

Rural Hard to Reach

Public Sector Business Plan Recommendation

To: Energy Efficiency Program Administrators

Bay Regional Energy Network

Pacific Gas & Electric Company

San Diego Gas & Electric Company

Southern California Edison

Southern California Gas Company

Southern California Regional Energy Network

March 4, 2016

From: Rural Hard to Reach Local Government Partnerships' Working Group

Association of Monterey Bay Area Governments

Community Development Commission of Mendocino County

High Sierra Energy Foundation

Redwood Coast Energy Authority

San Luis Obispo County

San Joaquin Valley Clean Energy Organization

Sierra Business Council

Valley Vision

Table of Contents

| | |
|--|---|
| Statement of Intent | 3 |
| Summary | 3 |
| Barriers..... | 4 |
| Cost Effectiveness Criteria and Program Access..... | 4 |
| Access to Information: | 4 |
| Access to Public Sector Services and Support: | 4 |
| Access to Third Party Implementer Services and Support:..... | 4 |
| Program Complexity as a Barrier | 4 |
| Talent Recruitment and Retention: | 5 |
| Increased Customer Confusion: | 5 |
| Capacity for Work | 5 |
| Opportunity Costs | 5 |
| Capitalization & Procurement..... | 5 |
| Staff Limitations: | 5 |
| Drivers | 5 |
| Alternative Cost Effectiveness Criteria | 5 |
| Program Design Adaptations | 6 |
| Minimum Service Quotas..... | 6 |
| Program Complexity: | 6 |
| Controls on Program Complexity..... | 6 |
| Appendix A..... | 7 |

Statement of Intent

The Rural Hard to Reach working group (RHTR) is comprised of eight agencies representing local governments from across the state and spanning three Investor Owned Utilities (IOUs). RHTR has a primary goal of advancing local, regional and state policy and regulatory decisions in rural California. RHTR's intent in drafting the following recommendations for the Public Sector Business Plan (PSBP) is to provide Program Administrators (PA) specific feedback on barriers and drivers observed while serving rural public agencies. Public agencies include but are not limited to: California County governments, Municipalities, Joint Power Authorities, Council of Governments, Special Districts and Local Educational Agencies. RHTR is confident that Program Administrators will be able to operationalize observations to benefit both rural and urban public agencies.

Summary

RHTR has identified three key barriers in delivering energy efficiency services to the public sector in rural areas. All three barriers are rooted in program design elements and may be addressed by incorporating strategic drivers into the PSBP. Barriers and proposed drivers noted below¹.

Barriers:

- Access to information and services
- Service complexity
- Local Government's Capacity to do work

Drivers

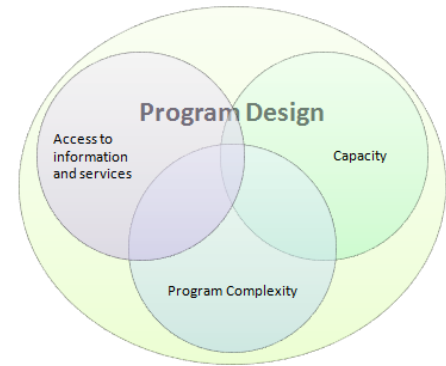
- Alternative Cost Effectiveness Calculations
- Program Design Alterations

The PSBP must capture program design elements that support improved program delivery that addresses the key attributes of the public sector while limiting the creation of new barriers. In the short term, RHTR agrees the proposed barriers and associated drivers are applicable to the represented territories.

¹ The market barriers and the associated drivers noted on the following pages are not comprehensive nor should they be considered unrelated to each other.

Barriers

Several high level barriers have been identified that restrict effective public sector implementation efforts in rural California Areas. Please note that RHTR group presents these barriers as unique and stand-alone yet recognizes that they also are interactive. The basic Venn diagram to the right presents how the larger program design can create program barriers that are all individual challenges but interconnected.



Cost Effectiveness Criteria and Program Access

Cost effectiveness criteria limit the ability for rural public agencies to equitably access program offerings. Feeder metrics of concern are specific to resource-based implementation of direct install/rebates programs. Examples of feeder metrics are but not limited to: kWh, kW, therm offsets, Net to Gross (NtG) and incremental measure costs. Feeder metrics influence total resource costs and other applicable cost effectiveness tests.

Access to Information: Rural areas and governments do not have the same “access” to information as urban areas. Program cost effectiveness criteria often push dollars tagged to education to spaces that have the ability maximize impressions per unit of program dollar spent.

Access to Public Sector Services and Support: Cost effectiveness criteria shape Public Sector services and support and create effective barriers to serving those most in need. Those most in need are not the local government agencies already participating but rather those who are more reluctant to engage. Cost effectiveness criteria move Public Sector services and support to geographic locations where quick, short-term success can be realized. In delivering services to distinct geographic regions, one size does not fit all.

Access to Third Party Implementer Services and Support: Cost effectiveness criteria limit the ability for mostly urban-based third party (3Ps) implementers to effectively serve rural areas. Facilities are often smaller, usually geographically challenging and population densities are often much lower than urban areas. This means the third party implementer must expend more resources to serve these areas than urban areas. For example, the three contractors authorized to perform SCE direct install offerings are physically located in the Greater Los Angeles area. To serve Kern, Kings and Tulare counties requires additional staff labor hours, mileage and other associated travel costs. As long as 3Ps are held to specific kW,kWh, therm, Total Resource Cost (TRC) and Program Administrator Cost (PAC) metrics, urban areas will continue to be a primary focus. Current cost effectiveness test are a disincentive for mostly urban 3Ps to provide services to rural areas.

Program Complexity as a Barrier

CPUC and the PAs have and are continuing to structure program requirements that increase complexity and implementation costs.

Talent Recruitment and Retention: Rural implementers often have a challenging time finding local talent as rural areas simply have lower population densities and lower levels of educational attainment. Thus, when talent is found it must be nurtured and retained. Cost effectiveness criteria and overall program design at the CPUC and PA level does not afford rural government partners an opportunity to be competitive with urban implementers. As noted previously, rural governments may not have the capital/income to provide competitive wages beyond our contracts with IOUs, which also contributes to being less competitive when recruiting and retaining talent.

Increased Customer Confusion: As program design differentiates to better meet artificial complexities deployed by the CPUC and PAs, program costs increase to explain and deliver offerings. Cost effectiveness criteria often limit program's abilities to navigate complexities which can lead to customer confusion. Customer confusion leads to lower participation rates whether for benchmarking or technology upgrades.

Capacity for Work

Small rural local governments often do not have the capacity to take on additional activities that are beyond critical activities that ensure minimal/required services are sustained.

Opportunity Costs: Rural government administrators and publically elected officials may have the desire and capital to participate but can't justify letting other activities go unaddressed. In these cases the opportunity costs outweigh the benefit of action.

Capitalization & Procurement: Rural governments have the human capacity and will to take action but they cannot capitalize energy related work effectively. Capitalization is both an organizational and structural barrier. Structurally, PAs and the CPUC do not often provide the stability in program implementation needed when dealing with budgeting that may push projects and programs out 12, 18, 24 months.

Staff Limitations: Urban governments often are more specialized due to available resources-whereas rural government may have one person running multiple programs. In this sense, staff in rural governments have to possess more capacity than their urban counterparts because in addition to running "core" programs they have to also be experts in energy efficiency.

Drivers

The following drivers may be effective ways to adjust program design in a way that promotes increased participation rates within Rural Hard to Reach government agencies.

Alternative Cost Effectiveness Criteria

Cost effectiveness calculations need to be adjusted to account for the increased fiscal burden of serving rural areas. If done well, this exercise may also benefit, or at least not marginalize urban participants: Examples include:

- Expanding HTR impacts beyond a net-to-gross adjustment within PG&E's territory. HTR impacts could also be more broadly applied to rural LGPs supporting action. We have loosely used the

term “rural adder” but urge caution in rolling one out to ensure it does not marginalize other hard to serve demographics.

- Reexamine the Societal Cost Test (SCT) and/or run the SCT in parallel to TRC calculations.
- Internalization of an economic multiplier based on local market activities that are a direct result of rural governments taking action.

Program Design Adaptations

Alterations to PA program design may drive additional work forward in rural areas for example:

Minimum Service Quotas: Specific to 3P services and IOU classes such as those hosted through PG&E’s Pacific Energy Center; require a minimum service quota for rural areas that can be defended as making access to the service reasonably available to rural ratepayers. Adjust cost effectiveness calculations to internalize this increased program cost.

Program Complexity: Drivers cost effectiveness will benefit complexity as well by affording additional resources to rural areas. However, additional drivers should be considered to address the root of the barrier—program complexity. The CPUC should consider a more refined balance between reporting/regulating requirements and implementation. Similar to drivers associated with access, appropriate program design will have broad benefits beyond the rural hard to reach demographic.

Controls on Program Complexity: Limit continued differentiation of program designs that are meant to address regulatory requirements. Engage LGPs to form broad coalitions to address program complexity at the legislative and regulatory levels.

Appendix A

| Barrier | Structural Barrier / Organizational Barrier | Driver 1 | Driver 2 | Driver 3 | Driver 4 |
|---|---|---|--|---|---|
| Access: Environmental Justice--Rural CA residents do not have equal access to state programs as urban CA residents. This is justified under the guise of "cost-effectiveness." | Structural Barrier | Advocate that IOUs serving rural Californians look at environmental justice as a real issue when reducing services to hard to reach areas based on cost-effectiveness | Reach out to state upper/lower house reps to communicate issue | Encourage IOUs to build portfolios that balance cost-effectiveness across the urban and rural divides | Build scale and collaborate with neighboring rural communities to justify cost if needed. |
| Access: Local governments do not have staff resources, expertise, or time to enforce new Title 24 building codes | Organizational Barrier | Deliver more resources to Building Officials | Educate Building Officials on Section 6 | | |
| Access: Rural areas and local governments simply do not have the same "access" to information as urban areas. | Structural Barrier | The IOUs and the state need to accept that rural areas and governments are more expensive to serve and provide alternative ways to implement that acknowledge this expense. | | | |

| | | | | | |
|---|------------------------|--|---|---|---|
| <p>Capacity: In some cases the opportunity costs associated with learning about appropriate tech outweigh the return of project adoption. Information availability is a broad sweeping barrier and includes LGs, staffers, builders and community members. Information availability in rural areas is often restricted by a lack of knowledgeable professionals, post-secondary educational centers, lower rates of higher educational attainment. Source: http://www.ers.usda.gov/topics/rural-economy-population/employment-education/rural-education.aspx/ Note that lower rates of post-secondary education also suggests a reduced ability in being able to access accurate and authoritative information when it is "available." This is assumed to be true in the local government sector--particularly with our publically elected officials.</p> | Structural Barrier | Build organizational trust with local LG decision makers and builders with the goal of becoming an opinion leader. Opinion leadership and trust building increases social capital which can be spent on influencing the decision making process. | In parallel, provide the community with easy to access information to assist in the decision making process | Local, on the ground support, with no profit motive, assists in building trust. | Provide services and support that go above and beyond to show LG decision makers that the organization is committed to serve. |
| <p>Capacity: Larger muni projects with high costs must automatically go through lengthy bidding and review processes, sometimes requiring board or council approval.</p> | Organizational Barrier | Acquire a special waiver from the local government specifically for energy efficiency projects | | | |
| <p>Capacity: LG decision makers often do not have the time to manage the project life cycle associated with technology updates as they may be</p> | Structural Barrier | Provide LG decision makers with no-cost turnkey project management services. Service ranges from | Provide project related information in an easy to digest format for decision makers. | Support LG approval process | Support public works bidding process |

| | | | | | |
|--|------------------------|---|--|--|--|
| the City Manager, Facilities Manager and WWTP operator all in one. | | initial assessment to scoping to costing to QAQC to reporting and incentive disbursement | | | |
| Capacity: Zero staff capacity dedicated to greenhouse gas emissions or climate planning | Organizational Barrier | Provide shared employees so that counties or cities might pool resources | | | |
| Design Build Community: Designers and contractors may not be fully informed on how to use new technology, this means that design build and design-bid-build RFPs may not include the most up-to-date technologies. | Structural Barrier | Provide an opportunity for building professionals to learn and synthesize and apply information relating to new technology through workshops and collaboration | Provide market demand in the technology which will intern drive building professionals to become informed on new technologies | | |
| Design Build Community: Access to commercial recycling for old fluorescent lights is limited in rural areas. Contractors cannot properly dispose of old lights. | Structural Barrier | Local governments help subsidize cost of recycling programs to provide a resource to contractors | Have local governments do a semi-annual or quarterly recycling program similar to drives to recycle electronic waste or prescription drugs | | |
| Design Build Community: Rural distributors may not stock advanced technology because of low volume of sales. Lack of available of the shelf products increases timelines with project life cycles and in some cases reduces adoption rates because of opportunity costs or need for quick action. | Structural Barrier | Projects installed by localized programs can increase returns/demand for advanced technologies which incents distributors/retailers to stock technology. Note, when outside | | | |

| | | | | | |
|---|------------------------|---|--|---|--|
| | | companies like RHA/Staples come in, unless their using local contractors/distributors, they do not increase localized product availability. | | | |
| Geography: Population density and vast geographic territories make serving rural LGs very costly, especially since the trust-building phase of service may take a bit of time. | Structural Barrier | To ensure equal access to state programs and to avoid the continuation of institutionalized environmental injustice, IOUs and the CPUC has to account for the increased cost of serving those rural ratepayers who are most disadvantaged based on their geographic location. | | | |
| Money: LG decision makers often do not have the money necessary to cover to code and/or above code efficiency retrofits | Structural Barrier | Provide organizations the ability to locally manage incentive levels to ensure that the minimum dollar amount necessary to incent the purchase is provided. | Provide effective financing options. | Work with local distributors and/or contractors to build the scale necessary to bring costs down. | |
| Money: Local governments do not have access to funding in order to implement retrofits with their own buildings | Organizational Barrier | Provide additional resources to local governments so they understand funding resources. | Help to prioritize EE projects through benchmarking to isolate low hanging fruit | PG&E provides additional funding to implementation programs to better serve local governments | |

| | | | | | |
|--|------------------------|--|--|---|--|
| Program Design: Due to most 3Ps being based in urban locations, 3Ps often do not travel to rural counties unless they reach a threshold number of grouped customers or amount of kwh energy savings. Where word of mouth is the primary marketing tool, this can hinder quality customer service in rural areas and ultimately make it more difficult for rural GCPs to deliver energy savings. | Organizational Barrier | Develop capacity of GCP staff to perform energy audits and site assessments so that they can serve our hardest to reach customers and support non-local 3Ps. | IOUs to develop alternative models for rural GCPs so that support services provided through GCP are recognized and reimbursed. | We anticipate Driver 2 producing overall cost savings to the partnership; GCPs closer and cheaper than 3Ps. | |
| Program Design: Due to variability in 3P subcontractor pricing throughout our rural two-county service territory, there is no reliable cost-effectiveness standard | Structural Barrier | Allow rural GCPs the ability to more directly manage 3P subcontractor implementation, especially related to pricing and cost-effectiveness | GCPs to work with 3P DI implementers to procure subcontractors at start of program | | |
| Program Design: Exclusions for larger LG facilities that have a premise demand exceeding 200kW makes no sense. This is a challenging message to take to rural LGs and impacts our ability to build trust. | Structural Barrier | Afford rural implementers an opportunity to serve all LGs. | | | |

| | | | | | |
|--|---------------------------|---|---|--|--|
| <p>Talent: Rural areas lack a pool of talent to recruit from which limits ability to serve LGs. This also limits LGs ability to recruit individuals who have the Knowledge-Skills-Abilities necessary to be successful.</p> | <p>Structural Barrier</p> | <p>Initiate a robust internship program to recruit and grow talent from the bottom up.</p> | <p>Coordinate and collaborate with local educational agencies and STEM teachers. If a CSU/UC/CCC is close, engage appropriate departments to recruit interns that have potential but need the area specific training.</p> | <p>Create a talent pipeline in the organization...give interns and new hires an opportunity to grow over time.</p> | |
| <p>Talent: The phase, "Brain Drain," captures a specific barrier. Rural areas are suspected to lose talent to more urban areas as upward mobility and opportunity is often limited compared to metro areas.</p> | <p>Structural Barrier</p> | <p>We do not have any drivers yet beyond hoping that the people who choose to stay are committed to the area because it is rural and beautiful.</p> | | | |