

50 Megawatt San Francisco Solar Power Facility Fact Sheet

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4281 Piedmont Avenue Oakland, California 94611

1. A Solar Power Facility?

50 Megawatts is both large and small. It is 5 times larger than the world's current largest urban solar power system, but will take half as long to build. It will provide 5% of the combined community's total energy needs in the afternoons, and 10% at night. It will cover San Francisco's rooftops with 200 acres of panels, and power 50,000 apartments. It will cost several hundred million dollars, about the price of a larger gas plant minus the fuel cost, yet its power output is quite small if compared to midsized 3-500 Megawatt plants like Hunters Point.

In effect, we are proposing a "peaker" plant small enough that a gas plant of the same size would not need a permit in some states. The Facility will bring about the largest greenhouse gas pollution reduction yet achieved by the City, but will deliver less than a one percent net greenhouse gas reduction (compared to the Kyoto treaty's call for more than seven percent by 2010). In short, the Solar Power Facility is large compared to anything an American city has done before to stop Climate Change (of which electricity is the largest single cause): but that is not saying much.

The original May 2001 proposal for the Solar Power Facility may be found on the front page of our web site at www.local.org but may be summarized as follows:

- **The Solar Power Facility is designed to provide for the most cost-effective solar power system** that can be built, using large-scale aggregation of small and large customers to lower the ultimate price of the solar facilities. Local Power wrote the nation's first municipal aggregation of energy law, under which 600,000 northeast Ohio customers switched from coal and nuclear power to natural gas and renewables in 2001, for less money.
- **The Facility will offer energy security to local residents and businesses as well as government agencies**, making systems affordable by removing the hefty down-payment and tailoring payment packages to the needs of each customer class, including system purchase, system lease, power purchase, or power sharing.
- **The Facility sets in place a performance contracting mechanism to transfer engineering and manufacturing risks to the private sector** and enable speed and creativity in the design and networking of solar power plants. Using a Design-Build-Operate-Maintain-Transfer contract structure commonly used in large transportation projects, the Facility requires contractors to operate and maintain solar systems, and links solar payments to system performance. Solar power faces significant challenges, and if not optimally designed, built, operated and maintained, its power output can vary; the Facility RFP requires companies to link repayment to power output so if systems do not work they do not get paid.
- **The Facility offers industry participants the opportunities for speed and creativity** in designing and installing systems. The Facility removes barriers to installation, getting systems on line for the community and revenues flowing for the contractor in shorter time periods.
- **The Facility is designed to qualify for every possible state and federal subsidy** to further reduce the ultimate prices that will be charged for these systems.

March 2002. Following voter approval of Proposition H in November 2001, Local Power is drafting legislation with Board of Supervisors President Tom Ammiano's office to start a Summer-long competitive bidding process for the solar industry to start building a 50 Megawatt San Francisco Solar Power Facility in Spring, 2003. Announced in May, 2001, the Solar Power Facility legislation, for which Prop H was written as a finance authority, should face a Rules Committee hearing in Spring, 2002.

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2. The Government-Only Plan

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Because two solar bonds were passed in the November election, however, we are up against another proposal for solar power that would exclude residents and businesses and permanently erect barriers between government solar facilities and facilities used by the community at large. In particular, we are discouraging a plan to build solar power exclusively on city buildings for use by the government only. It is wrong, first, because it prioritizes government over the community when the energy crisis affects everybody; second, the government-only plan will dramatically increase the price the government itself will pay for installations.

- **Breaking up the city into separate buying groups weakens everyone's buying power, cherry-picking the government from the people it is meant to serve, thus senselessly driving up prices for all.** Rather than separating the community, the Facility aggregates them. Size matters: larger volume buyers get a lower price than smaller volume buyers, period. This is as true for buying solar panels as it is for purchasing transportation fleets, gasoline or toilet paper. By aggregating the purchasing power of residents and businesses with the City's purchasing power, the Solar Power Facility will ensure the lowest possible price for all.
- **Unlike the government-only plan, the Facility will target buildings that qualify for 50% state subsidies.** The government-only plan's solar installations on city agencies will cost **twice** as much as they should: unlike residents and businesses, city agencies don't qualify for fifty percent state "buy-down" subsidies: nor for federal tax breaks. While in some cases it will be worthwhile to build solar on government facilities, targeting them and prohibiting use by the community needlessly doubles the price the City has to pay. The Solar Power Facility's government installations are not restricted from community use and can select locations that qualify for the 50% subsidies.
- **The Facility promotes "Distributed Generation," meaning a network of solar power plants, not the disconnected hodge-podge of solar panels proposed by the government-only plan,** under which a massive solar array on a city property would permanently be prohibited from serving its surrounding neighborhood. San Francisco should not erect artificial barriers when there is no need for them. The Facility avoids this entirely, creating a flexible community energy resource that can be adapted to community needs as they emerge.

3. Starting Small is a Non-Starter

The government-only plan is presented as a "first step," but will not likely lead to a second step in the final equation. Its proponents warn that the City should "start small" and continue with a "phased approach" if the program is successful. But this is self-defeating: smaller is more already more expensive, plus costs twice as much without subsidies; therefore the "first step" will prove *unsuccessful*; the less successful it is, the less likely we will ever reach the promised "second step."

That is why aggregating government, residents and business facilities is so important. By financing solar power on the *same scale* that we build smaller gas and coal plants every day of the year and without a thought, the Solar Power Facility will drive down the price of solar power to be more competitive; by being competitively-priced, it will succeed. Without a minimum commitment to scale this project will become just another token, expensive solar program. A commitment to adequate scale is the cornerstone of our strategy.

4. Money Saver: Energy Efficiency Added

Enabling legislation for the Solar Power Facility also calls on participating energy companies to include proposals for installing energy efficiency facilities in conjunction with solar installations. If coordinated, there are known synergistic benefits to combined rooftop solar and energy conservation processes that in effect dramatically lower the cost of the solar systems, whether for the public or private sectors.

To sign a petition in support of the 50
Megawatt Solar Power Facility, call 510
451 1727, jpeters@local.org or site visit

@ local.org