DOCKETED	
Docket Number:	23-DECARB-01
Project Title:	Inflation Reduction Act Residential Energy Rebate Programs
TN #:	258055
Document Title:	Powertree Services Inc. Comments - Ensuring Equitable Multi-Family deployments in HEEHRA Program Plan 7-26-2024
Description:	N/A
Filer:	System
Organization:	Powertree Services Inc.
Submitter Role:	Public
Submission Date:	7/26/2024 12:41:44 PM
Docketed Date:	7/26/2024

Comment Received From: Powertree Services Inc.
Submitted On: 7/26/2024
Docket Number: 23-DECARB-01

Ensuring Equitable Multi-Family deployments in HEEHRA Program Plan 7-26-2024

Additional submitted attachment is included below.

ceo@powertree.com, www.powertree.com

Disclosure

Founded in 2011, Powertree Services Inc. (www.powertree.com) works solely in the multi-family building market, enabling demand side load management, solar energy storage and Electric Vehicle charging for residential applications. Powertree designs, manufactures and installs directly, or with Installers, Demand Side Load Management, Solar, Energy Storage, Backup and EV Charging for Multi-Family properties. Powertree currently has installed, or has under contract, thousands of low-income apartments in California alone. Powertree is not reliant upon net metering or IOU/POU policies that prevent deployment to over 40% of Californians all while delivering 2x to 5x the value per KWH to property Tenants and Owners than current IOU energy and solar programs. While Powertree may benefit from our proposals there are multiple competitors in the field who may also benefit.

Opportunity/Problem Being Solved

PROBLEM FOR THE STATE

The State of CA in the currently proposed HEEHRA plan is seeking to enable 40% of funds to be directed to low-income residents and at least 10% for multi-family properties for retrofits. As 44% of Californians live in multi-family properties it is impossible for the State to reach it's Zero Net Energy and GHG goals if multi-family is not fully enabled. As the HEEHRA electrification program is directed to address this we must point out that this is not possible unless the HEEHRA program addresses applications beyond Heat Pumps or direct heat pump related projects.

An example:

A typical heat pump requires between 3KW and 7KW of power per unit and in the case of Multi-Family this means *per apartment*.

If we apply this to a typical 88-unit low-income apartment complex this means between 264KW and 616KW of power capacity must be available depending on the equipment chosen. [Between 1269 and 2961 Amps]

Since the housing is already built this will trigger a need for a Utility service upgrade requirement to add that power capacity. At this size a new transformer or even new circuit will be required from the Utility. This is a cost in both time and money and is above and beyond the cost of the heat pump and related electrification items currently listed in the HEEHRA plan.

The following table provided by PG&E in recent interconnection forum discussion illustrates as of Mid-2024 the minimum lead timed for different types of grid connection upgrades or new orders:

Capacity Upgrade Timelines

Due to the long lead times associated with capacity upgrades, collaboration and proactivity will help to ensure capacity is available when and where it is needed

Scope of Work	Est. Timeline	Obstacles
Line Extension Work/Meter Upgrade (Service Planning Only)	12-18 months	Easement acquisition & permitting
Circuit Line Work	2-3 years	Easement acquisition & permitting
New Circuit	2-3 years	Material availability, Easement acquisition & permitting
Added Substation Capacity	3-4 years	Material availability
New Transmission Interconnection	3-5 years	Land Acquisition & Environmental permitting
New Substation	5-8 years	Land Acquisition & Environmental permitting

It is clear from this table that even the "lightest" work has a current lead time from the Utility of between 12-18 months and 2-3 years for the type of work needed for a multi-family property to be able to install new load equipment such as heat pumps or HPWH. These timelines are NOT atypical of other utilities.

This long lead time creates a "Utility Blockage" that will place multi-family and the resident low-income tenants who are 66% more likely to live in an apartment than a standalone home at a severe disadvantage in being able to access or benefit from HEEHRA funds given the demand.

Equitable solutions are also critical and required by the IRA legislation. The State of CA and legislation affecting climate and energy have historically been analyzed, structured and measured around Single-family customers and "average" Utility Customers. ***Multi-Family IS NOT THE SAME as Single Family in energy consumption, rights of control, income distributions, access or optionality and as a result historical policy attempts have succeeded for Single Family but have failed for Multi-Family as demonstrated in the lack of tenant benefitting multi-family projects.***

PROBLEM TO SOLVE FOR RENTERS

Currently energy efficiency offering and Demand Side Load Management as well as generation technologies like residential solar are appx 98%+ installed in single family homes while 44% of the California population (and rising) are Renters most of whom live in multi-family properties that have limited access to the benefits of electrification, renewable technologies such as solar power, backup energy storage for emergency use in case of power outages and readily available access to electric vehicle charging. Benefits accruing from these technologies include lowering renters' costs of living through decreased utility costs, and realistically displacing dirty gasoline powered vehicles with electric vehicles as California has set as the State's goal. Of note is that low-income households who disproportionally reside in multi-family residential properties spend an average of 1/3rd of their after-tax income on transportation. (More than 1/3rd when home use of energy is added.) Transportation electrification is KEY goal of the State of CA. With rapidly rising energy prices, especially in IOU territories, tenants are seeing their budgets squeezed. As State of CA stated in its recent EV Infrastructure report "PEV adoption still faces several challenges, including high upfront vehicle purchase costs, barriers to home charging, and range anxiety due to gaps in public charging infrastructure. These challenges are often felt by low-income households that spend, on average, about a third of take-home income on transportation costs." [CA EV Instructure Deployment Report – page 10]

PROBLEM TO SOLVE FOR PROPERTY OWNERS:

Concurrent with the above, property owners of multi-unit buildings who do not pay the direct cost of electricity have little incentive to allow or make investments on their property yet are being seeing decreasing property values due to increasingly economically stressed tenants. Low-income properties have a direct link between rents and utility costs in their financing due to rent restrictions that require the total of rent AND utilities to be under 30% of AMI. This means as utility cost rise the rent reduces and that threatens the stability and quality of care possible for the properties. With double % digit decreases in rents and 30%+ (per Nation Multifamily Housing Council tracking) of renters being late or unpaid the value of multi-family properties is under stress. Of note is that multi-family property, unlike single family, has no option for long term fixed rate mortgages and must refinance or reset every few years. This leaves MF properties vulnerable to significant valuation drops as interest rates rise. This situation means that the added time due to Utility upgrades with associated direct and overhead costs will effectively block multi-family projects from being able to electrify.

OPPORTUNITY:

It is possible to **simultaneously** lower the cost of living for tenants, increase recognized rents and property values for owners, access significant private capital to matching and fund energy efficiency and EV infrastructure upgrades while creating jobs and increasing the utilization of renewables for home and transport. Our studies, in conjunction with the State of CA and energy industry associations, show there is a tremendous real estate equity increase opportunity (with associated multi billion capital supply from MF owners) if the 42% of CA residents (the majority of urban residents can be brought into help in meeting the electrification, renewable energy and clean transportation goals already set forth in State law and executive orders. This can create jobs, reduce evictions, clean the air, stabilize and increase the tax base for communities and lower cost of health care throughout the country.

No plan for 100% can be achieved if we do not address this heretofore forgotten portion of our population – our renters.

Recommended Actions

We note that the TECH Mission statements include this statement:
"In these cases**, TECH will continue to work with existing and evolving energy efficiency** and weatherization programs to highlight opportunities to further enhance efficiency upfront in a household to minimize negative bill impacts. TECH will continue to include notices on contractor invoices that there may be utility bill increases from greater usage such as air conditioning in summer."

We recommend that the rebate rules in HEEHRA align to rules within the IRA 50121 and 50122 implementations by California to address the barriers to delivering renewable energy and electrified transport benefits to Renters in Multi-Family.

These include:

1) Recognize that multi-family on site load reductions such as Demand Side Load Management, other load efficiency upgrades meet the "evolving" category and are necessary before and/or in conjunction with other electrification efforts and that non-heat pump upgrades that reduce load and/or facilitate electrification are allowed for at least Service Panel Upgrades and Wiring.
    a. These load reductions will reduce or eliminate the Utility Blockage and allow more multifamily properties to electrify.

2) Given point (1) expand the allowable Contractor License eligibility to include C-10 and C46 as such contractors have the skills and existing workforce needed for Service Panel Upgrades and Wiring.
    a. Of note is that the C46 and C10 California workforce has been under stress recently due to significant negative changes in Solar rules and as such are a ready pool of skilled labor that can bring projects and effort to electrification. This workforce includes HIGH % of workforce development hires and candidates.

3) Do NOT restrict multi-family rebates to having to have HPVAC or HPWH in order to be eligible but ALSO allow other load reducing systems that reduce load to allow for concurrent or future electrification upgrades.

4) Increase the allocation for multi-family and/or set aside an additional amount for low-income multifamily projects. Specifically, to projects at 30% to 60% AMI.

Powertree Services is happy to provide further details and analysis support for the points made here around the needs and challenges in multi-family on request.