

local power

4281 Piedmont Avenue, Oakland, California 94611 local.org

FAQ: How Can the Cost of Power From Solar Photovoltaics Be Lower Than Utility Rates?

1. **Bundling.** The solar photovoltaic arrays will be only one energy technology, bundled together with others, including energy efficiency, wind power and conventional energy resources, and sold to San Franciscans as a package under competitive rates. It is the whole package that will meet or beat Pacific Gas & Electric's rates. Any one component can cost more or less than the average. Of the \$225 million electricity purchase per year under this plan, only 2% of the kilowatt hours sold will come from the solar component. R.W. Beck predicts that the aggregation will deliver savings of between \$11 and \$18 million per year compared to today's cost of power from PG&E. Savings of between \$15 and \$32 million can be anticipated from energy efficiency programs. Any extra cost of the solar component should easily be absorbed by these surpluses. H Bonds will assure low interest financing.

2. **Long-Term and Large-Scale:** Solar photovoltaic arrays are a very long lasting technology. In 10 to 15 years, the solar installations will have produced enough to repay their entire original cost. Then, since the systems require no fuel, and will carry 25 year warranties, they will provide guaranteed "free" power for 10 or more years, bringing its power price far below PG&E's rates. After that, experience suggests that they will continue to produce fuel-free power for a another decade. Secondly, the aggregated purchase of 30 to 50 megawatts of solar equipment should deliver a significant volume discount below the average retail price of solar photovoltaics today. We expect no difficulty keeping the costs below PG&E.

3. **Aggregation Allows Integration.** Community Choice removes major market and regulatory barriers to new green distributed generation and conservation technologies. This opens the door to cost savings available through the designed integration of the various technologies and techniques: solar power, wind, efficiency, fuel cells, hydrogen and other power generation, storage and load curtailment systems. When we aggregate the daytime power demand of businesses with the morning and evening demand of households, this load balancing lowers the cost of power. A solar installation on a business or industrial building with summer afternoon peak loads directly shaves that company's peak demand at the time when the price it pays for power is the highest. Wind energy during the nighttime hours can be producing and storing hydrogen for stationary fuel cells and buses. Opportunities for integrated design of all the green technologies on a large scale have been rare until now. Several potential cost advantages will likely be discovered as time goes on. Regional markets gave birth to wireless telephone innovation. Regional markets with Community Choice could well give birth to fully affordable green energy technologies.