

LOUISIANA PUBLIC SERVICE COMMISSION

DOCKET NO. R-31417

LOUISIANA PUBLIC SERVICE COMMISSION,

EX PARTE

In re: Re-examination of the Commission’s Net Energy Metering Rules found in General Order No. R-27558, dated November 30, 2005 (the “Net Metering Order”)

COMMENTS OF KARL R. RÁBAGO, RÁBAGO ENERGY, LLC

ON BEHALF OF GULF STATES RENEWABLE ENERGY INDUSTRIES ASSOCIATION

Karl R. Rábago submits the following comments on behalf of Gulf States Renewable Energy Industries Association (“GSREIA”) regarding Commission Staff’s proposals in the above-styled matter.

INTRODUCTION AND OVERVIEW

I am Karl R. Rábago. I am principal of Rábago Energy LLC, a Texas limited liability company. My place of business is Austin, Texas. My professional experience includes service as a Public Utility Commissioner for the State of Texas, as a Deputy Assistant Secretary for the US Department of Energy, service as a utility executive with Austin Energy, the municipal electric utility for the City of Austin, and with the AES Corporation, a global power company with operations in more than 25 countries, leadership positions at several research and non-governmental organizations, and some 12 years as an officer in the United States Army, as a cavalry officer, a JAG officer, and a professor at the US Military Academy at West Point. My full resume is attached to this testimony.

I am here today to testify on behalf of the Gulf States Renewable Energy Industries Association to assert that the Commission and Staff should abate any action to adjust the benefits and burdens under Louisiana's net metering rule unless and until competent objective evidence is developed regarding the benefits and costs associated with distributed solar energy generation.

As preamble to my testimony, I offer the following:

1. The ultimate goal of regulation in the public interest is to ensure that utilities ultimately procure the most cost-effective and economically efficient portfolio of resources to meet the demand for electricity services. In order to properly compare alternative resources, each resource must be valued correctly. This is the vital foundation concept. Understanding cost and price, even if done very well, does not mean the same thing as understanding value. The failure to understand this difference between value and cost is a big part of why we owe billions to China for stuff we bought that no longer works. Avoided cost may be a good place to start, but as a preponderance of evidence already submitted in the record and included with this testimony establishes, distributed solar generation provides additional value that the Commission Staff and its consultant simply ignore. I believe it is the Commission's duty, as regulators of utility businesses affected with the public interest, to try to characterize this value fairly before changing the reasonably established net metering rule.

The Staff Recommendation fails in this regard and disserves the Commission and the public. Particularly disturbing in this proceeding has been the failure of the Staff to apply any critical review to the assertions of Parties regarding value, to demand analysis of value and

review of the literature from the Commission's consultant, and to blinding echo and advance conclusory assertions regarding costs and benefits, such as the assertion that all credit to customers in excess of avoided cost constitutes a "subsidy."

2. Valuation techniques for distributed solar energy resources have significantly improved over time and with decades of deployment experience, allowing utilities, regulators, and policy makers to make better-informed decisions about how distributed solar can maximize benefits to the utility and ratepayers. The "value" of distributed solar to utilities and ratepayers is now well documented. Importantly, this means that utilities, the Commission, and Staff have access to the tools necessary to address biases against renewable energy resources inherent in the proposal to change Louisiana's net metering rule, in the analysis conducted by the Commission consultant, and in the Recommendations proposed by Staff. These biases include, for example, undervaluation of risk reduction, especially fuel price volatility, availability, and price risk; undervaluation of capacity and peak coincidence value; and failure to account for energy security benefits, line loss benefits, environmental regulation risk reduction, the ability to avoid the need for regulatory asset mechanisms to avoid rate shock, among others.

3. Numerous published solar valuation studies confirm that distributed solar resources offer cumulative energy, capacity, ancillary services, financial and security benefits that I estimate to be in the range of \$250/MWh, or 25 cents per kWh. Other elements of value, not included in this number, include fuel price hedging value, line loss reductions, transmission and distribution investment savings, environmental benefits beyond compliance costs, merit order benefits, competitively induced fuel price reductions, economic development and tax base benefits, volatility in water availability and price, and others. Of course, fair valuation includes assessment

of integration costs as well. Not all value components can be precisely quantified, and not all are fairly applied to electricity rates, but all merit attention in an effort to make fully-informed, economically-efficient resource valuation decisions. Such a full-featured analysis should have been the minimal threshold for consideration of changes in the allocation of benefits and costs currently and reasonably reflected in the Louisiana Net Metering Rule. The failure by Staff and its consultant to even conduct a literature review is arbitrary and capricious, especially in light of the drastic realignment of burdens proposed by Staff.

4. Solar prices established through experience indicate that the cost of solar to the utilities and non-solar customers in Louisiana is already below the value established in these numerous studies and received by utilities and all ratepayers through increased solar deployment. This conclusion is inherent in Louisiana law authorizing net metering. Given that solar customers can *only* receive retail rate credit for solar generation, and that the studies cited in this testimony reveal value much greater than this credit level, the current Louisiana Net Metering Rule is almost certainly causing solar to be deployed at a cost to ratepayers well below its solar value. To be clear, continuing and strengthening Louisiana's Net Metering Rule is very likely to stimulate third party and customer distributed solar development that will, over the life of the solar facilities, put downward pressure on Louisiana's electric service rates.

I emphasize that my testimony does not attempt to quantify a Louisiana-specific solar rate. This is the work of the electric service providers, reviewed through the objective and critical analysis of Staff. I did not have access to the budget or the data to perform that analysis. The utilities, the Staff, and the Staff consultant also did not conduct any economic cost-benefit

studies for distributed solar generation. Value of solar analysis would be a good place for the Staff to start.

When Austin Energy, the utility where I worked until about a year ago, first undertook value of solar analysis in 2006, the goal was to develop an analytical reference price to index and inform market proposals from 3d party solar developers. I later applied the analysis, which we updated annually, to benchmark rebates and other incentives for distributed solar. And then, two years ago, we used the analysis to create a wholly new, award-winning retail rate for solar customers. Calculating the value of solar has numerous benefits, primarily that it sets an indifference level, and if the utility can spend less than the value of solar to get solar, ratepayers get benefits. Market solicitations can confirm the cost-effectiveness of distributed solar, that is, the availability of distributed solar at costs that are less than its value and that are less than the planned cost of other capacity additions.

In conclusion, numerous studies conducted by capable and respected organizations conclusively establish that distributed solar generation appears to offer resource value that greatly exceeds its cost, and justifies net metering policy that reflects that fact. Given that value of solar analysis is essentially avoided cost analysis, obtaining solar at a value-to-cost premium affords an opportunity to financially outperform the current resource mix. Solar markets are largely driven by economies of manufacturing scale, that is, the more systems that are deployed, the faster the market moves to lower prices and even greater value. Now is the time for Louisiana to accelerate the development of this highly valuable resource through its existing Net Metering Rule.

TESTIMONY

I. The existing Louisiana Net Metering Rule is reasonable and consistent with the practice in the majority of states and jurisdictions in the United States.

A. The Commission bears an obligation under law to ensure that adverse impacts associated with net metering are avoided. This duty applies to customers and utilities, and is not limited to customers that do not invest in solar generation systems.

B. The Commission's Net Metering Rule, established under authority of LA R.S. 51:3063, provides a reasonable allocation of burdens and benefits to customers and utilities in net metering situations.

C. Any revision to the allocation of burdens and benefits under the Louisiana Net Metering Rule should be based on competent, persuasive evidence submitted and tested in a public proceeding, subject to review and rebuttal.

D. The record in this proceeding is devoid of factual data or objective analysis of the costs and benefits of net energy metering for distributed solar such as to justify any adjustments in the allocation of benefits and burdens under the Louisiana Net Metering Rule. In addition, there is no specific objective data or analysis to demonstrate that an improper subsidy has arisen since the adoption of the Louisiana Net Metering Rule that would justify adjustment of the burdens and benefits under the Rule.

II. There now exists a growing body of evidence that distributed solar energy provides benefits to utilities and non-solar customers in a total value that exceeds the costs imposed on utilities and non-solar customers and that substantially exceeds average retail rates for electricity. This evidence strongly suggests that solar customers are, in fact, subsidizing non-solar customers.

A. The Louisiana State Legislature found that net metering was favorable public policy and provided for such in law.

B. The Louisiana Public Service Commission found that it was fair, reasonable, and proper to establish a net metering system that credited solar customers at the applicable retail rate (not including customer service charges) for both offset and excess solar production.

C. Since 2002, a growing body of published literature confirms the common sense notion that useful energy produced at or near the point of consumption offers superior value to the utility and its customers compared to energy produced at remote power plants and transmitted and distributed to load.

D. Attached to these comments is a table of studies and reports addressing various aspects of the benefits and costs of distributed solar generation. These studies would have contributed greatly to this proceeding and to the Commission Staff's ability to address the benefits and costs questions. It is unclear why the Staff chose to ignore this publicly available information in developing recommendations for changes to the net metering rule.

III. Cost of service ratemaking techniques confirm that the value of distributed solar generation is *at least* equal to the retail rate for electricity service.

A. Under traditional cost of service ratemaking, customers are only properly charged for the full and fair costs of producing, distributing, and metering electric service, along with any other proper charges for used and useful activities, equipment, and other costs. A properly set retail rate sets the indifference value for full electric service. In this regard, the retail rate represents substantially more value than merely the avoided fuel associated with the production of the energy that underlies electricity service. Distributed solar generation avoids not only fuel, but all the costs associated with the provision of electric service. Therefore, a net metering rate for offset and excess distributed solar energy equal to the retail rate properly establishes a floor for fair credit for solar generation, as it reflects all the value that delivered kWh provides at the point of consumption.

B. In addition to providing value at least equal to energy produced and delivered to the point of consumption, distributed solar energy provides additional benefits to the utility and its ratepayers, also unreasonably ignored by the Commission Staff in this proceeding. These benefits include reduction in the risk of fuel price volatility, energy security benefits such as rapid restart after natural and manmade disasters, reduction in the risks associated with changing environmental rules and regulations, reduction in the risk associated with procuring adequate water supply, reduction in financial risk due to the assumption of financing burdens by solar customers, and other benefits.

C. The Commission and the Commission Staff have expressly recognized these types of benefits in approving, for example, the so-called “Rate Moderation Plan” structures for utilities to charge customers for purchased power even before such power is produced. The logic should also apply to distributed solar generation. It should be noted, for example, that the customer burden associated with “regulatory asset” that DEMCO customers pay is at a level 10 times greater than the so-called “subsidy” that the Commission’s consultant calls the difference between the avoided costs and the retail rate.

IV. Recommendations

A. The Commission Staff should withdraw its unsubstantiated recommendations to adjust the benefits and burdens associated with net metering in Louisiana in favor of an evidence-based assessment of the benefits and costs of distributed solar energy.

B. The Commission should retain a qualified independent advisory consultant to assess the benefits and costs of distributed solar generation in Louisiana, and use the results of that assessment before considering any further changes in the net metering rule. This will avoid enacting rule changes currently proposed by Commission Staff that would constitute arbitrary and capricious discrimination and imposition of adverse impacts on present and future solar customers.