DOCKET NO. 03-0371

PUBLIC UTILITIES COMMISSION

CONSUMER ADVOCATE'S RESPONSES TO HAWAII RENEWABLE ENERGY ALLIANCE'S ("HREA") INFORMATION REQUESTS ON THE CONSUMER ADVOCATE'S PRELIMINARY STATEMENT OF POSITION

HREA-CA-IR-1 On pages 5 and 6 of the CA's SOP, the CA discusses the technologies believed to be feasible and viable in Hawaii. Would the CA agree that technology viability will be determined by the market, and especially a competitive market in which there is a level playing field and all barriers to market entry are removed?

RESPONSE The Consumer Advocate has not attempted to forecast what factors will determine technology viability. However, as indicated on page 5 of the Consumer Advocate's Preliminary SOP, policies or rules should not limit the types of DG that might be applicable to the Hawaii electric industry.

HREA-CA-IR-2 On page 8, how does the CA define “firm” capacity and a “dispatchable resource?

RESPONSE The definition of “Firm” in this context is a resource that can be relied on to start and run when needed. Combustion turbine or reciprocating engine driven generators are considered “firm” in this context, whereas a wind generator that depends on the wind would not be considered to be firm because it cannot be called on and run when needed.

The definition of “dispatchable” in this context is a resource whose electrical output can be controlled or regulated to match the instantaneous electrical energy requirements of the electric system.

HREA-CA-IR-3 On page 8, would the CA support including net metering electricity as an energy offset in our RPS law?

RESPONSE Yes, if the energy savings derived from solar systems continues to be considered in meeting the RPS law. If on the other hand, the purpose of the RPS law is to determine the energy to be generated and sold by the utility, it may not be appropriate to consider electricity generated through a net metering arrangement in meeting the RPS law.

HREA-CA-IR-4 On page 9, please clarify the statement: "When available, however, their energy can be absorbed by the electric utility system if the amount of generation is a small percentage of the electric utility generating source." For example, there are examples of wind penetration on island grids, such as St. Paul Island, Alaska (See http://www.northernpower.com/template.php?t=7&g=22&c=122), where the instantaneous supply of wind-generated electricity can be 100% of the load.

RESPONSE "Small percentage" referred to on page 9 is simply stating that while solar photovoltaic and wind energy sources are not firm or dispatchable, the energy from these sources can be absorbed by the electric system if it is not too great of a percentage of the on-line generating resources so as not to force other generators to be taken off-line when wind or solar is available and then have to be restarted in a short time period when such resources' output is at a lesser output level. The discussion on pages 8 and 9 are in the context of DG connected to a synchronous electric utility grid that must have continuous generation on-line to meet instantaneous energy requirements of its customers, and, maintain synchronism. The example provided in your question was referring to a hybrid wind-diesel generator system that does not rely solely on wind. We would agree that such a hybrid system would be considered more "firm" than wind generation alone.

HREA-CA-IR-5 On page 9, would the CA agree that a non-utility DG could be relied on as a reliable energy (and capacity) source for the electric utility, if the non-utility DG had an interconnection/power purchase agreement with the utility that specified a schedule of the DG's operation and/or delivery of capacity/energy to the utility?

RESPONSE The Consumer Advocate contends that a non-utility DG resource could be a reliable capacity and energy source depending on the type of DG technology and the type of services that could be provided to the utility electric grid by the DG project. However, the demonstrated physical ability of the resource and how it will be controlled and dispatched by the electric utility operator is of key importance in providing firm, dispatchable capacity and energy to the electric system.

HREA-CA-IR-6 On page 18, please explain the CA's following statement: "So, wind might have a benefit to meeting customer energy needs, but little benefit to the Electric Utility Companies delivery systems." HREA can think of several benefits, including providing capacity when they are on-line, improving system reliability, helping the utilities meet their RPSs, and staying on-line during utility faults to help protect the utility system.

RESPONSE Page 18 indicates that, "Wind generation, however, typically does not provide capacity on-demand because the resource is subject to nature and is often remotely located on the electric utility company's system from the areas of customer concentration." Since this section of the Consumer Advocate's Preliminary SOP is referring to the ability of a DG resource to benefit the delivery system (distribution and/or transmission facilities), it is recognized by the Consumer Advocate that wind generation or other DG that are not located in areas of delivery system constraints and are not dispatchable on-demand will likely not benefit the delivery system in a manner that could avoid distribution and transmission system capital expenditures.

HREA-CA-IR-7 On page 19 (last paragraph), is the CA concerned about the net impact of the air emissions from multiple fossil DG units?

RESPONSE The Consumer Advocate recognizes that fossil-fueled DG units may be limited in their application because of emission constraints. Such constraints could prevent fossil-fueled DG from being sited in certain locations, or could be limited in the number of hours of operation.

HREA-CA-IR-8 On page 20, we do not understand the CA's reference to the "unbundled rates" that would be implemented in conjunction with DG. Would not the Customer compare and make his decision based on the cost of a DG with respect to the retail rate that he is paying?

RESPONSE The Consumer Advocate recognizes that existing electric utility "bundled" rates include recovery of the cost of capital (generation, transmission, distribution), operating and maintenance costs and fuel costs. In general, it is assumed that most of these cost components are currently rolled into the energy rate to the customer. Unbundling rates means that each cost component is separately billed to the customer so that the customer can pay for the services it chooses to purchase from the electric utility and also determine what services can be provided to itself in a less costly manner than could the electric utility. For instance, transmission and distribution capital expenditures have been incurred to serve existing customers, to serve growth in usage of existing customers and to serve new customers. If an existing customer installs DG, the energy provided by the DG would decrease the electric utilities' revenues. A decrease in revenue is acceptable if there is a corresponding decrease in the electric utilities' expenses. However, because revenues derived from an energy charge can decrease and costs included in the energy charge may not decrease, rates may need to be modified to truly reflect costs. If rates are not modified appropriately, as revenues decrease

disproportionately with costs, electric rates will eventually need to be increased to recover revenue shortfalls. In essence, over time, DG would be subsidized by other customers if rates do not accurately reflect cost components.

HREA-CA-IR-9 On page 26, the CA discusses issues regarding planning for DG in IRP. Would the CA agree that planning for DG in IRP is dependent on how the DG is to be implemented and should not alternate implementation strategies be evaluated as part of IRP? For example, the utility typically plans for power plants as if they would be constructed and operated by the utility. We argue that approach would give you one answer as to the types of DG and their associated costs and performance characteristics that would go into the IRP, whereas a utility solicitation for bids from customer-sited DG, provided by third Parties, could give quite a different answer.

RESPONSE It is unclear to the Consumer Advocate what types of implementation are contemplated by HREA. The Consumer Advocate agrees that a competitive bidding process is useful to ensure that a lowest reasonable cost IRP is developed by the electric utilities. It is unclear to the Consumer Advocate what differences in approaches referred to in this question would result in different answers. Please refer to the response to HREA-CA- IR-8.

HREA-CA-IR-10 In the case where a utility is experiencing load growth, would the CA agree that the maximum benefit to the ratepayers would occur if DG investments and fuel costs were not rate-based?

RESPONSE The maximum benefit to ratepayers occurs only when the DG facilities needed by the utility are established by the utility's lowest reasonable cost IRP plan and selected through a competitive bidding process. The utility should recover all such costs it incurs from this process through its rates.

HREA-CA-IR-11 As a follow-up to HREA-CA-IR-10, would the CA support DG implementation in the following manner? The regulated utility specifies areas and amounts of desired DG (including CHP) in IRP, and then solicits (in a competitive bidding process) for DG proposals from potential DG customers and ONLY non-utility energy service providers. Specifically, only an unregulated utility entity would be allowed to compete with other non-utility entities. If not, why not?

RESPONSE The Consumer Advocate agrees with the general process described in this question, but does not agree that utilities should be excluded from the competitive bidding process. The Consumer Advocate believes that to accomplish the goal of lowest reasonable cost to the customer, the bidding process should be open to all bidders that can provide viable and feasible DG.