

## DOCKETED

<b>Docket Number:</b>	15-IEPR-05
<b>Project Title:</b>	Energy Efficiency
<b>TN #:</b>	204286
<b>Document Title:</b>	Comments of Association of Bay Area Governments on Behalf of BayREN to Draft Existing Buildings Energy Efficiency Action Plan
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Association of Bay Area Governments/Jennifer Berg
<b>Submitter Role:</b>	Public Agency
<b>Submission Date:</b>	4/21/2015 3:19:37 PM
<b>Docketed Date:</b>	4/21/2015

*Comment Received From: Jennifer Berg*

*Submitted On: 4/21/2015*

*Docket Number: 15-IEPR-05*

**Comments of ABAG on Behalf of BayREN to Draft Existing Buildings Energy Efficiency Action Plan**

*Additional submitted attachment is included below.*

**BEFORE THE CALIFORNIA ENERGY COMMISSION**  
**Docket Number 15-IEPR-05**

**COMMENTS OF THE ASSOCIATION OF BAY AREA  
GOVERNMENTS ON BEHALF OF THE SAN FRANCISCO BAY AREA  
REGIONAL ENERGY NETWORK ON *DRAFT EXISTING BUILDINGS  
ENERGY EFFICIENCY ACTION PLAN***

April 21, 2015

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For THE SAN FRANCISCO BAY AREA  
REGIONAL ENERGY NETWORK

## I. Introduction

The Association of Bay Area Governments (“ABAG”), on behalf of the San Francisco Bay Area Regional Energy Network (“BayREN”), provides these comments on the March 2015 draft of the California Energy Commission’s (“CEC”) *Existing Buildings Energy Efficiency Action Plan* (“Draft Plan”). Overall, the BayREN is supportive of the Draft Plan and sees many of the identified strategies as critical to helping achieve the goals of Assembly Bill 758 as well as 2030 goals recently articulated by Governor Brown. BayREN appreciates the recognition of the important role local governments have in the implementation of the Draft Plan strategies. Below, we provide suggestions for strengthening the Draft Plan, particularly in relation to local governments, and point out some inherent difficulties in the reliance of existing funding sources for achieving the stated goals.

## II. The Importance of Local Governments for the Success of the Draft Plan is Commended; However, The Draft Plan does not Identify Sufficient Funding for Local Governments to Implement Identified Strategies

BayREN commends the CEC for recognizing that local governments are essential loci for innovation. (Draft Plan, p. 54.) We also appreciate identifying local governments as playing an integral role at the regional and municipal level, and we look forward to participating in new programs and becoming leaders and advocates working closely with the State. (Draft Plan, p. 94.) Many of the strategies - especially related to Codes and Standards and data access - will have far reaching benefits. However, without additional funding beyond what is identified, and without changes to the current framework, we are pessimistic about achieving many of the goals set forth in the Draft Plan.

## **A. The Regulatory Requirements for Use of Existing Funding Sources Limit the Ability of Local Government Access**

Current state policy allows spending of approximately \$1.4 billion in energy efficiency, the majority of which is ratepayer funding overseen by the California Public Utilities Commission (“CPUC”). (*See* Draft Plan, at p. 91.) It is our understanding that these funds will be the primary driver toward the goals laid out in the Draft Plan. However, these funds are currently subject to the state’s Public Utilities Code (“Code”) which has been interpreted to require limits on programs that are deemed not cost effective and/or ‘non-resource’. As stated in the Code: “In order to ensure that prudent investments in energy efficiency continue to be made to produce cost-effective energy savings...it is the policy of this state and the intent of the Legislature that the [CPUC] shall continue to administer cost-effective energy efficiency programs authorized pursuant to existing statutory authority.” Public Utilities Code §399.4(a). Further, the CPUC shall allocate funds to programs that provide in-state benefits, including cost-effective energy efficiency and conservation activities. Public Utilities Code §381(b)(1). (*See also* Energy Efficiency Policy Manual, Applicable to post-2012 Energy Efficiency Programs at p. 1: “The Commission’s (sic) is to pursue all cost-effective energy efficiency opportunities over both the short and long term.”) The Total Resource Cost Test (TRC) is used by the CPUC as the primary indicator of energy efficiency program cost effectiveness. The TRC measures net costs as a resource option based upon the total costs for the participants and the utility. (Energy Efficiency Policy Manual, Applicable to post-2012 Energy Efficiency Programs, at p. 17.) This test is therefore a significant determinant in what programs are approved and implemented.

If the state is to achieve AB 32 targets as well as 2030 goals, it is imperative that the CPUC and the CEC work together to better align the strategies with the program evaluation

metrics used by the CPUC. The Draft Plan offers many opportunities for integration with existing programs and for new initiatives; however, many of these programs would be considered ‘non-resource’ under the rules governing Investor Owned Utility (“IOU”) ratepayer funded programs, thereby reducing a Program Administrator’s overall portfolio cost-effectiveness. While BayREN is very interested in proposing programs in 2016 that would address several goals in the Draft Plan particularly around benchmarking and behavior change, there may be reluctance if the programs alter the CPUC evaluation of our overall portfolio performance.<sup>1</sup> While the IOUs (with their larger portfolios) are often able to add non-resource programs without significantly affecting their cost-effectiveness, local governments and smaller program administrators are unable to absorb the reduction in the overall effectiveness of their portfolio thereby limiting the ability to utilize funding for these non-resource programs. The creative initiatives identified in the Draft Plan can only be realized with better alignment with the CEC goals and the CPUC evaluation of success. BayREN is encouraged that the Energy Efficiency Collaborative (Strategy 1.9) is poised to ensure coordination among the agencies. It is imperative, however, that stakeholders - including implementers - are added to this group to provide feedback and information about the realities of on the ground implementation.

Reliance on existing funding from the CPUC will limit the entry of local governments and other non-IOU administrators because of the resources required for participation.

Specifically, most local governments are unable to attend all day CPUC workshops often held over several days, develop written comments and track the comments of the others, submit

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<sup>1</sup> The Draft Plan acknowledges this difficulty: (*See e.g.* Opportunities and Challenges for the Single Family Market, **Behavior:** While quantifying the actual savings available from behavior programs is difficult, it is anticipated that there are substantial opportunities to achieve higher savings in the residential sector through behavior programs....”. Draft Plan at p. 9.) Still, “[b]ehavior and operations are key drivers of consumption and understanding and influencing them should be central elements of energy efficiency programs.” (Draft Plan, p. 64.)

monthly, quarterly and annual reports and participate in Evaluation, Measurement and Verification (EM&V) studies. Unlike the IOUs that have entire regulatory departments, staff working exclusively on reporting and EM&V, and have large program staff, local governments typically do not have the resources to assign full-time staff to these efforts. Since the Draft Plan strategies rely primarily on existing funding sources, unless the regulatory process is more streamlined, the primary participants will continue to be the IOUs with their large staff dedicated to CPUC participation, since other actors such as local governments are too resourced constrained to effectively participate.

Another area of difficulty among the goals and the current regulatory structure is in relation to the use of ratepayer funds. For example, under the current framework, energy efficiency funds can only be used for energy efficiency projects, which precludes projects that also involve renewable resources, fuel switching, demand response, etc. The 2030 goals of an increase from one third to 50% of our electricity derived from renewable sources require a more expansive and flexible use of ratepayer funds.<sup>2</sup>

### **B. The Local Government Challenge Does Not Provide Adequate Funding**

BayREN commends the CEC for setting aside startup funding for encouraging forward thinking local governments to adopt policies and gather relevant experience for wider application, through the Local Government Challenge Program. This Challenge is in step with meeting the 2030 goal of doubling the efficiency of existing buildings. As articulated by the Governor: “How we achieve these goals and at what pace will take great thought and imagination mixed with pragmatic caution. It will require enormous innovation, research and

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<sup>2</sup> We note that this issue is currently being discussed in the CPUC’s IDSM proceeding (R14-10-003).

investment.” \$13M is far below the amount necessary to develop these initiatives especially since this will be shared with local governments across the state.<sup>3</sup> The Local Government Challenge is a potential game changer, but to be successful, must have adequate funding. The set aside amount will not be sufficient to meet the goals. BayREN recommends that the annual funding for this effort be increased to at least \$25M, although this amount still may fall short of what is needed.

### III. **BayREN’s Codes & Standards Program is Poised for Further Success but is Constrained by Issues Identified In the Draft Plan**

The Draft Plan identifies Codes & Standards (C&S) program opportunities, yet is also shows the lack of alignment with the CPUC program framework, as exemplified below.

The Draft Plan correctly notes the issue of **“Code-as-Baseline”**:

*- “to-code” projects have little or no program support—however challenging they may be for many older, inefficient existing buildings—while “above-code” savings opportunities represent only incremental savings and tend to be more complex. If this disconnect between codes and standards and voluntary programs is not addressed, attractive upgrades of existing buildings may go unrealized or be driven underground—done without a permit.”(Draft Plan, p. 7.)*

This challenge is directly seen in the BayREN Codes & Standards and Single Family/Multifamily incentives programs. The BayREN as a local government program administrator is exceedingly well positioned to advance “to-code” projects, and yet we are limited in our ability to do so based upon current CPUC program policies and frameworks. In particular, through our Codes program we believe it would be beneficial to work to address projects that are typically not permitted and/or work with stakeholders to vet options for

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<sup>3</sup> The Bay Area alone has 9 counties and 101 cities many of whom successfully implement energy efficiency programs and would be poised to apply and would be well qualified for the Challenge.

incentives with to-code projects from typically non-permitted activities like HVAC change outs and non-residential lighting tenant improvements.

Based on our conversations with contractors *and* building departments during the implementation of our C&S program, BayREN believes that we would get significant support from these groups if we could:

- 1) Incent projects that are typically not permitted for doing what's right.
  - a. Contractors would love this as it would level the playing field against "underground" contractors that don't get permits.
  - b. It quickly would increase compliance for high impact projects like Res and NonRes HVAC retrofits and NonRes Lighting Retrofits/Tennant Improvements. HVAC has always been a problem; since release of the 2013 Code, building departments report that permit rates for NonRes Lighting Retrofits has dropped off *significantly*.
- 2) Use building departments to provide project QA/QC (as they already are supposed to do) and even potentially pay them for it, rather than creating a secondary level of program specific QA/QC as BayREN currently does for Home Upgrade application review, field inspections, etc.

Another area that requires better agency alignment relates to:

**Compliance with Building Standards (for additions and alterations):**

*“Current estimates are that less than 10% of all residential HVAC replacements are performed under a building permit. However, little data is available that documents energy savings lost as a result. There is limited perceived value in the marketplace by contractors and homeowners in getting permits for HVAC replacement.”* (Draft Plan, p. 10.)

Un-permitted HVAC replacements are a lost energy saving opportunity not because of the HVAC equipment being replaced, but because un-permitted jobs most likely *are not* fixing the rest of the HVAC system – leaky ducts; uninsulated ducts; etc. Contractors that get permits are automatically fighting uphill with customers because getting a permit requires a larger and more expensive work scope. Again, this is another issue of tension within based current CPUC program policies and frameworks that should be understood and addressed in the Final Plan.

#### IV. Water Policy Context

*The embodied energy in water is vastly overlooked and critically undervalued in terms of the economic and social viability of California.* There is a vital and critical need currently facing the citizens of this state; the establishment of a program that creates a real, lasting, and meaningful installed effect on water efficiency. Water is energy; energy is water. This needs to be elevated to the highest levels of program priority, not relegated to the back pages of plans or couched as coordination.

The Water Policy Context section (Draft Plan, pp 37-38), and indeed the Draft Plan overall, addresses the water-energy nexus, but BayREN opines the treatment of water efficiency is weak throughout the document. As noted at p. 37 of the Draft Plan: “Large-scale change-out of older fixtures could save a great deal of water, and would benefit from both consistent funding of water-utility incentive programs, and close coordination across the energy and water agencies.” We suggest that “funding of water-utility incentive programs” should be reworded and expanded to “funding of water-utility *rebate and financing* programs.” Also the term “older” in this context obscures the significant water savings achievable in many applications by replacing relatively new, efficient fixtures (such as 1.6 gallon per flush (“gpf”) toilets) with high efficiency fixtures (such as 0.8 gpf toilets).

Based on our experience implementing water efficiency programs, we assert that “close coordination”, as noted in this section, is not enough to ensure success in water conservation. Significant funding is required to modernize water agency infrastructure, including Advanced Metering Infrastructure, billing system enhancements to provide greater functionality, and rate and reporting practices that facilitate greater transparency. The preclusion of water retailers from providing meters to customers, having online billing, and the inability to even post water rates on

line, is unacceptable. Furthermore, the fact that the provision of water and water revenues are not decoupled is a significant barrier to water agencies pursuing conservation on the scale that is necessary, especially during a severe drought.

The energy intensity of water is great (“...[translating] to over 25 terawatt hours of embedded electricity associated with treatment, distribution, heating, wastewater management, and conveyance” (Draft Plan, p. 37), and likely to increase exponentially if California is required to move more to marginal sources of water supply like recycled water or desalinization.<sup>4</sup>

BayREN implores that water efficiency programs be given more emphasis in the Draft Plan, both within the Water Policy Context section and elsewhere in the document.

We suggest the following additions:

- **Page xi: Future Discussion and Evaluation:** “Over the next ten years, these strategies will be evaluated and refined as required to better support and ensure achieving the State’s goals. Examples include: ... Align water and energy policies for existing buildings.” If current drought pressures are the new normal, we do not have ten years to wait to align traditionally siloed water and energy policies and programs. DWR, CEC, and CPUC initiatives are consistently delayed and are overly complex, severely limiting participation. Changes on the agency level must happen now.
- **Page 6: Oversight of Efficiency Activities:** “Coordination across agencies and with implementers and the marketplace will improve program effectiveness, align

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<sup>4</sup> This was made exceedingly clear in the CPUC Water-Energy Nexus proceeding, R. 13-12-011.

goals and measures, and reduce duplication of efforts.” Again, coordination is not enough. Significant funding is required to modernize water agency infrastructure.

- **Page 50: Strategy 1.5. Building Efficiency Standards Development and Compliance:** “Water efficiency is another area ripe with opportunity in existing buildings. Additional water efficiency measures in BES will need coordination between the code setting agencies in California and key stakeholders, to better align plumbing code requirements with water efficiency objectives in the State.” The BayREN as a local government implementer is exceedingly well positioned to advance “to-code” water projects, and yet are limited in our ability to do so based upon current CPUC program policies and frameworks (i.e., only being able to claim savings for above-code projects, and not being able to incent water-only projects). Furthermore (and per the “Strategy” table on page 51 of the Draft Plan), water projects in existing buildings are a great example of upgrades that may trigger significant additional project costs such as replacing rotted floor boards under toilets; replacing corroded/rusted pipes; replacing drain lines to effectively move lower waste water flows to the sewer. Efficiency initiatives must be able to account for these additional (and often significant) costs.
- **Page 84-85: Goal 5.** “Solutions are accessible and affordable for all Californians.” This section should include reference to empowering utilities to provide for water efficiency improvements at customer’s homes and businesses and recover these costs with tariffed charges paid by the bill payer at these premises, just as utilities recover the costs for investments in supply and distribution.

- **Page 95: Single Family Market Priority Strategies Table.** The introductory paragraph to this section identifies the need to “enable customer to reduce ... water consumption”. There is no strategy prioritized in the table for which this seems to be a focus.
- **Page 97: Multifamily Market Priority Strategies Table.** The introductory paragraph to this section identifies the need to target “the largest property owners and/or buildings ... with high ... water savings potential”. There is no strategy prioritized in the table for which this seems to be a focus.

BayREN requests that these edits be incorporated into the Final Plan.

**V. PAYS® Exemplifies a “Niche” Program that is Scalable**

Pay-as-you-Save (PAYS®), a program within the BayREN portfolio, is an on-bill water and energy efficiency program. BayREN has partnered with three water utilities in the Bay Area to develop programs customized for each utility. There are several inaccuracies about PAYS in the Draft Plan. While the Town of Windsor on-bill program pilot commenced under ARRA, the program has continued and expanded under BayREN. Moreover, BayREN, through the PAYS program, partners with *water*-utilities. BayREN requests that this distinction be made at p. 54 of the Draft Plan since the current reading implies that this is a government partnership with the Investor Owned Utilities.

The Draft Plan framework provides that “activities must be developed with the expectation that they can be expanded and implemented at a large scale, avoiding niche programs”. (Draft Plan, p. 21.) While in general, this is true, the PAYS program is an example of an effective “niche” program that by necessity started small, but is now tried and tested and ready to be scaled. The Plan should clarify that there may be value in some niche programs.

Windsor Efficiency PAYS<sup>®</sup> has already reached 5% of the Town's residents, delivering significant savings to a much larger percentage of the residential market than most resource efficiency programs. Single family participants have seen **average water savings of 19% (bill verified)** and energy savings of 10% (estimated). **Multifamily participants' water savings average 33% (bill verified)**. BayREN's work with new water utility partners is providing additional insights into how the model can expand to serve the region and the rest of the state. The creation of centralized infrastructure and financing authority could enable any water utility to participate in a BayREN on-bill program to offer financing and customer services. Once established, a regional model could follow the HERO<sup>™</sup> program's lead as a public private partnership capable of unleashing hundreds of millions of dollars on water and energy efficiency statewide. Clearly the severity of the state's drought requires programs that could provide quick and significant water savings on a large scale.

## VI. The Role of Local Governments Should be Expanded

BayREN appreciates the recognition of the importance of local government in the Draft Plan, but for the many goals to be realized, they must play a larger role. BayREN provides the following recommendations:

- **Page x:** Consumer Focused Energy Efficiency. The title of this section is accurate, however first and foremost is a necessary revamp of rethinking of what are the customer needs and values and industry practice. Local governments have a unique understanding of and relationships with their constituents and can offer programs that work for the customer.
- **Pages 9-10, 12-13:** Single and Multifamily Market Challenges. In both the single family and multifamily markets, there is an inherent opportunity to offer

innovative mechanisms, such as on-bill financing, to pay for project costs. Municipal utilities should be empowered to provide for efficiency and renewable investments at customers' homes and businesses and recover these costs with tariffed charges paid by the bill payers at these premises, just as they recover the costs for investment in supply and distribution.

- **Ch. II.** Water Policy Context: The list of agencies that should be engaged in the integration of water efficiency should be expanded to include Municipal Water Utilities (i.e.: “Regional/Local Water Districts and Municipal Water Utilities”). Sixty percent of cities in California own and operate their own water utilities, providing water to approximately 20 million Californians.<sup>5</sup>
- **S.1.7.1** The list of challenge program considerations should include: “Expand scalable program models to provide for more efficient and effective delivery of participant services.”
- **S.1.7.2** This should not be limited to Local Government Partnerships, but should include Regional Energy Networks and local governments that want to participate outside of a utility partnership. Adding these initial market actors will allow for more flexible initiatives.
- **S1.7.3** Regional Council of Governments and Association of Governments are key Lead/Partners as they not only have land use planning authority, but also have existing structures to work on these issues on a regional level, as well as to layer

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➤ <sup>5</sup><http://privatewaterlaw.com/2013/09/25/the-organization-of-water-utilities-in-california/>

energy related issues onto other programs such as hazard mitigation and resiliency strategy.

- **S1.8.2** Local governments must be included in Market Transformation Program Portfolios, especially those that seek to mobilize to close gaps between code shortfalls in existing buildings.
- **S1.9** As discussed above, it is imperative that the CEC and the CPUC work together to better align the respective regulatory framework and goals. BayREN is supportive of the Energy Efficiency Collaborative. Local government implementers are an important stakeholder to this process and should be added as a Lead/Partner.
- **S2.1.2 - 2.1.4** BayREN applauds the CEC for detailing the importance of data to successful attainment of the Draft Plan goals, particularly as outlined in the “Use Metrics for Improved Regional and Local Decision Making”. (Draft Plan, p. 61.) While the IOUs are in control of the needed data, local governments should still be included in the development of these strategies as necessary partners.
- **S5.1 – 5.4** Local governments, with their ability to issue bonds, pass resolutions allowing for property assessed liens, etc. are important partners in financing strategies.

## VII. Conclusion

ABAG applauds the CEC for the tremendous work that has been put into the Draft Plan and is overall pleased with the goals and strategies. We believe that incorporation of our comments and strategies will allow for greater participation of local governments and the creation of new initiatives that will help meet the goals of AB 758. Additionally, the Action Plan

was designed with the idea of achieving the Governor's goal to double the rate of efficiency savings in buildings, and BayREN believes this Plan, if implemented effectively, is a significant step toward realizing that goal.

Dated: April 21, 2015

Respectfully submitted,  
ASSOCIATION OF BAY AREA GOVERNMENTS

A handwritten signature in black ink that reads "Gerald Lahr". The signature is written in a cursive style with a large initial "G" and "L".

Gerald Lahr  
For the Bay Area Regional Energy Network