

Comments on the SMART 400 MW Review Straw Proposal  
Robert Cherdack, Ashfield MA

I. General

A. Siting Issues

The intent of the SMART program is stated in 225CMR20.01

"The purpose of 225 CMR 20.00 is to establish a statewide solar incentive program to encourage the continued use and development of generating units that use solar photovoltaic technology by residential, commercial, governmental and industrial electricity customers throughout the Commonwealth. "

As stated, the goal was to have consumers of electric energy develop solar generation, not a horde of third party independent generating entities.

The purpose statement goes on to state:

" The continued use and development of these generating units has the potential to reduce peak demand, system losses, the need for investment in new infrastructure, and distribution congestion; increase grid reliability; improve public health and safety; "

This clearly alludes to the benefits to be gained from electric energy generation at the site of consumption, and identifies the difficulties imposed on the grid by generation located at a distance from loads.

The program as currently configured has missed this laudable purpose by a wide margin. The approach of using a "market" which uses mandates and subsidies to try to meet the purpose of the program has instead resulted in a free for all for developers to stake out projects that have the lowest first cost and the lowest potential for delays. Not surprisingly, projects meeting these two criteria tend to be located on greenfields and forest lands in rural communities usually far from major loads. Such projects do great harm to natural lands while contributing to distribution and transmission problems.

There was a recognition of the possibility of this unwanted bias toward projects on undeveloped lands and compensation rates for desirable locations and subtractors for undesirable ones were included in the initial SMART rules. It is now recognized that these rate modifiers were woefully inadequate to compensate for cheap land and uncomplicated development schemes. At the same time, excluding land in areas locally zoned to allow solar from being subject to even the overly modest greenfield subtractors made matters even worse.

The proposed remedy to these flaws is to raise the greenfield subtractor fivefold, extend the life of adders for desirable sites, and to consider the nature of the installation site in establishing compensation rates regardless of its being zoned for solar. While these remedies may work to get the majority of new solar generation where it should go, their effectiveness won't be known until they are in place for some time and then if they are not succeeding, it will take a long period to modify them again.

If new adders and subtractors are to be used they should be carefully developed to ensure they will accomplish the goal of getting solar power installations where they do the most good and least harm. A survey and analysis of costs and development complexities of existing and proposed installations should be used to determine the new rates. After all, with SMART encompassing 2400 MW as currently called for in the Straw Proposal, there could be over 10,000 acres at stake and gigawatts of power in the wrong places.

An alternative to this is for the DoER to determine what the ideal outcome of the SMART program would

be and allocate carveouts to achieve this. While this may be anathema to advocates of markets, a market manipulated via varying rates of compensation and allocation of power blocs among utilities is hardly a free market at all and would only be called successful if it, indirectly through manipulation, achieved what carveouts would do through direct actions.

Carveouts could be flexible and would also be an effective way to enhance the amount of behind the meter generation and energy storage encouraged by the SMART program.

## B. DoERs Overall Approach to the SMART Program

The DoER has quite properly indicated that SMART is only one program in a system of many to accomplish the state's goals for protecting and enhancing the environment. The DoER should integrate with all the departments, agencies and groups with established environmental credentials whose domains are affected by the SMART program. At this time it appears that the main beneficiaries of the program are aggressive developers of large scale installations, who collect subsidized compensation at the expense of utility rate payers.

The SMART program is huge in its consequences which encompass thousands of acres of development and billions of dollars in expenditures. If one were to consider these consequences as resulting from a single project or proposal it would be subject to detailed scrutiny, and almost certainly invoke MEPA review. It is time for DoER to provide a detailed analysis of the range of consequences of SMART, both positive and detrimental and to use this information to plot the best means of implementing the program.

This should be well long before any expansion for the program is implemented. At this time expansion of the program before it is carefully redesigned seems to benefit the aforementioned developers first and foremost.

## II. Specific Comments

### A. Establish Specific Goals

In consultation with relevant state agencies and affected stakeholders, DoER should establish goals for the SMART program including how much generation, what kinds of sites and what type, for each region. A total MW figure, even by region, is just not enough. All of this needs to be done before expanding, what is in some ways, a runaway program.

### B. Ensure Rate Adjustments are Adequate or Use Carveouts

It is clear that the current rate structure needs substantial modification for Massachusetts to obtain the maximum benefit and minimum detriment offered by SMART. Disincentives for siting on undisturbed land and far from loads and incentives for building on disturbed and developed sites must be adequate. DoER needs more than reasonable guesses as to what it will take to drive development to desirable sites. Any disincentives should be based on total areas affected, not just the footprint of the solar cells. Inadequate rate structures will have great consequences especially with the long delays between proposal and implementation of regulation changes. Incentives beyond current adders for desired sites are probably necessary to compensate for the increased potential for delays and the near certainty of higher development cost. DoER should consider carveouts consistent with established goals.

### C. Minimize Grandfathering

It is recognized that the original SMART rate structure and other rules promoted siting in greenfields and also resulted in smaller projects on buildings and developed properties being squeezed out of blocs. Grandfathering of proposals made under these old regulations should be minimized to the greatest feasible

and legal extent .

#### D. Solar Zoning and Public Ownership

The nature of a site and not whether or not a town has zoning specifically allowing solar installations should determine what adders or subtractors apply. Similarly, public ownership should not affect what subtractor applies. Greenfields and forests should be subject to the maximum subtractors and publicly owned greenfields and forests should not be developed for solar fields at all.

#### E. Behind the Meter Compensation

SMART compensation rates should reflect the fact that behind the meter electric energy generation is considerably more valuable than stand alone generation because unlike stand alone generation, it reduces loads on transmission and distribution systems, and is not subject to transmission losses. The added value of behind the meter generation should be fully determined, perhaps in consultation with ISONE.

#### F. Energy Storage

Energy storage is vital if solar energy is to become a major source of power to the grid. Adders for storage should be substantial enough to encourage not only its use in Massachusetts, but also be structured to spur development of more economical and environmentally friendly technology. Energy storage can make behind the meter installations more attractive and beneficial to the grid.

#### G. Logged Lands

Logged but otherwise undisturbed lands should be treated as forested for determining what subtractors apply. This would prevent logging done to allow a subsequent installation to escape a subtractor and also because logged lands are capable of becoming forest if left undeveloped.

#### F. Avoid Merging Eversource East and West

The proposed merger of Eversource East and West blocs will promote more destruction of forests and the location of generation at great distances from loads. The results of such a merger would undermine much of what the straw proposal is allegedly trying to accomplish.

Robert Cherdack  
1180 Hawley Road  
Ashfield MA 01330