

**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)

**WOMEN'S ENERGY MATTERS
COMMENT ON THE PROPOSED
EFFICIENCY SAVINGS PERFORMANCE INCENTIVE (ESPI)**

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**WOMEN'S ENERGY MATTERS
COMMENT ON THE PROPOSED
EFFICIENCY SAVINGS PERFORMANCE INCENTIVE (ESPI)**

Women's Energy Matters (WEM) appreciates this opportunity to provide comments on the proposed new Efficiency Savings Performance Incentive mechanism (ESPI), pursuant to the Assigned Commissioner's Ruling of April 4, 2013.

Introduction – Problems with the proposed ESPI mechanism

In accordance with the Ruling, WEM will not bother to repeat our many objections to various shareholders incentives mechanisms that we have voiced over a dozen years in multiple Annual Earnings Assessment Proceedings (AEAPs) as well as Energy Efficiency Rulemakings and Application proceedings since 2001, and the two Risk Reward Incentive Mechanism (RRIM) proceedings, including this one.¹

We have just a few additional comments on the current proposal:

1. The ESPI will be unsuccessful in reducing controversy.

First of all, like all previous incentive mechanisms, it *exclusively rewards only utilities for EE management. It rewards them precisely **because** they have conflicts of interest with EE — but far from eliminating the conflict, it puts the utilities in a position to game the system in countless ways. (See EE as a resource, below).* The sensible thing to do is to take EE funds away from utility management and put them in the hands of those who are aligned with energy efficiency and motivated to do a good job — i.e. Community Choice Aggregators, Regional Energy Networks (and other independent EE providers who are currently prevented from administering programs). These worthy parties not only get no rewards, they are forced to endure utility interference with their ability to plan and conduct good programs. (This is because the bulk of each category of programs remains with the utility, and CCAs and RENs are reduced to nibbling around the edges of utility programs rather than conducting full-featured programs of their own design.)

2. It is unfair and discriminatory.

¹ For specific page references, please refer to our compensation requests in those proceedings, and our Application for Rehearing of the total denial of WEM's compensation in 4 -1/2 years of EE proceedings, in apparent retribution for our support of independent EE and critique of utility profits for EE programs that failed to perform as resources and also fell far short of their goals.

Not only does this proposal prevent CCAs and RENs from getting rewards — *it would reward utilities for non-resource programs and Codes and Standards programs in CCA and REN territories, whether or not the utility is the administrator.* (Utilities are rightly excluded from profiting on the Ex Ante Process and Ex Post Achievement in those territories.) This is unacceptable.

3. ESPI will waste enormous amounts of staff and consultants' time and resources

Such resources are sorely needed for important things (in particular, EM&V that makes EE compatible with procurement — see below). This version is even worse than previous incentive mechanisms in that regard, because it divides the mechanism into four parts, each of which requires laborious processing. WEM predicts that each segment will blossom with its own nasty and intractable controversies.

4. ESPI stands in the way of using EE as a resource

Currently, incentive mechanisms allow utilities to game the system, and this one will continue that tradition rather than end it. *Utilities are able to double-dip — profiting on EE programs and also profiting from generation and transmission projects that should have been but were not deferred or displaced by EE programs.*

For example, consider SCE's failure as of this date to use ANY EE to replace San Onofre power and grid support, ever since the twin nuclear reactors' brand-new steam generators failed in January 2012. As of that date, SCE had ~\$600 million left in its 2010-12 EE accounts, all of which was supposed to be spent by the end of the year, and SDG&E had a comparable amount, for its much smaller size.

Both SCE and CAISO stated, in response to WEM's questions in Evidentiary Hearings in the LTPP in summer 2012, that energy efficiency was capable of reducing the need for power and reducing constraints on transmission lines, including in the San Onofre outage. Yet hardly any of the parties who designed replacement resources in the backroom that year — SCE and SDG&E, CAISO, CEC and the CPUC — even mentioned, much less seriously discussed EE as a way to fill gaps and prevent blackouts — except in response to WEM's questions in those hearings.

This speaks volumes about the failure of California's utilities and regulators to follow through on the promise of the Energy Action Plan, which remains a chimera, in violation of PU Code 454.9 (C): "The electrical corporation will first meet its unmet

resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.”

To reverse this situation, the Commission would need to assign substantial staff resources to redesign EM&V to make EE useable in procurement, particularly in Local Capacity Areas — rather than focusing another \$100 million or so, plus staff costs, on a sterile and stultifying quest for the right level of profits for utilities.

WEM’S PROPOSED ALTERNATIVE: A LIMITED INCENTIVE MECHANISM FOR THE USE OF EE AS A DISTRIBUTION RESOURCE

Michael Day of Rockwood Consulting has graciously asked WEM to present the following proposal for an incentive mechanism that directly and amply rewards utility shareholders for money saved on distribution upgrades through the targeted use of EE. This is the first ever version of an EE incentive mechanism that WEM could support.

The basic concept is to separate the energy and capacity elements of DSM, appropriately reward the IOUs and their private industry partners for measured deliverables, and in the process make DSM a resource in the true sense of the word for the first time.

Please see the spreadsheet, Attachment A, for a demonstration of how the mechanism works over a 40-year time frame.

Let’s focus on capacity to start with — energy and incentives come in later. Under the current distribution structure, as we understand it, the following applies:

1. IOUs identify constrained areas, either at the substation or Demand Control Area (DCA) level.
2. A plan is made based upon limiting factor for that specific site, on how to increase capacity to that geographic area, which may include reconductoring, transformer upgrades, etc.
3. The cost for this activity is relatively large. For the purposes of this exercise we use an average of \$11,500/KW.
4. The IOU acquires funds in the capital markets to pay for this work, usually structured as bonds with long maturities (40 years), and a Weighted Average Cost of capital (WACC) of approximately 7%.
5. The cost of this is passed on to ratepayers by inclusion in each utility’s General Rate Case, where the IOU is allowed a fixed rate of return on the asset of approximately 12%.²

² Note: very little time is spent reviewing these projects in GRCs, but that is the only proceeding where distribution upgrades are considered. Energy Division reportedly reviews these upgrades in a private, non

6. The spread between the WACC and the fixed rate of return allows IOU shareholders to collect a return for the use of their asset.
7. The asset is fully depreciated over 40 years.
8. For the purposes of this exercise we are assuming that 4,000 KW of increased capacity is installed in a year.

The cash flows for this hypothetical scenario should look something akin to the “Standard” Tab of the attached spreadsheet.

Standard Tab Discussion

- Under this arrangement, the cost of the upgrade project, which is equal to the amount financed by the IOU, is \$46MM.
- A 40 year fully amortized bond would indicate a payment of about \$3.4MM/year by ratepayers.
- Additionally, \$46MM is added to the rate base, on which the IOU would earn a return for its shareholders in excess of WACC of about 5%, or ~\$2.3M in Year 1.
- Over time, the payment to account for the financed cost of the project remains the same, but as the asset is depreciated over time, the revenue to IOU shareholders decrease over time.
- Total cost to ratepayers over the 40 years is \$184MM, with a Net present value of roughly half that amount (\$90.7MM) at a 4.5% discount rate.
- IOU shareholders do fairly well under this scenario. The roughly 5% spread between their Fixed Rate of Return on capital assets and WACC yields \$2.3M in revenue the first year, \$47.5M over the 40 year depreciable life, and an NPV of \$26.6M at a 4.5% discount rate

Proposed Tab

If DSM is truly used as a resource, then two major costs to ratepayers are also avoided in addition to capacity upgrade charges: annual capacity contracts with generators and marginal energy costs for actual run time when those assets are called.

- On the proposed tab, these costs are included under the column Costs to be Avoided. As a straw proposal, these avoided costs are estimated at \$1.6M/year.
 - This includes both Capacity contracts and avoided Energy
 - This value is held fixed over time, but would probably rise
 - Since the RRIM as we understand it is dominated by avoided energy costs, the Energy factor in this spreadsheet may be stripped out of the equation and replaced with either the current RRIM or a properly modified version thereof

transparent process. Because of the complete lack of transparency in distribution, it is impossible to know how detailed or rigorous ED’s review might be.

- When added to the previously calculated “Wire Costs”, this indicates that ratepayers as a whole would be charged \$7.3M in the first year for an upgrade campaign that added 4,000 KW in capacity to the grid.
- This works out to \$249M in total costs to ratepayers over the 40-year period.
- On a KW/year basis, this cost to ratepayers per year runs from \$1,836/KW/yr in Year 1 to \$1,277 in year 40.

Proposed Tab Discussion

The basic concept is this: can we reward the utility for engaging in focused DSM activities in the same way that we engage them in pulling wire (or transformers or switches, etc.), but do so in a way that benefits ratepayers? We think that the answer is yes, and the model on how to do so may be extremely simple:

- Split the cost that the ratepayers would otherwise have to pay (total avoided cost) with the utility for projects that offset capacity upgrades
- Split could be set at a different level every few years based upon experience but should remain constant for the life of any project
- Only substations that meet current criteria for upgrades would be eligible
- ED staff could and should verify that the anticipated upgrade costs are reasonable
- Only for projects with permanent embedded continuous M&V
- Is an option for an IOU, not a requirement
 - Some areas may not be conducive to economic usage of DSM technology to meet capacity needs
 - Maintaining IOU “wire pull” contracting keeps cost estimates in line with a constantly changing cost reality.
- Should be technology neutral

The proposed tab is an example of how this arrangement could play out.

- The split is the percentage of expected ratepayer payment per year that goes to the utility
- Split in this model is set at 60% to the IOU to account for the risk inherent in doing this the first time
- Under this arrangement, net IOU revenue would increase from \$2.3M to \$2.675M in the first year, making DSM a better option for their shareholders than pulling wire
- Cost to ratepayers for this capacity project would decline from \$7.35M to half of that amount
- In succeeding years, the amount that would go to the IOU would decrease on a per KW basis, but the cost of procuring the DSM peak KW resource would most likely decline as well
- In this model Negawatt providers would be able to compete to deliver peak load reduction to the utility, driving both innovation and a downward pressure on cost.³

³ Note: this proposal is predicated on negawatt providers being independent of the IOU.

- Unlike the standard model, where ratepayers are charge for capacity that may or may not be used, in this case ratepayers would only pay for KW impacts that are actually delivered. For summers where the peak temperature is low, payment would be less, but summers where the peak temperature is high could be a windfall.
- Using DSM to achieve capacity goals (particularly if EE is the primary vehicle) lowers overall energy consumption, thereby making attainment of RPS goals marginally more achievable.

In the end, a structure like this does three things:

- Lowers cost to ratepayers
- Delivers the capacity needed to maintain proper system operation
- Aligns the interests of IOUs and their shareholders with choosing DSM as a resource, an alignment that is currently absent

This is the basis of our thoughts on the matter. WEM and Michael Day of Rockwood would very much appreciate the opportunity to discuss these ideas with Commissioners and staff some time in the near future.

Dated: April 26, 2013

Respectfully Submitted,

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Attachment A