Compare* D.05-01-055 at 100 ("we expect the IOUs and PAGs to ensure that statewide residential and nonresidential program offerings take advantage of 'best available practices'").

[~~115~~117] *Compare* D.05-01-055 at 101 ("PAGs will provide a joint report to the Energy Division with recommendations on how the IOUs can improve their effectiveness as administrators in managing the portfolio of programs, including how the program selection process could be improved to better meet the Commission's procurement goals. If consensus on these issues cannot be reached, the report should present consensus and nonconsensus positions.").

[~~116~~118] Joint Parties' Proposal: Portfolio Review Process, presented at Workshop 1, session 1, slide 10.

above, is why will a new stakeholder process be any more successful than its predecessors?[~~117~~119]

TURN provides an interesting answer: "Against the backdrop of the untenable status quo, TURN submits that [the coordinating committee] is a gamble worth taking. And if we end up back in the same place in a decade, it won't be for a lack of trying something different." [~~118~~120] If the result is, as TURN hopes, "a meaningful opportunity to engage with the IOU PAs and discuss the real portfolio challenges and opportunities, and most importantly, to have this dialogue in a substantive way and in time to potentially influence what the IOU PAs bring to the Commission," [~~119~~121] then we will have achieved what we set out to do in creating PAGs and PRGs in D.05-01-055. On its face, there seems to be little portfolio quality risk associated with putting this to the test, although the intervenor compensation levels will need to be managed to avoid significant ratepayer costs for an as-yet undetermined benefit.

The Joint Parties propose the following refinements on previous stakeholder efforts:

- A clear charter or mission,
- Defined and measurable outcomes (e.g., deliverables or decision points),

[~~117~~119] In asking for comments on the joint proposal, the Assigned Commissioner and ALJ asked: "How can we be confident that the various stakeholder groups will not end up as dissatisfied with the joint proposal process as they appear to be with the current stakeholder processes (e.g., the Program Advisory Groups)? Relatedly, how can we be confident that stakeholders will participate in those processes?" Administrative Law Judge's Ruling Regarding Comments on Phase II Workshop 1, March 18, ~~2015~~2015, at 4.

[~~118~~120] TURN comments on Workshop 1 at 3.

[~~119~~121] TURN comments on Workshop 1 at 2.

- Process to keep track of discussions,
- An independent facilitator and administrative support,
- Committed and representative membership,
- Presentation of ideas at an appropriate time to allow for input early in development,
- Resources to "follow through" with action items and decisions, and
- A feedback loop for PAs to update stakeholders on actions taken after a discussion.

These recommendations largely overlap those of a 2007 report we commissioned on PAGs and PRGs, as referenced in D.07-10-032 (the TecMarket report).[~~120~~122] Our response to the report in 2007 was to disband the PAGs. Today, given that our alternative approach did not work as well as hoped, we can use the TecMarket report to help the next generation of stakeholder groups work better than their predecessors.

In recognition of the foregoing, we will adopt the following recommendations for the coordinating committee, blending the recommendations of the TecMarket ~~Report~~report, the joint proposal, and our experience with various past and present stakeholder activities.

1. Intervenor Compensation: PAG and PRG participation was eligible for intervenor compensation prior to termination.[~~121~~123] We will extend intervenor compensation eligibility to

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[~~120~~122] D.07-10-032 at 105, n. 103. The report, conducted pursuant to a contract with the Commission, is titled "Program Advisory Group and Peer Review Group Process Evaluation" and was published February 14, 2007 by TecMarket Works (TecMarket Report).

[~~121~~123] D.07-11-024 at 3. For examples of our granting intervenor compensation for participation in energy efficiency PAGs and PRGs, *see* D.06-01-034 (awarding compensation to UCAN), D.07-04-008 (awarding compensation to NRDC), and D.08-04-022 (awarding compensation to TURN).

stakeholder participation in stakeholder processes around developing and revising business plans. The guidelines we established in D.07-11-024 will apply to claims for stakeholder participation in stakeholder processes around developing and revising business plans. We remind parties that any claims for intervenor compensation will, of course, be subject to the usual requirements applicable to intervenor compensation claims. Claims must include enough information for the Commission to make the findings required by §§ 1801-1812. In particular, an intervenor seeking compensation for work on the joint proposal must clearly describe its unique contribution(s) to developing a proposal that helps to achieve the overarching process goals articulated in R.13-11-005. A claimant must also demonstrate reasonable collaboration with others to avoid duplication of effort. Claimed amounts must be reasonable. As with other extra-proceeding intervenor compensation claims, we will have to work through the inherent difficulty of knowing whether/to what extent an individual claimant influenced a group outcome where we did not participate in the group's deliberations. We will address such issues on a case-by-case basis. This entails some uncertainty for stakeholders, but that is presumably preferable to the certainty of no recovery.

2. One statewide coordinating committee, with a single individual as chairperson, or not more than two co-chairs. There is no need for PA-specific PAGs, as the PAs all deal with a similar set of issues. The focus then can be on how the PAs incorporate the ideas and concepts developed by the coordinating committee into their specific portfolios. Longer meetings may be a consequence of this approach, but meetings should be fewer in number. A single coordinating committee should facilitate greater statewide coordination and harmonization of statewide programs across PAs. As we said in D.05-01-055, "we expect the [PAs] to ensure that statewide residential and nonresidential program offerings take advantage of best

practices and avoid customer confusion by being as uniform and consistent as possible. It should also reduce participant travel costs. Subcommittees should be along sector lines, not separated by PA. The coordinating committee should select the chairperson(s) for the coordinating committee, and also should select the chairperson(s) for each subcommittee.

3. Charter of Mission for the Coordinating Committee and its members. A complaint about many prior stakeholder activities (PAGs and PRGs in particular) is that many PAG members did not understand the roles of the CPUC, PAs, or themselves, and noted that various participants played different roles depending on the individuals attending. Some thought that the CPUC was to be in charge, others said the IOU was in charge, others said that the membership should be in charge. To avoid confusion and conflicting opinions, these roles should be made clear to all members. The practical reality is that stakeholders other than PAs (and more particularly the IOU subset of PAs) will be unable to cover more than a discrete and focused subset of issues under the auspices of the proposed stakeholder group. What we said in response to a similar proposal to have stakeholders shoulder more of the policymaking burden in D.05-01-055 remains instructive today: "We believe that the resolution of significant policy and program management issues can be better achieved through other procedural venues, including ~~workshops~~Workshops." There will continue to be an ongoing need for Commission involvement in ~~energy efficiency~~EE at multiple levels; we neither can nor should defer matters to stakeholders to the degree joint parties propose. With those considerations in mind, here are the roles we envision for the coordinating committee and its members.

   a. Scope of Work:

i. Provide input into development of business plans *prior to and throughout the drafting process* (see notes below re scope of input and timing);

ii. Provide input into development of implementation plans, again, *prior to and throughout the drafting process*;

iii. Provide input into development of annual budget advice letters, again, *prior to and throughout the drafting process*; and,

iv. Provide input into development and revision of metrics for inclusion in business plans and implementation plans as part of i and ii.

v. Provide a clearinghouse for discussion of the scope and schedule of other stakeholder processes.

b. The coordinating committee may take on other issues, but we will not authorize intervenor compensation for parties participating in coordinating committee work outside the above scope (e.g., we will not provide intervenor compensation for coordinating committee work on EM&V).

c. We authorize Commission Staff to participate in the coordinating committee. Commission Staff shall develop a proposed scope of participation. They are to work with Legal Division to ensure our compliance with relevant open meeting and *ex parte* laws, rules, and regulations. We will put a proposal out for comment. In the meantime, Commission Staff should limit input into the coordinating committee to high-level guidance. We note that staff perspectives may not reflect the final position of the Commission, and cannot bind the Commission.

d. For the coordinating committee to work, PAs must be collaborative. PAs should work with the coordinating committee "consistent with today's decision in the spirit of the collaborative approach they discuss in their filings." [~~122~~124] PAs shall give stakeholders early and meaningful opportunities for input, as discussed more below.

e. Non-PA stakeholders should focus on program/strategy/intervention design consistent with the Strategic Plan, statewide coordination, market characteristics, and particularly on cost effectiveness as defined by our adopted cost-effectiveness methodologies. The TecMarket ~~Report~~report noted allegations by some PRG members that "not all PRG members fully understand the concept of cost-effectiveness even though the PRG is specifically charged with improving the cost-effectiveness of the portfolio in the ALJ's order establishing the PRGs. Members also noted that improving the cost-effectiveness of the portfolio requires expert skills that may not be embedded in the membership of the PRG." [~~123~~125] We do not want to see those shortcomings repeated here. Stakeholders should staff the coordinating committee accordingly and/or arrange for appropriate preparation of those who will participate in stakeholder processes.

6. Group-developed agenda: Stakeholders will collectively set the coordinating committee agenda. A PA to be selected by the stakeholders will file an annual Tier 1 advice letter in January setting out the coordinating committee meeting plans and agendas for the year. A PA to be selected by the stakeholders will post to the online tool any modifications to the meeting plans during the year.

~~122~~124 D.05-01-055 at 98.

~~123~~125 TecMarket Report, at 29.

7. Run by a facilitator, and with an operational budget: Stakeholders are to arrange for professional meeting facilitators. PAs will fund the coordinating committee budget pro-rata based on their share of the overall authorized annual ~~energy efficiency~~EE spending. The budget will be filed with us for review as part of the Tier 1 advice letter containing the meeting plans. Budget should be the minimum needed to hire a facilitator and conduct meetings to cover the scope of work outlined above. This is not a blank check. Also, we will review how well the facilitator is functioning. The Commission delegates to Commission Staff to decide whether to continue with a particular facilitator. If it is brought to our attention that the facilitator *concept* (as opposed to a particular facilitator) is not working, we will revisit whether to continue with a facilitator at all.

8. Coordinating committee meeting process

   a. The coordinating committee chairperson is responsible for convening coordinating committee meetings.

   b. More meaningful/earlier input. A consistent theme from stakeholders is that non-IOU stakeholders want more influence over portfolios and the programs within the portfolios, rather than only reacting to the programs placed in front of them to review. PAs are to involve stakeholders early and often in business plan and implementation plan development.

   c. Equal input opportunities: stakeholders should have equal input opportunities within the discussion process and individual IOU and non-IOU members should not be allowed to dominate the discussions.

   d. Sufficient review time of materials: Another common complaint about stakeholder processes is that they are too rushed, that stakeholders did not have enough time to review the materials provided to them, and that there are many instances in which materials were provided too late to be reviewed prior to the meetings, or not at all. The coordination committee will need to develop rules for timely submittal of materials for review, and hold all participants accountable to these rules, to see that these problems do not re-emerge.

e. Records of meeting outcomes: there is to be a decision-advice documentation trail, so that the advice of the coordinating committee, as a group, moves into program design changes or results in a documentation of why specific advice is not used. The facilitator shall also ensure an objective and clear decision-advice documentation trail.

f. More reliable conference room equipment: many stakeholder events are hampered by poor conference calling equipment not designed to capture all attendee conversations. Reliable, multi-distributed microphones that allow all attendees to be heard need to be provided for coordinating committee events.

Many commenters on the proposed decision requested additional guidance on the Coordinating Committee's role, its membership, and its governance. While we want to avoid micromanaging the Coordinating Committee, we agree that some additional guidance is in order.

First, PAs, not the Coordinating Committee, are responsible for the content of what PAs file with the Commission (i.e., applications and advice letters).[~~124~~126] PAs also bear responsibility for what PAs post to Commission-maintained web sites pursuant to this decision (e.g., implementation plans). This means that PAs, not the Coordinating Committee, will have the final say in what PAs file and/or post with the Commission.

The Coordinating Committee's role is to advise the PAs. The Coordinating Committee therefore needs both stakeholder and PA participants, but *PAs must*

[~~124~~126] *See* Rules of Practice and Procedure, Rule 1.

not dominate Coordinating Committee proceedings. PAs must provide the Coordinating Committee with information in a form and on a timeline that allows for meaningful stakeholder input. ~~Beyond that~~In addition, PAs must be willing to take Coordinating Committee advice. If the Coordinating Committee becomes a "forum[] for the utilities to present decisions already made rather than to seek input in a collaborative manner," [~~125~~127] rather than a source of useful input, then we will be back to the drawing board.

What this translates to in terms of Coordinating Committee and subcommittee membership is that anyone should be able to participate. We understand the Joint Parties' desire to require a certain level of commitment and subject-matter competence. However, the more of a time commitment and the more selective the experience and training required to participate, the more the participant pool could be winnowed down to utility employees. In other words, imposing formal requirements for membership increases the likelihood of IOU domination of the Coordinating Committee. Hence our unwillingness to impose such requirements. In practice, we would expect that participants will self-select their level of participation appropriately.

We will require that subcommittees be on a sector basis, notwithstanding some commenter's objections. Sector organization should promote uniformity across PAs by having all PAs discuss all statewide programs for a sector in a single statewide forum.[~~126~~128] Sector-specific subcommittees should also simplify translation of subcommittee work to business plans, which will also be organized

[~~125~~127] D.07-10-032 at 105.

[~~126~~128] As contrasted with, say, PA-specific subcommittees, with a correspondingly fragmented discussion of each PA's sector-specific approaches.

by sector. This direction does not preclude formation of other ad-hoc subcommittees, if needed. Again, though, ad-hoc committees should be the exception, not the rule.

We expect that the Coordinating Committee will obviate the need for some current stakeholder processes. From a practical perspective, some current processes will have to give way, as stakeholders and Commission Staff have time for only so many processes. If the Coordinating Committee simply becomes another addition to the long list of ongoing stakeholder activities in ~~energy efficiency~~EE, it seems unlikely to succeed.

That said, we do not prescribe here which current processes should change (or cease altogether). As joint parties noted in comments on the proposed decision, this is something that the Coordinating Committee itself should take up with PAs in initial meetings. We have modified the scope of the Coordinating Committee's role above accordingly.

Whether a more stakeholder oriented approach to ~~energy efficiency~~EE programs will work ultimately comes down to trust. No matter how many rules we promulgate, no matter how prescriptive Commission Staff and we are, ultimately this edifice will stand only if all concerned act in good faith towards a common goal of reduced energy use for a given level of activity. In closing our remarks on the stakeholder process, we repeat here the admonition we gave in D.05-01-055: "we provide general guidance and expectations for the [stakeholder] group structure, but purposefully do not specify every implementation detail.

Technical Updates to DEER

DEER updates (available via on line datasets and documentation on DEEResource.com) flow into the portfolio development process by providing new savings estimates from which to design programs. New savings estimates, including baseline assumptions, inform where a current program may need to shift to continue to capture savings cost effectively. DEER updates may also reflect new market conditions (reflected in baseline and predicted attribution rates). PAs need to factor in all of these new values and assumptions by a) knowing there is an update, b) understanding the fundamental assumptions for the update, and c) identifying necessary shifts to their programs to still capture cost effective savings. Updates to DEER methods similarly may re-define the adopted approach to estimating savings, and hence would need to be applied in the ~~work paper~~workpaper development and program deployment decisions.

In D.09-09-047, the decision approving 2010 to 2012 EE Portfolios and Budgets, we addressed the issue of "freezing" *ex ante* values, including DEER values and workpaper values, in order to provide stability to the values that the PAs use for planning, program implementation, and goals achievement.[~~127~~129] D.09-09-047 directed Commission staff to update DEER and non-DEER *ex ante* values using best available information and to freeze "both DEER and non-DEER *ex ante* measure values as the 2010-2012 portfolio implementation begins."[~~128~~130] This decision allowed for staff, in consultation with the utilities, to develop a process by which new measures values can be added to the frozen measure datasets and mutually agreed errors in the frozen values can be corrected. D.11-07-030 also allowed for mid-cycle updates to ex ante values for custom projects if errors were found. "Any overstated ex ante values or

~~127~~129 *See* D.09-09-047 at 42-44.

~~128~~130 *See* D.09-09-047 at 44.

unrealistic savings estimates must be corrected as soon as possible and cannot wait for the next cycle." [~~129~~131]

D.12-05-015 allowed additional mid-cycle changes if there are new state and federal codes and standards that affect DEER values. Specifically, the decision stated in Conclusion of Law 84: "We generally agree with parties' request that ex ante values should be adopted and held constant throughout the portfolio cycle. However, mid-cycle updates of *ex ante* values are warranted if newly adopted codes or standards take effect during the cycle." [~~130~~132] Conclusion of Law 80 states: "Our Staff should have significant latitude in performing DEER and other policy oversight functions and, absent specific directives to the contrary, should not be required to consult with or otherwise utilize any other groups to perform this work." [~~131~~133]

From this history, there are two major takeaways for incorporation into the new review process. First, DEER values should generally remain frozen for a locked in period. With the "~~bust~~bus stop" approach we adopt here, DEER values will generally change only once per year, and there will be a delay between when changes are announced and when changes are effective so that market participants have time to incorporate changes into their activities. Second, there must and will be limited exceptions to the general rule of no mid-year changes.

[~~129~~131] *See* D.11-07-030 at 39.

[~~130~~132] *See* D.12-05-015 at 396.

[~~131~~133] *See* D.12-05-015 at 396.

Commission Staff shall propose changes to DEER once annually via resolution, with the associated comment/protest period provided by General Order 96-B. However, Commission staff may make changes at any time without a resolution to fix errors or to change documentation.

Several commenters on the proposed decision have requested that we provide more boundaries around these exceptions to the general rule of changes only at the "bus stop." Our objective with these exceptions is to continue the policy from prior decisions allowing for correction of errors (i.e., "correction of typographical and clerical errors, and other obvious, inadvertent errors and omissions" [~~132~~134]). Those policies have been in place for years and do not require additional gloss here. In response to comments, we strike the exception for additional tiers under existing measures. Those can be picked up at the next bus stop, and addressed via workpapers in the interim.

3.2.3. Rolling Portfolio Cycle Schedule

Central to the rolling portfolio cycle framework is the schedule. The joint parties prepared a proposed proceeding schedule that was defined by firm "bus stops," or deadlines for the critical steps in the portfolio updates. The value in the bus stop concept is that it sets a reliable, regular schedule for future updates, so that any new information that "misses a bus" can get on board when the bus rolls around to the stop again the following year.

In the joint parties' proposal, the last business day of November each year would be the cut-off date for EM&V studies to be included in the following year's *ex ante* update. Draft *ex ante* values would be released for comment by

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~~132~~134 Resolution A-4661 (re: orders correcting errors in commission decisions).

January 31, two months later. Stakeholders would review and comment by March 31, and savings values and parameter would be finalized by May 31 for inclusion in the portfolio the following year.

The concept of bus stops is a useful one, and we will adopt it as already discussed. However, the joint parties' specific deadlines do not provide enough time to complete each process, and do not align with the ESPI schedule, which is tied into the EM&V and ex ante updates.

In the rolling portfolio cycle schedule, a new set of studies is initiated each year for parameters identified to have the greatest uncertainty. The *ex ante* uncertain measure list will be updated at the end of every year during the EM&V planning period. EM&V studies for specific measures or parameters will typically have a two-year implementation horizon since most EM&V studies need a full calendar year past the original study year in order to collect pre and post-installation data. Results will be released on a regular basis each year reflecting best available information at that time. This is a major departure from the three year cycles, in which we studied all high-priority areas of the portfolio for the entire three year period.

The annual EM&V plan is expected to be completed at the end of each calendar year. The studies to be implemented in the following year will inform, and be informed by the EM&V plan. March 1st will be a consistent target to ensure information will be available for program planning, *ex ante* savings updates, and potential and goals, but interim results and actionable findings may be available throughout the year. This date aligns with the schedule for delivering ESPI draft ex post savings results, which will also be informed by all available EM&V studies.

With this shift in the EM&V bus stop, the DEER update bus stop needs to shift to the fall. The *ex ante* update period would run through Q2 and Q3, with draft results released on June 1, and the final DEER released on September 1.

Commission Staff's proposed Gantt chart provided the PAs and CalTF with an open-ended period for ~~work paper~~workpaper development and review. However, if the *ex ante* review team is to be able to meet the schedule set for them to develop DEER updates, there will need to be a reasonable schedule for when workpapers are submitted for review. If the workpapers are all submitted in March or later, the *ex ante* review team will not be available to timely complete the DEER update. The concern here is one of Commission Staff resources. If a large tranche of workpapers arrive concurrent with the DEER update process, Commission Staff will be unable to handle all of this simultaneously. In the proposed decision, we imposed a January 1 deadline for workpapers that just reflected recent DEER updates, in order to allow Commission Staff to work through those workpapers and then be free to focus on the next set of updates to DEER itself. As some commenters observed, this deadline for workpaper submission was in tension with provisions elsewhere in the decision for filing updated workpapers on the first and third Monday of each month (and new measures any time).

We clarify that the distinction we are drawing is between workpaper updates to reflect changes in DEER, and workpaper updates for other reasons and/or for new measures. Historically Commission Staff received a large volume of workpaper updates all at once that PAs were only changing because of DEER changes. The goal with the January 1 deadline is to ensure a window between the arrival of that mass of updated workpapers and the start of the DEER update process. Commission Staff will then have adequate time for workpaper review.

The schedule we adopt here provides for DEER updates to be completed by Commission Staff by September 1. A January 1 deadline allows PAs four months (September through December) to make corresponding changes to their workpapers. In comments on the proposed decision, SDG&E and SoCal proposes that after DEER updates are completed, PAs should update workpapers over a two-month span, and then submit them for review over the next two months.[~~133~~135] We encourage PAs to use this timing, but do not require it.

Accordingly we will maintain the January 1 deadline for *updates to workpapers to reflect changes in DEER values*. Workpapers for new measures, and workpapers that do more than just update values to conform with revised DEER values, may come in at any time or on the first and third Monday, respectively.

The Gantt chart in Appendix 6 provides for an annual workpaper plan in October. Some commenters requested that we impose requirements on the workpaper plan.[~~134~~136] We are requiring a workpaper plan. We will leave development of the particulars of the workpaper plan to Commission Staff, with stakeholder input, as we do with EM&V workplans.

Relatedly, goals will be updated every other year, in sync with the CEC's IEPR demand forecast. Since the IOUs need the potential and goals Report to prepare their annual compliance filing, a draft potential and goals study should be released the first business day every other May, with a comment period following. The final potential and goals study, with associated goals, should then

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[~~133~~135] Sempra's proposal contemplated DEER updates being due from Commission Staff in March, and have the two months run June-July. To be clear, we are encouraging compliance with the two-month timeframe, but are expressly not adopting the June-July proposal.

[~~134~~136] E.g., Joint Parties (requesting that we reiterate the need to include a workpaper /workplan each year based on areas of uncertainty or programmatic focus).

issue as part of a proposed decision adopting goals in time for an August meeting.

Each PA's annual budget advice letter is to be filed on the first business day in September.

Evaluation Measurement & Verification (EM&V)

EM&V updates from impact, process and market studies flow into the portfolio development process by providing actionable information. This includes updates to savings estimates, information about the effectiveness of deployment of programs, and information about market conditions. Commission Staff have facilitated a collaborative EM&V processes since the adoption of D.10-04-029. Commission Staff and PA staff discuss key findings and the PAs report back to Commission Staff on the changes made to the programs based on feedback from EM&V. This can come in formal 60 day reports of how PAs will address key recommendations (as done after 2006-2008), and as presented in amendments to the program implementation plans (as was done in 2013-2014) portfolio applications. Most of the information, however, is exchanged in the on-going communications between staff and PAs.

Commission Staff will remain responsible for EM&V. Commission Staff and PAs will issue EM&V reports also using a "bus stop" approach. It is important to note that the research available for the "bus stop" in any given year is not expected to reflect the last year of program activity. Results will be based on information gathered and built over a longer period of time. This is consistent with the expectations for updating "uncertain measures" in the Energy Savings Performance Incentive structure, and the general process currently required for field EM&V.

The public process for EM&V now in place will continue but will be updated to reflect new PAs. We delegate to Commission Staff authority to make changes to that process so that it does not ossify. We note that Commission Staff are undertaking various reforms to EM&V activities. A broader reexamination of EM&V is in order, but will have to await Phase III of this proceeding, and would be best aligned with updates to goals, program design and implementation.

Under the rolling portfolio cycle model the information available from current evaluations will be available to infuse at key points in the process. Impact evaluation results will inform DEER and *ex ante* updates, process and market studies will be available to inform program applications and updates to implementation plans. However, actionable information to improve programs can be leveraged at any time. For example, if an evaluation reveals a particularly ineffective implementation mode (e.g., one resulting in high free-ridership) there is nothing to preclude the implementer making an adaptive change (e.g., improving customer outreach) and updating savings claims. Likewise, if a market opportunity is revealed mid-stream of implementation, it is not the Commission's intent to stifle action. In fact that is exactly what EM&V results and the rolling portfolio process should enable.

Historically, we have grossed IOU budgets up by 4% and used the resultant funds for EM&V. "In D.05-01-055, the Commission split evaluation activities along two tracks: (1) impact evaluation that assesses program performance (conducted by the Commission); and (2) process and market characterization studies' that support program improvement (conducted by the IOUs)." [~~135~~137] We

[~~135~~137] D.14-01-033 at 6.

have historically divided EM&V funds between Commission Staff for impact evaluations and IOUs for process and market characterization studies at a 3:1 ratio.

We authorized CCAs to conduct their own process evaluations in D.14-01-033.[~~136~~138] In comments on the proposed decision, MCE observed that it has not been allocated any EM&V funds for its own use. MCE may request EM&V funds in its business plan and associated budget proposals, consonant with D.14-01-033. We note that all PAs using EM&V funds must comply with the public review, vetting, and stakeholder processes adopted in D.10-04-029, and cooperate with Commission Staff.

ESPI

D.13-09-023 established the ESPI to award ~~energy efficiency~~EE shareholder incentives. The decision established a detailed timeline for Commission staff activity that needs to be modified to flow with the rolling portfolio cycle. Specifically, Attachment 6 of D.13-09-023 established the annual process for submission, review, and resolution of management fees and incentive awards claims and Attachment 5 established a process for the *Ex-Ante* Review performance incentive award. These two processes preceded the concept of a rolling portfolio cycle, so we modify those two annual ESPI processes with the schedule in Appendix 5. This schedule in Appendix 5 of this decision will replace the timelines in Attachment 5 and 6 of D.13-09-023.

[~~136~~138] "CCAs may also undertake their own process evaluations and market studies in conjunction with Commission oversight in the same manner as authorized for IOU energy efficiency projects pursuant to D.12-11-015 and D.10-04-029." D.14-01-033 at 6.

Accounting and Fund Shifting Requirements

Accounting Issues

In order to develop a more effective and transparent accounting system, Commission Staff has contracted with the State Controller's Office (SCO) to review the current PA accounting systems and make recommendations for improvements. While we are not yet in a position to speak to details, we can provide a few high level recommendations on accounting issues.

In any "Rolling Portfolio" process, there will no longer be vintaging of funds and associated tracking for accounting purposes, as there was prior to D.14-10-046. In addition, budgets will be annualized rather than for a multi-year (portfolio cycle) period, creating new budgeting issues associated with under/over-spending compared to the pre-D.14-10-046 world. These changes will require a re-think of budgeting practices, some mechanism for dealing with carry-forward of unspent/uncommitted/unencumbered funds rather than just letting those funds pile up in balancing accounts, and new reporting requirements not tied to the "vintage" [~~137~~139] of funds. As long as we are making these changes, a hard look at all accounting practices is in order.

On the point about "standard utility accounting practices," we note that a recurring problem we encounter is that such "standard" practices are not standardized *across utilities*. This is something we would like to address.

We will of course invite and expect formal public input on SCO's forthcoming proposal before adopting any changes.

Here are the principles guiding the SCO's work.

[~~137~~139] I.e., what portfolio cycle the money was collected for (e.g., 2010-2012).

1. **Clean-sheet approach:** The Commission has imposed a variety of non-standard accounting requirements on PAs over the years, in pursuit of various policy objectives (e.g., an administrative cost cap and accounting categories adopted in D.09-09-047). All of these requirements should be up for reconsideration. Questions the State Controller's Office will consider are: is the policy underlying the accounting requirement still valid? If so, is there a way to achieve the Commission's policy objective that does not require use of non-standard accounting rules?
2. **Use standard accounting conventions:** PAs should use generally applicable accounting principles (GAAP) wherever possible. If we can achieve a policy goal (e.g., reduced administrative costs) within a commercial off-the-shelf accounting framework, then that is preferable to our creating unique accounting rules.
3. **Clarify 'committed', 'spent/unspent' and 'encumbered':** We need to simplify or eliminate use of committed/encumbered/unspent funds as the basis for determining carryover amounts. Relatedly, we will want insight into project pipelines, so that we can evaluate the validity of claimed commitments/encumbrances. That said, we recognize that smaller PAs like CCAs and RENs may have particular concerns here. Because of their relatively small size, it is difficult for them to smooth revenues and costs over time. For the time being we will defer to later in Phase II of this proceeding consideration of proposals to allow a carry-forward of unspent portions of annual budgets (or borrowing from future years when annual spend exceeds the budget).

Deferring accounting issues means that the status quo will continue on the accounting front. We will continue to protect ratepayers by using balancing accounts for IOUs (and, by extension, RENs), and adjusting annual IOU payment amounts to CCAs to reflect actual spending.~~[138]~~[140] Current accounting reporting requirements will remain in effect.

Fund-shifting Requirements

Fund shifting guidelines or rules establish the level of flexibility that utility PAs have (without prior authorization) to modify funding levels for specific ~~energy efficiency~~EE activities as the portfolio plans are implemented. In particular, the guidelines establish the extent to which the utilities may shift funds among programs within the same program category, across program categories, carry over or carry forward funds from one program year to the next, as well as discontinue programs that are not performing or add new programs during the program cycle.~~[139]~~[141] The idea here is to prevent a "bait and switch" approach to budgeting where a PA represents in its budget filing that it will do X, but the PA then takes money for X and instead does Y. The Policy Manual~~[140]~~[142] summarizes the Commission's current fund shifting rules. ~~[141]~~[143]

The Joint Parties did not propose changes to fund-shifting rules. Rather, they responded that fund-shifting requirements should be developed based on portfolio structure decisions and further dialogue with staff. MCE requested

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~~138~~140 *See* D.14-10-046 at 43-44 (discussing mechanics for protecting ratepayers while we resolve accounting issues).

~~139~~141 D.05-09-043 at 83.

~~140~~142 "The Policy Manual is a Commission Staff-prepared compendium of our decisions and resolutions relating to energy efficiency, and it also includes some additional staff-prepared gloss on those decisions. Commission Staff has revised the Policy Manual periodically, updating it to incorporate regulatory changes that have come along since the most recent edition. It is a convenient reference for Program Administrators." D.14-01-033 at 12.

~~141~~143 Energy Efficiency Policy Manual, v. 5 at Appendix C (citing D.12-11-015, 12/22/2011 ACR (R.09-11-014), D.09-09-047, D.09-05-037, D.07-10-032, D.06-12-013, and D.05-09-043).

changes to account for the fact that its budget is comparatively small. The application of percentage thresholds to MCE means that even very small shifts in MCE's budgets give rise to an advice letter filing obligation.[~~142~~144]

Commission Staff proposed to eliminate advice letter requirements for fund-shifting and instead require PAs to track fund shifting on the online tool and report updated budgets in their annual compliance filings.[~~143~~145] The Joint Parties subsequently supported the Commission Staff proposal.

We adopt the Commission Staff recommendation that we eliminate advice letter requirements for authorization for fund-shifting. Many advice letters filed regarding fund shifts receive minimal review, have no significant impact on the portfolios, and contribute to regulatory churn. There are also a variety of "work-arounds" that PAs employ to avoid triggering fund shifting reporting requirements, further reducing the potential for oversight that was originally envisioned in creating the filing requirements. Most importantly, the problem we are trying to solve with fund-shifting triggers (a "bait and switch" situation in which utilities submit for multi-year portfolios that are dramatically changed after the Commission authorizes them) is rendered largely moot in a rolling portfolio environment in which budgets are revised annually. Consequently, fund shifting alone will no longer trigger an advice letter filing.

Instead, we will require PAs to track fund shifting on the online tool and report updated budgets in their annual budget filings, as discussed at 3.2.2.3 above. If Commission Staff or stakeholders identify fund-shifting activities that

[~~142~~144] MCE Comments on Workshop 1 at 5, 16.

[~~143~~145] NRDC Comments on Commission Staff White Paper at 15-16.

substantially depart from Commission policy direction or, in the opinion of Commission Staff or stakeholders, are not in the best interest of ratepayers and/or the efficiency portfolios (e.g., the sort of "bait and switch" behavior described in the opening paragraph of this subsection), they should raise their concerns in response to the next budget advice letter.

Ex Ante Review

Ex ante values are savings values established before (hence, *ex ante*) a program or project is completed; often before a project even begins.~~[144]~~[146] In our policy construct, all PA-submitted savings claims are termed ex ante values even if they have been developed using post-installation information. The PA *ex ante* values come in several flavors. There are DEER values, workpaper values, and custom values. As far as DEER goes, we know of only two significant recent *ex ante* updates. There are: (1) the changes that we directed for codes and standards updates last year, and (2) the changes that we are making to DEER values here.

> For custom projects the adopted *ex ante* review process provides Commission Staff with the ability to review and update ex ante values including NTG for those projects. The IOUs are expected to respond to Commission staff reviews by taking steps to improve NTG results. Utility programs should strive to push customers to augment projects to include action that would not occur without

~~[144]~~[146] PA *ex ante* values contrast with Commission evaluation ex post values. PA deemed *ex ante* values rarely depend on current participant field measurements and surveys but rather are developed from estimates using historical data or best estimates using judgement and models. PA *ex ante* custom project values are often subject to post installation true-up using field measurements and as-installed parameters. Commission ex post values are savings values established after a project is completed. Ex post values often rely on field measurements and surveys targeted at truing up site and measure specific *ex ante* parameters and assumptions to provide an accurate estimate of savings for all the projects and measures completed during a particular annual or other period.

> incentive support or redesign the incentive structure to encourage deeper and more comprehensive activities as well as aligning the incentive amounts to be commensurate with the level of savings that can be attributed to the program.[~~145~~147]

We are aware of stakeholder dissatisfaction with *ex ante* processes, particularly in connection with custom projects. Exemplary comments are these:

> Current technical update processes are unpredictable, can result in significant modifications within a short time frame, and are not in sync with program planning.
>
> In the existing process, changes to ex ante savings are made on an ongoing basis, without commensurate changes in the potential and goals to which the IOUs are held. This introduces uncertainty of energy savings for PAs, implementers, and most-importantly customers.[~~146~~148]

And these:

> ··· the whole custom review process still embodies unclear expectations, long turn-around times, poor communication, and unexpected policy changes. All parties in the system share joint responsibility in solving these issues, but the issues still remain, and will take further time to resolve. This uncertainty creates large enough business risks that no one is willing to step forward, which means customers are left hanging. The overall [e]ffect is resulting in decreased program participation and decreased installation of large custom ~~energy efficiency~~EE projects. The short-term impact is an immediate "chilling" of large ~~energy efficiency~~EE projects in the state and further market uncertainty. [¶] An immediate solution to reduce the problem this creates for customers is to apply custom dispositions prospectively after a period of "market transition" so the customer whose project is the subject of the disposition can move

[~~145~~147] Commission Staff Energy Efficiency Policy Manual at 21.

[~~146~~148] NRDC's comments on white paper at 4 (emphasis added).

> along the implementation process without delay, as proposed in the Joint Party comments.~~[147]~~[149]

And these:

> "EnerNOC has attempted to obtain clarifications and modifications regarding the custom project review process since 2011. [citation to comment filed on Proposed Decision Providing Guidance on 2013-2014 ~~Energy Efficiency~~EE Portfolios]. Most recently, EnerNOC has worked with CEEIC, the IOUs, the Commission's Energy Division, and other stakeholders to develop specific processes to improve the timing, develop a communication plan, and propose a dispute resolution. [¶] However, none of these efforts have resulted in significant improvements to the custom project review process. Meanwhile, it is EnerNOC's experience that customers will not accept the uncertainty caused by the inability to reach a final conclusion about a potential custom project. EnerNOC's customers have experienced delays in excess of two months. In fact, many of the customers, frustrated by the uncertainty and delays, will choose not to implement custom measures, taking with them a substantial portion of the deep retrofit savings that the Commission expects to achieve from custom measures" ~~[148]~~[150]

From our high-level vantage points, there seem to have been significant strides towards addressing these sorts of complaints. The four investor-owned utilities and Commission staff are engaged in a collaborative process to develop guidance documents for custom project ex ante review. Final "*Ex Ante* Review Custom Process Guidance Documents" addressing early retirement and industry standard practice studies are available on the CPUC website. Additional guidance documents are in process and will be available when finalized. These

~~[147]~~[149] California Energy Efficiency Industry Council Comments on Phase II Workshop 1 received on April 6, 2015 at 7-8.

~~[148]~~[150] *Enernoc Comments on Workshop 1, Phase II, April 6, 2015 at 6-7.*

guidance documents provide details on the Commission's policies and procedures for custom projects/measures. Commission Staff developed these guidance documents to address concerns expressed by the PAs and implementers that Commission staff review criteria and requirements should be set forth in documents available to those engaged in program implementation activities. The CPUC webpage also contains downloadable industry standard practice studies, which are used when setting baselines for custom projects.

Ex ante review expectations and processes have been communicated to the PAs, implementers, and stakeholders in various ways since the review process was first implemented. For example, in 2014 staff and contractors had several meetings with CEEIC and CEEIC members (twice alluded to in part in the comments quoted above) to discuss ex ante requirements and procedures. Staff have met with PAs and their implementers (many are members of CEEIC) on dozens of occasions from 2011-2015 and discussed details of specific projects and issues such as ineligible measures, incorrect baseline assumption, incorrect calculations methods, incorrect use of site-specific M&V methods or use of M&V data. Theses meeting must involve the PAs. The customer's contractual relationship is not with the Commission. Customer information is confidential to the PA and cannot be discussed with a customer's contractor implementer without customer permission. Communication of the CPUC staff's custom projects review findings and dispositions thus is the responsibility of the PAs to their account representatives, field staff, third party implementers and project sponsors.

Additional changes to ex ante processes are under way. In particular, custom project *ex ante* review guidance documents in various developmental stages are:

- ~~Energy Efficiency~~EE Savings Eligibility at Sites with non-IOU Supplied Energy Sources
- Custom Project Cost Development
- Net-to-gross/Free-ridership guidance
- Industrial Retrocommissioning
- Use of DEER assumptions, methods and values in custom measure/project ex ante value development.
- To make sure that ex ante findings and dispositions are widely available, SDG&E is developing a searchable online document storage system that will hold redacted versions of Commission Staff's project review findings, final dispositions, guidance documents and standard practice studies for all PAs. Once completed SDG&E will turn over this online document storage system to Commission Staff. Commission staff will host this as a publicly accessible and searchable online document system that will hold these redacted dispositions as well as all the other guidance documents and standard practice studies for all PAs. SDG&E has indicated to Commission Staff that they plan to start uploading redacted dispositions this year. A link to the new database site will be provided on the CPUC's website.

From the Commission Staff perspective, the implementer and joint party complaints about delays and lost opportunities are a red herring. Customer and implementer payments are based on gross first year ex ante savings estimates. The real issue is the ability to set the *ex ante* values that determine the customer and implementer payments. In Commission Staff's view, prospective application of review findings will actually prevent fixing the underlying problems of overpromising savings and hence overpayment of incentives. Ex post evaluation is of little concern to customers or to implementers compared to the *ex ante* values that set their incentive or compensation payments.

For our part, we are frustrated and perplexed by ~~the~~stakeholders and Commission Staff's radically competing narratives regarding issues with ex ante custom review. CEEIC and the implementer community have their complaints, as represented in the quotes above. PAs largely echo these complaints. Commission Staff have their markedly contrasting concerns, as articulated in the preceding paragraph~~.~~, and in the annual ex ante review scorecards that the Commission directed Commission Staff to prepare.[151] With as much experience as all concerned have in the ~~energy efficiency~~EE arena, Commission Staff, PAs, and implementers should be converging on agreed-upon approaches to custom project savings estimates. This does not appear to be happening. If anything, parties and Commission Staff seem to be hardening in their respective positions.

It is clear from party comments on the *ex ante* custom review section of the proposed decision that there is work to be done in this area. We note as well that ~~there is legislation currently pending before the governor that~~ SB350 and AB802will impact *ex ante* review.[~~149~~152] We direct the PAs to work with stakeholders to jointly investigate and propose potential solutions to Commission Staff to improve the usability and transparency of all *ex ante* values. The solutions

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[151] D.13-09-023, at 73-73 ("A designated team of EAR staff and contractors shall produce semi-annual *ex ante* scorecard updates that provide utilities with feedback and an opportunity to make mid-year and mid-cycle process improvements. ") Final scores for 2013 and 2014, as well as mid-year progress reports for 2015, are posted to http://deeresources.com/index.php/espi/espi-ear-performance-scoring (username: DEER, password: 2008, if prompted).

[~~149~~152] SB350, Section 16, amending section 399.4 to add subsection (d)(4): "In updating its policies, the commission shall, at a minimum, do all of the following: . . . (4) Ensure that customers have certainty in the values and methodology used to determine energy efficiency incentives by basing the amount of any incentives provided by gas and electrical corporations on the values and methodology contained in the executed customer agreement. Incentive payments shall be based on measured results."

may include new software tools that offer a common platform for all PAs to compose savings estimates transparently and consistent with Commission direction. Proposals should be focused on opportunities to facilitate transparency and collaboration. Proposals should specify the expected outcomes from the proposals and how they will improve the process to develop review, and implement *ex ante* values. Any proposal must recognize that Commission staff is still responsible for review and approval of *ex ante* values and methods and that past and current ex ante guidance still pertains.

Once Commission Staff receive the proposal, they will prepare a white paper in response, which will be put out for public review and comment. Then we can decide on next steps.

We are deliberately not specifying timing here for an ex ante reform process. Timing will be for PAs and stakeholders (for their proposal), Commission Staff (for their white paper, and possibly a round of informal comments), and then for the assigned office and ALJ (for formal public comment and any formal next steps) to address.

In the meantime, PAs shall accelerate the ongoing effort to publish redacted copies of Commission Staff dispositions of custom projects. PAs shall also publish for each disposition redacted versions of the project material the PA submitted to Commission Staff that led to the disposition.

We note numerous factual questions around ex ante custom review. We hear anecdotes from implementers about Commission Staff acting capriciously when disposing of custom project submittals. Conversely, we see Commission Staff dispositions identifying myriad defects in custom project submittals. We are also aware of EM&V reports showing much lower levels of actual savings than PAs and implementers forecast in their submittals (i.e., low "realization rates"),

~~150~~153 which call into question the quality of PA and/or implementer ex ante savings estimates. ~~151~~154 What are the problems here, and with whom does the ability to rectify them lie?

Without facts, reform efforts will likely just devolve into a finger-pointing exercise. Parties and Commission Staff should look into the following questions in performing the work we direct above.

1. How many custom projects does Commission Staff review actually delay, and for how long?
2. Relatedly, what percentage of the custom projects by MW and/or MWh are delayed by Commission Staff review, and for how long?
3. What is the PA process for custom review? What delays does it introduce either in conjunction with or independent of Commission Staff review?
4. What volume of projects (by number, and by savings amount) are impacted by the "retroactivity" of Commission Staff disposition, of which implementers and PAs complain (discussed more below)?
5. What are the specific issues that Commission Staff tends to raise with the submittals they review? Are there recurring issues that can be dealt with generically?

~~150~~153 *See*, e.g., *2010-12 WO033 Custom Impact Evaluation Final Report*, Itron, Inc., July 14, 2014. ("With all sample points included, the mean realization rates by IOU, fueland energy metric are less than 0.70 for all but two energy metrics.") *See* generally section 5.1.
See also *2013 Custom Impact Evaluation Industrial, Agricultural, and Large Commercial*, Itron, Inc., July 17, 2015. *See* generally sections 1.2 and 3.2.

~~151~~ 154 2010-12 WO033 Custom Impact Evaluation Final Report, Itron, Inc., July 14, 2014. *See* generally section 5.2 ("Discrepancy Analysis"). *See* also *2013 Custom Impact Evaluation Industrial, Agricultural, and Large Commercial*, Itron, Inc., July 17, 2015. *See* generally section 3.4 (Discrepancy Analysis).

6. What models are PAs and implementers using to forecast savings, and why are realization rates for custom projects not higher?

Parties should consider these questions and the answers to them in preparing their proposal for ex ante custom review reform, as should Commission Staff in their white paper.

Market Transition and Retroactivity

As already discussed, many commenters are displeased with the *ex ante* review process. One area where parties express concern is with Commission Staff's allegedly "retroactive" application of Commission Staff determinations of savings values for custom projects. The thrust of the concern is that Commission Staff will identify a value in connection with one project, then apply that value to similar projects that were already in, but not yet through, the Commission Staff review process. CIEEC's comments,[~~152~~155] as well as NRDC's and Joint Parties' comments on Phase II Workshop I; [~~153~~156] and NRDC's response to the staff White Paper propose that custom review disposition be made applicable on a prospective basis by applying a "market transition period."

NRDC suggests in the Response to the Staff White Paper that "the project under review [should] be approved, completed, and paid out without the additional time associated with the Custom Measure Project Archive (CMPA) review allowing customers currently in the pipeline to rely on information provided by implementers in good faith." [~~154~~157]

[~~152~~155] CEEIC Comments on Phase II Workshop 1 received on April 6, 2015 at 8. *See* also CEEIC opening and reply comments on the proposed decision, *passim*.

[~~153~~156] NRDC Comments on Phase II Workshop 1 received on April 6, 2015 at 19-21.

[~~154~~157] NRDC comments on Commission Staff White Paper at 32.

NRDC Comments on Workshop I~~[155]~~[158] propose that: "Projects in the pipeline" or projects previously submitted as a lead, application, or signed agreement on the Custom Measure Program Archive (CMPA) list would be grandfathered under the original, existing policy. "NRDC defines project pipeline as a combination of: (1) project leads and (2) project applications.

NRDC proposes further that "dispositions be applicable on a prospective basis to future projects of similar nature." They further propose that "the project under review [should] be approved, completed, and paid out without the additional time associated with the Custom Measure Project Archive (CMPA) review allowing customers currently in the pipeline to rely on information provided by implementers in good faith." ~~[156]~~[159]

~~We decline to adopt these proposals. Were we to adopt the "grandfathering" proposal, PAs could avoid the impact of dispositions simply by submitting project leads as a placeholder. It is inappropriate to classify a project in the 'project lead' stage the same as with a project in the 'project application' stage where the customer has submitted its plans and a signed application to the PA.~~ While we generally decline these recommendations, we will adopt as an interim measure one element of the "market transition" proposals related to "grandfathering." This is a variation of a solution proposed by SCE in its reply comments on the proposed decision.

~~[155]~~[158] NRDC and Joint Parties Comments on Phase II Workshop 1 received on April 6, 2015 at 19-21.

~~[156]~~[159] NRDC comments on Commission Staff White Paper at 32.

~~Further, the proposals at hand fail to give effect to prior dispositions and do not allow application of quality control determinations to the actual project under review.~~ As TURN notes in its comments, "The current custom review process was developed to address important quality assurance concerns." [~~157~~160] ~~These concerns persist today. To apply the Parties' proposed "market transition" approach would fail to remedy the concerns the review process was designed to address; the Commission rejected a similar argument regarding the custom review process was in Decision 11-07-030, and the reasons are applicable to the proposal before us now: "The utilities propose that they not be required to adjust ex ante values in response to Energy Division reviews and that non-reviewed ex ante values not be subject to a gross realization rate adjustment. We will not adopt this suggestion, which would delay or even preclude *ex ante* values being reflective of actual savings."~~ ~~[158]~~Thus, the "grandfathering" approach we adopt will not apply to situations where Commission Staff identify computational or other basis errors in project submittals that should be corrected in any similar projects to ensure accuracy.

The "market transition" or "grandfathering" approach will apply only in situations where the ex ante custom review process results in a disposition that program administrators would otherwise normally apply to all projects that are similarly-situated compared to the project chosen for review.

To address concerns about market certainty while we consider the potential for additional process changes, we will allow any similar projects with a signed

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~~157~~160 TURN, Comments on Phase II Workshop 1, at 12-13.

~~158 Decision 11-07-030, at 39-40.~~

project agreement or project application that occurs within 60 days of the staff disposition that modifies the ex ante value, to utilize the prior ex ante savings estimate for those qualifying projects. In other words, projects with signed agreements or applications that occur within 60 days will be "grandfathered" and allowed to utilize prior ex ante savings estimates.

We are generally sensitive to concerns about market certainty. The optimal way to ensure such certainty is to have quality submittals and universally understood rules for their review. We look to the reform process laid out in the prior subsection to bring us towards that endpoint more globally.

Workpaper Reviews

Joint Parties did not directly propose any changes to the current workpaper review process first adopted by ALJ Ruling[~~159~~161] and modified in D.12-05-015. We note that that the current process and the joint proposal for the schedule of workpaper updates do not provide for an organized and predictable workflow for workpaper reviews. We will adopt a "bus stop" approach to submissions and reviews of both new and updated workpapers. Presently, workpapers can be submitted at any time and the "clock" for Commission staff's 15 day preliminary and 25 day technical review begins with the date of the submission. Requiring Commission Staff and PAs to track many dozens or even hundreds of annual workpaper submissions on separate clocks to be unreasonable.

[~~159~~161] The phase 1 and phase 2 workpaper review process was first adopted by "Administrative Law Judge's Ruling Regarding Non-DEER Measure *Ex ante* Values", dated 18 November 2009 in A.08-07-021, *et.al*. The process steps and timeline are provided in detail in the attachment to the ruling.

For custom projects, we aggregate submissions into semi-monthly windows. For workpapers, we will adopt a similar approach. All workpaper submissions, independent of the exact time submitted, will be considered to have been submitted on the 1st or 3rd Monday of the month; workpapers actually submitted after the close of business of the first Monday will be considered submitted on the 3rd Monday and workpapers submitted after the close of business of the 3rd Monday will be considered submitted on the 1st Monday of the following month.

Commenters on the proposed decision asked how this timeline intersects with the requirement elsewhere in the decision that PAs submit by January 1 all workpaper updates to conform to changes in DEER. We address this issue at 3.2.3 above.

3.3. Guidance on 2016 Program Changes

The Phase II scoping memo placed in scope a "limited universe of changes we will discuss for 2016 portfolios." In pertinent part[~~160~~162] we stated we would consider the following changes for 2016:

- Changes to standardize statewide programs across PAs
- Changes to third-party programs[~~161~~163]

[~~160~~162] The Phase II scoping memo identified several additional 2016 changes we could consider in Phase II, but that depended in part on the outcome of this decision, or other outside events. Those changes include: changes in response to new savings goals, changes to maintain portfolio cost-effectiveness, and changes to water-energy measures or programs. We expect to take these up in the second Phase II decision.

[~~161~~163] "i. includes proposed changes to administration practices; proposed expansion of percentage of portfolio devoted to third party programs; auction design and targeted market segments." Phase II scoping memo at 7.

We defer consideration of these issues to the next decision in Phase II of this proceeding, with the exception of clarifying how PAs should handle renewal of their third party programs in the interim.

Until our next Phase II decision in this proceeding, PAs may move forward under the existing Third Party Programs framework. PAs may execute new contracts that will extend up to three years from the date of this decision. PAs may also extend existing contracts. PAs may also redefine program design parameters for the three year period. The additional time will give the Commission sufficient time to properly address additional revisions to Third-Party Programs.

3.4. Updates to Other Program Metrics

3.4.1. DEER Updates

We base *ex ante* savings estimates on predictions of typical operating conditions and baseline usage. One repository for these predictions is DEER. DEER requires periodic updating, and Commission Staff on March 5, 2015 conducted a DEER2016 scoping webinar. Commission Staff has since proposed to update DEER various additional and revised savings values:

a) The ESPI Uncertain Measures Update
   i) screw-in CFLs of all types with wattages of 30 watts and less, and
   ii) T5 fluorescent lamps and fixtures replacing metal halide.
b) The DEER 2015 Update
   i) updates to reflect code changes that went into effect in 2014 and in 2015.
c) The DEER 2016 Update
   i) consists of updates to non-residential lighting profiles, lighting technologies, HVAC technologies, residential

appliance technologies, effective useful life values, net to gross ratio values, and gross savings installation adjustment values, and

ii) Recycled Refrigerator/Freezer measures impacted by Federal Refrigerator/Freezer standard updates as well as the results of the Appliance Recycling Program Evaluation. [~~162~~164]

On May 15, 2015, the assigned ALJ put the DEER2016 Update draft results out for public comment.[~~163~~165] On May 21, 2015, the Commission conducted ~~workshop~~Workshop 4, concerning the DEER2016 Update draft results. Parties filed

June 8, 2015 comments on the DEER2016 Update draft release.[~~164~~166] The following day, we issued a ruling requesting comment on updates to certain cost

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[~~162~~164] CPUC Rulings and Scoping Rulings: http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=151726019.

The ruling categorized updates to refrigerator and freezer measures updates under the Uncertain Measures Update as an error; the measures should be and are part of the DEER 2016 Update.

[~~163~~165] CPUC Rulings and Scoping Rulings: http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=151726019.

[~~164~~166] The following parties submitted post-workshop 4 comments:

1. NEST
2. NRDC
3. PG&E
4. SCE
5. SDG&E
6. SoCal Gas
7. TURN

information in DEER. On June 29, 2015, we received comments on the cost information proposal.[~~165~~167]

Revisions to DEER Values for Appliance Recycling Measures

Calculating Savings from Recycling Older Vintage Refrigerators and Freezers

In comments on the proposed decision, AHAM and ARCA take issue with the reduction in savings values for appliance recycling measures. Specifically, they take issue with changes in DEER to Remaining Useful Life (EUL) values and, by extension, to changes to the expected savings from recycling of refrigerators that are older than 10 years. They ask that the Commission decline to make Commission Staff's proposed updates to these values.

Commission Staff's analysis of the Appliance Recycling Program (ARP) ex ante values ~~focused on:~~

~~(a) whether; and,~~

~~(b) for how long;a refrigerator the ARP picked up~~divided used refrigerators into two groups –units that would have stayed in service ~~if not recycled by the program. Commission Staff was, in other words, establishing the counterfactual for appliance recycling.~~without the program and units taken out of service that the program collected. The first group was given 100% savings credit and there was no adjustment of the credit based upon age. The second group was then

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[~~165~~167] We received comments from:

1. ORA
2. PG&E
3. SCE
4. SDG&E
5. SoCal Gas

divided into those that would have been destroyed versus those that would have been attempted to be transferred to another owner to place back into service. The latter of these two portions was subjected to a "viability" adjustment.[168]~~[1]~~

AHAM argues, citing its own research,[169]~~[2]~~ that new units~~,~~ (as opposed to the used units~~,~~ that appliance recycling programs target) stay in service with their initial owner for 14 years. AHAM also cites a national landfill study from 2005, which determined that units found in landfills were 20 years old or older. AHAM also cites a recent DOE standards update that determined the average age at a refrigerator's "end of life" was 17.1 years. AHAM also cites a JACO study (with no specific citation), which apparently found that the average age of 65,000 refrigerators is 25 years. AHAM summarizes its objections to the revised DEER EUL and RUL for refrigerators by as follows: "All these data sources are consistent in that a first owner may use a refrigerator for 14 years and the second owner uses it on average for another 6 or more years."[170]~~[3]~~

To this point in the discussion, Commission Staff and commenters on this issue are generally in agreement. DEER, as revised, will use 14 years as the EUL for a new refrigerator and 5 years as the RUL of a unit collected by the ARP. AHAM, ARCA and JACO's concerns appear to lie not with EUL or RUL per se. Rather, they take issue with the ~~*discounting of the value*~~viability factors that *discount the likelihood for transfer of 10-14 year old and older refrigerators – and therefore the*

~~[1]~~ 168 ARCA is correct that Commission Staff "seek[s] to quantify that which would have happened in the absence of the ARP's, to the extent that some of these appliances would likely have been placed back into the secondary market." ARCA Comments on PD~~,~~ at 3.

~~[2]~~ 169 Although AHAM does not provide or cite specific reports, examination of the information included in a report posted on AHAM's website reveals this value is for units owned in May 2001.

~~[3]~~ 170 AHAM Comments on PD~~,~~ at 4.

savings associated with the program taking these units out of service – in the revisions to DEER.

Recent surveys of California IOU customers~~[4]~~[171] shows that the desirability of used refrigerators drops rapidly for refrigerators more than 10 years old. Consequently there is not much of a secondary market for these old refrigerators, and they would go out of service at a higher rate than new refrigerators even in the absence of a ratepayer-funded recycling program. If we adopt Commission Staff's proposal, PAs will still receive savings credit for these older units, but at a value discounted to reflect the lack of ~~resale~~transfer opportunities.

The discount that Commission Staff proposes depends on the age of the refrigerator–the older the refrigerator, the greater the likelihood of it going out of service in the absence of the program, and so the lower the program savings associated with recycling such a unit. This is consistent with both the survey data mentioned above and with one's intuition that older refrigerators are less desirable than newer refrigerators. For the oldest refrigerators (e.g., thirty year old models) there is virtually no market at all, and they will generally end up

~~[4] The California Lighting and Appliance Saturation Survey (CLASS, 2012) and the Appliance Recycling Program impact evaluation (2014). Commission Staff discussed the data from these reports at a workshop on May 21, 2015.~~

[171] The most recent data available on appliance recycling savings values come from a 2014 EM&V report (DNVGL report)[1] that we commissioned on the 2010-2012 cycle appliance recycling programs. The DNVGL report underwent a public notice and comment process, and it and the work that underlies it informed Commission Staff's recommendations. These data contradict AHAM's contention that "41% of all consumers . . . . keep the old [appliance] operating" even after buying a new refrigerator. The DNVGL report found that a much smaller percentage of appliances in that situation are kept in use by participant. *See, e.g.,* DNVGL report, at Table 47 (13.7% of refrigerators would have been kept in use in PG&E's service territory, absent a ratepayer-funded recycling program).

going to the scrapyard irrespective of whether there is a ratepayer-funded recycling program.

~~Nothing AHAM et al. present bears on the re-saleability of old refrigerators.~~ Commenters' primary point is that even unsold old refrigerators remain in service (e.g., as a second refrigerator).[172~~5~~] "[T]ransfer paths of these appliances begin and continue on with much older, less energy efficient appliances and the increasing consumer use of a second refrigerator in the home compounds higher energy consumption consequences." ~~[6]~~[173] As a general principle, this is true. However, the specific claims that commenters make regarding the number of units that remain in service even after purchase of a new unit are contradicted by the more recent data upon which Commission Staff rely in making their recommendations.[174]

We ~~find that Commission Staff's discounting of the savings value of old refrigerators by 50% (rather than to zero) is reasonable in light of the data presented. Accordingly, we decline to make the changes to EUL/RUL values that commenters request.~~have examined how Commission Staff developed discounts for old refrigerators, and how those discounts flow into the proposed changes to DEER values. We are in general agreement with Commission Staff's recommendations on this point. That is, we agree that as refrigerators and

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~~[5]~~ 172 "AHAM's Early Replacement Initiative states that 41% of all consumers that buy new refrigerators keep the old one operating." ACRA Comments on PD~~,~~ at 4.

~~[6] "AHAM's Early Replacement Initiative states that 41% of all consumers that buy new refrigerators keep the old one operating." ACRA Comments on PD, at 4.~~

173 ACRA Comments on PD at 4.

174 The California Lighting and Appliance Saturation Survey (CLASS, 2012) and the Appliance Recycling Program impact evaluation (2014). Commission Staff discussed the data from these reports at a workshop on May 21, 2015.

freezers age, the market for them shrinks. The data we have regarding the fates of old refrigerators and freezers is of sufficient volume and quality to be actionable. That there is uncertainty around results is no reason to ignore them "in favor of older results that are likely even less representative of the current activity."[175]

However, we conclude that there is greater uncertainty in the underlying data on the fate of old refrigerators than the specific proposal before us reflects. In light of the uncertainty around the point source intervals, we opt to treat 10-15 year old refrigerators as equally re-sellable on the secondary market as newer-model refrigerators, as commenters request. We will continue to discount the value of even older models, but have directed Commission Staff to revise the discounts applied to older refrigerators to reflect a more gradual tapering off of the secondary market for old appliances. The following table reflects the specific discount values we are using in the adopted DEER values:

	Age Cohort	**DEER 2016 Proposed Factors**	**DEER 2016 Adopted Factors**
Viability Factor Adjustment Alternatives	More than 30 years old	0.05	0.25
	20-29 years old	0.05	0.25
	15-19 years old	0.15	0.50
	10-14 years old	0.50	1.00
	5-9 years old	1.00	1.00
	Less than 5 years old	1.00	1.00

Further, In the course of reviewing the calculation of refrigerator and freezer savings values, Commission Staff identified a calculation error in the freezer savings values. This error, which had materially lowered freezer savings values,[176] is corrected in the revised DEER values that we adopt today.

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[175] D.12-11-015, at 77-78. ("While there are instances where the sample size used to develop particular utility program results should have been larger (to reduce uncertainty in those results), this does not lead us to agree that those results should be rejected in favor of older results that are likely even less representative of the current activity. We agree with Commission Staff's recommendation to update DEER with 2006-2008 evaluation Net-to-Gross results rather than retain older DEER values based upon older evaluation results.")

[176] The original DEER 2016 proposal had incorrectly assigned a unit energy consumption where freezer discarders decided not to acquire another freezer after disposing of their existing freezer

Footnote continued on next page

Calculation of the Net-to-Gross Ratio for Recycled Appliances

On a separate point, ARCA states that "By inserting the two additional disposition paths Destroyed by Discarders-non-viable units and Destroyed by Discarders-working units into the gross savings, and then developing yet another independent Net-to-Gross (NTG) value,"[~~7~~177] it "appears the DEER2015 Update essentially produced a double NTG adjustment, which negatively impacts the net energy savings twice."[~~8~~178]

Both of these new categories reflect independent paths outside of ~~ARPs~~ratepayer-funded programs by which units go out of service, and so both are correctly incorporated into the NTG ratio for ~~ARPs~~appliance recycling programs. This is not a "double counting," as any given refrigerators gets counted only once, but in one of two categories instead of ~~in~~ in a single category.

To amplify: ostensible savings from non-viable units discarded or destroyed – that is, refrigerators that certainly would have gone ~~to the scrapyard~~out of service even without a program – get ~~counted as standard practice~~removed from the baseline savings. Eliminating such ostensible savings, which are not really savings at all, requires removing them from the calculation of the gross baseline. ~~The~~However, while the result of this change is a significant decrease in *gross* savings, ~~but~~it also results in a significant increase in *net* savings ~~and so~~, as reflected in the increased NTG ~~ratio~~ratios for the programs. There is no

through the program. Correcting this error changed savings in that instance to "full savings" instead of "partial savings." This revision increases the savings of freezer measures about 60-100% depending on the IOU.

[~~7~~] 177 AHAM Comments on PD~~,~~ at 4.

[~~8~~] 178 AHAM Comments on PD~~,~~ at 4.

question that recyclers are successfully removing viable, inefficient appliances from the market. However, recyclers are not limiting what they collect to only ~~viable~~ units that would have stayed in service absent the program. Recyclers cast a wide net to get the most valuable catch, and consequently sweep up many appliances that would have been discarded or left unused anyway. ~~The DEER~~

Please note that the NTG ratio has increased ~~more than~~roughly 50% over previous DEER values. E.g., from an NTG ratio of .53 for SDG&E refrigerator values
to .83.

Other Concerns Regarding Changes to Appliance Recycling DEER Values

Commenters have expressed concern that changing the savings values for appliance recyclers may lead to discontinuance of ratepayer-funded recycling programs. We note that we are not making any decisions today on whether or not appliance recycling programs should continue. Program changes, if any, are something to take up in the context of PA business plans.

Commenters have noted that appliance recycling programs offer various non-energy benefits. These observations are consistent with the 2014 appliance recycling impact report. That said, whether and how to account for non-energy costs and benefits not already captured by the Commission's cost-effectiveness tools (which already reflect an avoided greenhouse gas cost "adder") is a generic issue in EE.[179] It is not unique to appliance recycling programs. How to deal with

179 *See* D.14-10-046 at 98-100 (discussing how to account for non-energy costs; deferring the issue to a stakeholder working group).

the non-energy benefits of appliance recycling programs is best taken up as part of the discussion of non-energy benefits generally.

Effective Date of DEER 2015 Updates

We will depart from the Commission Staff recommendation on the effective date of changes, and make all changes to DEER approved here effective on January 1, 2016. PAs have already made and implemented 2015 portfolios, customers have undertaken investment decisions; implementers have prepared voluminous paperwork, all in reliance on older DEER numbers. We will not reopen nine months' work by the numerous actors involved in ratepayer-funded ~~energy efficiency~~EE programs, as would be necessary were we to make changes effective this year.

Cost information Updates

SCE and PG&E recommend the Commission to complete the cost updates by Q3 of 2015 in order to apply it to the 2016 ~~energy efficiency~~EE portfolio. SCE notes a need for cost models and cost calculators for measures out of scope and would also like Commission Staff to provide further guidance on applying the update to the portfolio. SDG&E recommends that Commission Staff work with PAs to prioritize measures to be addressed by the costs update. SDG&E and SCG note that some of the data in the 2013 Measure Cost Study may already be outdated and should be updated.

The Commission generally agrees with the parties' concerns regarding the timeline for finalizing the update, the technical constraints for the current update, and the need for collaboration in the future on applying the updated costs to the portfolio. Commission Staff are already prioritizing measures for the costs update. Commission Staff are to work with parties to provide further guidance on how to apply the updates.

PG&E identified a number of errors and inaccuracies with the Commission Staff Proposal[~~1~~180] for measure cost updates. Commission Staff will correct these errors before finalizing the update. PG&E also recommends the Commission include custom measure cost study results as part of the update. Custom measure costs are out of the scope for the most recent update but may be addressed with future guidance on costs.

SDG&E is concerned with the models being miss-specified and with over-estimation of base equipment costs. Commission Staff is to work with SDG&E on any specific issues unique to the utility, and make adjustments as data warrant.

Data Adequacy

SCE takes issue with the choice of data for the estimated useful lives for CFLs. SCE contends that the DEER revisions should have taken account of recent laboratory test work as well as saturation studies.

The updated DEER values should and do reflect the laboratory work (some of which the Commission's consultants performed) as well as saturation studies. Best available data is the key here. Neither source should be used exclusively.

PG&E takes issue with the proposal to use a value of 10% for outdoor lights being left on in the daytime. The data problem here results from the technology used to measure when lights are on or off – "light loggers." Light loggers overstate incidences of outdoor lights being left on because light loggers measure

[~~2~~180] Measure cost Integration Methodology memo: http://www.cpuc.ca.gov/NR/rdonlyres/96B4CC68-5F41-4FA9-9602-412A04E3D118/0/Measure_Cost_Integration_Methodology_Memo.pdf light, not current. There is abundant light during the day, even when the lights are off. Light Loggers erroneously interpret daylight as lights being left on.

We know that light loggers on outdoor lights yield material numbers of false positives. Some correction to the light logger data is in order, and we will adopt Commission Staff's proposed correction to the light logger data. We direct Commission Staff to investigate and refine this number in time for a 2017 DEER update.

Link to Adopted DEER Updates

- The Uncertain Measures Update: http://www.deeresources.com/index.php/deer-versions/2015-uncertain-measures-update
- The DEER 2015 Update: http://www.deeresources.com/index.php/deer-versions/deer2015-code-update
- The DEER 2016 Update: http://www.deeresources.com/index.php/deer-versions/deer-2016

For all links, if prompted for a username and password the username is: "DEER", and the password is: "2008".

4. Comments on Proposed Decision

The proposed decision of the Administrative Law Judge (ALJ) in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on September 8, 2015.[~~1~~181]

[~~3~~181] The following parties filed opening comments:

Association of Home Appliance Manufacturers (AHAM)

Appliance Recycling Centers of America, Inc. (ARCA)

JACO Environmental, Inc. (JACO)

Footnote continued on next page

Reply comments were filed on September 1, 2015.[~~1~~182] Comments were generally supportive of the Proposed Decision. Some commenters, did however request changes, clarifications, and/or further guidance in certain areas of the proposed decision. Changes in response to some comments are interspersed throughout the decision.

5. Assignment of Proceeding

Carla J. Peterman is the assigned Commissioner and Todd O. Edmister is the assigned ALJ in this proceeding.

Nest Labs, Inc. (Nest)BayREN

Cal-UCONS

CEEIC

CSE

EnerNOC

LGSEC

MCE

NRDC

ORA

PG&E

SCE

SDG&E and SoCal Gas jointly.

[~~4~~182] The following parties filed reply comments:

CEEIC

MCE

NAESCO

NRDC

ORA

PG&E

SCE

Findings of Fact

1. The energy savings goals in section 3.1.2 above are aggressive yet achievable.

2. Data limitations require us to develop goals by IOU service territories, rather than by PAs.

3. Many factors in addition to those in the TRC drive real-world decisions about whether to undertake a measure. These do not factor into the Economic Potential calculation

4. In addition to such practical concerns, customers may have different views than PAs (and each other) on what constitutes a "cost-effective" measure or project.

5. Neither Technical Potential nor Economic Potential provides a realistic basis for setting savings goals for PAs.

6. Within Market Potential are numerous possible "cases" to choose from, depending on the chosen modelling assumptions.

7. There are compelling justifications for ~~energy efficiency~~EE policies. Nevertheless, in order to succeed, they must be based on a sound understanding of the market problems they seek to correct and a realistic assessment of their likely efficacy.

8. Calibration is the systematic adjustment of model parameter estimates so that model outputs more accurately reflect external benchmarks.

9. Calibration provides both the forecaster and stakeholders with a degree of confidence that simulated results are reasonable and reliable.

10. Calibration is effectively built into the model underlying the potential and goals study, and cannot be feasibly disentangled.

11. As a matter of good modeling practice, modelers should explicitly layer predictions about how the future will depart from the past atop a calibrated model, not bake them into the model *ab initio.*

12. Smartmeter data cannot, and may never, inform incremental cost, measure life, and appliance saturation.

13. Joint party reliance on PA discretion and stakeholder processes in place of formal regulatory processes actually makes many ~~energy efficiency~~EE activities opaque for Commissioners and possibly for other stakeholders who do not have time or ability to participate in multiple detailed stakeholder processes.

14. The Commission needs more opportunities to weigh in via decisions and/or resolutions than the joint proposal contemplated.

15. The sector to which a program is assigned can determine who administers it, who controls its budget, how effectively it achieves savings, and who is accountable for the program's success or failure. Segregation of cross-cutting activities into a sector of their own makes it easier to coordinate interventions, budgets and responsibility for cross-cutting activities across different administrators, or to move those activities to a single administrator if/when appropriate.

16. Generically speaking, we use metrics to gauge portfolio and/or program performance.

17. There is no need to require PAs to immediately reformat all of their current PIPs into the new implementation plan format.

18. Stakeholders other than PAs (and more particularly the IOU subset of PAs) will be unable to cover more than a discrete and focused subset of issues under the auspices of the proposed stakeholder group.

19. DEER values should generally remain frozen for a locked in period. With the "~~bust~~bus stop" approach we adopt here, DEER values will generally change only once per year, and there will be a delay between when changes are announced and when changes are effective so that market participants have time to incorporate changes into their activities. Second, there must and will be limited exceptions to the general rule of no mid-year changes.

20. Central to the rolling portfolio cycle framework is the schedule. The joint parties prepared a proposed proceeding schedule that was defined by firm "bus stops," or deadlines for the critical steps in the portfolio updates. The value in the bus stop concept is that it sets a reliable, regular schedule for future updates, so that any new information that "misses a bus" can get on board when the bus rolls around to the stop again the following year.

21. The joint parties' specific deadlines do not provide enough time to complete each process, and do not align with the ESPI schedule, which is tied into the EM&V and *ex ante* updates.

22. The annual EM&V plan is expected to be completed at the end of each calendar year. The studies to be implemented in the following year will inform, and be informed by the EM&V plan. March 1st will be a consistent target to ensure information will be available for program planning, ex ante savings updates, and potential and goals, but interim results and actionable findings may be available throughout the year. This date aligns with the schedule for delivering ESPI draft ex post savings results, which will also be informed by all available EM&V studies.

23. PAs have already made and implemented 2015 portfolios, customers have undertaken investment decisions; implementers have prepared voluminous paperwork, all in reliance on older DEER numbers.

24. PG&E identified a number of errors and inaccuracies with the Commission Staff Proposal for measure cost updates.

25. Since we last changed DEER values additional actionable information on those values has become available.

26. The most recent data available on appliance recycling savings values come from a 2014 EM&V report (DNVGL report) that we commissioned on the 2010-2012 cycle appliance recycling programs. The DNVGL report underwent a public notice and comment process.

27. The DNVGL report and the data underlying it (e.g., survey results) allow for development of a "standard practice" baseline for refrigerator and freezer recycling. Discreet age ranges of used units have different levels of viability in the used appliance market.

28. Commission Staff's proposed DEER values reflect that used appliances of different ages have different probabilities of being able to be transferred to new service locations when retired from service at their current location. Some of the assumptions Commission Staff would have us make regarding what would have happened to refrigerators and freezers absent appliance recycling programs should change to better reflect the uncertainty in the data currently available or the rate at which the odds of selling an old appliance deadline.

29. Commission Staff's methodology for determining net-to-gross ratios already correctly accounts for any possible "double counting" of reductions in the marketability of older refrigerators and freezers (and so for any possible double-reduction in savings values).

Conclusions of Law

1. Public Utilities Code Sections 454.55 and 454.56[~~1~~183] require the Commission, in consultation with the California Energy Commission (CEC), to identify all potential achievable cost-effective electricity and natural gas efficiency savings and "establish efficiency targets"[~~1~~184] for electrical or gas corporations to achieve.

2. One of our statutory obligations is setting savings "targets,"[~~1~~185] *i.e.*, goals, for PAs.

3. It is reasonable to establish single set of goals that is "aggressive yet achievable,"[~~1~~186] and rests on data-based assumptions.

4. Navigant's calibration of the potential and goals model is reasonable.

5. It is reasonable to manage the inherent uncertainty around emerging technology by updating goals regularly with the best available data.

6. It is reasonable to rely on EM&V data, DEER, and other Commission-vetted studies as much as possible in setting goals.

7. In setting goals, the Commission is not requiring PAs to adopt to any particular portfolio structure.

~~5~~183 Cal. Pub. Util. Code § 454.55: "The commission, in consultation with the State Energy Resources Conservation and Development Commission, shall identify all potentially achievable cost-effective electricity efficiency savings and establish efficiency targets for an electrical corporation to achieve pursuant to Section 454.5." Cal. Pub. Util. Code § 454.56: "(a) The commission, in consultation with the State Energy Resources Conservation and Development Commission, shall identify all potentially achievable cost-effective natural gas efficiency savings and establish efficiency targets for the gas corporation to achieve."

~~6~~184 *Id.*

~~7~~185 Cal. Pub. Util. Code § § 454.55 and 454.56.

~~8~~186 *See* D.07-09-043 at 107-108.

8. Due process requires a greater degree of Commission oversight of ~~energy efficiency~~EE spending than the joint proposal contemplates.

9. Commission Staff's participation in an informal process is not equivalent to Commission participation. Moreover, a stakeholder process, even with Commission Staff participation, is not necessarily an adequate substitute for Commission review of an application or advice letter.

10. Open meeting laws and the Commission's *ex parte* rules may be in effect as concerns some or all issues covered in stakeholder processes.

11. It is reasonable to treat cross-cutting programs as their own portfolio sector.

12. It is reasonable to fund a stakeholder-let coordinating committee to work collaboratively on ~~energy efficiency~~EE programs.

13. It is reasonable to allow for possible recovery of intervenor compensation under §§ 1801-1812 for participating in the coordinating committee, subject to the usual requirements applicable to intervenor compensation claims.

14. We should modify the ESPI timeline to reflect revisions to other key dates in this decision.

15. It is reasonable to adopt a timeline for ~~energy efficiency~~EE portfolio review and related activities as set forth in the Gantt chart in Appendix 6.

16. Requiring Commission Staff and PAs to track many dozens or even hundreds of annual workpaper submissions on separate clocks to be unreasonable. It is reasonable to aggregate ~~energy efficiency~~EE program administrators' workpaper submissions to Commission Staff into semi-monthly windows.

17. It is appropriate to update DEER with the most recent evaluation results rather than retain older DEER values based upon older evaluation results.

Commission Staff's proposed changes to DEER, as modified herein, are reasonable.

O R D E R

IT IS ORDERED that:

1. Each energy efficiency program administrator must file an initial business plan in 2016, as an application. Business plans must contain the information described in Appendix 4 to this decision.

2. Each energy efficiency program administrator must file an application with a revised business plan when a "trigger" event happens. Triggers are:

    1. A Program Administrator (PA) is unable to adjust its portfolio in response to goal, parameter, or other updates to:
        a. meet savings goals,
        b. stay within the budget parameters of the last-approved business plan, or
        c. meet the Commission-established cost effectiveness (excluding Codes and Standards and spillover adjustments)
    2. The Commission calls for a new application as a result of a decision in the policy track of the proceeding (or for any other reason);

    The affected PA must file a business plan not less than one year prior to the end of funding.

3. An energy efficiency program administrator *may* file an application with a revised business plan whenever they choose.

4. Each energy efficiency program administrator must file a Tier 2 advice letter containing a budget for the next calendar year's energy efficiency portfolio by the first business day in September. The Tier 2 advice letter shall contain a

portfolio cost effectiveness statement and application summary tables with forecast budgets and savings by sector and program/intervention filed in paper, with an electronic query output available in an online tool. Additionally, the Tier 2 advice letter shall provide a report on portfolio changes, annual spending, and fund shifting.

5. If a calendar year ends before Commission disposition of a Program Administrator's advice letter with the budget for the next calendar year, then the prior year's budget shall remain in place until disposition of the pending advice letter. Electric corporations and gas corporations shall continue to recover costs, and to make transfers community choice aggregators and regional energy networks, based on the prior year's authorized budget.

6. Beginning with the date this decision mails, Energy efficiency portfolio administrators (PAs) shall upload all new implementation plans and all associated cost and savings data to a Commission-maintained online system. Implementation plans shall contain the information described in Appendix 5 to this decision. Each PA will maintain current implementation plans on the online system. PAs will catalog any changes to implementation plans when made.

7. We delegate to Commission Staff responsibility for developing additional annual filing guidance and the tools to track compliance, simplify submission, and ensure transparency. Commission Staff is to prepare a white paper further detailing what business plans should contain. Commission Staff shall circulate the white paper to the service list in this proceeding, and take informal comments on the white paper. Commission Staff shall then prepare a guidance document detailing what business plans shall contain, with a template for PA use. Commission staff shall provide an online filing tool in time for an annual budget submission in 2017.

8. There shall be a stakeholder process associated with business plan, Tier 2 advice letter budget filing, and implementation plan preparation. Participants in that stakeholder process may be eligible for intervenor compensation, subject to generally applicable requirements applicable for intervenor compensation claims. There shall be one statewide coordinating committee, with a chairperson or two co-chairpersons. The coordinating committee shall select the chairperson(s) for the coordinating committee, and also shall select the chairperson(s) for each subcommittee.

9. The coordinating scope of work for which intervenor compensation may be awarded shall be as follows:

i. Provide input into business plans prior to and throughout the drafting process (see notes below re scope of input and timing);

ii. Participate input into implementation plans, again, prior to and throughout the drafting process;

iii. Provide input into annual budget advice letters, again, prior to and throughout the drafting process; and,

iv. Provide input into development and revision of metrics for inclusion in business plans and implementation plans as part of i and ii.

v. Provide a clearinghouse for discussion of the scope and schedule of other stakeholder processes.

10. The coordinating committee shall select an energy efficiency program administrator (PA) to file an annual Tier 1 advice letter in January setting out the coordinating committee meeting plans and agendas for the year. Stakeholders

shall also select a PA to post to a Commission-maintained online tool any modifications to the meeting plans during the year.

11. Energy efficiency program administrators (PAs) shall fund the coordinating committee budget pro-rata based on their share of the overall authorized annual energy efficiency spending. The budget will be filed with us for review as part of the Tier 1 advice letter containing the meeting plans. Budget should be the minimum needed to hire a facilitator and conduct meetings to cover the scope of work outlined above.

12. The coordinating committee shall arrange for professional meeting facilitators. We will review how well the facilitator is functioning. The Commission delegates to Commission Staff to decide whether to continue with a particular facilitator. If it is brought to our attention that the facilitator concept (as opposed to a particular facilitator) is not working, we will revisit whether to continue with a facilitator at all.

13. We relieve program administrators from their reporting requirements for both program performance metrics and market transformation indicators under Resolution E-4385.

14. Parties and Commission staff shall comply with the timeline for energy efficiency portfolio review and related activities as set forth in the Gantt chart in Appendix 10.

15. Energy efficiency program administrators (PAs) shall continue to provide monthly cost reports for all programs. For resource programs, PAs shall continue to provide monthly savings data as well.

16. If (alleged) non-compliance with Commission/Commission Staff direction is identified in the implementation plans, manuals, and/or rules, the dispute resolution process we previously approved for ex post evaluation disputes in

Decision 13-09-023 may be invoked.[~~1~~187] A party may file a "Motion for Implementation Plan Dispute Resolution" in this docket (Rulemaking 13-11-005) or in the relevant Program Administrator's most recent business plan application docket. This formal procedure should only be invoked after informal attempts to resolve disputes have been exhausted.

17. Commission Staff shall propose changes to the Database of Energy Efficient Resources (DEER) once annually via resolution, with the associated comment/protest period provided by General Order 96-B. However, Commission staff may make changes at any time without a resolution to fix errors or change documentation.

18. We eliminate requirements that energy efficiency program administrators (PAs) file advice letters for authorization to shift funds among authorized programs. If Commission Staff or stakeholders identify fund-shifting activities that substantially depart from Commission policy direction or, in the opinion of Commission Staff or stakeholders, are not in the best interest of ratepayers and/or the efficiency portfolios they may raise their concerns in a protest to the PA concerns next budget advice letter.

19. PAs shall accelerate the ongoing effort to publish redacted copies of Commission Staff dispositions of custom projects. PAs shall also publish for each disposition redacted versions of the project material the PA submitted to Commission Staff that led to the disposition. PAs shall work with stakeholders to jointly investigate and propose potential solutions to Commission Staff to improve the usability and transparency of all ex ante values. The solutions may

[~~9~~187] D.13-09-013 at attachment 4.

include new software tools that offer a common platform for all PAs to compose savings estimates transparently and consistent with Commission direction. Proposals should be focused on opportunities to facilitate transparency and collaboration. Proposals should specify the expected outcomes from the proposals and how they will improve the process to develop, review, and implement ex ante values. Any proposal must recognize that Commission staff is still responsible for review and approval of ex ante values and methods and that past and current ex ante guidance still pertains.

20. While proposals for reform to the custom ex ante review process leading to Commission Staff dispositions is underway, program administrators shall allow any projects similarly situated to projects where Staff has issued a disposition to be grandfathered and use prior energy savings estimates if a project application or agreement is completed and signed within 60 days of the Staff disposition. This grandfathering provision does not apply to situations where the Staff has found computational or other simple errors and corrections should be applied immediately for all similar projects.

21. ~~20.~~ All workpaper submissions, independent of the exact time submitted, will be considered to have been submitted on the 1st or 3rd Monday of the month; workpapers actually submitted after the close of business of the first Monday will be considered submitted on the 3rd Monday and workpapers submitted after the close of business of the 3rd Monday will be considered submitted on the 1st Monday of the following month.

22. ~~21.~~ Until the Commission's next Phase II decision in this proceeding, energy efficiency program administrators (PAs) may move forward under the existing Third Party Programs framework. PAs may execute new contracts,

and/or modify existing contracts, that may extend up to three years beyond the date of this decision.

23. ~~22.~~ The Database of Energy Efficient Resources shall be updated as set forth in section 3.4.1.5 above.

24. ~~23.~~ The changes we approve here to the Database of Energy Efficient Resources shall be effective on January 1, 2016.

25. ~~24.~~ This order is effective today.

Dated _______________________________, at ~~San Francisco~~Sacramento, California.

Appendices

1. Glossary
2. Navigant Study
3. Business Plan template
4. Implementation Plan template
5. ESPI Revised Timelines
6. GANTT Chart for Rolling Portfolio Cycle Review Process

Appendix 1

Glossary

ALJ	Administrative Law Judge
C&S	Codes and Standards
CAISO	California Independent System Operator
CalTF	California Technical Forum
CARB	California Air Resources Board
CCA	Community Choice Aggregator
CEEIC	California Energy Efficiency Industry Council
CEC	California Energy Commission
CFL	Compact Fluorescent Lamp
Commission	California Public Utilities Commission
CSE	Center for Sustainable Energy
DAWG	Demand Analysis Working Group
DEER	Database for Energy Efficient Resources
EM&V	Evaluation, measurement, and verification
ESPI	Efficiency Savings and Performance Incentives
ET	Emerging Technology
FirstFuel	FirstFuel Software, Inc.
GAAP	generally applicable accounting principles
HVAC	heating, ventilating, and air conditioning
IOU	Investor Owned Utility
IT	information technologies
JP	Joint Parties
Joint Parties	San Francisco Bay Area Regional Energy Network, California Energy Efficiency Industry Council, Local Government Sustainable Energy Coalition, Marin Clean Energy, Natural Resources Defense Council, Office of Ratepayer Advocates, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, Southern California Gas Company, Southern California Regional Energy Network, and The Utility Reform Network
Joint proposal	Proposals of how rolling portfolios could work presented by Joint Parties at Workshop 1
LBNL	Lawrence Berkeley National Laboratory
LG	local government
MCE	Marin Clean Energy

ME&O	Marketing, education, and outreach
Navigant	Navigant Consulting, Inc.
Navigant Study	The initial study of energy efficiency potential Navigant presented to the Commission at Workshop 2
NRDC	Natural Resources Defense Council
ORA	Office of Ratepayer Advocates
PA	Program Administrator
PAG	Project Coordination Group
PG&E	Pacific Gas and Electric Company
PHC	Prehearing conference
PIP	program implementation plan
PRG	Peer Review Group
REN	regional energy network
Revised Navigant Study	Energy Efficiency potential and goals Study for 2015 and Beyond, Stage 1 Public Draft Report
ROI	Return on Investment
RPS	Renewable Portfolio Standard
RRIM	Risk/Reward Incentive Mechanism
SCE	Southern California Edison Company
SDG&E	San Diego Gas and Electric Company
SoCal Gas	Southern California Gas Company
Strategic Plan	The Commission's Energy Efficiency Strategic Plan
TRC	total resource cost
TURN	The Utility Reform Network
WE&T	Workforce education and training
WHPA	Western HVAC Performance Alliance

Appendix 2

Navigant Study
Energy Efficiency Potential and Goals Study for 2015 and Beyond

Appendix 3

Business Plan Template

Business Plan Guidance

1) Overview

For the portfolio, and for each sector within the portfolio, overview of:

a) Proposed budget,

b) Projected savings and performance metrics,

c) Cost effectiveness,

d) Narrative description of changes from existing portfolio, including

   (1) budget changes

   (2) program/intervention strategy changes

   (3) justifications for the above

e) Description of how the portfolio meets portfolio guidance

2) Sector Chapters

Provide a chapter for each of six sectors (residential, commercial, industrial, agriculture, public, cross-cutting) for which a Program Administrator (PA) is taking action. Each chapter should discuss the following:

a) Sector-Specific Intervention Strategies:

   i) overarching goals, strategies and approaches;

   ii) near-, mid- and long-term strategic initiatives;

   iii) how the sector approach(es) advances the goals, strategies and objectives of the strategic plan and other Commission policy guidance.

b) Statewide Coordination: Description of which and how strategies are coordinated statewide and regionally among PAs and/or with other demand-side options. Discussion should address the following, as applicable:

   i) Investor Owned Utility (IOU) and Regional Energy Network (REN) programs within a PA's geographic territory

   ii) Statewide programs

iii) Coordination with other state and local government activities

c) Cross-Sector Coordination: Description of how cross cutting activities are addressed in customer sectors strategies. Include as applicable:

   i) Emerging Technologies program
   ii) Codes and Standards program
   iii) WE&T efforts
   iv) Program-specific marketing and outreach efforts (provide budget)

d) Pilots and Innovation: Describe any unique or innovative aspects of program not previously discussed, and describe any pilots contemplated or underway for the sector.

e) EM&V Considerations: Statement of evaluation needs that must be built into program designs. Identify which programs will need to consider and build evaluation methods into the program design. These might include:

   i) data collection strategies embedded in the design of the program or intervention to ensure ease of reporting and near term feedback, and

   ii) internal performance analysis during deployment

3) Portfolio Budget and Savings Tables

Portfolio budgets should be submitted via EE Stats, guidance and templates are posted in the Regulatory/Guidance Documents section at http://eestats.cpuc.ca.gov/StandardTables/GuidanceDocument.aspx. While the tables below should be attached to the business plan filings, budgets and savings will be reviewed and approved through the advice letter filing process, which should be filed at the same time as the Business Plan application. Updated data table templates will be posted to EE Stats once the filing system has been developed. Data inputs will include:

a) Program level proposed budgets that meet portfolio savings and cost effectiveness requirements (Placemats)

b) Cost effectiveness showing outputs, with cost calculator submittals posted in EE Stats

c) Program Performance Metrics

(End of Appendix 3)

Appendix 4

Implementation Plan Template

ATTACHMENT: Implementation Plan Guidance

The following information will be uploaded to EEStats, to create a separate webpage for each program and sub-program through an online database platform.

Program Budget and Savings Information

EE Stats implementation plan platform will generate summary views of the following information, based on application tables that the PAs upload to EE Stats .The information will be organized at the measure and sub-program level to enable multiple cross tabulations and outputs for stakeholders review and consideration. Programs with subprograms will be displayed at subprogram level, and will roll up to a program summary page..

1. Program and/or Sub-Program Name
2. Sub-Program ID number
3. Sub-program Budget Table
4. Sub-program Gross Impacts Table
5. Sub-Program Cost Effectiveness (TRC)
6. Sub-Program Cost Effectiveness (PAC)
7. Type of Sub-Program Implementer (Core, third party or Partnership)
8. Market Sector (including multi-family, low income, etc)
9. Sub-program Type (Non-resource, resource acquisition, market transformation)
10. Intervention Strategies (Upstream, downstream, midstream, direct install, non-resource, finance, etc)

Implementation Plan Narrative

Provide the following narrative description for each program (and sub-program, if applicable):

1. **Program Description:** Describe the program, its rationale and objectives.

2. **Program Delivery and Customer Services:** Describe how the energy efficiency program will deliver savings (upstream, downstream, direct install, etc); how it will reach customers and the services that the program will provide. Describe all services and tools that are provided.

3. **Program Design and Best Practices:** Describe how the program meets the market barriers in the relevant market sector/end use. Describe why the program approach constitutes “best practices” or reflects “lessons learned”. Provide references where available.

    4. **EM&V:** Describe any process evaluation or other evaluation efforts thatthe Program Administrator (PA) will undertake Identify the evaluation needs that the PA must build into the program. These might include:
        a. data collection strategies embedded in the design of the program or intervention to ensure ease of reporting and near term feedback, and

   b. internal performance analysis during deployment
   c. performance metrics

5. **Pilots:** Please describe any pilot projects that are part of this program, and explain the innovative characteristics to these pilots. The inclusion of this description should not replace the Ideation Process requirements currently agreed by Commission staff and IOUs. This process is still undergoing refinements and will be further discussed as part of Phase III of this proceeding.[1]

6. **Additional information:** Include here additional information as required by Commission decision or ruling (As applicable. Indicate decision or ruling and page numbers)

Supporting Documents

Attach the following documents in Word:

1. **Program Manuals and Program Rules (See below)**

2. **Program Logic Model:** Model should visually explain underlying theory supporting the sub-program intervention approach, referring as needed to the relevant literature (e.g., past evaluations, best practices documents, journal articles, books, etc.).

3. **Process Flow Chart:** Provide a sub-program process flow chart that describes the administrative and procedural components of the sub-program. For example, the flow chart might describe a customer's submittal of an application, the screening of the application, the approval/disapproval of an application, verification of purchase or installation, the processing and payment of incentives, and any quality control activities.

4. **Incentive Tables, Workpapers, Software Tools:** (Can incentives be drawn out of the E3s?) Provide a summary table of measures and incentive levels, along with links to the associated ~~work papers~~workpapers. Templates are available at http://eestats.cpuc.ca.gov/StandardTables/GuidanceDocument.aspx.

5. **Quantitative Program Targets**: Provide estimated quantitative information on number of projects, companies, non-incentive customer services and/or incentives that program aims to deliver and/or complete annually. Provide references where available.

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[1] The Ideation Process is a set of reporting requirements developed collaboratively to ensure adequate reporting and review of pilots and other similar projects. This process will be further deliberated as part of Phase III. The current set of guidelines can be found here: http://www.cpuc.ca.gov/NR/rdonlyres/2D89F0DD-619B-4FC7-BD17-843E2993594D/0/IdeationProjectsProcess_OUT.pdf

6. **Diagram of Program:** Please provide a one page diagram of the program including sub-programs. This should visually illustrate the program/sub-program linkages to areas such as:
    a. Statewide and individual IOU marketing and outreach
    b. WE&T programs
    c. Emerging Technologies and Codes and Standards
    d. Coordinated approaches across IOUs
    e. Integrated efforts across DSM programs

Program Manuals:

All programs must have manuals to clarify for implementers and customers the eligibility requirements and rules of the program. Note that program rules must comply with CPUC policies and rules. Table templates are available at http://eestats.cpuc.ca.gov/StandardTables/GuidanceDocument.aspx. At minimum, manuals should include:

1. **Eligible Measures or measure eligibility**: Provide requirements for measure eligibility or a list of eligible measures.

2. **Customer Eligibility Requirements:** Provide requirements for program participation (e.g., annual energy use, peak kW demand)

3. **Contractor Eligibility Requirements:** List any contractor (and/or developer, manufacturer, retailer or other "participant") eligibility requirements (e.g. specific IOU required trainings; specific contractor accreditations; and/or, specific technician certifications required).

4. **Participating Contractors, Manufacturers, Retailers, Distributers**: For upstream or midstream incentive and/or buy down programs indicate

5. **Additional Services:** Briefly describe any additional sub-program delivery and measure installation and/or marketing & outreach, training and/or other services provided, if not yet described above

6. **Audits:** Indicate whether pre and post audits are required, if there is funding or incentive levels set for audits, eligibility requirements for audit incentives

7. **Sub-Program Quality Assurance Provisions:** Please list quality assurance, quality control, including accreditations/certification or other credentials

For Market Transformation Programs Only:

1. **Quantitative Baseline and Market Transformation Information:** Provide quantitative information describing the current energy efficiency program baseline information (and/or other relevant baseline information) for the market segment and major sub-segments as available.

2. **Market Transformation Strategy:** A market characterization and assessment of the relationships/dynamics among market actors, including identification of the key barriers and opportunities to advance demand side management technologies and strategies A description of the proposed intervention(s) and its/their intended results, and specify which barriers the intervention is intended to address.

(End of Appendix 4)

Appendix 5

ESPI Revised Timelines

Updates to Attachment 5 of D.13-09-023

The Ex Ante Review (EAR) performance incentive award claim will be determined and distributed through the following process:

1. By ~~June 1~~ July 31 of each program year (PY), Commission staff, for their EAR contractors, will post preliminary EAR performance scores to the deeresources.info website.

2. By ~~July 1~~ August 15 of each PY, Commission staff will hold a meeting (by phone or in person) with each utility to discuss the preliminary EAR scoring results. This meeting is not intended to be a forum for the utilities to dispute their scores, but rather for Commission staff to explain their concerns, and for the IOUs and Commission staff to identify any possible factual errors or miscommunications in the use of the metrics and areas where utilities' scores can be improved.

3. By ~~January~~ March 31 of PY +1, Commission staff, or their EAR contractors, will post final EAR performance scores to the deeresources.info website.

4. By ~~February~~ April 15 of PY +1, Commission staff will hold a meeting (by phone or in person) with each utility to discuss the final EAR scoring results. This meeting is not intended as a forum for the utilities to dispute their scores, but rather to discuss each utility's EAR performance through the PY and any potential changes in performance since the progress report, as well as to identify any possible factual errors or miscommunications in the use of the metrics.

5. If utilities wish to dispute how the EAR performance scores were calculated, they may initiate the Dispute Resolution process described in D.10-04-029 by submit their concern(s) to the ALJ by ~~March~~ May 1 of PY +1.

6. The ALJ will resolve any disputes by ~~June~~ August 15 of PY +1.

7. By ~~June 30~~ September 1 of PY +1, each utility will file its annual ESPI advice letter for Energy Division disposition pursuant to section 7.6.1

of General Order 96-B addressing the EAR performance incentive award claim. In the advice letter, each utility will calculate the EAR incentive award claim using their respective EAR performance score as a percentage of the total EAR performance component cap. For instance, if a utility scores 86 out of 100 for EAR performance, their EAR incentive award claim would equal 86% * [3% of resource program expenditures].[1]

8. Energy Division will prepare a draft resolution to approve the advice letter as practicable as possible thereafter so as it correctly incorporates the final EAR performance scores. If it does not, Energy Division will take other appropriate action under General Order 96-B.

Updates to Attachment 6 of D.13-09-023

1. By October 31 of the previous PY, Commission staff will finalize the list of DEER and Phase 1 Non-DEER Workpaper measures that will not be locked down for the upcoming PY and post this "high uncertainty measure list" on a publicly accessible website. Commission staff will post a draft list of measures in advance of the October 31 date, which will be vetted with stakeholders. The list of measures that are not locked down will be based on a review of remaining uncertainties which may have a significant impact on the portfolio performance and that can be addressed with additional research. For ESPI purposes, “highly uncertain” measures are defined as those measures for which the Commission believes the –net lifetime savings of the current DEER or non-DEER savings estimate may be as much as 50% or more under- or over- estimated. For example, three parameters with just over 20% uncertainty or two with 30% uncertainty can provide an overall uncertainty threshold of at least 50%. In addition, only parameters that are expected to be addressed by the Commission’s evaluation activity during the current period are included in the sufficiently uncertain measure list. Commission staff shall similarly identity any uncertain parameters in mid-cycle (also referred to as “Phase 2”) workpapers submitted by the IOUs in the workpaper dispositions developed during the portfolio implementation period. All other deemed measures will be awarded based on ex ante savings parameters.

[1] Excluding funding dedicated to administrative activities, codes and standards programs, and non-utility administration of programs (e.g., CCA and RENs’ programs).

2. Throughout the year, Commission staff may add to the list any measures submitted via Phase 2 (i.e. mid-cycle) non-DEER workpapers that staff deems too uncertain to lock down based on information submitted by the IOUs in the workpapers.
3. By October 31 of the implementation PY, Commission staff will post on a publicly accessible website – Evaluation Plans for the upcoming PY based on a review of proposed and the first three quarters of actual IOU program activity.
4. By December 31 of the implementation PY, the Evaluation Plans are finalized in response to stakeholder input and posted to a publicly available website.
5. Commission staff, with assistance from their evaluation contractors, complete draft final evaluation reports[~~1~~2] based on the plans and post them on a publicly accessible website by ~~December 31 of PY+1~~ April 1 of PY + 2. The draft final evaluation reports will detail the specific updates that are recommended for application to the IOU savings claims based on the field analysis.

   The evaluation contractors notify the CPUC Energy Efficiency service lists of the availability of the draft final evaluation reports and their website posting location(s) and provide the date/time/location of the conference described in Step 6.
6. Commission staff, with assistance from their evaluation contractors, hold a conference, under Commission staff sponsorship, with stakeholders (by telephone or in-person) to discuss draft final evaluation reports by ~~January~~ April 15 of PY+2.
7. Stakeholders have an opportunity to provide written comments identifying any errors in the draft final evaluation reports. Stakeholders will be required to include in the written comments at least a brief description of every point in the draft report which they believe needs correction, even if discussed at the conference, by January 31 April 30 of PY+2.

[~~2~~2] Evaluation reports refer to either interim or final reports submitted to the Commission by program evaluation contractors describing evaluation results (e.g., impact evaluation studies) for specific portfolio areas.

8. Commission staff directs evaluation contractors to make any necessary changes to final evaluation reports stimulated by the comments. All written comments, and Commission staff's treatment of them, will be reflected in appendices to the final evaluation reports. The final evaluation reports are posted on a publicly accessible website by February 28 June 1 of PY+2 (one month after comments are received).

9. If parties have continued disputes with how the comments were addressed or handled, they may submit an issue to the ALJ via the Dispute Resolution process outlined in D.10-04-029 by ~~March~~ June 15 of PY +2. The ALJ will resolve any disputes by ~~June~~ September 30 of PY +2.

10. For IOUs not impacted by a dispute process, Commission staff applies evaluation results to the IOU filed tracking data to quantify the portfolio energy savings and uses that quantity to develop the draft Savings Performance Statement by ~~March 31~~ June 15 of PY +2. For IOUs impacted by a dispute process, Commission staff develops the draft Savings Performance Statement by ~~July 31~~ October 30 of PY+2.

    In either case, Commission staff will notify the CPUC Energy Efficiency service lists of the availability of the draft Savings Performance Statement and the website posting location and provide stakeholders with the date/time/location of the conference described in Step 11.

11. Commission staff, with the assistance of relevant contractors, holds a conference with stakeholders by telephone or in-person to address each IOU's Savings Performance Statement by ~~April 15~~ July 1 of PY+2 (~~August~~ November 15 if a dispute was addressed). At this meeting, all stakeholders have an opportunity to ask questions about the application of evaluation results in the draft Savings Performance Statement with those who prepared it (and supporting consultants).

    Stakeholders may raise questions about the draft Statement, receive responses from those who prepared it, and point out any errors they believe are contained in the Statement. The goal is to have a give and take between the stakeholders, report authors, and the supporting technical experts.

12. Stakeholders have an opportunity to provide written comments identifying any errors in each IOU's draft Savings Performance Statement by ~~April 30~~ July 15 of PY+2 (~~August 31~~ November 30 if a dispute was addressed). Stakeholders will be required to include in the written comments at least a brief description of every point in the draft statement which they believe needs correction, even if discussed at the conference. However, stakeholders are not allowed to re-initiate debates over the evaluation results that were already reviewed.

13. Commission staff makes any necessary changes to the Savings Performance Statement stimulated by the oral conference and written comments and posts the Final Savings Performance Statement on a publicly accessible website and sending it to the Energy Efficiency proceeding service list(s), by ~~May 31~~ August 1 of PY+2 (~~September 30~~ December 15 if a dispute was addressed). All written comments, and Commission staff's treatment of them, will be reflected in an appendix to the Final Savings Performance Statement.

14. Within 30 days of issuance of the Final Savings Performance Statement (i.e., by ~~June 30~~ September 1 of PY+2, or ~~October 30~~ January 15 if a dispute was addressed), each utility will file an advice letter for Energy Division disposition pursuant to section 7.6.1 of General Order 96-B. The advice letter will address the ex post savings award claim based on the Final Savings Performance Statement.

15. Energy Division will approve the advice letter by ~~August 31~~ November 1 of the PY or as practicable as possible thereafter so long as it correctly incorporates the results of the Final Savings Performance Statement. If it does not, Energy Division will take other appropriate action under General Order 96-B.

(End of Appendix 5)

Appendix 6

GANTT Chart for Rolling Portfolio Cycle Review Process

Document comparison by Workshare Compare on Tuesday, October 20, 2015 4:36:23 PM

Input:	
Document 1 ID	file://d:\dc3\Desktop\REVISIONS\R1311005 Edmister Agenda Dec Rev 1 Decision re EE Goals.docx
Description	R1311005 Edmister Agenda Dec Rev 1 Decision re EE Goals
Document 2 ID	file://d:\dc3\Desktop\REVISIONS\R1311005 Edmister Agenda Dec Rev 2 Decision re EE Goals for 2016 and Beyond by TOD.docx
Description	R1311005 Edmister Agenda Dec Rev 2 Decision re EE Goals for 2016 and Beyond by TOD
Rendering set	Standard

Legend:	
Insertion	
~~Deletion~~	
~~Moved from~~	
Moved to	
Style change	
Format change	
~~Moved deletion~~	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
	Count
Insertions	528
Deletions	430
Moved from	0
Moved to	0
Style change	0
Format changed	0
Total changes	958