BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Reform the Commission's Energy Efficiency Risk/Reward Incentive Mechanism	Rulemaking 12-01-005 (Filed January 12, 2012)

COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) ON THE ASSIGNED COMMISSIONER'S RULING SOLICITING COMMENTS REGARDING EFFICIENCY SAVINGS AND PERFORMANCE INCENTIVE DESIGN FOR ENERGY EFFICIENCY 2013-2014 PORTFOLIO

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I. INTRODUCTION AND SUMMARY

Pursuant to Rules 1.9 and 1.10 of the California Public Utilities Commission's (CPUC or Commission) Rules of Practice and Procedure, the Natural Resources Defense Council (NRDC) respectfully submits these post-workshop comments pursuant to the "Assigned Commissioner's Ruling Soliciting Comments Regarding Efficiency Savings and Performance Incentive Design for Energy Efficiency 2013-2014 Portfolio" (ACR) issued April 4, 2013. NRDC is a non-profit membership organization, with nearly 100,000 California members with an interest in receiving affordable energy services and reducing the environmental impact of California's energy consumption.

NRDC incorporates by reference our comments on, and proposal for, a new efficiency incentive mechanism for 2013-14 in our July 16, 2012 and October 1, 2012 comments.[1] NRDC continues to urge the Commission to adopt the incentive mechanism detailed in our earlier comments. However, these comments focus on the ACR's proposal for a new incentive mechanism design, and do not repeat NRDC's proposal in detail.

NRDC appreciates the Assigned Commissioner's thoughtful effort to combine elements of various parties' proposals into a new incentive mechanism design for 2013-14. There are many elements of the ACR's proposal that we support, as discussed below in Section II. In particular, NRDC strongly supports basing potential utility earnings on the CPUC's priority objective: saving

[1] *Comments of the Natural Resources Defense Council (NRDC) on the Administrative Law Judge's Ruling Calling for Comments on Incentive Reform Issues*, R.12-01-005, July 16, 2012; *Post-Workshop Comments of the Natural Resources Defense Council (NRDC) on Incentive Reform Issues for 2013-14*, October 1, 2012.

energy. Our recommendations for changes to the ACR's proposal are summarized as follows:

- **Use ex-ante EM&V savings estimates.** NRDC opposes the ACR's proposal to return to full ex-post EM&V for the 2013-14 incentives, because it would reignite contentious fights that could derail progress on efficiency. Instead, we urge the CPUC to use ex-ante savings estimates (but still verifying the installations and expenditures) for the 2013-14 transition period, while setting up a process for an improved approach to determining energy savings estimates in the future.
- **Count savings from codes and standards.** NRDC opposes the ACR's proposal to stop counting savings from codes and standards (C&S) towards the performance-based element of the incentive mechanism, since it would significantly "de-value" C&S relative to the Commission's existing approach and the rest of the portfolio. Instead, we urge the CPUC to continue counting savings from C&S, since it is often a highly cost-effective strategy that should be strongly encouraged.
- **Simplify.** NRDC urges the Commission to significantly simplify the mechanism proposed in the ACR.
    - **Emphasize performance.** NRDC urges the Commission to put more emphasis on the performance-based component of the mechanism tied to energy savings, and less emphasis on the management fees (e.g. 5% of the total).
    - **Set a cost-effectiveness threshold.** NRDC urges the Commission to replace the cost-effectiveness components of the ACR's proposal (to multiply the earnings based on lifecycle savings by the difference of the ex-post and ex-ante TRCs) with a cost-effectiveness threshold and/or a cost-effectiveness guarantee.
    - **Consistency across utilities.** NRDC urges the Commission to provide consistent earnings coefficients for the utilities or, at minimum, reduce the significant disparities that exist in the ACR's proposal.
- **Increase potential earnings.** NRDC urges the Commission to increase the magnitude of the potential maximum and expected earnings to align with the importance of efficiency and the CPUC's past mechanisms.
- **Eliminate conformance earnings.** NRDC urges the Commission to eliminate the earnings based on the ex-ante conformance scores or, at minimum, make it a much smaller component of the overall incentive.

These comments are organized to provide NRDC's overarching view of the ACR's proposal in Section II, followed by responses to the specific questions in the ACR in Section III.

II. NRDC'S OVERARCHING COMMENTS

In December, the Commission stated that "a shareholder incentive mechanism is an important tool to promote California's policy objectives for energy efficiency."[2] The ACR's

[2] D.12-12-032 , Finding of Fact 15.

proposal for a new efficiency incentive mechanism - the Efficiency Savings and Performance Incentive (ESPI) - is a step forward to enable the Commission to continue using this important policy tool. NRDC supports many elements of the proposed ESPI, including its focus on performance at meeting the CPUC's core objectives for the efficiency programs, consistent with the Commission's statement that "energy efficiency savings is an ideal metric to use" for an incentive mechanism.[3] In particular, NRDC supports:

- **Basing earnings on net lifecycle energy and demand savings.** This approach will reward utilities for achieving the Commission's goal of maximizing energy savings, with an emphasis on long-lived savings (which are often achieved through deeper and more comprehensive efficiency upgrades). NRDC explained why relying on lifecycle energy savings will better meet the Commission's current objectives than the shared savings approach in previous comments.[4]
- **Spurring high levels of performance.** NRDC supports an approach that sets a cap on earnings at a high level of performance, to spur utilities to exceed the CPUC's goals.

NRDC also supports other elements of the ESPI, however, our primary focus in these comments to recommend improvements and changes.

A. NRDC urges the CPUC to use ex-ante EM&V estimates for the 2013-14 incentive mechanism while developing an improved approach to enable continuous updating of estimates in the future. NRDC opposes the ESPI's proposal to return to full ex-post EM&V at this time, because the underlying problems with the EM&V process remain unresolved.

The ACR proposes to use ex-post evaluation, measurement and verification (EM&V) estimates for the component of the earnings mechanism that is based on energy savings. As NRDC noted in the past, an ex-post mechanism could provide significant benefits in theory. However, an ex-post mechanism based on essentially the same public process as the prior cycles will likely fall victim to similar difficulties experienced with the 2006-08 incentive mechanism. An ex-post approach for an incentive mechanism will not be able to succeed until the Commission addresses the underlying problems with the EM&V system. In other words, the problem is not with the incentive mechanism design but with the Commission's approach to EM&V.[5]

[3] Ibid, FOF 21.
[4] See, e.g., *Post-Workshop Comments of the Natural Resources Defense Council (NRDC) on Incentive Reform Issues for 2013-14*, October 1, 2012, pp. 6-8.
[5] In prior comments, NRDC has recommended (i) setting clear guidelines up front, (ii) resolving disputes in a timely

NRDC supported ex-post EM&V for the 2006-08 incentive mechanism and was one of the last "hold outs" continuing to support ex-post EM&V when the CPUC and many parties originally proposed using ex-ante to eliminate the controversy that arose with the 2006-08 Risk Reward Incentive Mechanism (RRIM). We ultimately agreed to support the move to ex-ante because the CPUC had not established a mechanism to resolve disputes that could have saved the ex-post approach. While NRDC appreciates the steps Energy Division has taken to begin increasing the transparency of the EM&V process, the basic approach proposed in the ACR is very similar to the one the CPUC used for 2006-08, so it is likely to lead to the same contention and delays.

The ACR's proposed approach would change very few of the underlying issues that led to the controversy over ex-post EM&V in the 2006-08 mechanism. Although the linear earnings function, elimination of "cliffs" and the other factors noted in the ACR (pp. 12-13) could help, they are only minor improvements when it comes to reducing contention. The two largest causes of the problems with the 2006-08 mechanism were (i) the CPUC's lack of a clear approach to meaningfully discuss results and resolve disputes over EM&V methodologies and results, and (ii) the delays of final EM&V results which did not afford the utilities and implementers the opportunity to make mid-course changes to programs. These factors still remain and will plague the ex-post process in the same manner as they did before.

The ACR appears to envision a very similar approach in which those responsible for the evaluations are essentially "walled off" from the rest of the Commission's process,[6] and therefore parties would have no ability to meaningfully discuss or challenge results (which would also not be available until after the programs are complete). This would result in the same potential for endless controversy that the CPUC experienced using a very similar approach for 2006-08. California cannot afford a repeat of that experience, which consumed excessive amounts of the Commission's and stakeholders' time and resources and impeded progress on energy efficiency. The state needs to urgently ramp up energy efficiency, which requires stakeholders and the Commission to focus on critical policies, program and implementation efforts, and not be bogged down once again by endless debates that could be addressed through a clear and focused effort. The Commission should take the time now to put a structure in place that will enable that progress.

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manner, (iii) making information publicly available, and (iv) adopting accurate estimates of energy and bill savings.

[6] The ACR's discussion appears to provide some amount of opportunity (albeit undefined) for parties to work with the evaluators at the beginning of the process, but once findings are made it appears that the evaluators would only "be available to explain their findings to decision-makers" (p. 20)

Although we continue to believe that the policy rationale for an ex-post approach is strong, it is simply premature to try it again. The CPUC must make significant changes to create a collaborative and transparent EM&V process that will increase the Commission's and all parties' confidence in the energy saving estimates and enable continuous updating of those estimates. This 2013-14 "transition period" is the time to set up an approach that will improve the EM&V process and save enormous time and resources down the road. Rather than jumping right back into the fire and expecting a different result, the Commission's resources over the next two years would be much better spent building an alternative approach to avoid the fire altogether in the future. NRDC recommends that the Commission use ex-ante EM&V for the 2013-14 transition period (which the ACR notes has already been largely "locked down"[7]), and still verifying actual installations and expenditures, while it establishes a collaborative EM&V forum that can enable continuous updating of energy saving estimates in the future.

Recommendations to Improve the EM&V Process to Enable Continuous Updating of Estimates

The Commission should use the remainder of this transition period to establish a process that will enable CPUC staff and stakeholders to work through the technical details and measurement uncertainty associated with EM&V and develop credible, technically sound estimates through an open and transparent process. There are effective models for EM&V that achieve these goals; a prime example is the Regional Technical Forum in the Pacific Northwest. NRDC urges the Commission to implement an open and transparent technical forum to develop and inform CPUC adoption of savings estimates. Such an approach will pay significant dividends, including: (i) saving time for the CPUC and staff by working through technical issues in a collaborative forum with a clear and focused process rather than through a more cumbersome and time consuming formal written commenting process, (ii) increasing the CPUC's and all parties' confidence in saving estimates, (iii) informing program design and implementation, and (iv) reducing contention. Such an approach could also enable updated EM&V estimates to be integrated into program designs and the incentive mechanism on a rolling basis.

[7] The ACR notes that the lock down of 2013-2014 estimates was completed on March 1, 2013. (p. 11) As NRDC has recommended in prior comments, the Commission should provide limited exceptions to the use of ex-ante for the 2013-14 cycle. For example, the Commission could use ex-post for the new and innovative measures discussed in the ACR (p. 12), behavioral programs, etc.

Absent such an approach, an ex-post incentive mechanism would require a formal CPUC dispute resolution process (such as offering EM&V results as testimony and letting stakeholders test the validity of the results through the cross-examination process). However, for the 2013-14 mechanism, it would be a better use of the Commission's time and resources to use ex-ante estimates while focusing on establishing a collaborative technical forum that could enable continuous EM&V updating in the future.

At Minimum, the CPUC Should Use Ex-Ante Net-to-Gross Ratios and DEER

If the Commission does not accept NRDC's recommendation to use ex-ante values for 2013-14, then we recommend that at a minimum the CPUC use ex-ante the DEER values (which are from the Commission's own database of ex-ante values that implementers are required to use) and net-to-gross (NTG) ratios.

Changes in NTG estimates caused a significant portion of the controversy around the 2006-08 mechanism. NTG estimates rely on counterfactual estimates of the portion of efficiency upgrades that would have taken place even in the absence of the efficiency programs. This makes NTG ratios notoriously difficult to "measure" in any objective sense, and therefore extremely likely to provoke controversy.

Of course, continuing to study the effectiveness of programs at spurring action is extremely important to improve program design and to make the best use of program investments, but that information should be used on a *prospective* basis to make improvements. *Retroactively* adjusting NTG ratios (i.e. using ex-post NTG) would make earnings entirely unpredictable at best, and a game of "gotcha" at worst. Either scenario would significantly undermine the effectiveness of the incentive mechanism.

Ex-post NTG estimates are particularly susceptible to the appearance of a game of "gotcha" in instances where the NTG estimates are simply based on judgment calls.[8] Expectations about the naturally occurring activity in a given market (i.e. the number of projects that are expected to happen without programs) should be fixed up-front; trying to second guess it after the fact will always be highly controversial because it is impossible to prove what "would have

[8] A particular focus of the controversy around the 2006-08 mechanism was the ex-post results for the Upstream Lighting Program, and the NTG for that program was simply based on a consultant's "expert judgment." Another example is NTG analyses that use "Delphi panels," which essentially survey a small group of experts to get their opinion on the impact of any particular program. While such an approach can often provide very valuable information to improve program design, it is clearly subjective (both in relying on expert judgment and in the choice of which experts to rely upon).

happened" without programs.[9]

Moreover, ex-post NTG updates can penalize the very market transformation efforts that the CPUC seeks to expand. The goal of market transformation efforts is to increase market acceptance for an efficient product or process to the point where it becomes standard market practice (and/or is adopted in a minimum code or standard). Therefore, in theory, the more successful a program becomes at changing the market, the lower the NTG ratio should become. But using retroactive adjustments to NTG ratios could then minimize the savings that are counted for a program that succeeds in transforming the market. In other words, implementers are essentially penalized for doing a good job of moving the market. When the Commission approves a program, it has an expectation of what is happening in the market place and the opportunity to influence that. An approach that comes back after the fact for a transformed market and updates the NTG ratio retroactively paints an incorrect picture by assuming that "everything would have happened anyways," even though the Commission saw a need for market intervention in approving the program in the first place. Such an approach can undermine the motivation for aggressive market transformation efforts, contrary to the Commission's goals.

B. NRDC opposes the ACR's proposal to stop counting savings from codes and standards towards the performance-based element of the ESPI.

Codes and standards are an extremely cost-effective way to capture energy savings and help avoid lost opportunities, and they are a critical part of the market transformation cycle.[10] The utilities' programs have been critical to both California and national C&S enhancements. The ACR's proposal to stop counting savings from codes and standards towards the energy savings component of the ESPI would significantly "de-value" C&S relative to the rest of the portfolio. It would also create perverse incentives that would discourage utilities from aggressively pursuing codes and standards upgrades. This would set California policy back nearly a decade.

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[9] As NRDC recommended in prior comments, we recommend an approach modeled off of one used in the Northwest that would work as follows: (1) ED would calculate a fixed baseline rate of market adoption of particular measures, (2) Attribution of program savings up to those values would be considered naturally occurring (i.e., if the program did not surpass the established baseline, the program would not receive any credit), and (3) program participation *beyond* that fixed level which was identified before the program began would be considered net program savings as a result of program intervention.

[10] For further discussion on the importance of C&S, see *Comments of the Natural Resources Defense Council (NRDC) on the Administrative Law Judge's Ruling Calling for Comments on Incentive Reform Issues,* July 16, 2012, pp. 16-17.

If utilities can only count program savings but not C&S savings, the perverse incentive arises because new C&S increase the baseline against which program savings are estimated, thereby lowering program savings. The CPUC had years of experience with this policy, which created a perverse incentive for the utilities to keep measures in programs, even if it would be more cost-effective and effective to capture savings through C&S. That is why the CPUC sought to put programs and C&S on a more even footing by setting combined goals and allowing the utilities to count savings from C&S upgrades according to their "contribution" to those C&S.

The ESPI management fee approach for C&S program implementation would offer maximum earnings of approximately $2.5 million for 2013-14 (for all utilities combined).[11] In contrast, NRDC's proposed mechanism described in our October 1, 2012 comments would continue the Commission's current policy of counting C&S savings alongside program savings and would offer earnings of approximately $33 million for C&S savings for 2013-14 (for all utilities combined). Therefore, the ESPI's management approach would yield a drastic 90% cut in potential earnings for C&S relative to NRDC's recommendation.

Moreover, the ACR offers maximum potential earnings of about $122 million for the two components that yield quantifiable savings (the "savings performance award" and the C&S, in the illustrative figures provided in the ACR), but only 2% of that is for C&S while 98% is for programs alone. However, C&S savings are expected to account for approximately 10% to 30% of the portfolio's total net lifecycle savings. This illustrates how significantly the ACR's approach would skew the portfolio away from C&S efforts.

The ACR offers only a very brief rationale for changing the CPUC's critical policy on how C&S savings are counted, essentially arguing that accounting for C&S savings is "complicated" and that savings usually do not accrue in the same cycle as expenditures. However, accounting for C&S savings is critical for other purposes (e.g. procurement) and already well-established, and neither of the ACR's rationales is a persuasive reason to de-emphasize the most cost-effective approach to saving energy. Instead, the CPUC's objective should be to spur the utilities to pursue C&S upgrades wherever possible, feasible, and cost-effective. Therefore, NRDC strongly urges the CPUC continue counting savings from C&S towards the performance-based element of the incentive mechanism.

[11] ACR Table 12a. Note that Table 2 states that total earnings would be $5 million, however, that appears to be a typo since it is more than 10% of the Table's C&S budget.

If the CPUC decides to use a management fee for the codes and standards programs, contrary to NRDC's recommendation, then we urge the Commission to provide a greater earnings opportunity for the C&S efforts, proportional to the importance of the C&S savings in the portfolio. Since C&S savings are expected to account for approximately 10% to 30% of the portfolio's net lifecycle savings, an amount in the range of $12 million to $36 million (instead of the $2.5 million proposed in the ACR) would better reflect the actual importance of the C&S savings (and the utilities' contribution to achieving them) as part of meeting the CPUC's goal of maximizing energy savings.

C. NRDC urges the Commission to simplify the ESPI.

Over the years, the Commission and parties have expressed a clear preference for simplifying the energy efficiency incentive mechanism. There will always be a tension between simplicity and effectiveness. However, NRDC strongly urges the Commission to simplify the incentive mechanism wherever feasible without sacrificing the core effectiveness of the mechanism.

The Commission Should Emphasize Performance at Saving Energy

Commission policy and state law is clear that the energy efficiency programs' top priority is to maximize cost-effective energy savings. As such, the top priority for the incentive mechanism should be spurring achievement of that goal. In contrast, the ESPI would tie only 75% of the potential earnings to achievement of energy savings and 25% to three different management fees. In addition, the majority of the management fees would be tied to highly complex and subjective Ex Ante Review Process Conformance scores. NRDC urges the Commission to put more emphasis on the performance-based component of the mechanism tied to saving energy (e.g., 95%), and less emphasis on the management fees.

Simplify the Cost-Effectiveness Considerations Using a Threshold or Guarantee

NRDC agrees with the ACR's intent to ensure that utilities continue to focus on achieving maximum energy savings in a cost-effective manner. However, the proposal to add a multiplier (based on one minus the difference between the ex-post and ex-ante TRC ratios) to the "Energy Savings and Demand Reduction Achievements" component of ESPI is unnecessarily complicated. Moreover, calculation of the TRC requires numerous inputs beyond those needed to calculate

lifecycle energy savings (e.g., avoided costs, incremental measure costs, and discount rate), which adds considerable complexity and a potential source of controversy if it is a large factor in determining earnings. These are some of the sources of complexity and controversy that the Commission intended to move away from in considering alternatives to the shared savings approach.

Instead, the CPUC should focus on maximizing energy savings while ensuring that the efficiency portfolio as a whole remains cost-effective (in other words, is a better investment for customers than the utilities' alternative resource investment to "keep the lights on"). This can be achieved much more simply by using a cost-effectiveness threshold and/or a cost-effectiveness guarantee, as NRDC proposed in our earlier comments.

Offer Consistent Earnings Per Unit of Energy Saved For Each Utility

Although the ACR's approach to determining the potential earnings based on energy savings for each utility follows a logical progression, the net result is that each utility would be offered a different amount of earnings per unit of energy saved (see Table 1). In some cases, this creates significant disparities among the utilities on earnings for each unit of energy saved (for example, the extreme case is the potential earnings for natural gas savings for SDG&E would be more than twice as high as for PG&E). NRDC urges the Commission to provide consistent earnings rates (what the ACR calls "correlation coefficients") for the utilities or, at minimum, reduce the significant disparities that exist in the ACR's proposal.

Table 1: Comparison of ESPI's Proposed "Correlation Coefficients" Among Utilities

	PG&E	SCE	SDG&E	SoCal Gas	Percent Difference (Low & High)
$ / lifecycle GWh	$2,580	$2,166	$2,547		19%
$ / lifecycle MW	$6,521	$4,945	$5,858		32%
$ / lifecycle MMTh	$14,328		$39,860	$21,017	178%

Source: ACR pp. 16-19

D. NRDC urges the Commission to increase the magnitude of the potential maximum and expected earnings to align with the importance of efficiency and the CPUC's past mechanisms.

The ACR proposes an incentive mechanism with maximum earnings based on a percent of certain components of the utilities' budgets. The ACR provides illustrative figures based on the utilities' original budget proposals from their applications to the CPUC. For example, the ACR provides an illustrative total cap on earnings of $158 million (for all four utilities over both years of 2013 and 2014). However, since the CPUC authorized approximately 5% lower budgets than the utilities' requested, the actual cap would be approximately $150 million.[12] NRDC provided extensive comments earlier in this proceeding demonstrating that a cap of $188 million for 2013-14 is reasonable, albeit conservative. The ACR's proposal would be 20% lower than NRDC's already conservative recommendation, making it excessively low.

As Table 2 illustrates, the ACR's proposal would not meet many of the Commission's key criteria for determining the appropriate magnitude of potential earnings. In particular, it would provide maximum earnings that are:

- At the lower end of the range of incentive mechanisms nationwide. The cap would be only about 8% of the total budget, while the national average is 12% to 13%.[13]
- Less than half the comparable supply-side earnings. While a moderate reduction relative to supply-side comparable earnings would be warranted to account for the relative risk of a mechanism using ex-ante EM&V estimates, the ACR proposes a very large reduction (nearly 60%) and simultaneously increases the risk by proposing ex-post EM&V.

Moreover, despite the ACR proposal's many similarities to the 2006-08 mechanism, particularly in proposing ex-post updates, this mechanism would provide a maximum earnings opportunity that is only half the level of the past mechansim.[14]

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[12] D.12-11-015, p. 103: "The resulting approved portfolio budgets above are approximately 95% of the level originally requested by the utilities."

[13] The CPUC authorized a total budget of $1.9 billion for the two year cycle in D.12-11-015. According to ACEEE's latest survey of efficiency incentives in various states, caps range from 5% to 20% of program spending, and average 12% to 13%. ACEEE, *Carrots for Utilities: Providing Financial Returns for Utility Investments in Energy Efficiency*, U111, January 2011, p. 10.

[14] The 2006-08 RRIM provided a cap of $450 million over three years, or $150 million per year on average.

Table 2: Comparison of EE Earnings Cap Proposals and Benchmarks Based on Criteria from D.07-09-043

Shaded cells do not meet suggested benchmark

CPUC Criteria (D.07-09-043)	Benchmark[15]		ACR	PG&E	SDG&E/SCG	NRDC	TURN
	Proposed Cap (2 yr)		$150 M[16]	$264 M	$198 M	$188 M	$103 M
What level of earnings will balance the level of potential penalties under the mechanism and offset existing financial and regulatory biases in favor of supply-side procurement	Supply-side comparable earnings ($millions)	$370	Lower	Lower	Lower	Lower	Lower
What level of earnings potential will provide a clear signal to utility investors and shareholders that achieving and exceeding the Commission's savings goals (and maximizing ratepayer net benefits in the process) will create meaningful and sustainable shareholder value.	Percent of average pre-tax profits	>1%	<2%	3%	2%	2%	1%
Differences in the risk/reward profiles of utility resource choices in applying the comparable earnings benchmark to the incentive mechanism.	Risk adjustment relative to supply-side comparable	Moderate reduction	59%	29%	46%	49%	72%
The level of performance expected in return for higher and higher earnings potential.	Performance level when cap becomes binding	Good performance	Goals at target EUL and NTG	~$125% of CPUC goals	100% of CPUC goals	120% - 130% of CPUC goals	N/A (When budget is spent)
	Comparison to other states (% of spending)	> 12% to 13%	8% of budget	14% of budget	11% of budget	10% of budget	5% of budget
What is "fair" to ratepayers in terms of the return on their investment in energy efficiency.	Is EE portfolio cost-effective?		Unclear	Yes; threshold	Yes; threshold	Yes; cost-effectiveness guarantee	Unclear

Sources: Parties' October 1, 2012 comments and ACR

[15] For a discussion of these proposed benchmarks as they relate to the criteria in D.07-09-043, see *Post-Workshop Comments of the Natural Resources Defense Council (NRDC) on Incentive Reform Issues for 2013-14*, October 1, 2012, pp. 8-11.

[16] The ACR's illustrative cap of $159 million reduced by 5% to account for the CPUC's 5% reduction to utility budgets in D.12-11-015

Although the *maximum* level of earnings is important to consider, it is unlikely to be reached since the ACR appropriately proposes to structure the mechanism such that the maximum earnings would only be reached at very high levels of performance. (And as the ACR notes, that high level of performance "may not be achievable in this portfolio." p. 15) Therefore, it is also important to consider the magnitude of the reasonably *expected* level of earnings.

The illustrative example of expected earnings provided in the ACR is $102 million (for all four utilities over both years of 2013 and 2014). Reducing this by 5% to account for the lower authorized budgets as noted above yields expected earnings of $97 million. This amounts to earnings of only 5% of the total budget, and would put California at the low end of the range of mechanisms around the country (and at half the nationwide average of actual earning awards at 10% to 11% of spending).[17]

Moreover, it would be nearly 25% lower than the average earnings the CPUC awarded for 2006-2010 (equivalent to $125 million for a 2-year period.)[18] That would send a signal in the wrong direction. California needs to dramatically ramp up energy efficiency and make it a much more important part of the utilities' businesses; an incentive mechanism that provides lower and lower earnings over time would send the incorrect signal that efficiency is decreasing in importance.

E. NRDC urges the Commission to eliminate the earnings based on the ex-ante conformance scores or, at minimum, make it a much smaller component of the overall incentive.

The ACR proposes to provide up to nearly $30 million in earnings, or nearly 20% of the overall maximum earnings, based on scores by CPUC staff and consultants of each utility's conformance with the ex-ante review process. NRDC provided detailed comments previously that we incorporate by reference but do not repeat on why the Commission should design incentives to focus on priority outcomes not processes, and the problems with the proposed subjective, complex, and opaque approach.[19] NRDC continues to urge the CPUC to eliminate the earnings

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[17] ACEEE, *Carrots for Utilities: Providing Financial Returns for Utility Investments in Energy Efficiency*, U111, January 2011, p. 10.

[18] For the 2006-2010 program years, the CPUC awarded a total of $314 million, or an average of nearly $63 million per year.

[19] See *Opening Comments of the Natural Resources Defense Council (NRDC) on the Proposed Decision and Alternate Proposed Decision on the 2010-2012 Energy Efficiency Incentive Mechanism,* December 4, 2012 and *Reply Comments of the Natural Resources Defense Council (NRDC) on the Proposed Decision and Alternate Proposed Decision on the 2010-2012 Energy Efficiency Incentive Mechanism,* December 10, 2012.

based on ex-ante conformance scores. If the CPUC maintains them, contrary to NRDC's recommendation, then we urge the CPUC at a minimum to reduce the heavy emphasis on such earnings that the ACR proposes. Earnings for processes rather than outcomes should be a very small portion of the total potential earnings, if used at all.

III. RESPONSES TO THE ACR'S QUESTIONS

In this Section, we respond to the questions posed in the ACR (reprinted in *italics).*

1. *Should non-resource based programs be a component of the ESPI for the 2013-2014 energy efficiency portfolio?*

NRDC supports the ACR's proposal for a small management fee for the non-resource programs. Such an approach can help ensure adequate emphasis on these important programs, and avoids the disincentives for non-resource programs that were a concern in the shared savings mechanism.

2. *Does a management fee, paid as a fixed percentage of expenditures of non-resource programs, adequately incent utilities for successful implementation and investment in quality non-resource programs?*

In general, management fees do not spur good performance, since they incentivize spending money rather than outcomes. However, the Commission and parties have not developed clear metrics that could be used to measure the performance of the non-resource programs to date, therefore a simple and small management fee for the non-resource programs can help ensure there is no disincentive and can help spur activity in these important areas.

3. *In lieu of a management fee, should the Commission reward utilities for non-resource based programs using* specific *program performance metrics as a more appropriate measure of nonresource program performance?*

Since the 2013-14 programs are already well underway, the CPUC's top priority should be implementing a simple and effective incentive mechanism as soon as possible. At this late date, the CPUC should not seek to include additional performance metrics. For the next cycle, the CPUC should only consider performance metrics that meet the criteria outlined in NRDC's earlier

comments.[20]

4. *If program performance metrics (e.g., number of whole home retrofit projects in hot climate zones; number of measures adopted into the portfolio from the Emerging Technology Program) are utilized rather than a management fee based on expenditures, which program performance metrics should be utilized? Are there specific programs that should be targeted over others? What level of incentive earnings potential should be offered for specific performance metrics and for non-resource programs in the aggregate?*

See response to Question 3. In prior comments, NRDC recommended that the Commission consider developing two performance metrics: (i) to further accelerate the Energy Upgrade California comprehensive whole home retrofits, and (ii) to emphasize the importance of avoiding lost opportunities through new construction.[21] Given the late date, NRDC urges the Commission not to consider any additional performance metrics for this cycle, but to consider them for the following cycle.

5. *Is rewarding codes and standards program activity via a management fee is appropriate?*

No. Management fees should only be used in limited circumstances for priority activities when the CPUC is unable to evaluate outcomes quantitatively. In contrast, efforts to upgrade and increase compliance with codes and standards result in real savings that are quantitatively evaluated. Moreover, as discussed above, the C&S programs are highly cost-effective activities that should be strongly encouraged as a top priority. The ESPI's proposal to remove C&S from the performance-based component of the mechanism would devalue the C&S programs, and could potentially resurrect the perverse incentive that made C&S upgrades disadvantageous to utilities (since it lowers other program savings). The CPUC sought to eliminate that perverse incentive nearly a decade ago by counting C&S savings on an even footing with programs, and we strongly urge the Commission to continue with that approach.

[20] See *Comments of the Natural Resources Defense Council (NRDC) on the Administrative Law Judge's Ruling Calling for Comments on Incentive Reform Issues*, R.12-01-005, July 16, 2012, pp. 10-11.
[21] *Post-Workshop Comments of the Natural Resources Defense Council (NRDC) on Incentive Reform Issues for 2013-14*, October 1, 2012, pp. 19-21.

6. *Is the fixed percentage of 10% an appropriate level to set the management fee?*

No, as discussed above, a 10% management fee on C&S investments would significantly devalue C&S efforts relative to the status quo and incentivize utilities to put more emphasis on programs rather than C&S.

NRDC strongly urges the CPUC continue counting savings from C&S towards the performance-based element of the incentive mechanism, rather than adopting the ACR's proposed management fee approach (which would offer maximum earnings of approximately $2.5 million for 2013-14 for all utilities combined). If the CPUC adopts the management fee for C&S contrary to NRDC's recommendation, then we urge the Commission to provide a greater earnings opportunity for the C&S efforts, proportional to the importance of the C&S savings in the portfolio. Since C&S savings are expected to account for approximately 10% to 30% of the portfolio's net lifecycle savings, an amount in the range of $12 million to $36 million (instead of $2.5 million) would better reflect the actual importance of the C&S savings (and the utilities' contribution to achieving them) as part of meeting the CPUC's goal of maximizing energy savings.

7. *Are the ex ante metrics included in the Appendix adequately designed to provide objective assessment of utilities' ex ante review performance? Are there other benchmarks that should be utilized to objectively measure utilities' ex-ante review performance?*

No comment at this time.

8. *Parties have expressed concern over rewarding utilities for process conformance since it is not results (i.e., energy savings) oriented and other Commission processes are not, and historically have not been, assessed under any incentive mechanism. Which Commission energy efficiency policy goals would be compromised or unattainable in the event that an incentive is based on process conformance?*

Emphasizing process conformance for a significant portion of the potential earnings compromises the Commission's focus on its top priority efficiency policy goals of maximizing all cost-effective energy efficiency savings, as well as its goal to design an incentive mechanism that is simple and transparent. The value of a mechanism focused on ex-ante conformance is also unclear given the ESPI's proposal to base earnings on ex-post evaluation. Tying a small component of the overall earnings to ex-ante process conformance would be more logical if the

larger performance-based earnings tied to energy savings are also based on ex-ante values.

9. *What are the pros and cons associated with calculating the savings award based on net benefits, using a modified version of the original PEB calculus, versus using NRDC's approach, as modified, which multiplies energy and demand savings by coefficients that would be derived from the adopted savings goals and the predetermined savings component cap?*

See NRDC's prior comments on why relying on lifecycle energy savings will better meet the Commission's current objectives than the shared savings approach, and the difference between maximizing energy savings in a cost-effective manner versus maximizing net economic benefits.[22]

As we expanded upon in our prior comments, there are important differences between the Commission's current policy objectives to capture all cost-effective energy savings, including deeper, more comprehensive, and longer-lasting savings, and its prior objective to maximize net economic benefits. The key difference is between maximizing the *energy savings* in "cost-effective energy savings," and maximizing the *cost-effectiveness* of "cost-effective energy savings;" in other words, maximizing energy savings while keeping the portfolio benefit-cost ratio above 1, versus maximizing the net economic benefits. In the former approach, the state gets more energy savings, stronger support for market transformation, pollution reductions and avoided power plants and other infrastructure; at the same time, the net economic benefits will be lower because portfolio design will focus more towards achieving the longer-term policy vision and capturing all savings up to the point where the portfolio would become non-cost-effective.[23] In contrast, the latter approach of maximizing net economic benefits gets the state higher economic benefits but lower energy savings and less support for longer-term policy objectives, as the policy guides away from any measure or program that is not cost-effective (even if it may be in the future).

10. *Given the focus on deeper, longer-lived energy savings, is the use of proposed "target" EULs and NTG ratio of 12 years (electric EUL), 15 years (gas EUL), and 0.8 (NTG) appropriate as goals for utilities to achieve in the 2013-14 or future portfolio cycles?*

NRDC supports setting a cap on earnings at a high level of performance at achieving the

[22] See, e.g., *Post-Workshop Comments of the Natural Resources Defense Council (NRDC) on Incentive Reform Issues for 2013-14*, October 1, 2012, pp. 6-8.

[23] It's important to note that such a portfolio can include a mix of cost-effective and non-cost-effective measures, but some of the measures that are currently not cost-effective may become cost-effective in the future thanks to the programs and therefore may provide more economic benefits over the long-term.

CPUC's objectives. The ACR's proposal to use "target" EULs and NTG is a logical way to set that high level of performance. NRDC urges the Commission to clarify that those targets would not be used as thresholds, and instead solely used to calculate the "correlation coefficients;" therefore, any lifecycle savings that the utilities actually achieve would be eligible for earnings (regardless of how close to the target EULs and NTG the utility portfolios actually get).

As the ACR notes, these "stretch" targets may not be achievable in this portfolio. (ACR p. 15) We agree since the Commission will be adopting an incentive mechanism after a significant portion of the cycle is already over and because certain CPUC rules inhibit progress towards these targets. In particular, the Commission's 20-year cap on EULs will limit how quickly and how high the portfolio average EUL can shift. The Commission should consider should eliminating or raising the EUL cap to achieve its objective of spurring longer-lived measures. Since many of the long-lived measures are also part of comprehensive upgrade efforts that the Commission (rightly) seeks to emphasize, the CPUC should consider lifting the EUL cap on the Energy Upgrade California program as a pilot.

11. One potential unintended consequence of using the proposed approach is that customers are exposed to some risk that the utilities will make changes to the measure mixes in their adopted portfolios that maximize total savings rather than maximizing total cost-effective savings. What is the magnitude of the risk that implementation of a non-cost-effective (i.e., TRC < 1.0) portfolio would result from a net savings-based approach? Does the TRC calculated for the authorized portfolio based on ex ante savings estimates and utility proposed measure mix, in combination with the existing fund-shifting rules, adequately protect against this risk? What other steps could be taken to protect customers from this risk if the Commission adopted a net savings, rather than net benefits, based savings component of the incentive mechanism?

The Commission should protect customers from the risk of a non-cost-effective portfolio by using a threshold and/or a cost-effectiveness guarantee. As NRDC proposed in prior comments, the portfolio (including earnings) should pass the PAC cost-effectiveness test or else earnings should be capped to ensure that the overall cost of the efficiency efforts will not exceed alternative resources.[24] In addition, the Commission should require a "cost-effectiveness" guarantee, to require utilities to compensate customers if the ultimate cost of the portfolio exceeds the benefits. This will ensure that customers face no risk with their funds that the utilities are

[24] *Comments of the Natural Resources Defense Council (NRDC) on the Administrative Law Judge's Ruling Calling for Comments on Incentive Reform Issues*, R.12-01-005, July 16, 2012, pp. 8-9.

investing on their behalf, and ensures that all funds put towards efficiency will yield a positive return on investment or at least break even. This penalty should be capped at the budget of the efficiency programs.

With these safeguards in place, the CPUC should eliminate the ACR's proposed cost-effectiveness "multiplier" since it adds complexity and is unnecessary (since the utilities would already have an incentive to invest their budgets cost-effectively, since they have an incentive to maximize long-lived energy savings within the constraint of their fixed budgets).

12. Will the differences identified between the 2006-08 mechanism and the mechanism proposed herein sufficiently reduce the risk of contention associated with an ex post savings basis to warrant using an ex post approach rather than an ex ante approach, which resulted in unintended consequences related to the ex ante lockdown?

No. As we discussed above, the ACR's proposal would not change the fundamental sources of contention in the 2006-08 mechanism (i.e., the lack of a clear approach to meaningfully discuss results and resolve disputes, or to ensure final EM&V results are timely enough to enable implementers to make mid-course changes to programs).

13. Should the Commission include bonus "adders" for results not captured explicitly by the four proposed components (e.g., Energy Upgrade California projects in hot climate zones, increases in portfolio average Effective Useful Lives, etc.)? If so, which ones, and how should they be calculated?

Since the 2013-14 programs are already well underway, the CPUC's top priority should be implementing a simple and effective incentive mechanism as soon as possible. At this late date, the CPUC should not seek to include additional "adders." For the next cycle, the CPUC should only consider "adders" that meet the criteria outlined in NRDC's earlier comments.[25]

14. Should we include a cost-effectiveness adder in the ESPI? If so, is the proposed approach appropriate, or would a different approach be superior? Is there a need for an explicit cap on the potential resource program award to protect ratepayers? If so, how would we best determine a cap on an adder that is rewarding increases in program cost effectiveness? Should the cost-effectiveness adder be symmetric (i.e., increase or reduce resource program savings benefits) or should it only be applied if ex post cost-effectiveness is greater than the ex ante estimate?

[25] See *Comments of the Natural Resources Defense Council (NRDC) on the Administrative Law Judge's Ruling Calling for Comments on Incentive Reform Issues*, R.12-01-005, July 16, 2012, pp. 10-11.

As noted above, we urge the Commission to replace the cost-effectiveness "multiplier" with a cost-effectiveness threshold and/or a cost-effectiveness guarantee. This will more effectively protect customers while simultaneously motivating the utilities to capture more energy savings.

15. *Is it possible that funds used to establish the On-Bill Financing programs in the 2010-2012 portfolio cycle will be re-loaned in the 2013-2014 cycle, and therefore should be included in the savings cap calculation and in ex post savings estimates? Alternatively, should these issues be deferred to future cycles, when the overall financing program designs are better understood? If the former, how should the portion of 2010-2012 On Bill Financing funds that will be available for loans in the 2013-2014 cycle be calculated for inclusion in the cap and savings calculations?*

No comment at this time.

16. *As described in Table 13, the payment for the ex post savings component is delayed by an additional year to allow time to complete impact evaluation studies. Does this delay create an unnecessarily complicated payment schedule? Or would it be preferable to delay the full payment by the additional year to provide all four components of each year's incentive in the same year, even if it meant a one-year pause (in 2015) as we transitioned to the reformed mechanism?*

See response to Question 17.

17. *The proposed payment approach provides annual payments, obviating the need for an end-of-cycle true-up mechanism. Would the true-up approach be a preferable method to address the resulting staggered payment or one-year pause associated with the annual payment approach?*

In prior decisions, the Commission stated the importance of regular, timely assessments.[26] It will be very difficult to meet this objective in this cycle using a full ex-post approach to assessing savings and earnings. Past experience has shown that finalizing ex-post results often takes longer than planned and, in particular, the CPUC's continuing lack of a clear dispute resolution process would make an ex-post process unlikely to yield timely earnings awards. Moreover, although the proposed schedule for some type of annual payment would be preferable

[26] See, e.g., D.12-12-032, Finding of Fact 16. "Booking incentive earnings on a regular basis, and in a manner that can be anticipated by the investment community, makes an incentive mechanism the most effective and enable its full potential benefit."

to a long wait for ex-post results, it does not appear that the current EM&V plans are structured to provide full ex-post results for 2013 and 2014 individually (and given the late date of any final incentive decision, it could be hard to make adjustments in time).

IV. CONCLUSION

Changing the Commission's regulation of the utilities to align their business models with the CPUC's policy goals is critically important to ensure the utilities make investments consistent with society's interests. As such, NRDC appreciates the ACR's thoughtful proposal for a new incentive mechanism, which is a key part of what is needed for that alignment. NRDC urges the Commission to adopt a mechanism for 2013-14 as soon as possible, and to modify the ACR's proposal as we discuss above.

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Respectfully submitted,

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