



Appendix F: Statements of Alternative Perspectives

Edison Electric Institute

CHP-related issues must be viewed from the perspective of rapidly changing electricity markets. New technologies are changing the distribution system in ways that challenge investor-owned electric utilities and the grid they operate for the benefit of consumers, businesses, and the economy. However, because the grid is designed around a central station paradigm, the integration of increasing amounts of CHP needs to be done in a way that ensures that reliability is maintained and costs to all customers remain reasonable. Also, because our existing regulatory and incentive mechanisms mirror the needs and workings of that system, it is important that they, too, be looked at in conjunction with all other technical and commercial changes that the industry introduces to accommodate increasing levels of CHP so that fairness of rates is maintained. Increasingly, public policy needs to approach these issues in the context of generator interconnection agreements, identifying the services distributed generators will be taking from the grid, and any benefits they will be providing the grid. Agreements and policies should be structured accordingly.

The public review process conducted by SEE Action has been very constructive and consensus-based. Nevertheless, a number of concerns still remain. EEI members urge policy makers to consider the following:

Standby rates need to recover fixed network costs. (Executive Summary at page x, Chapter 2 at page 9) T&D assets are sized to supply customers, and related costs are incurred, whether power flow over the lines continuously or not. By recommending only “as-used” demand charges the Guide proposes an approach that would, inevitably, shift fixed costs to non-CHP customers. Proper rate policy should include contract terms (e.g., contract demand) to collect the CHP customer’s fair share of fixed network costs.

Standby rate policy needs to take account of retail market structure. (Executive Summary at page x, Chapter 2 at page 9) Rates offered by traditional, vertically integrated utilities should take account of the outage rate of other distributed generators on the system, the combined outage rate of the utility’s generators (not just the single best), and the utility’s required reserve margin. Wires-only utilities (e.g., those that procure supply to provide Provider of Last Resort Service) may handle this by simply procuring load-following service. The Guide does not recognize differences in market structure, recommending only one approach to pricing standby generation

Interconnection fees should reflect the actual cost of engineering services needed to ensure safety and reliability. (Executive Summary at page xi, Chapter 3 at pages 14-15) In order to interconnect a distributed generator safely and reliably, the utility must analyze how the generator’s output will affect the circuits into which its power will flow. The costs incurred to do this may not vary directly with the size of the generator. Nevertheless, the Guide recommends that fees be commensurate with the generator’s size and complexity. This approach would lead to a policy that arbitrarily limits utility cost recovery, regardless of the true cost of performing required engineering analyses.

The larger the unit, the less feasible it is to rely on “standard” interconnection requirements. (Executive Summary at page xi, Chapter 3 at page 16) Every CHP interconnection is unique, and the scope and scale of potential reliability and safety impacts increase as the size of the generator increases. Nevertheless, the Guide recommends that generators 20 MW and larger be allowed to qualify for “standardized” interconnection procedures. Rather, utilities should have flexibility to ensure safety and reliability. Where larger generators are concerned, utilities should not be constrained by the arbitrary requirement for a standard procedure.

Programs based on “multi-tiered” avoided cost would harm non-CHP customers. (Executive Summary at page xi, Chapter 4 at pages 19-20) FERC has allowed avoided cost to be unbundled so that it no longer reflects marginal costs avoided by the utility, but the marginal costs of specific categories of favored renewable technologies (e.g., photovoltaic conversion, biomass based synthetic fuels, etc.). This is not an appropriate strategy for encouraging cost-effective CHP. Multi-tiered avoided cost is an innovation that was motivated precisely by the desire to achieve higher purchase prices. It will increase utility costs, which must be borne by other, non-CHP customers. There is no



way to reconcile multi-tiered avoided cost-based purchase rates for CHP with a desire to protect non-CHP customers.

Feed in tariffs for CHP can harm non-CHP customers. (Executive Summary at page xii, Chapter 4 at pages 20-21) Like multi-tiered avoided cost-based purchase rates, feed-in tariffs can be designed to induce new uneconomic supply by offering purchase rates that are higher than the prevailing market value of (utility cost for) electricity supply. FITs frequently are substantially higher than the fully bundled retail rate in effect for the purchasing utility (i.e., the rate which includes costs for generation, transmission, distribution, and customer care). It stands to reason that such tariffs have a significant potential to increase costs for non-CHP customers.

National Rural Electric Cooperative Association

The National Rural Electric Cooperative Association (NRECA) is the national service organization dedicated to representing the national interests of cooperative electric utilities and the consumers they serve. NRECA represents more than 900 not-for-profit rural electric utilities that provide electric energy to over 42 million people in 47 states or 12 percent of electric customers. NRECA members generate approximately 50 percent of the electric energy they sell and purchase the remaining 50 percent from non-NRECA members. Cooperative electric utilities (co-ops) were formed to provide safe, reliable electric service to their owner-members at the lowest reasonable cost. NRECA is on the Executive Group of the State and Local Energy Efficiency Action Network (SEE Action) and is participating, along with some of its members, in several SEE Action working groups, including the Industrial Energy Efficiency and Combined Heat and Power Working Group (Working Group).

NRECA appreciates the opportunity to participate as a Working Group member in the collaborative process of developing the “Guide to the Successful Implementation of State Combined Heat and Power Policies” (Guide). We thank the Working Group for providing us the opportunity to express alternative perspectives.

NRECA believes the Guide misses an opportunity to address the initial question that state and local decision makers should ask and answer: Can Combined Heat and Power (CHP) be developed cost-effectively in a way that makes sense for my state or area? Cost-effectiveness is an underpinning of SEE Action and the Obama Administration’s Executive Order “Accelerating Investment in Industrial Energy Efficiency” (Executive Order). Within SEE Action, DOE and EPA are tasked with facilitating efforts “to achieve all cost-effective energy efficiency by 2020.”²⁶⁵ SEE Action was intended to provide resources to state and local decision makers “as they provide low-cost, reliable energy to their communities through energy efficiency”.²⁶⁶ Similarly, the Executive Order encourages deployment of 40 gigawatts of new, cost-effective CHP by 2020, a goal that is also noted in the Guide.²⁶⁷

Given that “cost-effectiveness” is fundamental to SEE Action efforts and to meeting the Obama Administration’s goal, the fact that the Guide does not provide guidance on how to consider what is cost-effective is a missed opportunity. The Guide assumes that “CHP must have the potential to be economically viable.” While NRECA agrees that holding CHP to this measure is essential, we do not believe that it can be assumed, especially in the context of a roadmap on developing CHP. In making this predetermination, the Guide also misses an opportunity to assist state and local decision makers in evaluating whether or not CHP is the right resource under given circumstances. Instead, the Guide focuses on providing tools for implementing CHP through subsidies and other policies that can shift costs from CHP providers to non-CHP customers.

By way of example NRECA offers comments on a few categories that are essential to developing CHP, and where, we believe, the Guide misses an opportunity to assess the cost-effectiveness and reliability of CHP.

Standby rates should not shift fixed costs to non-CHP customers. Overall, rates for CHP facilities are comprised of different combinations of standard, supplemental service, standby, emergency, and economic replacement rates.

²⁶⁵ www.seeaction.energy.gov.

²⁶⁶ Id. emphasis added.

²⁶⁷ www.whitehouse.gov/the-press-office/2012/08/30/executive-order-accelerating-investment-industrial-energy-efficiency and pages ix and 2 in Guide.



One cannot identify a unique structure that fits all CHP customers, utility rate designs, and market characteristics. However, there are basic rate structures that could potentially provide savings to CHP facilities and appropriate cost recovery to utilities and their customers. The retail rate utilities charge includes not only the marginal cost of power, but also recovers costs incurred by utilities for transmission, distribution, generating capacity, and other utility services not provided by the customer-generator.

Interconnection standards must ensure safety and reliability. NRECA takes an alternate perspective on the ability for larger CHP systems (20 MW and larger) to qualify under standardized interconnection rules. Standard approaches do not apply to large units. Custom analysis and solutions are required for large unit interconnections to ensure safety and reliability.

Feed-in tariffs (FITs) raise the cost of power for retail consumers by requiring utilities such as co-ops to pay, under long-term contracts, far more for certain favored resources than they would otherwise pay, in order to attract investment in that resource industry. For example, a feed-in-tariff could require a co-op to purchase power from a customer with a CHP unit at a higher cost per kilowatt hour, when the co-op could otherwise have acquired power from an existing resource for less, say at the avoided cost. Under this scenario, FIT resources would not be most cost-effective resource, increasing the costs borne by non-CHP customers.

In summary, while NRECA appreciates the time and effort the Working Group has dedicated to the Guide, the decision not to address whether or not CHP is cost-effective is an omission that calls into question the value of the Guide to state and local decision makers. CHP has the potential to bring substantial benefits to electric cooperatives and their consumers, and to support energy efficiency efforts within the United States. However, these benefits will only be realized if state and local decision makers are given the tools necessary to encourage development of CHP in ways that are cost-effective, do not unfairly shift costs among customers and do not risk degrading electric reliability or safety.

As an example of a guidance document that NRECA has developed and maintains for its members is a “Distributed Generation Interconnection Toolkit” that can be used as a resource for developing policies and procedures related to distributed generation. The Toolkit can be found online at:

<http://www.nreca.coop/issues/FuelsOtherResources/DistributedGeneration/Pages/default.aspx>.