

# Residential Weatherization

## Expanding the definition of “electrically heated”

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# Overview of issue

- When does a residence qualify for a BPA payment for Wx measures that are intended to reduce electric energy use.
  - Definition of Primary Electric Heat still qualifies
  - Expansion of definition of electrically heated is optional
  - Allows for utility's discretion in unique cases
  - Today's dollars worth more than tomorrow's

# Purpose of requirements

- To ensure electric energy savings are realized, where the modeled energy savings are based on a reduction electric energy use for space heating/cooling.
  - This includes measures that rely on a reduction in electric energy use by the residence's HVAC equipment, such as building shell improvements and HVAC equipment improvements.

# Primary electric heat vs. electrically heated

## Primary:

- “Electric heating system as the primary\*”
- \*A heating system that serves 50% or more of the conditioned living area”

## Expanded definition

- Consideration of other variations

## Possible variations

### **Possible variations from “Permanently installed electric heat as the primary heating system.”**

- Presence of a wood stove or fireplace insert
- Presence of a fossil fuel (i.e., natural gas or propane) fireplace, space heater, or free standing stove.
- A home with multiple electric heating systems
- A home with multiple heating systems and fuel types
- Extensive use of electric plug in heaters.

# Scenario 1

Single family home with electric baseboards

- No information on presence of wood stove

*Does this home qualify for Insulation?*



## Scenario 2

Single family home with baseboards + woodstove

- Homeowner tired of high bills, starts using wood
- No current electric heating signature

*Does this home qualify for Insulation?*

## Scenario 3

Single family home with cadet wall heaters and non-functioning (in fact dangerous) gas furnace

*Does this home qualify for insulation?*



## Scenario 4

Single family home with non-functioning (in fact dangerous) gas furnace, currently using plug in space heaters.

*Does this home qualify for insulation?*



# Savings assumptions

- Upgrade the asset (house) not the occupant's current use
- Do we need pre-existing electrical signature?
- Do we count only past or do we also include future energy efficiency aka improve for the future?

# New definition: primary heat

- Homes that currently qualify still do:  
*“Electric heating system as the primary system”*

*Primary heat = “A heating system that serves 50% or more of the conditioned living area”*

# New definition: wood heat

1. A permanently-installed electric heating system with either (a) no other functioning nonelectric heating system or (b) a wood stove, pellet stove, fireplace, fireplace insert (wood or pellet) or wood furnace



# New definition: heat pump

2. A electric heat pump system integrated with a non-electric heating system (e.g., natural gas, propane, or wood supplementary/backup system)



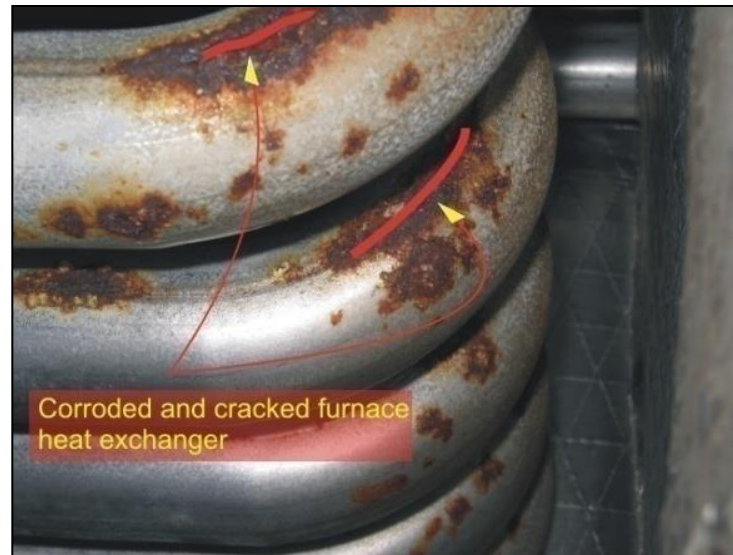
# New definition: plug-in heaters

3. A wood stove or pellet stove with no other non-electric space heating system, accompanied by the current usage of plug-in electric space heaters



# New definition: non-functional fuel

4. A electric heat system and a separate functional or non-functional, non-electric space heating system (i.e. oil, natural gas, or wood furnace) with the entire non-electric space heating system decommissioned, removed, all penetrations sealed, and all fuel (electric, gas, oil) connections to the decommissioned heating system disconnected. System equipment includes furnace, air-handler, fuel lines, fuel tanks (abated in compliance with local code).



# It's your choice

- Definition of Primary Electric Heat still qualifies
- Expansion of definition of electrically heated is optional
- Allows for utility's discretion in unique cases
- Today's dollars worth more than tomorrow's



# Questions?

Thanks

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