

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking to Create a
Consistent Regulatory Framework for the
Guidance, Planning, And Evaluation of
Integrated Distributed Energy Resources.

Rulemaking 14-10-003
(Filed October 2, 2014)

**COMMENTS OF ADVANCED ENERGY ECONOMY (AEE)
ON THE APRIL 4, 2016 ASSIGNED COMMISSIONER'S RULING
INTRODUCING A DRAFT REGULATORY INCENTIVES PROPOSAL
FOR DISCUSSION AND COMMENT**

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In accordance with Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission (Commission) and ALJ Hymes' April 28 ruling extending the time to file comments until May 9, 2016, Advanced Energy Economy (AEE) submits these comments in response to the Assigned Commissioner Ruling¹ (ACR) issued April 4, 2016.

I. INTRODUCTION

AEE is a national association of businesses dedicated to transforming public policy to enable a prosperous world that runs on clean, secure, affordable energy. We are comprised of over 100 companies both large and small across the technology spectrum, including energy efficiency, solar, wind, storage, biofuels, electric vehicles, demand response, advanced metering, and enabling software.

¹ *Assigned Commissioner's Ruling Introducing a Draft Regulatory Incentives Proposal for Discussion and Comment*, issued April 4, 2016 in R.14-10-003.

Although we appreciate the desire for deliberate and sequential consideration of multiple DER sourcing mechanisms and the need for a manageable docket, many of our member companies continue to believe that costly, time-consuming, and transaction-heavy competitive procurements may be the least productive sourcing approach to successfully integrate DER into utility systems. In the time it will take to design robust incentives and develop instructive pilot projects, ongoing rapid evolution in technology, equipment, and performance standards will likely outdistance lessons to be learned from RFP-like solicitations. Along the walk-jog-run continuum that the Commission favors, we still believe that an early focus on more streamlined, less costly sourcing mechanisms would get us closer to the finish line sooner and more efficiently. We are also concerned that spending much of the next year in the process-intensive effort now under way will impose a heavy resource burden for AEE member companies which cannot rely on ratepayer funding to support their participation.

That said, although many AEE members do not believe that competitive procurement should be the primary approach for widespread DER integration, we applaud the Commission and Commissioner Florio for initiating this discussion of utility incentives. Addressing the existing bias inherent in cost-of-service ratemaking that favors utility-owned investments is an important element in an overarching effort to encourage the utilities to think more expansively about the role that distributed energy resources (DERs) can play in the energy system. The specific questions embedded in the ruling are a first step and will help lay a foundation for further discussion and dialogue around innovative regulatory incentive models and their role in expanding DERs on the grid, whatever sourcing mechanisms ultimately prove most fruitful.

II. KEY QUESTIONS

AEE provides the following feedback and comments in response to the questions listed in the April 4 ACR.

- 1. Is the description of the source of utility shareholder value summarized in the ruling and discussed in the Appendices accurate?*

AEE believes that the description is largely accurate insofar as the Commission is limiting its scope to easily quantifiable measures. However, other less quantifiable but still critical factors drive shareholder value. These include revenue stability, regulatory outlook, appeal to financial markets, profit growth, customer loyalty, brand strength, and investment scale, among others. For any pilot or longer-term incentive program to succeed, AEE believes the Commission must consider these factors in addition to those identified in the ACR.

Furthermore, the appendix largely focuses on the cost of equity for investments of similar risk when looking at shareholder value for utilities. The comparison of return on equity among different utilities may carry more weight to investors than a utility's return on equity compared to a larger class of investments with similar risk profiles. For example, if investments with similar risk profiles to utilities have an estimated cost of equity of 7%, a 9% return on equity for a utility may not be as attractive to investors if most utilities are earning 10%. This illustrates the difficulty of determining what the market considers to be the cost of equity for a utility, and suggests that the Commission should evaluate response to the incentive during the pilot and consider midcourse adjustments as necessary.

2. *Would an incentive program, as described in the ruling, achieve the objective of promoting the cost-effective deployment of DERs?*

Currently, as stated in the ruling, DER deployment is a pass through and not included in rate base, meaning there is no ROE earned on the investment. Simply providing an ROE as several other states already do, would mark a major shift in the direction of additional DERs. But it is not enough.

The ruling posits that $r-k$ drives shareholder value and that the current difference which drives investment is 2.5-3.5%. While we understand the intent of the question is not to find an exact number, we believe that simply equaling that number won't work, for several reasons. First of all, we have no way of knowing the actual cost of equity but we can assume that it will be higher for non-traditional investments. Non-traditional to investors will mean risk and risk costs money. Second of all, there will be an inherent bias within the utility toward traditional investments. Human nature is to do more of what is known.

Thus, we believe the number needs to be higher than 3.5%. Still, consumers should do better. To use a simple example, if a utility obviated the need for \$50,000,000 in T&D with DERs for \$40,000,000, a return on equity of 10% on the T&D would still be far more in total than a return of 15% on the DERs. In this example, consumers would save \$9 million while the utility would earn \$1 million more ($\$50m + \$5m \text{ ROE} = \$55m$ and $\$40m + \$6m = \$46m$). But if the ROE is the same, the utility loses \$1m ($\$4m \text{ ROE instead of } \$5m$) and thus favors the T&D project over the DER project. The utility loses, consumers lose, and DERs are not deployed. DERs need a higher ROE to truly align utility incentives with those of consumers; equivalence or slightly higher ROE likely won't move the needle.

3. *What alternative approaches should the Commission consider at this time?*

There are a number of examples around the country and abroad where utilities and regulators have wrestled with similar questions, and where their experiences might inform this discussion. No single example or model presents the exact formula, but should be considered as California develops its own approach. Domestically, real world experience on creating a level playing field between utility investment in infrastructure and procurement of third-party resources or services is limited. Most efforts are either still just ideas or in the nascent stages of implementation. With the additional considerations described in our responses to questions 1 and 2 above, the ACR proposal appears theoretically sound and should be tested. The approaches that other states are attempting have their own challenges, and more real-world experience is needed before we could recommend them over the ACR's approach. There are obvious differences between each of these situations and California's energy and regulatory environment, but the following approaches from other jurisdictions are worth considering:

- In the UK, regulators have taken a completely different approach to leveling the playing field between OpEx and CapEx. Instead of creating separate incentives in an attempt to equalize earnings potential between the two categories, they have eliminated the distinction between types of expenditures entirely in a model called “totex” (short for total expenditures). All of the utility expenditures are categorized in the same way and receive equal treatment in terms of earnings. Roughly 80 percent of a utility’s expenditures are capitalized (similar to the treatment of CapEx) while the remaining 20 percent are funded through a direct pass through in rates (similar to OpEx). Total utility expenditures are capped and are subject to a shared savings mechanism where the utility receives a portion of the savings if its expenditures are below the cap.

- The Brooklyn-Queens Demand Management (BQDM) program – This is an approved program in Consolidated Edison’s territory whereby the utility will defer a \$1 billion upgrade in traditional transmission and distribution infrastructure with a \$200 million expenditure on a combination of traditional “wires” solutions and distributed energy resources. Expenditures for DER procurement (largely contracted services from third-party or customer-owned resources) will be capitalized as a regulatory asset (including RoE) with the potential for an additional 100 basis points in RoE on program expenses if certain performance metrics are achieved.
- Utah’s Senate Bill 115, enacted earlier this year, allows Rocky Mountain Power to capitalize demand-side management expenses, providing a path for earning a rate of return on what would otherwise be revenue-reducing costs. (See <http://le.utah.gov/~2016/bills/sbillenr/SB0115.pdf>). The Utah Public Service Commission will hold hearings on implementing SB 115 later this year.

4. *Is the proposed incentive, in the range of 3.5% grossed up for taxes, approximately correct?*

The proposed incentive appears approximately correct, but should be viewed in the context of the issues raised in response to questions 1 and 2 above. Those issues are institutional inertia, aversion to risk, the return available at other utilities, decreased size of investment base, and the treatment of operating expenditures. These considerations argue that a 3.5% incentive may well be on the lower end of an effective range, at least if the incentive is not coupled with some legally enforceable standard as illustrated in the Kihm, *et al.*, article (ACR Appendix B, at pp. 18-19).

5. *Are there other disincentives to the deployment of DERs that this proposal does not address that should be considered at the same time?*

With the caveats discussed above, this proposal addresses one of the most significant disincentives to utility DER integration. AEE identifies at least two others that merit consideration by the Commission, both of which might create unintended obstacles to widespread deployment of DERs.

- First is the treatment often used by ratings agencies for third-party agreements entered into by utilities. Agencies frequently impute debt equivalencies to these agreements, leading to lower ratings. Lower ratings, of course, affect a utility's ability to borrow at favorable interest rates reduce investors' interest in owning utility shares. The Commission should consider ways in which contracts with third party DER solution providers could be de-risked to limit the adverse impact these contracts may otherwise have on the utilities' credit ratings. For example, the utilities could be allowed to track the costs associated with third party contracts via balancing accounts. AEE understands this approach can provide much greater assurance to the credit ratings agencies that the utilities will be allowed to recover the costs of these contracts from their ratepayers. This could ease any potential concerns and gain confidence with ratings agencies.
- The Commission itself should assess the in-house technical skills needed to effectively evaluate the assumptions embedded in utility procurement models. With the number of potential pilots, to say nothing of any widespread deployment of successful models, staff may need additional support to deal with the complexity of proposals and manage the volume and analysis necessary to achieve the Commission's program objectives.

- Finally, the proposed approach should go beyond contracts for DER services and include contracts for cloud or software-as-a-service (SaaS) software needed to integrate DERs. Investment into information and communication technology infrastructure, including SaaS, which is not tied to any one program, is essential to support long-term market transformation and empower customers to manage their energy consumption.

6. *Is the suggested process for identifying and approving DER projects that would generate an incentive reasonable and appropriate?*

AEE believes that the suggested process is well considered but ultimately insufficient to achieve the results the Commission desires. In addition to concerns expressed above, we have two other significant concerns:

- If competitive procurements are the Commission's early priority, many AEE member companies who are eager to work with utilities to provide creative solutions to distribution system challenges, would prefer a collaborative approach in which utilities identify their current investment plans and any constraints they are facing, using this information to work with third parties toward innovative solutions. This will require clear delineation of ways to ensure greater utility transparency around identification of potential project locations and values.
- The process itself seems especially cumbersome for pilot projects. The very nature of trying out innovative approaches to solving problems requires tight cycles of trial, learning, and adjustments that lead to continuous improvements in technologies, products and services. The processes described will likely lead to months if not years of deliberations before projects are deployed and evaluated, at which point the initial technologies proposed will have been eclipsed by newer developments. At a minimum,

rather than requiring projects that are ultimately selected via the RFO process to be submitted via an application, AEE recommends that the Commission consider allowing utilities to submit an advice letter that would enable quick deployment of pilots and rapid iterations based on ongoing evaluations of program effectiveness.

7. *Is there a need for a limit on the number of projects or the amount of dollars that a utility could propose during this pilot program?*

The very nature of a pilot is a limit on its size, providing evaluators with a real-world simulation of widespread deployment on a smaller scale. The Commission should consider reasonable size limitations on these pilots, whether in MWs (or other appropriate energy-related measures) or per-project dollar amount. The Commission should avoid duplicative pilots and ensure that implementation is cost-effective and to the benefit of ratepayers. Each pilot should be designed to answer critical questions related to potential changes in business models that can be evaluated simultaneously.

8. *Would participation in a DER solicitation by a utility affiliate require any changes to the Affiliate Transaction Rules, or any changes to the process for review and approval of proposed DER solutions?*

AEE has no comment on this question.

9. *What would be the appropriate role of the IOUs themselves in the deployment of cost-effective DERs? Should direct IOU participation in DER deployment be encouraged, foreclosed, or allowed with certain caveats?*

AEE supports the CPUC's existing policy on utility ownership of DER as noted in D.11-07-029 and as evolved in D.14-12-079. More specifically, utilities should only be allowed to propose direct ownership of distributed resources where there are clear conditions of "market failure"; that is, where there exists unfettered access to markets and yet the private sector has not stepped forward to provide

the products or services required to fill a clear need. Examples might include deployment of DERs among low-income households or in circumstances where landlords have no incentive to deploy DERs whose benefits accrue solely to tenants. But beyond these clear conditions of market failure, utilities should work with third-party providers of products and services to facilitate the rapid deployment of DERs. AEE contends it would be premature to support utility entry into the broader market for DERs and may also create a conflict of interest, at cross purposes with the intent of the ruling and proposed mechanism, which is intended to eliminate or reduce the bias against third-party solutions that currently exists.

III. CONCLUSION

AEE appreciates the opportunity to submit these comments and looks forward to working with the Commission, the IOUs and other parties in this proceeding.

Respectfully submitted,



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