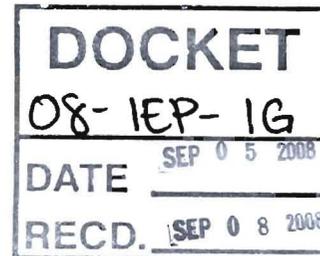


**Peter B. Evans
New Power Technologies
25259 La Loma Drive
Los Altos Hills, California 94022**

September 5, 2008

California Energy Commission
Dockets Office, MS-4
1516 Ninth Street, First Floor
Sacramento, CA 95814

Re: Docket No. 08-IEP-1G
SGIP Cost Benefit Analysis
Marginal Generation



A basic requirement in estimating the environmental benefit or cost of distributed generation or self-generation as part of a cost-benefit analysis of self-generation incentives is the nature of the generation the distributed generation unit(s) displace. TIAX, in their presentation of September 3, 2008, proposes a natural gas combined-cycle combustion turbine (NG CCCT) as the “marginal generation.”

NG CCCTs are among the most modern, fuel-efficient, lowest-emission conventional-fueled central generating units in the resource mix serving California. So as the marginal generation they have the lowest environmental impacts per kWh. Moreover, they are most likely rarely on the margin in terms of dispatch order. Therefore, I believe using these units as the marginal is a very conservative assumption as it relates to the environmental benefits of generation displaced by self-generation.

A more likely scenario is that a self-generation unit, when operating, will displace energy production from the unit that is truly on the margin during that hour. A production simulation would show this; it may well be that during daytime hours this marginal unit is a relatively high heat-rate steam plant providing regulation services, or during super peaks, a simple-cycle combustion turbine. Such units may have less than half the efficiency and over twice the emissions of a NG CCCT on a per-kWh basis. This scenario arguably applies to all photovoltaic self-generation.

Microturbine, gas turbine, internal combustion engine, fuel cell, and wind turbine self-generation may have significant off-peak operating hours, during which the marginal generation could be NG CCCT, but it also could be even dirtier vintage coal, or cleaner hydroelectric.

A more appropriate analysis may involve time-weighting of the emissions of units truly on the margin for self-generation units having different operating profile.

Arguably a self-generation unit may also displace the next unit of capacity to be installed. The capacity of a self-generation unit is in fact capacity the load-serving entity (utility) would otherwise have to buy or build to meet a Resource Adequacy requirement, even if that capacity never operates. However, there is no additional inherent air pollution benefit to this displacement; this benefit is fully captured in the capacity value of the self-generation unit's capacity. The next unit to be installed may well be a CCCT; however, the value of the capacity alone will eventually be set in the Resource Adequacy capacity market, and there will be no need to establish a proxy value.

If you have any questions or require further information, please do not hesitate to contact me at 650.948.4546.

Sincerely,

A handwritten signature in blue ink that reads "Peter B. Evans". The signature is written in a cursive style with a large initial "P" and a long, sweeping underline.