CARBON FINANCE STRATEGIES LLC

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Massachusetts DOER (by e)

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Carbon Finance Strategies LLC ("CFS"), a MA corporation operating nationally, appreciates the opportunity to submit these brief comments on **post-400 MW program design**. We also appreciate the focus provided by DOER's March 22 policy slides, which appear to build in significant part on previous informal discussions with DOER.

CFS together with its co-developers currently has approximately 70 MW of ground-mounted PV projects under development in the Commonwealth. Some of these will be virtual-net metered through NM Credit Agreements in lieu of PPAs. However, a critical portion will sell energy + capacity through long-term PPAs, generally to out-of-state entities. Due in part to historically low wholesale PPA rates driven by recent shale-gas expansion (or perceptions of that expansion's effects), bankable long-term SREC revenues have become a key determinant of project feasibility for our development pipeline. Thus we (like others) have a major stake in a continuing, robust, and cost-effective SREC market that will smoothly support non-disruptive project development, without promoting phantom projects.

In rough priority order:

- We support a single market that builds as seamlessly as possible on the existing 400 MW structure. We agree with DOER that (however attractive conceptually) the time, political effort and market disruption involved in adopting anything close to a workable Central Procurement approach would outweigh any potential benefits.
- We also urge DOER carefully to consider the potential pitfalls of competitive SREC procurement, should it pursue a Centralized SREC Procurement approach. Our experience with such approaches for PPA procurements in MA, NJ and CA has led us to conclude that they tend inevitably to result in "races to the bottom" in which the lowest clearing price becomes the cap for subsequent procurements, resulting in procurement prices at which few projects that are viable long-term likely will be built. The desire to "reduce ratepayer costs" in these circumstances generally has proved difficult to resist, resulting in "zombie projects" that either have rolled the dice on continued large reductions in component prices, or will face intense pressure to cut O & M corners and/or abandon projects when available tax benefits have expired. See our March 2012 comments to Gov. Brown's DG Task Force, attached.
- For these reasons, we strongly support both a rational SREC adjustment factor for post-400-MW projects, and a "firm" SREC price floor like (but not necessarily identical to) the one outlined in H. 2915 for all qualified projects.

The adjustment factor should fairly reflect ancillary benefits – e.g., reduced congestion, increased system reliability, the system-upgrade costs typically borne by 6 MWp "utility scale" PV projects rather than serving utilities, demand-response benefits, and frequency-regulation effects -- that historically have been undervalued. These benefits will be greater when commercially-feasible storage becomes available for PV at the 3+ MWp scale.

A "firm" SREC price initially set at the Auction net price (with appropriate, predictable downstream adjustments for later-installed projects) would go a long way towards ensuring the financeability of

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otherwise-sound projects. It also could provide a buffer against power-rate volatility and currently depressed power rates, provided that (using H 2915 as an example) utilities acquiring SRECs at the specified acquisition price cannot manipulate the market to their advantage by dumping such SRECs at opportunistic times. Such safeguards would appear particularly important given utilities' current ability to pass through to a large ratepayer base both the costs of SRECs and the costs of SACP payments. DOER apparently has acknowledged the risk posed by the latter in its recent CMR 200 § 14 proposal to eliminate the SACP subtraction component from the Minimum Standard RPS Formula.

In our view, the current SQA-based Auction opt-in eligibility period *is not* working as intended. Instead it promotes lumpiness and phantom projects by encouraging a short-term "race to SQA completeness" to avoid upfront eligibility-period reductions. To the extent a modified Minimum Formula and other program improvements do not address this issue, we believe other market-equilibrium measures feasibly can do so.

• For similar reasons, we strongly support a fixed, 15-year Auction eligibility period fully commensurate with the established "SREC generation life" of 15 years for each qualified solar project. Whatever the original basis for 10 years, its rationale would not seem to apply with much force where the Floor is no longer project-owner "last chance," where a "real permanent floor" exists, and where the program goal is 3X or 4X the original 400 MW.

We also believe that **removal of "last chance" opt-in eligibility is critical for a future expanded program as well as the current one.** In our view it is a necessary predicate for development of a robust secondary SREC market. Indeed, the markets already have responded based on news of this proposal, by developing long-term SREC contracts of up to 10 years — products that did not exist before March of this year. Moreover, some of these contracts have prepay features, and thus the potential to relieve other financing pressures.

Unfortunately, the early promise of such products has not yet been realized – credit enhancement requirements have tended to limit them to developers with deep balance sheets. In addition, they generally have been offered only in relatively small "subscription" batches, so as to limit buyers' portfolio risks. That is why we view removal of Last chance" as necessary but not sufficient. A 15-year opt-in period could substantially ameliorate both these limitations. This in turn could allow bilateral secondary market transactions to mitigate other program risks potentially posed by "excessive" H 2915 purchases (risks to ratepayers) or "excessive" Auction deposits. DOER's March 22 presentation (p. 5, last bullet) already acknowledges the beneficial market effects from the mere existence of an Auction mechanism that has not yet been used. DOER should build on that observation operationally.

• We do not oppose further reductions in the SACP to limit potential expanded-program-ratepayer costs, as long as the SACPs remain sufficiently high to allow reasonable market "play." No top-quality ground-mounted PV project currently needs a \$550 SREC price cap (however desirable that may be), given cost declines in Tier One components over the last two years and continued (though more modest) projected cost declines through at least 2013. However, we urge DOER carefully to consider (a) the potential SREC price squeezes that could result from drastic SACP reductions that in effect make the market price little different than the Floor price, and (b) what will happen should component prices rise, and what equilibrium measures should address that.

DOER already has recognized that "High ACP rates are justified to compensate PV investors' risk exposure to SREC prices [that are] below [project] economic need during [times of] market oversupply" (March 22

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presentation, p. 6). This portfolio-based observation would seem to require that future SACPs work to complement "a strong and sufficient SREC floor price" (id.), not work at cross-purposes to it.

• We strongly support a single-program with a cap expanded to at least 1800 MW. SEIA recently called for up to a quadrupling of the Commonwealth's Carve-Out cap (to as much as 1600 MW) to bring it roughly in line with comparable PV-potential-based commitments in NJ and MD (neither of which even has a formal cap). We see no reason artificially to limit this goal, either aspirationally or pragmatically. We also believe that safeguards like those sketched above can produce a more robust program with significantly reduced uncertainties for developers, investors, ratepayers and utilities alike. The paramount criteria should be *first*, do no harm; and *second*, create an expansion which uses to the maximum extent possible the procedures and mechanisms which have been tested in the current program and have become familiar to stakeholders through that program.

Time limits have precluded us from expanding these comments, their rationales, and available implementation options. We would be pleased to explore those with DOER as appropriate.

Sincerely,

Michael H. Levin Managing Director & General Counsel