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

COMMENTS OF ENERGY SOLUTIONS AND VEIC ON THE ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENT ON MARKET TRANSFORMATION STAFF PROPOSAL

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Dated: October 5, 2018

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I. INTRODUCTION

Energy Solutions and VEIC (hereafter referred to as "Companies") applaud the *Market Transformation Staff Proposal* and whitepaper (hereafter referred to as "Staff Proposal"). California's aggressive clean energy and carbon legislation, notably SB 350, will undoubtedly require an agile market transformation framework. The Companies believe the Staff Proposal is a solid starting point to build from.

Within the constructs of the Resource Acquisition framework, the Companies have each developed specialized capabilities for accelerating adoption of clean energy technologies and services (hereafter referred to as "Clean Tech"). Examples include supporting Codes and Standards, programs such as the ENERGY STAR Retail Products Platform (ESRPP) and its predecessor program that successfully transformed the national television market at a point of rapid change, Market Development inititives, implementing upstream and midstream supply chain programs that transform regional stocking patters and accelerate adoption of new Clean

Tech, and supporting the development of ancillary policies and programs such as building benchmarking and disclosure. This background of successfully incorporating Market Transformation strategies and tactics into existing efforts which are governed by the Resource Acquisiiton evaluation framework forms the basis of the Companies' feedback to the California Public Utilities Commission (CPUC).

II. DISCUSSION

The Companies support many of the framing aspects of the Staff Proposal. For example, the Market Transformation Accord is a well-founded concept that should help establish a transparent and collaborative Market Transformation approach that is well coordinated with activities in the Rolling Portfolio.

The Companies offer the following overarching recommendations.

(1) The Staff Proposal should maintain the focus on *intentional planning* while also embracing the concepts of *inherent uncertainty* and *agile implementation*. Clean Tech savings are rapidly transitioning away from being widget-based, toward systems-, process- and service-based solutions. Trends such as device-level telemetry, cloud computing, and real-time control promise to disrupt many industries, including energy and facility management, through rapid creation of new Clean Tech products and services. Hence, the State's Market Transformation initiatives need to recognize and embrace the probable outcomes that (a) manufacturer product lifecycles will be much faster than a three to five year planning window and (b) Market Transformation activities need to have the autonomy and authority to predict, act, and respond rapidly to evolving industry trends. The Companies believe that, while well intended and exceptionally important, as proposed, the foundational planning components of the Staff Proposal will not allow sufficient agility to respond to and leverage opportunities provided by the rapid pace of technological change. Specifically, we are concerned that the process to develop a Market Transformation Accord "is expected to require several years of work" and "will have

limited flexibility." Similarly, the proposal that "the upfront cost- sharing agreement established in the Market Transformation Accord should remain static over the lifecycle of the Initiative" with "no possibility of mid stream adjustments to funding or proportional savings- credit allocations" creates a degree of inflexibility that is concerning relative to the expected pace and dynamism of markets for Clean Tech products and services.

We recommend, instead, that the Staff Proposal embrace the agile methods that have become common practice in many industries facing a similar rapid pace of change. Key characteristics of agile methods include intentional design, adaptive planning, speed to market, iterative growth, and change management.

(2) The Staff Proposal should establish a robust and relevant set of metrics, and require that Market Transformation Acccords establish a data model that facilitates accurate tracking of such metrics. A TRC metric will not be relevant for the critical early stages of a Market Transformation inititive. The Companies believe that, especially at early market development stages, metrics such as number of manufacturers producing a product, adoption of products within supply chains, performance reliability, and product cost are all more relevant and actionable metrics to track than TRC. Focus on the TRC metric could result in both the premature termination of an effective initiative and delayed termination of an ineffective initiative. Such metrics and data models already exist within the constructs of Resource Acquisition programs, and, while they can undoubtedly be improved with application of a Market Transformation framework, the Companies suggest that the Staff Proposal leverage and build upon these examples.

It is reasonable to require that Market Transformation initiatives include a plan to achieve cost-effectiveness over the life of an initiative, but they should be held to the same cost-effectiveness threshold as other energy efficiency programs.

(3) The Market Transformation Accord concept put forth in the Staff Proposal should be integrated into the Rolling Portfolio proceeding in an effort to better coordinate the activities taking place in Emerging Technology, Workforce Education and Training,

Marketing, Education and Outreach, Voluntary Programs and Codes and Standards toward Market Transformation outcomes. While Companies applaud the Market Transformation Accord concept, we do not believe it should be separate from the Rolling portfolio. The Rolling Portfolio proceeding establishes a precedent for third-party designed and implemented programs whereby the implementation firms assume risk for performance. Adding additional responsibilities to coordinate with the Market Transformation Initiative – even if in theory they seem feasible – introduces new business risk that Companies believe can be avoided by integrating the Market Transformation Staff Proposal into the Rolling Portfolio. We are particularly concerned about the feasibility of developing "Resource Program Coordination Plans" to address overlapping Resource Acquisition programs if Resource Acquisition and Market Transformation initiatives are managed in separate portfolios and regulatory proceedings.

By fully integrating the Staff Proposal into the Rolling Portfolio, Companies believe that Market Transformation initiatives can more effectively and efficiently serve as a bridge between Emerging Technology and Codes and Standards and as an acceleration catalyst for Clean Tech solutions that are at a more mature stage of their adoption lifecycle.

(4) The Staff Proposal should focus on filling gaps and and addressing shortcomings that cannot be funded in the Resource Acquisition framework. As previously noted, many Resource Acquisition programs include elements of Market Transformation. Given this, the Companies suggest that the State's Market Transformation funds be directed toward the barriers that cannot be addressed through a Resource Acquisition program that must achieve stringent cost-effectiveness thresholds, but that if addressed, could accelerate Market Transformation. Integration of Market Transformation principles into the resource programs could achieve the following benefits: (a) enabling resource and incentive-driven programs to invest more robustly in complementary training, supply channel engagement, and standards advancement activities in ways that contribute to future cost-effectiveness and savings, even if those results come in future years; and (b) providing an incentive for resource programs to undertake Market Transformation

activities without incurring cost-effectiveness penalties by allowing for negotiated net-to-gross adjustments.

Examples of activities that could be offered through existing Resource Acquision programs include, but are not limited to: (a) implementing large-scale performance validations, (b) developing standards and specifications for desirable Clean Tech capabilities, (c) developing the supply chain, including distribution, sales, and services, and (d) augmenting the marketing, education and outreach efforts to build awareness and confidence in emerging Clean tech.

(5) The Staff Proposal should include Codes and Standards impacts. One common aspect of many successful Market Transformation initiatives is engagement with rating and standard-setting bodies. The combination of program and market data has proven successful at informing and influencing progressive innovations to third-party ratings (such as ENERGY STAR) and mandatory standards. As currently proposed, it is not clear that there is an incentive for Market Transformation initiatives to result in more timely development and implementation of third-party ratings and Codes and Standards. By strengthening the emphasis and incentives for coordination with third-party ratings and Codes and Standards, Companies believe that the State's Market Transformation initiatives can add the data collection rigor needed to track Market Development to the Voluntary Resource Acquisition Programs for a relatively modest cost. Companies believe that the cost of enhancing existing Resource Acquisition program data models will both enhance Resouce Acquisition program performance and accelerate development, adoption and implementation of third-party ratings and Codes and Standards.

(6) The Staff Proposal should integrate program design, implementation, and evaluation, including by encouraging the formation of non-traditional partnerships between implementation and evaluation firms. EM&V activities should be revised to coordinate with program strategy. The proposed EM&V activities are all very important, and according to the Staff Proposal, should be done by an "evaluation firm that is not involved in program implementation". While standard for Resource Acquisition programs, several Market Transformation programs, including ESRPP, have found that a special interaction between

implementers and evaluators is beneficial, if not essential. For example, three of the four points in the Staff Proposal regarding the role of evalution can have an valuable influence the program strategy – how to implement the intervention strategy, which interventions are most relevant, when and how to intervene. If the framework too strictly mandates these activities be separate from strategy, then programs may incur pitfalls that would be avoidable.

(7) The Staff Proposal should recognize the uncertainty and risk that Resource Acquisition programs face, introduce solutions that provide regulatory certainty for the implementers and market actors who will be critical to achieving Market Transformation, and emphasize national coordination with other Market Transformation administrators. In many cases, the utility boundaries and state regulations that have traditionally governed energy efficiency programs create significant barriers for large market actors, including large manufacturers, ratailers, distributors and building owners and operators. These market actors often lament the energy efficiency program and regulatory structures because they fragment the market; thus, the Companies support the Staff Proposal's call for coordination across state lines and suggest that it also introduce mechanisms to mitigate regulatory uncertainty for consideration by parties.

(8) The Staff Proposal should expand beyond traditional energy efficiency to include a larger suite of Integrated Distributed Energy Resource (IDER) technologies and strategies. Recognizing that traditional energy efficieincy alone will not facilitate the State's broader goals of carbon-free energy supply, the Companies believe that the Staff Proposal could be strengthened by aligning the Market Transformation outcomes with the Clean Tech market California needs to facilitate its larger goals of carbon-free energy supply. Given that those goals increasingly go beyond energy reduction to encompass greenhouse gas (GHG) reduction, decarbonization, and grid reliability and flexibility, it is important that both Resource Acquisition and Market Transformation programs are broadened to align with California's defined statewide goals and targets. For example, Market Transformation efforts could focus on development and

adoption of consistent communication protocols for connected products and appliances, to support grid flexibility.

III. RESPONSES TO CPUC QUESTIONS

(1) What are the best characteristics of the market transformation framework in the Staff Proposal? What attributes are the most valuable and should be retained?

The Market Transformation Accord is a well-founded concept.

(2) Do you agree with the staff recommendation to begin the development of market transformation initiatives initially separately from the business plan portfolios? Why or why not?

No. While we understand the complexities of adding this to the Rolling Portfolio, Companies believe separating it creates unneccesary complexity, risk, and uncertainty that can be avoided. These funds can be more effectively and efficiently distributed if done within the construct of the Rolling Portfolio.

(3) Do you agree with the budget limit of $12 million per PA for operations outside of the business plan portfolios suggested in the Staff Proposal? Why or why not?

The Companies withhold judgement as to the amount of funding that should be allocated. However, Companies do not believe that an equal allocation of funds is the best means of allocating funds and may not maximize benefits to California ratepayers. We are also concerned with the lack of flexibility in modifying funds once allocated.

(4) Should there be a limit to the time period for how long market transformation initiatives may operate outside of the business plans before being integrated with the overall portfolio? If so, what is your proposed time limit? Explain your rationale.

Assuming that the Market Transformation initiatives are governed by a separate proceeding, we do not believe time limits are necessary. More important than time limits are clear mechanisms for mitigating risk to program adminsitrators, implementers, and market actors and supporting integration with Resource Acquisition programs, if they are separate.

(5) Do you support the Staff Proposal elements with respect to cost effectiveness? Why or why not? Describe in detail any changes you would suggest.

No. The Companies do not favor the proposed TRC metric, which from our view has been one of the largest impediments to undertaking well-conceived Market Transformation initiatives to date. Early stages of market development have, by definition, very low market uptake. Thus, a highly successful Market Development program can greatly improve key market metrics, such as quality specifications or qualified contractors, yet still have such low market penetration and resource savings relative to the scale of program activities so as to have very poor TRC. Resource cost approaches can fail to accurately reflect successful Market Transformation initiatives. In one example, the Northwest Energy Efficiency Alliance's (NEEA) evaluation of the ESRPP predecessor, the Business Consumer Electronics program, that focused on televisions was found to be highly effective – one of the most effective – from a Market Transformation perspective. However, the same program evaluated under a Resource Acquisition framework in California and Nevada suffered due to a lack of consensus by the evaluating parties on the degree of program attribution desite the documented and clear influence the program had on product development, product manufacturers, and retailer stocking practices and general merchant choices. Given these experiences, Companies suggest that the Staff Proposal seek to identify metrics that directly track indicators of market adoption and maturity relative to new Clean Tech. We recommend that the Staff Proposal suggest several example metrics of this type and then request that the utilities and their implementation and evaluation consultants propose an evaluation framework and program data model that best reflects the unique and dynamic needs of a Market Transformation initiative.

(6) Do you support the concept identified in the Staff Proposal for Market Transformation Accords? Why or why not? Describe in detail your suggested improvements.

Companies do support the concept of a Market Transformation Accord. Our primary feedback is to integrate this thoughtful planning exercise into the Rolling Portfolio so as to clarify how the Market Transformation activities intend to integrate and augement existing efforts.

(7) The Staff Proposal includes an allocation of funding for market transformation planning efforts. In some cases, such planning efforts may fail to produce a workable Market Transformation Accord. Should spending on such planning efforts be subject to separate budget caps or time limitations? If so, what should those limits be and why?

Companies do not believe the Staff Proposal needs to address this topic.

(8) Do you agree with the Staff Proposal's recommendations with respect to the interaction with statewide and third-party program requirements in the business plan portfolios? Why or why not?

Companies seek additional clarity in the Staff Proposal on this item. That said, Companies very much value the important role that utilities serve in Market Transformation and recommend that their involvement not be limited as has been established in the Rolling Portfolio. Rather, the Staff Proposal should encourage active and diverse partnerships between the program administrator, implementers, evaluators, and market actors.

(9) Do you support the Staff Proposal recommendation for how to conduct evaluation, measurement, and verification on market transformation initiatives? Why or why not?

Companies support the Staff Proposal recommendation but note that evaluation methods for Market Transformation cannot be as rigid as Resource Acquisition.

(10) Comment on the Staff Proposal's discussion of milestone based performance assessments.

Companies support the notion of having milestones defined in the Accord. However, Companies do not believe TRC should be the primary metric, particularly for interim progress milestones.

(11) Do you support the Staff Proposal's recommendations for the administrative aspects of management of the Initiatives, particularly in Section 5 on procedural approach? Why or why not?

Yes, provided that the Market Transformation Accord is fully integrated with the Rolling Porfolio. (See 3 above.)

(12) Are there other ways (besides those represented in the Staff Proposal) to engage and leverage stakeholder expertise effectively? If so, describe them.

Companies believe that Market Transformation is best pursued as a collaborative effort. The CPUC has made good efforts to invite such collaboration, and we applaud those processes. We support continued efforts to invite collaboration from market actors, and between program administrators, implemneters and evalautors.

(13) Are there characteristics of market transformation initiatives that are not sufficiently embodied in the framework described in the Staff Proposal? If so, describe them and suggest ways these characteristics can be integrated into the framework or requirements.

Companies believe this has been addressed in the Discussion section of these comments.

(14) Are there elements in the Staff Proposal that are missing or unclear? Describe.

Companies seek clarity on the rationale, inputs, and limitations for the cost-effectivenss calculation. See Discussion for additional aspects the Companies believe are missing or unclear.

(15) Ultimately, do you recommend that the Commission adopt this framework, or a version of the framework with your suggested modifications described in answers to the above questions? Why or why not?

Companies recommend the adoption of the the Staff Proposal with the changes described herein.

(16) Include any other comments or recommendations not covered by the above questions.

The Companies encourage the CPUC to move forward with adopting a Market Tranformation budget. However, we caution the CPUC of being overly prescriptive with timelines, cost-effectiveness metrics, and other performance factors that are commonplace in Resource Acquisition framework. The proposed Market Transformation framework is new to California, and learnings are inevitable. By leveraging early experiences, such as with the ESRPP, the State can evolve its approach, metrics and milestones in an agile way. Companies fear that being overly prescriptive up front on such a new and fundamentally different approach to achieving the State's energy and carbon goals may create unneeded barriers that ultimately compromise the success of all parties' efforts.

IV. CONCLUSIONS

Companies appreciate this opportunity to submit comments on the Staff Proposal and look forward to helping create and execute a market transformation framework that facilitates achievement of the State's statutory energy and climate goals.

Respectfully Submitted,

By:_____
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Dated: October 5, 2018