A. ELIGIBILITY

1. MLP Eligibility

Verbal Comments at Stakeholder Meetings

- Municipal utilities not eligible for tariff program – concern with being eligible for solar loan program
- In MLP municipalities? Could the loan program be made to work there?
- Perhaps not at significantly larger default risk even if no SREC 2 or successor incentive program?
- What threshold would need to be met for participation?

Sam Nutter, CSG

- Not Available Statewide: As drafted, it appears that this program will not be available in municipal electric communities. CSG recommends that DOER should consider options to make this available statewide. This may require the municipal electric departments to "buy-in" and/or offer incentives, but there should be an optional path for these communities.

Kim Boas, MMWEC

- All municipal light plants are connected to the transmission network of the covered utilities, anything done in a municipal affects the transmission system owned by those utilities. A PV system in Ipswich, South Hadley or any other municipal has the same positive effect on the greater picture of encouraging the installation of renewable energy systems in the Commonwealth, as one installed in a covered utility's territory.

- DOER in structuring the Solar Loan program should provide eligibility to customers within municipal light plants that have established net-metering and an incentive for PV installation, whether that incentive is rate based or a direct payment.

- DOER should strive to serve the interests of the whole Commonwealth, not just a portion of it.

Steven Tofel, First Sun Solar Company – Installer

- As we understand it, the CEC rebate was limited to five municipal utilities who were part of a trust and therefore their customers were eligible for the CEC rebate. (Is this close to correct?) Assuming we're close, we can see why a municipal's customers would be excluded from the rebate as their utility hadn't contributed to the money used in the funding.
- In the case of a loan program, why shouldn't they be part of it? Assuming that it's a commercially viable program created through the DOER's auspices, but funded only

with seed money and a loan loss reserve fund, there doesn't appear to be a financial burden on either the municipal or private utilities. Plus, the banks that will ultimately drive the program aren't tied to the geography of the utilities' territories. So why not have a solar loan program available to all homeowners?

2. Eligible costs

Verbal Comments at Stakeholder Meetings

- Can the cost of roof repair/structural improvements be included in solar loan? Can do that in CT?

Sarah Jane, GotSun-GoSolar

- If I understood correctly the proposed DOER-enhanced loan would cap at 35K - which, using your model of $4.50/kwh would allow for a 7-8kwh system. Lately, however, it seems that clients approach us with rather outstanding electrical appetites - requiring 10-12kwh systems. Any chance of bumping up that cap to 45k-50k?

Roy Campana, Industrial Credit Union

- To the issue of the condition of the roof, I believe the roof should be new. It would unreasonable to think that a homeowner, unprepared to fund the installation of a solar system and needing this loan, is suddenly fully capable of funding the disassembling and reassembling a system after a roof has been replaced, especially if it needs repair/replacement within 5 years of the initial installation.

3. Lender Eligibility

Verbal Comments at Stakeholder Meetings

- Are any and all lenders eligible?
- Does the lender have to meet ALL criteria/parameters? All or nothing?

Emeline Minor, Kilowatt Financial

- The program should be open to participation by a broad range of financial institutions, not just credit unions and community banks
- Will provide broader array of options to consumers and installers
- Will create level playing field for all lenders; a state program that subsidizes only one segment of lenders will make it very difficult for other financial institutions to compete, which is ultimately detrimental to consumers, installers, and the development of the industry at large

- Competition among lenders will stimulate further development of private sector lending, which will over time decrease the need for state support

Richard Kump, UMass Five Credit Union

- It is unlikely that we would want to utilize the 3rd party loan facilitator. We prefer to control the process rather than outsource the origination and screening.
- When advertising lenders, please make certain to include the eligibility rules for credit unions. Not every consumer will be eligible to join a particular credit union.

Roy Campana, Industrial Credit Union

- The 10 year term is reasonable, but the Note would have to be an Adjustable Rate Note given financial institution regulatory concerns over long term interest rate risk.

<u>4. Small Business/Non profit eligibility</u>

Verbal Comments at Stakeholder Meetings

- Are small businesses eligible? Small non-profits?

<u>5. Credit Enhancement Eligibility</u>

Sylvain Mansier, Sungage

- Long-Term Market Stability: Since the market for residential solar finance is highly dynamic and is evolving rapidly, the Program should be designed with some flexibility to adapt to new realities over time. It is imperative that the Program not crowd-out private sector actors that are innovating to provide residential solar finance, as these entities will be needed to transition to a market without DOER support once the Program resources have been depleted. Therefore, **the Program elements should address market failures and not areas in which private solutions already exist.** For example, a Loan Loss Reserve ("LLR") is an effective tool in developing financial markets where information failures (e.g. lack of historical information on performance of solar loans) limit participation by financial institutions. Since the goal of the LLR is to increase lender participation, access to it should be widely available. This implies eliminating any constraints, requirements, or conditions that are not absolutely necessary. In summary, all aspects of the proposed Program should be reviewed with this lens of fixing only areas of market failure.

<u>B. TECHNICAL REQUIREMENTS</u>

<u>1. Warranty, Inspection</u>

Verbal Comments from Stakeholder Meetings

- Who is going to fulfill warranty if installer or manufacturer goes under?
- How does the service and maintenance plan work? Who does it? What about a 10 year workmanship warranty instead? Or would an initial inspection cover this need?
- Installer warranty for 5 years may be hard for smaller companies. Make sure this is industry standard

Sam Nutter, CSG

- Service and warranty issues: 10 year term loans are required but there is uncertainty surrounding how service and warranty will be handled. CSG recommends requiring 10 year material warranties on all major components and requiring 100% post-installation verification inspections (as is done currently in the HEAT Loan program). These enhancements will make the program more attractive to the lenders, and will provide additional assurance to consumers.

<u>2. DAS Requirement</u>

Verbal Comments from Stakeholder Meetings

- What about cellular instead of internet transmission of production data?
- Is it possible to have utilities be required to report production through utility meter? Instead of DAS with remote reporting?
- What about areas in western MA without cell service or reliable internet for DAS technical requirement?

<u>3. 80%</u>

- 80% technical requirement came up – request that be left to discussion between installer, customer and lender. Also, the cost of modules could change the need for the 80% rule.
- 80% technical requirement is strict, perhaps 80% for ground and 70% for roof? Cuts out too much of market at 80%
- Would consider lending capital costs per kw instead of 80%?

<u>4. Licensed installer</u>

Verbal Comments from Stakeholder Meetings

- Licensed electrician technical requirement came up – could be an union issue?
- Should the installer be a Home Improvement Contractor (licensed)?
- Requirement for both building and electrical permit? Part of sunshot?

Christopher Kilfoyle, BPVS – Berkshire Photovoltaic Services

- We recommend DOER consult with the Office of Consumer Affairs and Business Regulation on details of Massachusetts residential construction contract law to assure lenders that requirements for this program exceed those of the Commonwealth Solar program. The latter has consistently omitted general or detailed guidance to consumers on contract law in its program offerings. The Office of Consumer Affairs and Business Regulation presents such guidance clearly at this link:
    - http://www.mass.gov/ocabr/consumer-rights-and-resources/home-improvement-contract/
- At minimum the solar loan program should require:
    - All Eligible installers have HIC registration and contribute to the Contractor Guaranty Fund
    - Carry and prove Workers Comp. and CGL insurance specific to the PV trade.
    - Eligible PV installers should have not just a registered licensed electrician on job sites but a Massachusetts Licensed Construction Supervisor to meet the full intent of code harmony and Massachusetts licensing laws.
- *Ideally,* to assure lender confidence, eligible installers should be required to have a NABCEP Certified PV professional on the job site at all times for technical oversight and for the ethical standards, NABCEP professionals are obligated to uphold.

C. FINANCIAL REQUIREMENTS

1. Tax credit

Verbal Comments from Stakeholder Meeting

- Tax credit may need to be spread over time, how does that work with 18 month paydown of loan?
- What happens if borrower is in debt with taxes, so no tax credit?
- Is borrower required to paydown loan with tax credit?
- Loan amortization perhaps not based on tax credit so borrower immediately sees higher monthly payment? Sees reality?
- Work with lenders on tax credit payment issue

Sam Nutter, CSG

- The draft proposes that the lenders carry the estimated amount of the consumer's tax credit for up to 18 months at which time the consumer is expected to pay the credit to the lender. This is an unworkable concept that would also add unnecessary complexity and confusion for both consumers and lenders. A tax credit does not necessarily mean a refund. Tax credits sometimes must be spread over multiple tax years. The lenders cannot be expected to "carry" that portion of the loan, and requiring re-financing after the tax season adds unneeded complexity. This concept is flawed and should be scrapped.

- Federal tax credits are scheduled to be reduced in 2016. The draft MA Solar Loan also plans to reduce the interest rate buy-down in 2016. The combination of these factors will lead to an excessive amount of activity in late 2015 and a slowdown in 2016. CSG recommends reassessing the state of the solar market in late 2015. If the market demand and expected cost reductions are not on track, perhaps the planned reduction in interest rate buy-down could be minimized or pushed back to 2017.

Richard Kump, UMass Five Credit Union

- The expectation that the consumer will apply their federal tax credit to the loan as a principal reduction is fine as long as the DOER only uses that action for illustrative purposes. It is unlikely that a lender will wish to amend their loan notes and amortization schedules to accommodate a forced principal reduction, nor would a lender wish to track and chase the consumer's tax return. Additionally, the federal incentive may not be received in full (or even part) as other federal tax liabilities of the consumer may net out the incentive. My recommendation is to use the incentive for your purposes only, and leave the lenders out of the mix (in relation to requiring the incentive to pay down the loan). It should be a best practice recommended to the consumer, but is probably unenforceable.

Christopher Kilfoyle, BPVS – Berkshire Photovoltaic Services

- It was surprising at the stakeholders session that none of the several DOER representatives or their consultants present were familiar with the existing private loan offerings being made by out of state firms to Massachusetts solar consumers. These solar loan packages (often presented as an alternative to a lease or residential ppa contract to residential homeowners) are unique.
- In particular the provisions of the loan package offered by the provider of the Solarize programs in the majority of western Ma. Towns should be familiar to DOER staff and actually includes one recommended provision of the DOER model loan package- the point in slide 14 that suggests borrowers could provide the lender with the federal solar tax credit within 18 months of closing or the loan would be reamortized. For consumer protection lets be sure the state program does not model this trigger which could confuse gullible consumers and result in escalated interest payments. It may be that local banks and lending institutions do not want to associate with DOER on a solar loan program precisely because they have seen this type of surprise balloon payment and penalty provision marketed in their communities.

<u>2. IRB</u>

Verbal Comments from Stakeholder Meetings

- IRB – the same for different loan terms – lender gets money upfront, amortize over life of loan, if loan paid early lender gets a windfall
- Lender potentially short-changed by assumption that borrower will pay back federal tax credit – trade-off for windfall of IRB
- If lender provides 3% loan, will there still be a 3.5% IRB?

- The coincidence of the federal tax credit ending and the declining IRB could be a big impact
- Differentiate FICO categories for IRB?
- IRB upfront?
- Without IRB could mitigate more risk? Perhaps do that?
- What about smaller graduations of IRB, perhaps by quarter? Also adjustment/flexibility based on potential end of FTC?
- IRB too expensive, distorts market; well structured LLR effective, shorter term; consider subordinated debt
    - IRB only helps with origination
    - Installers aren't discussing interest rates anyway, only cash flow
    - IRB also prevents private capital from coming in
    - Consider that market already providing 6-8% loans
    - LLR and SD function as lender risk mitigation
    - If look to stretch to 15 year, can provide comfort with LLR
    - SD allows accelerated payback of principal to lender. Amortization not shared equally among lender/DOER, with DOER taking longer interest amortization, so lender writing 10 year loan but lender paid back in 7 years

Sylvain Mansier, Sungage

- Interest Rate Buy-down ("IRB"): The DOER has limited resources for this Program ($30 million of ACP funding); therefore, the use of funds should be optimized to the extent feasible to ensure maximum leverage, thereby supporting the most residential solar installations. Given the current incentives in place, residential solar economics in Massachusetts already provide a compelling value proposition for consumers. As such, **even at reasonable market rates of interest, a financed solar purchase would be economically viable**. In other words, an interest rate of 2% is not required for residential solar loans to gain market acceptance. In fact, in Connecticut where Sungage offers a 15-year residential solar loan with a 6.5% rate, uptake of the solar loans has been meaningful. Using rate-payer funds to pay interest subsidies to financial institutions is not only unnecessary, it is also expensive and it does not return in long-term benefits. Assuming a typical loan amount of $30,000, a 3.50% buy-down, and a 10-year loan, the interest rate subsidy would be at least $4,500 per transaction. Based on DOER's expected origination volumes and buy-down rates (Stakeholder presentation pg. 17), the total interest rate subsidy would be at least $16.5 million, or more than half of the limited funds available for the Program. Moreover, by artificially and temporarily lowering rates for residential solar loans, this proposal would imperil the industry, by 1.) training the market that residential solar is always accompanied by cheap financing, an unsustainable offering and 2.) exacerbating the economic impact of policy changes on solar post 2016 by eliminating a financing subsidy at the same time as the expiration of the federal tax credit. Sungage strongly recommends removing the IRB from the Program design with one possible exception. Specifically, the DOER might establish a special loan program with an IRB for low and moderate income borrowers only. This would serve the DOER's objective of making solar more affordable and accessible for all MA residents. By narrowing the application of the IRB, the DOER could concentrate the limited resources for the Program on the segment of the population that needs additional financial assistance to go solar.

Emeline Minor, Kilowatt Financial

- State support levels **-** The interest rate buydown drops to 0% at the same time that federal incentives may also decrease from 30% to 0%; if both state and federal incentives drop to 0% at the same time it may significantly impact the market. DOER should consider how to retain flexibility to adjust state incentives based on changing federal incentive levels.

Richard Kump, UMass Five Credit Union

- The subsidized rate equating to 5.50% is reasonable (note rate at 2.00% to the consumer). As the subsidy declines after 2015, lenders must be able to charge a higher rate to the consumer so we can get back an acceptable ROI.

Roy Campana, Industrial Credit Union

- The 5.5% rate is appealing.

3. LRR

Verbal Comments from Stakeholder Meetings

- Mechanics of LLR? Separate accounts for each lender
- Consider backstopping LLR with insurance product?
- Lenders more interested in LLR than IRB
- Could SRECs be assigned to lenders, not to LLR?
- Increase LLR for first year?
- Could lender assign SREC to themselves upon default? Not to LLR?
- Assignment of SREC at close or default? And how does that work if early monetization of SRECs has taken place?

Sam Nutter, CSG

- Loan Loss Reserve (LLR): The lenders will be determining eligibility for the loan based primarily on credit worthiness of the customer. Therefore, CSG does not think there is a need for a loan loss reserve for customers that have high FICO scores. This opinion is based on the HEAT Loan experience in Massachusetts. The default rate has consistently been under .55% since the beginning of the HEAT Loan program in 2006. Also, lenders have their own LLRs for all loan types. So setting aside public funds for this class of customers is not warranted or prudent. A case could be made to have LLR for customers obtaining loans where their score is 600 and above to perhaps 639 or 679, but this risk might be better handled by increasing the subsidized rate and/or maximum interest rate allowed, or by options other than loans as described below.

Roy Campana, Industrial Credit Union

- The Loan Loss Reserve calculation is weak/inadequate – especially if you're requesting poor credit applicants be qualified for the loan.

<u>4. CSS</u>

Verbal Comments from Stakeholder Meetings

- What if a portion of the $30 million was allocated specifically for community shared solar (CSS) to encourage engagement with that sector?
- What about renter engagement in CSS and/or loan program?
- What about renters? Lender commented that already doing solar loans, but no renters, would consider CSS.
- Can landlords participate?
- Can multi-family affordable housing participate?
- CSS ownership position – need to define

Jill Winans, McCauley Lyman LLC

- As we discussed, I looked at the ownership issue for small participants in CSS facilities. The concern is how to make this credit support program available to residential customers in community shared facilities, that are also locally-controlled/owned, and still allow financing options sufficient to develop the projects. The simple definitions below allow local control, then ownership, and require the offtaker (residential customer) to be a member of the entity developing (then owning) the facility. Please let me know if I can help work through this issue.
- The following definitions address providing credit support for residential participants in locally-owned community shared solar facilities. The intent is to: Allow residential borrowers to participate in CSS facilities as offtakers and as members of the entity controlling the facility, encourage local ownership by requiring the entity controlling the facility to be locally-controlled, and allow the facilities to be developed using customary financing mechanisms. This structure allows the facility to use financing that returns ownership to the controlling entity (and the members) over time.
- A "Community Sponsor" is a legal entity, which owns, or can demonstrate its' right to own, over time, a CSS facility, and which entity is owned or controlled by individuals located within the same load zone as its CSS facility.

- Community Shared Solar “Small Participant”:
  - is an individual,
  - is a Community Sponsor member, and
  - holds an interest in the Community Sponsor’s CSS facility in the form of a net metering credit purchase agreement.

Christopher Kilfoyle, BPVS – Berkshire Photovaltic Services

- A solar loan program can be a great aid to Community Shared solar projects where the structure is truly an ownership model. The use of the phrase “off takers with ownership positions” in the slide presentation by DOER as being eligible for a loan through this potential program is especially worrisome. This why I asked during the Q & A if any of the DOER or consultant representatives have studied the offerings and contract terms for the Colorado based firm, Clean Energy Collective’s Community Shared projects in Massachusetts. These projects are being heavily marketed to consumers who signed up for sessions of those official DOER “Solarize” town programs whose sole provider is another Colorado based firm, RGS Energy.
- A rational perspective in researching their offering would conclude that a loan to an “off taker with ownership position” to participate in this type of Community Shared solar model is in fact not for ownership of anything but net metering credits. The true ownership “position” is really just an option after the projects corporate owners exhaust all incentives in six years . The contract ownership option expects the participant to expend significantly more personal funds to gain title only to the solar panels (not the power conditioning unit or mounting system share) and the ability to collect the SREC or production based incentive value. That a loan to a participant in this Community Shared model meets the program goal of increasing residential direct ownership of PV and keeping the benefits within the local economy is not defensible.

5. FICO Scores

Verbal Comments from Stakeholder Meetings

- HEAT loan allows lenders to set interest based on FICO and lenders risk aversion, is it possible to do that here?
- 580 credit score is very low – change to debt/income?
- Do we need to incentivize lenders?
- Currently lending at max $50k, 20 years, 8%, 680+, with 2% reserve
- Have to report 640 and below as subprime loans to federal regulators, even with external LLR?
- HEAT loan can set own parameters as a lender, can we do that?
- What skin in the game does the borrower have?
- Lender not comfortable with lower FICO score with unsecured loan. 580 is too low for unsecured loan.

- FICO – 680 prime, 640 below prime – lender can work on an individual basis for lower – or look at a specialty lender for lower
    - Debt/income ratio becomes a bigger factor – could look at 43% to 50%
    - 95% of loans are going to be 640+ anyway
    - Perhaps designate pool of funds specifically for 540-640 – can skip in general pool because not many borrowers in this pool anyway
    - No need to provide DTI info if 700 above, so slightly easier/faster for high FICO

Sam Nutter, CSG

- FICO Scores Below 600: Loans to consumers with FICO scores below 600 triggers additional reporting requirements due to the federal Dodd/Frank legislation. CSG recommends that the Lenders only be required to offer loans to consumers with FICO scores of 600 or higher. Lenders who choose to offer to lower FICO score customers should of course be allowed to participate but CSG recommends that the required minimum for participation begin at a FICO score of 600.

- Low Income Customer Concerns: It is apparent that the LLR and low FICO scores are an attempt to serve low income customers and/or those with a poor credit history. Such customers are likely better served with other program designs instead of a loan product. DOER should consider having a budget set-aside with extra incentives available for low income to better serve this segment of the marketplace.

Sarah Jane, GotSun-GoSolar – Installer

- We are by no means financial experts and have not walked in a lender's shoes but we wonder whether this interpretation seems to be more of a rough character judgement than a discussion of low-income situation. We propose that the savings generated by reduced energy bills would allow said client's credit score to change for the better as s/he uses this saving as income to pay bills. We'd like to think that Gov. Patrick shares this perspective as the DOER strives to offer increased solar ownership access to the 29% of Mass citizens with credit scores below 680.

Patrick Cloney, NextStep Living:

- DEPTH OF BUYING:
    - We can expand the total addressable market if we can offer financing solutions to those customers that have weaker credit. We lose about 15% of our sales to folks that can't get financing from our existing sources.

Emeline Minor, Kilowatt Financial

- FICO threshold of 580 with interest rate of 5.5% for an unsecured loan may not be economically feasible
- DOER should survey multiple lenders, including national lenders, to determine the FICO cut off and corresponding interest rate that is reasonable for an unsecured solar loan

- DOER should provide as much flexibility for lenders to use their own consumer underwriting processes as possible

Richard Kump, UMass Five Credit Union

- Requiring that all consumers with a credit score as low as 580 be guaranteed a solar loan would be very problematic for us. We have no intention of cherry-picking consumers, but need to stay within our prudent and reasonable underwriting guidelines. Placing a mortgage on borrowers with scores under 660 – at their expense – may mitigate some of the risks, but if the consumer is not creditworthy, we still need to turn it down. Perhaps dropping the loan loss reserves on the higher scores and pumping-up the loan loss reserves on lower scores would make sense. I don’t need to put anything aside for the A-quality borrowers.

Roy Campana, Industrial Credit Union

- Similarly, poor credit does not mean low income. They are distinctly different borrowers and if they are to be considered low income, the debt ratio should carry more weight than the fico score.

<u>6. UCC-1 Filing</u>

Verbal Comments from Stakeholder Meetings

- How does a lender re-possess panels? How does the UCC-1 filing help? What is the real value of the UCC-1 filing?
- Home equity loan structure is more comfortable
- What about a home equity note instead? But then solar loan would be a penalty for home equity line of credit?
- UCC on panel put you in superior position than a mortgage?

Massachusetts Credit Union League

- Establishes a security interest in the assets by providing public notice (no one wants to see panels being pulled off their house any more than seeing their car repossessed)
- Provides protection in the event that the debtor fails to make payments that are due to the creditor. Events of default are articulated in the filing.
- Once filed, the UCC-1 "perfects" the security interest against subsequent filers
- Simple, quick, and relatively inexpensive to file

Richard Kump, UMass Five Credit Union

- The unsecured nature of the program is probably acceptable as long as we can utilize our own underwriting criteria. Other lenders may feel differently. The filing of a UCC, though, doesn’t appear to offer much assurance. Repossessing the panels seems problematic and there is virtually no resale value. There was some talk about the UCC being able to be satisfied upon sale of the residence, but no one seemed certain whether this was truly an enforceable lien on the home. Do you have an answer to this? If the UCC on the panels does not extend any enforceable lien onto the rest of the property, then it seems to be an unnecessary step in the process (as it serves no purpose but requires time and money to perfect).

- The idea of treating these loans as second mortgages could work. It comes down to the costs of origination versus what we will earn in finance charges. Typically, there are costs for an appraisal, title update, flood certification, government recording fees, etc. Most lenders eat these costs, and on smaller dollar loans it could actually cost more to originate than what is earned. That's why I am probably more OK with an unsecured loan…I don't have to worry about the costs or real estate compliance.

Roy Campana, Industrial Credit Union

- The unsecured nature of the loan is contrary to most loans of this purpose. The program calls for fixed improvements to be made to the property. A lien more enforceable than a UCC1 is in order.
- DOER is asking that the loan be "transferrable" or assumable and I can't see how Real Property can be transferred to a new buyer with an assumption of an "unsecured" debt.

  Also, if unsecured and assumable, I think an argument can be made that the loan is being made for the chattel only. That's contrary to sound lending practices.
- Further, the homeowner would get no income tax benefit with an unsecured loan since a 1098 would not be created.
- Lastly, the borrower would be deprived the Right of Rescission, which originated with unscrupulous contractors or lenders. I'm sure the program would want to stay clear of that issue.

D. PROGRAM STRUCTURE

1. Heat Loan Incorporation

Sam Nutter, CSG

- Duplicates an Existing Energy Loan Program: The most significant recommendation that we can make is for DOER to engage in a more inclusive stakeholder process that includes the utilities and energy efficiency Program Administrators (PAs) to evaluate if the Residential Solar Loan should simply be added to the existing Mass Save HEAT Loan program as an additional measure.
- Existing lenders, administrators, quality control, systems, and procedures already exist in the Mass Save program. Therefore, we believe it is paramount that this option be evaluated before launching a parallel and potentially competing loan product. The most important aspect of this recommendation would be to bring solar and efficiency together in a common strategy. This concept of breaking down silos between efficiency and renewables was discussed recently in DOER's Updating Residential Conservation

Services stakeholder meetings, so it is confusing to CSG why DOER would concurrently be proposing to create a new 'silo'.

- Combining the Residential Solar Loan with the Mass Save HEAT loan will require asking the PAs to work with DOER and other stakeholders in a working group to evaluate the options and any potential concerns. For example, the PAs may need appropriate recognition and goal achievement if the energy efficiency funds supporting Mass Save HEAT Loan were to also support solar PV (e.g. - solar kwh production incorporated as the same as efficiency kwh reductions for goal achievement). In addition, PA's and Program Implementers will need to be assured that the procedures and integration will not adversely impact the existing EE program initiatives

<u>2. Lender Friendly</u>

Sam Nutter, CSG

- Not Lender Friendly: There are several aspects of the draft that are inconsistent with typical lender policies and procedures. This includes expecting lenders to evaluate the projected cash flow from SRECs, tax credits, and reduced electric bills. Lenders base their underwriting on credit worthiness. CSG recommends leaving the cash flow discussion to the solar salespeople and allowing the lenders to focus on credit worthiness such as income to debt ratios as their primary evaluation criteria.

<u>3. Consumer Friendly</u>

Sam Nutter, CSG

- Not Consumer Friendly: Some consumers will want to, or may need to, replace their heating system (gas, oil, heat pumps, etc.), insulate their home, and/or also want to add solar PV at the same time. Asking them to go through two different programs and take out two separate loans is a very confusing and poses a real barrier to achieving the overall goals of the Massachusetts clean energy strategy.

Patrick Cloney, Next Step Living

- PROCESS - LOAN ORIGINATION TO CLOSING:
  - I know we have touched on this before but we can't stress enough the need for simplicity in process for the borrower. Industry standard is quickly becoming an all on line and e-sign process and that is what we have now.
- COST:
  - Most buyers care about monthly payment. Monthly payment is influenced by rate, term, bank fees. General rule of thumb is the longer the term the lower the monthly payment. The market understands this as well and is creating products with long terms that are matching PPA deals i.e. 20 year terms.

<u>4. Contractor Friendly</u>

Sam Nutter, CSG

- Not Contractor Friendly: Many of the Home Performance Contractor (HPC's) are currently including, or may want to include, solar PV in their product mix. Similarly, some solar contractors may want to become HPCs. This 'silo' approach will discourage such developments.

Claire Chang, Installer

- Even if the application process is fairly straight forward and simple, the installers might need to add to soft costs to manage financing system costs before the loan is paid out. We ordinarily order materials in bulk before systems are installed about 4-10 weeks. We might get terms, we might not.

- In our contracts we ask for 1/3 at contract signing, 1/3 at materials delivery and last 1/3 minus 10% at completion of install, 10% at interconnection. There is a 4-8 week spread in this timeline. The installer either holds the cost of money or the consumer.

Sarah Jane, GotSun-GoSolar – Installer

- We'd like to propose that the payment schedule of a DOER-enhanced loan align better with a standard installation contract. As proposed the DOER's 1/3 at closing for deposit and 2/3 AFTER interconnection leaves the installer in the lurch financially - especially if interconnection is long delayed for some unforeseen reason. We propose this payment structure: a small deposit at signing, a larger sum (i.e. 65%) to cover the bulk of our expenses (materials and labor), and remaining payments made after project interconnection.

Patrick Cloney, NextStep Living:

- TIMING OF PAYMENTS AND CONTROL OF PROCESS:
  - Our best case scenario is we have the ability to control timing of payments, which is what we have now with one of our lenders. At the time of sale we present the buyer with a contract that lays out the schedule of 4 payments - 10% deposit at sale, 20% payment at schedule for installation, 65% payment after installation, 5% final payment at PTO. We have control over the account so we notify the buyer that the milestone has been hit and draw down the funds. This provides a big cash-flow benefit to us and reduces the amount of time getting the buyer to sign forms. The buyer does have control over the last payment via a "Certificate of Completion" form.

- LENGTH OF TIME TO DRAW DOWN FUNDS:
  - Residential roof top solar installation is a long process and a number of the steps are beyond our control. We continue to have systems that get to PTO beyond the traditional 4 month draw down window. In these cases we have to work with the lenders to get the draw down windows extended which takes a significant amount of staff time.

5. On-Bill Financing

American Solar Partners

- Suggest the adoption of an On-Bill Financing (OBF) program by the DOER, similar to the program currently operating in New York State. Benefits include:
    - A central administrator oversees the program, which provides increased stability and uniform treatment for all customers
    - Homeowners enjoy a simple administrative process by repaying the loan through their utility bills, rather than going through an entirely separate financing process
    - Since the ability to repay the loan is already demonstrated through previous utility payments, the loan program can afford to offer low interest rates since they have a low risk of non-payment. These low rates compare favorably to financing methods such as HELOC or personal loans

DeWitt Jones, Boston Community Capital

- I am worried that the loan program will be expensive for banks and outside what they typically do. I wonder if on bill financing wouldn't be a much better alternative, especially combined with the upfront purchase of SRECs I described in the letter yesterday. Our colleagues at Craft 3, in the Pacific Northwest, have found this to be very effective and cost effective for financing energy efficiency.

- What makes this comment especially late is that on bill financing would probably require legislation to force the utilities to allow it. With the concessions giving to the utility companies in the pending net metering legislation, that might have been a good vehicle for getting authorization for on bill financing. However, I expect it is far too late to introduce a new idea. There may be alternatives, though.

<u>6. SREC's</u>

Dewitt Jones, Boston Community Capital

- DOER were to pre-purchase all the SRECs (assuming the same price and discount that the banks were expected to finance against), we believe the program would be simpler, less expensive, and more accessible to lower income homeowners. BSS supports this alternative approach because:
- DOER is far better suited to understand the risks and manage the SREC registration, reporting, and selling process than either homeowners or lenders. Aligning and aggregating this work at DOER (or a single aggregator contracted with DOER) should lower administrative, program and financing costs.
- The resulting loan amount, using the DOER example, would be approximately $4,300 (after applying the tax credit). This smaller loan should allow more homeowners, especially lower income ones, to qualify for the loan, and should be more attractive to more lenders, including community credit unions who serve lower income

customers and typically provide personal and unsecured loans to their customers. The smaller loan amount should also reduce potential issues around the sale of a house before the loan is fully repaid. In addition, the lower loan amount should help lenders overcome potential regulatory hurdles they may have in lending to customers with lower credit scores.

- While the homeowner will give up the potential upside from any SRECs that might sell above the auction price, they would have greater net savings in the first year even without any interest write-down, and are likely to have greater savings over the life of panels, even if electricity rates are flat for the next 20 years.
- The Central Administrator role would remain, providing very valuable qualification requirements for the homeowner and the lender. However, it is likely that the same, if not greater, volume could be supported with lower interest rate buydown and loan loss reserve costs (as well as greater simplicity for managing and overseeing the loan program and the lending partners).

Christopher Kilfoyle, BPVS – Berkshire Photovoltaic Services

- The use of SRECs or an anticipated production based incentive as collateral for a solar loan was not attractive to the lenders present at the Greenfield session . They expressed good fiduciary reasons for their concerns. DOER should investigate how the existing solar PV loan marketers are using dubious SREC values and taking ownership of these Certificates as part of the terms of their product offerings to consumers. DOER should avoid this rather spurious type of financing enticement.