Commenter Name: Maria Stamas PA to receive feedback: SDG&E MF Presentation
Commenter Affiliation: NRDC in collaboration with Energy Efficiency For All (EEFA) Network Date: 5/18/16

Our recommendations are summarized in this chart; full recommendations and rationales provided below.

#	Recommendation	Relevant PA	For PA use: Was it integrated? Y/N and rationale.
1	**Problem Statements:** Add 2 problem statements: (1) multifamily sector is underserved compared to available potential and (2) programs not designed to meet needs of building owners.	All	
2	**Program Length:** Work with CPUC to approve 3-5 year implementation and incentive budgets.	All	
3	**Program Outreach/Delivery:** Provide meaningful, comprehensive services to owners by hiring additional "single point of contacts" for customers.	All	
4	**Program Design:** Provide consistent approach to each project (while tailoring solutions on the utility-side based onthe building's metered data); Shift away from product rebates to more holistic offerings determined by robust energy assessments; Create long-term plans to ensure MF programs contributing to Net Zero goals.	All	
5	**Financing/Incentives:** Increase incentive amounts for owners to overcome split incentives and increase participation; Assure incentives are reliable at project outset and are tailored to fit with refinancing loans; Provide phased payments to owners during construction to offset upfront costs; and Increase EUC budgets beyond pilot level to better serve the market.	All	
6	**Fuel-switching:** Separate combustion safety costs from overall cost effectiveness tests; Provide clarity on 3 pronged test for fuel switching.	All	
7	**Cost-effectiveness/ EM&V:** Incorporate benefits of market transformation in cost effectiveness tests; Pilot or fully transition to meter-based savings calculations.	All	
8	**Data/Benchmarking:** Assist owners in benchmarking properties through EPA Portfolio Manager; Use whole-building data and AMI data to target outreach and tailor program design.	All	
9	**Metrics:** Track attrition: percentage, reasons, timing; Create stakeholder group to review metrics and implementation on periodic basis.	All	

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Commenter: Please Fill In This Part Of The Form						For PA Use	
Comment #	**Stage**	**Sector**	**Page #**	**Comment**	**Rationale for Comment (include references to evaluations, studies, etc., if applicable)**	**Integrated (Y/N)**	**Rationale for Y/N**
NRDC/EEFA-1 Problem Statements	*2*	*Residential Multifamily*	None	**Observations** • Problem statements do not address the issue that programs are not sufficiently sized for the available market. **Recommended Action** • Reframe 'hard to reach' problem statement: MF sector is underserved; programs not to scale.. • Add problem statement: Programs not designed to meet needs of building owners; do not offer tailored solutions.	**Rationale** • PY2013-PY2014 Multifamily Impact Report shows utilities underspending available budgets. • The short length of program cycles have impacted the ability to serve the MF sector. • Currently, the problem statements ***place the burden on MF owners*** where owners are 'hard to reach' and view EE as low priority. However, the programs are not tailored to the owners' needs.		
NRDC/EEFA-2 Program Length			None	**Observations** • No indication whether PA will extend program cycles for EUC beyond 1 year authorizations. **Recommended Action**	**Rationale** • "MF retrofit projects can take as long as 24 months, making it difficult for projects to fit within typical efficiency program reporting cycles."[1]		

[1] Cadmus. 2013. *ESA Program Multifamily Segment Study.* p144.

				• Recommend PA offer long-term contracts and work with CPUC to approve 3-5 year implementation/incentive budgets for MF programs.	• One year start and stop cycles prevent implementers from engaging projects in the beginning of the design and budgeting phase, which is the ideal engagement timeline. This both reduces the number of participants and the energy savings of those who participate.		
NRDC/EEFA – 3 Program Outreach/ Delivery			P 20, 26	**Observations** • Strong support for SPOC. • Support streamlined web/mobile platforms. **Recommended Action** • Offer a single outward-facing multifamily efficiency program for owners and coordinate incentives, audits, and separate programs on the utility-side. • Design flexible programs that can provide nuanced offerings to market sub-sectors. • Dedicate a team of SPOCs that is responsible for signing up a certain number of participants to reach an energy	**Rationale** • Program experience shows building owners benefit from access to people who can help navigate program offerings and provide project development and technical assistance, such as initial assessments, audits and project support. • EE upgrades are a lengthy, cumbersome, and uncertain process. MF owners need a SPOC from beginning to end to ensure maximum energy savings are achieved in a cost-effective manner. This ensures a greater numbers of successfully completed retrofits and avoids participant attrition at numerous stages along the process.	

				reduction target. • Provide a single enrollment form for all programs. • Conduct outreach via apartment associations, state housing finance agencies, lending agencies, and housing development departments. • For single-fuel utilities, in service territories that are not yet coordinated, coordinate gas/electric measures and count savings across electricity and gas while attributing costs/benefits on the utility-side. • For all utilities, coordinate energy with water measures and count savings across water/electric utilities while attributing costs/benefits on the utility-side.			
NRDC/EEFA–4 Program Design			None	**Observations** • No statement on program design, alignment, or consolidation.	**Rationale** • Energy assessments help identify the most cost-effective strategies to reduce EUI.	i)	

				Recommended Action • Work with owners rather than tenants because owners make the upgrade decisions. • Provide tailored solutions based on energy performance of building. Shift away from product rebates to more holistic offerings determined by robust energy assessments (ASHRAE level I or II). • Even outside of EUC, provide incentives for comprehensive energy audits (ASHRAE Level II) as well as less intensive assessments where appropriate. • Provide tiered incentives based on energy savings. • Recommend budgets of EUC and bundled measures are expanded as MFEER sunsets. • Recommend MFEER measure rebates be re-directed to \$/kWh, \$/therms saved	• Prescriptive rebates and direct install programs result in giving owners products that may not work for them or do not improve their building's actual energy performance. • Targeting the owner improves cost effectiveness. • The myriad application processes, incentives, and program models are confusing and discourage participation. • In August 2012, Commission Decision 12-08-044 directed IOUs to immediately roll out three broader approaches to serve LIMF needs which are[2]: i) Streamlining program delivery: "..Whole Neighborhood Approach… and same day enrollment, assessment, and installation." ii) Addressing a wider range of efficiency needs in multifamily buildings.		

[2] Cadmus. 2013. *ESA Program Multifamily Segment Study.* p147.

				rebates, or standard incentives by number of units.	iii) Increasing direct outreach to multifamily building owners and managers.		
NRDC/EEFA–5 Financing			P 20, 21	**Observations** • Strongly support the statement: "Providing incentives to property owners for IDSM improvements regardless of account holder; provide or connect customers to financial assistance." **Recommended Action** • Assure incentives are reliable at project outset. Offer delivery payments in phase during construction to offset upfront costs as needed. • Align incentive payments with conventional purchase and refinancing cycles and partner with lenders. • Explore on-bill repayment.	**Rationale** • Tying incentives to the amount of efficiency realized in the whole building encourages the owner to implement the combination of measures most likely to produce the highest levels of savings. • "Multifamily buildings often operate using complicated financing structures, and may have limited ability to take on additional debt. Further, differences in existing financing arrangements for individual buildings in a multifamily complex may result in some buildings having more capital available for upgrades than others, and it may not be possible to transfer capital to		

				• Arrange financing with the expectation that the project's energy savings would cover the loan payments. • Increase EUC budgets beyond pilot-level to meet demand; allow incentives to be set aside for multiple implementation years. • Study appropriate incentive amount to ensure owner participation and overcome split incentives; allow customer representatives to adjust incentive amounts based on particular owner and building circumstances (within parameters), informed by detailed assessments.	buildings with the greatest need for retrofits." [3]		
NRDC/EEFA–6 Fuel-switching			None	**Observations** • Does not mention fuel-switching. **Recommended Action** • Work with CPUC to update EE Manual and provide clear guidance on three pronged test	**Rationale** • Fuel switching is critical path towards ZNE. Conversion from standard gas and water heating technology to high efficiency electric heat pump technology results in significant GHG		

[3] Cadmus. 2013. *ESA Program Multifamily Segment Study.* p144-145.

				for fuel switching, including whether it applies at measure, program, or portfolio level. Consider providing extra credit for projects that convert from gas to electric while installing solar PV. For new construction, include cost of bringing gas to the property and into building. • Provide clear information regarding how costs are measured to enable program implementers to calculate the requisite TRC/PAC values • Separate combustion safety costs from overall cost effectiveness tests. When CAS testing indicates problems and switching to electric appliances is not going to be pursued, the costs of the test-out and remediation work should be provided through the program budget, but should not be included in cost-effectiveness analyses (e.g., TRC/PAC tests). TRC/PAC tests should also include credit for electrification projects to value the cost benefits	reductions. • Fuel switching also completely eliminates any associated health and safety risks associated with open combustion appliances, and eliminates any future costs associated with further EE program participation. • Currently all of the multifamily EUC programs require that initial Combustion Appliance Safety (CAS) Testing (test-in and test-out) and any associated remediation work that results from that testing be performed before energy retrofit projects can close out; however, most of these programs are unable to provide funding for this testing and none of them provide any funding for the remediation work. As a result, some strong energy retrofit candidate projects drop out because they cannot, or do not want to incur these costs • Excluding combustion safety costs from the cost effectiveness test would create equal basis to compare programs. Not all EUC		

				resulting from not having to perform combustion safety testing and the associated reduction in health and safety risks. • To improve cost effectiveness, PAs should coordinate combustion safety testing with industry standard testing protocols to prevent scenarios where utility representative deems a system to pass when GSR had indicated it did not.	programs fund the CAS testing component and programs that do, face higher program administrative costs relative to those of other programs. Yet this is not necessarily taken into consideration during the evaluation process. • Not uncommon for EUC raters or program technical assistance providers to call IOU representatives to site to verify and address an appliance failure that the testing has identified only to have GSR deem that same appliance to pass. This can result in a significant waste of time and money for the program and/or rater, as well as the GSR departments.		
NRDC/EEFA–7 Cost-effectiveness/ EM&V			None	**Observations** • No mention of cost-effectiveness. **Recommended Action** • Work with CPUC to allow IOUs to incorporate benefits of market transformation in cost-effectiveness tests, e.g.	**Rationale** • Scaling EUC programs has significant potential to transform the market and should be appropriately credited. EUC programs also can help foster adoption of EE technologies to meet T24 activities and beyond more cost-effectively.		

				allow utilities to claim future non-participant energy savings and benefits of fostering adoption of EE technologies needed to meet net-zero goals and building codes in more cost effective ways. • Work with CPUC to solve definitional issues of EUC as a MT program • Pilot or fully transition to using metered-based approaches.	• For whole-building programs (EUC-MF), energy modeling is inherently uncertain and contributes to post-retrofit savings adjustments. Accordingly, it increases utilities' risks in creating budgets for these programs.		
NRDC/EEFA–8 Benchmarking/ Data			None	**Observations** • No mention of benchmarking. **Recommended Action** • Assist owners to enroll their properties in EPA Portfolio Manager or other automated benchmarking tools. • Use whole-building and AMI data to target outreach and tailor program design	**Rationale** • PA/owners cannot know the energy savings from retrofits if there's no baseline data.[4] • Owners will soon have to comply with AB 802 and benchmarking helps track their energy usage over time.		

[4] EEFA. 2015. *Program Design Guide: Energy Efficiency Programs in Multifamily Affordable Housing.* p6.

NRDC/EEFA–9 Metrics			None	**Observations** • No mention of metrics. **Recommended Action** **Meaningful metrics to track:** • Number of successfully completed projects; percent of projects completed from initial intake; and length of time from intake to successfully completed projects. • Reasons and timeline of participant attrition. • EUI reduction in treated properties (AB 802 allows now). • Average program expenditure per customer. • Create Multifamily stakeholder group to review metrics and program implementation on periodic	**Rationale** • Specific market data can help PAs develop customized solutions and delivery strategies targeting specific climate zones, building vintages, and equipment.[5] • Meaningful metrics on attrition improves program design by better understanding customers' needs.		

[5] Cadmus. 2013. *ESA Program Multifamily Segment Study.* p188-189.

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				basis.			

Commenter—please replace red text with the information you wish to provide.