

CLARIFICATIONS ON ELECTRIFICATION IN HPD'S PRESERVATION DESIGN GUIDELINES

HPD is issuing this memo to clarify where electrification is required and to clarify HPD's intentions to pursue electrification ONLY where it is beneficial, cost-effective, and technically feasible and where operational costs do not rise as a result.

For rehabs, a building's physical needs and the health and safety of residents should always be addressed prior to pursuing electrification. In addition:

- Electrification should never be pursued without corresponding efficiency measures (e.g., envelope work for space heating and low-flow fixtures and pipe insulation for hot water heating).
- Electrification must meet [HPD Electric Heating Policy](#) requirements which, among other things, sets policies to protect residents.

MODERATE REHABS

Requirements for Heating Systems

Per the Design Guidelines, the following equipment must be converted to high-performance electric heat pumps, meeting the performance standards outlined in Appendix A:

- Heating systems that use oil or electric resistance as a primary heating fuel.
- Heating systems where equipment is located in basements and cellars in flood-prone buildings.
- AND where project scope includes roof insulation and window replacements (or where these items already meet current NYCECC requirements for U-value and SHGC).

Clarifications

- Per [HPD's Rehab Classification requirements](#), if the scope includes replacement of the heating system, windows, and/or roof insulation, the project (or building) will likely be reclassified as a Substantial Rehab. All Substantial Rehab projects are subject to Enterprise Green Communities and Substantial Rehabs projects with electrification are subject to BLDS review.
- If replacing the heating system with electric heat pumps, the project will also require a mechanical engineer familiar with electrification.
- The above can add significant cost to a project, even with incentives, and HPD's Retrofit Electrification Pilot will not fund Mod Rehabs for electrification of heating systems.

Actions

- Projects may electrify if they can support the related costs (including reclassification as Substantial Rehab)
- Alternatively, projects should seek a Design Waiver and install non-electric equipment meeting the requirements of Appendix A of the Design Guidelines.

SUBSTANTIAL AND GUT REHABS

Requirements for Heating Systems

The following systems, equipment, and appliances are required to convert to high-performance electric equipment meeting the performance standards outlined in Appendix A of the Design Guidelines:

- Heating systems that use oil or electric resistance as a primary heating fuel
- Steam heating systems that are being replaced or require extensive modification.
- Heating systems where equipment is located in basements and cellars in flood-prone buildings (as defined in Section 2) as a means to protect equipment from future flooding.

Clarifications:

- For Sub Rehabs, the goal is to mandate beneficial electrification
- Beneficial electrification occurs when heating systems and thermal envelope enhancements are already included in the project, leading to reduced operational costs as a consequential outcome.
- Beneficial electrification typically doesn't occur when (1) replacing gas/hydronic systems that are generally low-cost to operate and can be electrified in the future and (2) where operational costs will RISE as a result of electrification (e.g., projects on gas that are not doing sufficient envelope work to reduce operational costs).
- Project teams must be willing and able to comply with [HPD Electric Heating Policy](#) which regulates how heating and cooling can be billed. .
- Project teams should refer to [HPD's Underwriting Electric and High-Performance Buildings](#) for more information on underwriting and policy requirements.

Actions:

- Projects that can't achieve beneficial electrification and meet the requirements above should seek a Design Waiver and comply with Appendix A for non-electric systems.
- For projects pursuing electrification, project will be subject to a BLDS CD Review
- All electrification projects must be designed to meet Clean Heat Program requirements and pursue Clean Heat Program Incentives.
- All electrification projects should apply to [HPD's Retrofit Electrification Pilot](#) which can help projects significantly offset hard costs.

Requirements for Hot Water Systems

The following systems, equipment, and appliances are required to convert to high-performance electric DHW systems meeting the performance standards outlined in Appendix A of the Design Guidelines:

- Domestic Hot Water (DHW) systems in buildings < 7 stories using oil or electric resistance as a primary heating source,
- Domestic Hot Water (DHW) systems where equipment is located in the basement or cellar in a flood-prone area

Clarifications

- Decoupling DHW systems reduces energy use and prevents heating systems from operating in summer.
- Converting to electric heat pumps can reduce a building's GHG emissions and protect the equipment during flood events.
- In addition, replacing oil and electric resistance hot water systems can reduce energy costs.
- However, not all projects have space or electrical capacity to electrify, and not all project teams include a Mechanical Engineer to design the system.

Actions

- Projects that can't electrify should seek a Design Waiver and comply with Appendix A for non-electric systems.
- For projects pursuing electrification, the project will be subject to a BLDS CD Review
- All electrification projects must be designed to meet [Clean Heat Program](#) requirements and pursue Clean Heat Program Incentives requirements and pursue Clean Heat Program Incentives
- All electrification projects should apply to HPD's Retrofit Electrification Pilot which can help projects significantly offset hard costs.

