



OFFICE OF PUBLIC AND INDIAN HOUSING

SPECIAL ATTENTION OF:

Public Housing Agencies; Public Housing Hub Office Directors; Public Housing Program Center Directors; Regional Directors; Field Office Directors; Resident Management Corporations

NOTICE PIH 2024-20

Issued: June 13, 2024

Expires: This notice remains in effect until amended, superseded, or rescinded.

Cross References:

Notices: PIH 2011-36; PIH 2018-20; PIH 2022-32; PIH 2023-17

Regulations: 24 CFR part 905; 24 CFR part 965; 24 CFR part 966; 24 CFR part 990

Subject: Responding to Extreme Heat in Public Housing – Eligible Expenses and Individual Relief for Excess Utilities Consumption

1. Purpose

This notice clarifies guidance related to the use of cooling technologies, including the use of air conditioning, in public housing. It explains the broad nature of eligible activities to achieve cooling using Capital Funds. It also explains how Public Housing Agencies (PHAs) operating public housing have the discretion to establish individual relief policies for excess utilities consumption due to severe or extreme heat. Individual relief policies that identify severe or extreme heat as reasonable grounds for relief permit PHAs to avoid surcharging residents for the use of air conditioning or other cooling systems or permit PHAs to adjust residents' utility allowances for cooling, as the PHA deems appropriate.

Section 3 of this notice summarizes recent HUD communications on severe or extreme heat. To help PHAs understand the range of options for responding to extreme heat in Public Housing, Section 4 reviews eligible uses of Capital Funds for activities related to cooling. To provide PHAs with the context needed to decide whether to adopt an individual relief policy for utilities expenses related to extreme heat, Section 4 also summarizes eligible uses of Operating Subsidy for air conditioning in public housing. Section 5 provides further guidance on individual relief policies PHAs may adopt, how individual relief policies may be tailored for severe or extreme heat, and what steps a PHA would need to take to adopt such a policy.

2. Applicability

This notice applies to PHAs administering Public Housing, including PHAs that participate in the Moving to Work (MTW) Demonstration.

3. Background

Public health experts recognize that extreme heat events can pose a hazard to public health.¹ The Centers for Disease Control and Prevention (CDC) defines extreme heat as “summertime temperatures that are much hotter and/or [more] humid than average.” Broadly speaking, severe or extreme heat could be any period of high temperatures or high humidity that poses a health risk, regardless of whether the heat is above average for that time of year or a recurring annual risk. Each year, over 1,200 people in the United States die due to extreme heat, and thousands more are hospitalized for illnesses including heat exhaustion and heat stroke.² The CDC notes that while older adults, people with disabilities, and children are disproportionately affected, extreme heat can create immediate health risks for everyone. Families with lower incomes are at higher risk for heat-related illnesses, since they may have limited access to air conditioning, other cooling technologies, or other means of avoiding extreme heat.

A. Cooling Spaces in Common Areas in Public Housing

In a letter sent to PHA Executive Directors on July 23, 2023, HUD recommended that PHAs who administer Public Housing should develop strategies for reducing the risks of extreme heat patterns for residents.³ HUD reminded PHAs that air conditioning is an eligible cost in the Public Housing program and identified possible uses of Capital Funds and Operating Subsidy to provide air conditioning. HUD recommended that PHAs consider creating cooling spaces in common areas for residents (e.g., lobbies, community rooms, or other non-dwelling spaces that could be made available to all residents).

PHAs are permitted to retrofit enclosed dedicated spaces, such as community rooms, with air conditioning units to serve as cooling centers for their residents. This option may provide PHAs with a more cost-effective approach to providing relief to residents from extreme heat, without directly affecting the individual utility cost to residents.

4. Review of Current Guidance in Public Housing

This section summarizes current guidance regarding the eligible uses of Public Housing Capital Funds and Operating Subsidy and highlights where activities related to cooling are eligible expenses. It also summarizes guidance concerning the establishment of and revisions to utility

¹ Centers for Disease Control and Prevention. *About Extreme Heat*. September 12, 2023. Available at: https://www.cdc.gov/disasters/extremeheat/heat_guide.html.

² Centers for Disease Control and Prevention. *About Extreme Heat*. September 12, 2023. Available at: https://www.cdc.gov/disasters/extremeheat/heat_guide.html.

³ Letter from PDAS Richard Monocchio to Executive Directors, July 26, 2023. Available at: [https://www.hud.gov/sites/dfiles/PIH/documents/Protecting%20Residents%20During%20Extreme%20Heat%20Events%20\(7-26-23\).pdf](https://www.hud.gov/sites/dfiles/PIH/documents/Protecting%20Residents%20During%20Extreme%20Heat%20Events%20(7-26-23).pdf).

allowances, as well as PHA policies on the management of cooling technologies like air conditioning. Clarification of the option to adopt individual relief policies follows in section 5.

A. Eligible Uses of Capital Funds for Cooling

HUD has identified air conditioning as an eligible modest amenity in 24 CFR 905.202, making the cost for both the purchase and installation an allowable expense under the Capital Fund Program.⁴

The term “air conditioning” in 24 CFR 905 can refer to a range of cooling technologies, not simply to air-conditioning units.⁵ Air conditioning can generally be understood as the process of removing excess heat and humidity from interior spaces, in order to achieve safe and comfortable interior temperatures. Capital Funds may be used to pay for the installation of cooling equipment and technologies in both dwelling and non-dwelling spaces.

PHAs can use Capital Funds to install both an air conditioning or cooling device itself, and any building modifications needed to ensure the safe and secure installation of those devices. For example, Capital Funds can be used to install structural bracing of non-permanent units (e.g., “window unit” air conditioners) to ensure the safety and security of both the residents and the units themselves.

Cooling can be achieved using a mechanical air conditioner or by other methods, including but not limited to passive cooling and ventilative cooling. Capital Funds may be used to add either active or passive cooling technologies. See the Appendix for a list of examples of cooling technologies and activities that PHAs may consider.

As it pertains to “temporary” air conditioning devices, such as window or portable units, Capital Funds may be used for the upfront cost of purchasing the cooling unit, if it will be reused. Capital Funds may also be used for costs associated with storing such units when they are not in use. However, Capital Funds cannot be used for the cost of installation that is cyclical—for example, to install and uninstall window units every summer.⁶ (In such cases, the cost of installation would be an eligible maintenance expense and so an eligible use of Operating Subsidy.)

Capital Funds can be used for complementary items that would improve cooling efficacy, such as weatherization, smart/adaptive thermostats and sensors, upgrades to electrical wiring and/or panels, evaluating and/or improving airflow, adding renewable energy generation, and installing

⁴ PHAs are reminded of the requirements under 24 CFR 965.306 to only acquire equipment that meets or exceeds the minimum efficiency requirements established by the U.S. Department of Energy. Furthermore, under the Capital Fund, under 24 CFR 905.200(b)(14)(v), PHAs may only install Energy Star rated appliances whenever energy systems, devices, and appliances are replaced, unless it is not cost-effective to do so. See the Energy Star program website: <https://www.energystar.gov/>.

⁵ The term “air conditioning” is not defined in 24 CFR 905. Department of Energy regulations at 10 CFR 431.92 provide specific definitions of several types of commercial air conditioners.

⁶ PHAs can choose to impose charges on tenants for the installation of air conditioning window units. PHAs may also decide to retain the responsibility for installing cooling window units, in the interest of resident safety and preventing damage to the building.

more energy-efficient appliances to reduce overall energy loads. Weatherization is particularly important to consider when adding cooling and refers to building improvements that reduce the energy used to make buildings more comfortable, including moisture control, air sealing, ventilation, and upgrades to insulation, doors and windows.

HUD strongly encourages any PHA considering a modernization program that includes installation of a new cooling system to first perform an energy audit, to ensure that the most appropriate system is selected. PHAs must complete an energy audit for each PHA-owned project under management not less than once every five years (24 CFR 965.302). PHAs may use Capital Funds for energy audits performed as part of a modernization program, where Operating Subsidy is not available (24 CFR 905.200(b)(14)(i)).

Some cooling systems may not be appropriate, in light of relevant building codes or safety considerations. Prior to installing (or allowing residents to purchase their own) cooling technologies or systems, such as window units, PHAs are encouraged to ensure that it is appropriate and effective to install and maintain such a system. Further, PHAs must ensure such installations are secure and do not lead to other undesirable conditions (e.g., condensation forming on the unit or distribution systems that lead to mold). PHAs are reminded that under the National Standards for the Physical Inspection of Real Estate (NSPIRE) standards, a permanently installed window-mounted air conditioner must not block a rescue opening in a sleeping room located on the 3rd floor or below.⁷

B. Eligible Uses of Operating Subsidy for Cooling, Without Individual Relief

Under normal circumstances, HUD does not allow utility expenses for in-unit cooling to be included in a PHA's operating subsidy request. However, individual relief policies, discussed in Section 5 below, may permit a PHA to increase a resident's utility allowance or avoid surcharging residents for use of in-unit cooling, as the PHA deems appropriate. The eligible uses of Operating Subsidy described in this section outline what is permissible in the absence of any individual relief policies.

Operating Subsidy may be used to pay for the costs of cooling common areas in Public Housing projects. For example, paying for the cost of air conditioning in hallways, lobbies, and other non-dwelling spaces is an eligible use.

When a building has resident-purchased utilities, PHAs provide a utility allowance to tenants to cover reasonable utility expenditures. PHAs are not permitted to include air conditioning in those utility allowances (24 CFR 965.505(e)).

When utilities are furnished by the PHA, the relevant requirements depend on whether the PHA can monitor consumption levels per unit and whether residents have the option to choose not to use air conditioning or cooling systems:

- For systems that provide residents with check-meters, and which offer residents the

⁷ See the NSPIRE Egress Standard, published August 11, 2023 at https://www.hud.gov/program_offices/public_indian_housing/reac/nspire/standards.

option to choose in-unit air conditioning, residents must pay for the energy consumption associated with the use of the air conditioning. The PHA sets an allotment for allowable utility consumption for each unit and surcharges residents for consumption that exceeds the allotment. The PHA is not permitted to include the expenses associated with air conditioning in a utility allotment.

- For systems that cannot be check-metered and which offer residents the option to choose in-unit air conditioning (either to use PHA-furnished equipment or to install resident-owned appliances), PHAs are directed to impose a surcharge on residents who choose to use air conditioning, in accordance with 24 CFR 965.506.

In both of these circumstances, when the PHA surcharges residents, that surcharge is recorded on line 19 of the form HUD-52722 and deducted from the PHA's Utility Expense Level (UEL).

When the PHA provides in-unit air conditioning but does not provide for resident options whether to use such air conditioning (i.e., residents do not have control over the temperature in their unit), residents are not to be charged. However, these systems should be avoided whenever possible.

When in-unit air conditioning is provided as a reasonable accommodation, the PHA may not charge the resident.

B.1. Communication with Residents and Maintenance

This section provides an overview of existing requirements related to communication with residents. When establishing or revising utility allowances or allotments, PHAs must communicate to residents their responsibilities to pay for energy consumption associated with air conditioning or cooling (24 CFR 965.502(c)). PHAs must meet several requirements for utility allowances, as indicated by 24 CFR 965.502:

- PHAs must establish and notify residents of allowances and scheduled surcharges. Surcharges for excess consumption of PHA-furnished utilities (24 CFR 965.506) are based on average utility rates and must be described in the PHA's schedule of allowances.
- PHAs must allow residents to review the record of how allowances and scheduled surcharges are established and revised.
- PHAs must notify residents at least 60 days before changing utility allowances and scheduled surcharges. Notices must state specific items of equipment included in the determination of an allowance or surcharge. All residents must be allowed to submit comments regarding the changes at least 30 days before they become effective. PHAs are not required to provide the 60-day notice under 965.502(c) when the revision is the result of a rate change (24 CFR 902.507(b)).

See the Public Housing Occupancy Guidebook chapter on utilities for detailed guidance about

establishing utility allowances.⁸

PHAs retain discretion to decide whether residents may purchase and install their own window-unit air conditioners or other cooling devices, in light of all considerations including the structure of the building, the need to maintain safe routes of egress, possible fire hazards, or other factors affecting the safety of residents. Air conditioners that can be removed from a window that is considered a “rescue opening” are allowable under NSPIRE. PHAs should include relevant policies in the lease (24 CFR 966.4), which may be referenced in the PHA’s Admissions and Continued Occupancy Policy (ACOP).

PHA policies should also outline the PHA and resident responsibilities for the installation and proper maintenance of cooling systems. PHAs need to adopt policies that ensure the maintenance of such systems. Preventive maintenance inspections need to occur at least annually, covering major systems. Tenant responsibilities for such systems should include a requirement to promptly report the need for repairs, and to use facilities only in a reasonable manner. Preventive maintenance inspections by the PHA of resident-provided cooling devices—such as to ensure that the devices are installed firmly and do not interfere with emergency egress, to ensure building components (e.g., window frames or sills) are not damaged, and condensate is draining properly (e.g., to the exterior or an internal connected drainpipe)—need to occur at least annually.

B.2. Energy Incentive Programs

PHAs may take advantage of several Energy Incentive programs available through the Operating Fund to invest in more efficient heating and cooling equipment. Three programs—Energy Performance Contracts (EPC), Small Rural Frozen Rolling Base (SR-FRB), and the Utility Partnership Program (UPP)—allow PHAs to implement energy efficiency infrastructure for up to 20 years using third-party financing and can be combined with other funding sources. See guidance on using other funding sources in the respective energy incentive published notices.⁹

- The **EPC** program is a financing technique that uses utility cost savings from reduced energy consumption to repay the cost of installing Energy Conservation Measures (ECMs), through Operating Subsidy incentives under 24 CFR 990.185. PHAs may utilize external funding sources, like the Energy Performance Contract (EPC) program, under 24 CFR 965 Subpart C, to install cooling technologies in Public Housing units.
- The **SR-FRB** program incentivizes small rural PHAs to implement energy efficiency infrastructure investments to their properties by freezing their three-year rolling base consumption level for up to 20 years. In this program, PHAs can choose whether to use third-party financing. PHAs may keep up to 100% of the savings to utilize for eligible capital and operating expenses.
- The **UPP** program, like the EPC, uses third-party financing for up to 20 years to

⁸ Public Housing Occupancy Guidebook, “Utilities.” Published June 2020. Available at: https://www.hud.gov/sites/dfiles/PIH/documents/PHOG_Utility_FINAL.pdf.

⁹ For the EPC program, see Notice PIH 2011-36 or successor notices. For SR-FRB, see Notice PIH 2022-32 or successor notices. For UPP, see Notice PIH 2018-20 or successor notices. PIH notices are posted at https://www.hud.gov/program_offices/administration/hudclips/notices/pih.

implement energy efficiency infrastructure. The program is implemented using the PHA's utility provider, which also can finance the Energy Conservation Measures.

An additional energy incentive program through the Operating Fund is the **Rate Reduction Incentive (RRI)**, which allows PHAs to retain up to 100% of the savings from actions taken to reduce utility rates that pursue special and significant efforts beyond what is required by statute and/or regulation to reduce their utility rate. The PHA's action must exceed the activities required by statute and/or regulation.¹⁰

5. Individual Relief Policies for Severe or Extreme Heat

A. Individual Relief Policies

PHAs may adopt policies to grant residents relief from surcharges or utility bills in excess of utility allowances upon request by residents, as the PHA deems appropriate (24 CFR 965.508). For example, an elderly family may submit a request for a utility allowance that is higher than the applicable amount on the utility allowance schedule, because it is needed to operate resident-supplied appliances related to their medical care. The PHA may grant requests for relief in line with policies it has adopted.

When a request for individual relief is approved, the PHA will not surcharge a resident for excess use of specified PHA-furnished utilities, or the PHA will set a higher utility allowance for the resident.

The current regulation provides several examples of reasonable grounds for granting relief, including the "special needs of elderly, ill, or disabled residents." Note that reasonable grounds are not limited to special needs of elderly, ill, or disabled residents. PHAs may also grant relief due to "special factors affecting utility usage not within the control of the resident." PHAs have discretion to develop policies to provide individual relief for other reasonable grounds, including other factors beyond residents' control.

B. Severe or Extreme Heat as Reasonable Ground for Individual Relief

PHAs may establish a policy to provide individual relief from air conditioning or cooling-related surcharges or utility supplier billings, on the basis of severe or extreme heat. Severe or extreme heat poses a risk even to healthy individuals, and residents may have few safe alternatives to using air conditioning or cooling-related utilities. Thus, severe or extreme heat may provide reasonable grounds for individual relief for all residents for use of cooling technologies. PHAs may establish that all residents have reasonable grounds to request relief due to severe or

¹⁰ Pursuant to HUD regulation 24 CFR § 990.185(b), "If a PHA takes action beyond normal public participation in rate-making proceedings, such as well-head purchase of natural gas, administrative appeals, or legal action to reduce the rate it pays for utilities, then the PHA will be permitted to retain one-half the annual savings realized from these actions." Eligible actions include on-site renewable energy, power purchase agreements, and community solar. PHAs should follow submission requirements provided by Notice PIH 2023-17 or the most recent PIH Notice on the Rate Reduction Incentive. For additional resources on incentive programs, see the Build for the Future Funding Navigator (<https://www.hudexchange.info/programs/build-for-the-future/funding-navigator/>) and the Database of State Incentives for Renewables & Efficiency (<https://www.dsireusa.org>).

extreme heat, regardless of age, disability status, or other special circumstances.

PHAs have discretion to define severe or extreme heat, and to adopt corresponding individual relief policies that indicate they will provide relief of varying lengths and degrees, as they deem appropriate. They may adopt a criterion for granting relief that is specific and delimited to periods in which there are identifiable extreme heat events. For example, if the forecast indicates that daily high temperatures are expected to reach dangerous levels, the PHA may activate an individual relief policy for that month. Alternatively, the PHA may elect to establish criteria for granting relief during a specified cooling season (e.g., from May through September each year), in anticipation of regular severe heat that may pose a health risk to residents.¹¹ This alternative may be especially relevant for PHAs operating in climates with routine periods of severe heat. Cooling seasons may vary by location, change over time, and weather variations outside of typical seasonal patterns may create severe or extreme heat at unanticipated times. PHAs may indicate they can elect to provide individual relief in months outside of this cooling season as necessary.

The PHA may indicate that individual relief is granted on a nonrecurring basis, such that individual relief must be granted again for a subsequent period of severe or extreme heat, or the PHA may allow for individual relief on a recurring basis (e.g., every year during the cooling season). These decisions inform the conditions the PHA generally views as reasonable for all residents to make such requests for relief, and PHAs must communicate their criteria for granting relief to all residents in accordance with 24 CFR 965.508.

When determining the criteria for granting relief for severe or extreme heat, PHAs may also indicate a standard adjustment they view as reasonable. For example, the PHA may indicate that given utility costs and expectations of modest use of air conditioning, they are prepared to adjust a family's utility allowance by a flat amount to account for the use of such air conditioning, in the absence of details in a family's request that warrant consideration of higher levels of relief.

The individual relief provision at 965.508 requires that to receive individual relief, a family must request it. This precludes a PHA from simply granting individual relief for severe or extreme heat to all residents automatically. Nevertheless, all residents may have an interest in receiving relief that is conducive to their health and safety. To reduce the administrative burden on PHAs and on families that would be involved in requiring every family to write an explanation of their request, the PHA may supply all residents with a streamlined option for requesting relief. For example, PHAs could bundle the requirement to notify residents about the criteria for individual relief with a very simple method of requesting a standard form of relief. PHAs are required by 24 CFR 965.508 to provide notice about the availability of and criteria for granting individual relief to all residents. They must provide this information when the PHA notifies all residents of utility allowances, scheduled surcharges, and revisions, as well as in the information given to new

¹¹ There are resources online that PHAs may wish to consult, for more information on cooling seasons. For example, see the National Integrated Heat Health Information System Tools and Information page (<https://www.heat.gov/pages/tools-information>), the Divisional Mapping tool from the National Oceanic and Atmospheric Administration (<https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/divisional/mapping>), and an explanation of degree days from the U.S. Energy Information Administration (<https://www.eia.gov/energyexplained/units-and-calculators/degree-days.php>).

residents upon admission. When providing residents with such notice, PHAs may inform families that they will approve all requests for individual relief for excess consumption of utilities related to cooling technologies with a standard adjustment, if the family makes such a request by simply checking a box on the notice and returning it to the PHA. If the family needs to request a different form of individual relief, they may submit a written request with an explanation of their individual circumstances. PHAs must provide the procedure for making such requests in each notice to residents given in accordance with 965.502(c) and in the information given to new residents upon admission (24 CFR 965.508).

A PHA's general criteria do not preclude families from requesting alternative forms of relief. For example, if the PHA elects to adopt criteria for granting relief that generally permits all residents to request relief for excess utilities consumption related to the use of air conditioning during a specified cooling season, that does not preclude the PHA from considering a request for individual relief for a family at other times, due to special circumstances. Families may request relief that would require a different adjustment than the standard adjustment outlined in the PHA's criteria for granting relief. PHAs may not disregard requests for reasonable accommodations merely because they do not meet the general criteria outlined in the PHA's policy.

An individual relief policy allows the PHA to waive surcharges of excess utility expenses for cooling, and when relief is approved, the cost of the excess utility consumption becomes a legitimate operating subsidy expense and will be included in the PHA's operating subsidy request. Therefore, in such cases PHAs will not include surcharges for the covered utility consumption for cooling on line 19 of the form HUD-52722. For resident-paid utilities, the PHA will adjust the tenant's utility allowance to reflect the higher utility consumption associated with the cooling.

C. Accompanying Requirements

For 2024, PHAs may immediately begin to grant individual relief requests on the basis of severe or extreme heat before providing a new utility allowance notice or updating their ACOP or lease. Additionally, PHAs may immediately announce their intention to approve all requests for individual relief from severe or extreme heat (e.g., announcement by letter or email to all residents as well as posting to the PHA website). Announcements must ensure accessibility for all residents.¹² PHAs may also immediately provide residents streamlined request forms. This will allow PHAs to provide individual relief to families quickly to respond to the threat of extreme heat in 2024 while in the process of updating the requisite policy documents described below.

PHAs that choose to adopt an individual relief policy for extreme heat should note the following

¹² Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA) regulations require PHAs to ensure effective communication with participants and to furnish appropriate auxiliary aids where necessary to afford individuals with physical or mental impairments an equal opportunity to access and participate in the program, as outlined in 24 CFR 8.6. PHAs must also take reasonable steps to ensure individuals with limited English proficiency have meaningful access to their programs and activities, in accordance with the four factors described in HUD's Limited English Proficiency Guidance (72 Fed. Reg. 2732 (January 22, 2007)).

requirements, however, and work expeditiously to implement these requirements:

- The grounds for granting relief, and the procedures for a resident to request relief, must be shared in notices to residents. New residents must be given this information at admission, and the policy must be shared in any notice proposing changes to utility allowances or scheduled surcharges (965.508).

As indicated in 24 CFR 965.502(c), PHAs must give this notice to all residents not less than 60 days before the proposed effective date of the allowances, scheduled surcharges, or revisions. The PHA must provide all residents with an opportunity to submit written comments during a period that expires at least 30 days before the proposed effective date, the PHA must keep such written comments, and the PHA must make such comments available to all residents. If the PHA is including in this notice grounds for granting individual relief and outlining procedures for requesting such relief, the PHA must also accept comment on these criteria and procedures.

If the PHA intends to adopt severe or extreme heat as a reasonable ground for requesting individual relief, the PHA should include in this notice details of the relief it is prepared to grant to all families—including conditions when such relief would be warranted, how long such relief would be granted, and what standard adjustment such relief would provide. The PHA should also indicate that such criteria do not preclude requests for reasonable accommodations.

- Individual relief policies need to be incorporated into a PHA’s ACOP and lease. A clear ACOP and lease promote a transparent and fair relationship between the PHA and its residents.¹³ The ACOP should describe the general policy for excess utility charges, individual relief policies and procedures (e.g., how requests are made and processed), reasonable accommodations policies for utilities allowance adjustments, and grievance procedures.
- Residents must have the option to present a grievance, following the PHA’s grievance procedure (24 CFR 966.51) if they are dissatisfied with a response to a request for individual relief.

6. Further Information

Questions concerning the guidance described in this notice may be directed to the following offices. For questions related to the Public Housing Capital Fund, contact the Office of Public Housing Investments at PIHOCI@hud.gov. For questions related to the Public Housing Operating Fund, the HUD-52722, or energy incentive programs, contact the Public Housing Energy Branch at PIHEnergyBranch@hud.gov. For questions related to PHA development of utilities policies, contact the Public Housing Management and Occupancy Division at

¹³ Technical assistance providers have provided sample ACOP text on HUD Exchange that could be a reference when adding an individual relief policy. See the PHA Admissions and Continued Occupancy Policy Toolkit, Chapter 3: Lease Requirements. Available at: <https://www.hudexchange.info/programs/public-housing/admissions-and-continued-occupancy-policy-toolkit>.

PublicHousingPolicyQuestions@hud.gov. For more information on the NSPIRE Standards, including the Heating, Ventilation, and Air Conditioning (HVAC) and Egress standards, contact NSPIRE@hud.gov.

A handwritten signature in blue ink that reads "Richard J. Monocchio". The signature is written in a cursive style with a large initial "R".

Richard J. Monocchio
Principal Deputy Assistant Secretary
for Public and Indian Housing

Appendix: Cooling Systems

Cooling systems are not limited to air conditioning units. For reference, here are examples of other cooling systems that PHAs may consider. While this is not meant to be an exhaustive list of cooling systems and technologies, the following are examples of eligible Capital Fund modernization activities.¹⁴

Active Cooling:

Active cooling methods work to reduce the amount of heat entering the building and/or increase the amount of heat exiting the building using mechanical or electrical devices to effectively lower or maintain the room or indoor building air temperature. See some examples listed below.

1. **Ceiling Fans** effectively circulate the air in a room to create a draft throughout the room.
2. **Radiant Cooling** cools the floor or ceiling by absorbing the heat radiated from the rest of the room. Most radiant cooling home applications have been based on aluminum panels suspended from the ceiling, through which chilled water is circulated. To be effective, the panels must be maintained at a temperature very near the dew point within the house, and the house must be kept dehumidified.
3. **Whole House Fan (Attic Ventilation)** pulls air in from open windows and exhausts it through the attic and roof. It provides good attic ventilation in addition to whole building cooling. Whole house fans should provide buildings with 15 to 23 air changes per hour (varies with climate, and floor plan).
4. **Evaporative Cooling** (also known as “Swamp Coolers”) passes outdoor air over water-saturated pads. The water in the pads evaporates, reducing the air temperature by 15°- to 40°F- before it is directed into the building.
5. **Heat Pumps** provide both heating and cooling by using electricity to mechanically remove or add heat from the indoor air to maintain a desired temperature by either extracting heat from the air to cool or adding heat to the air to heat.

Passive Cooling:

Passive cooling methods work to reduce the amount of heat entering the building and/or increase the amount of heat exiting the building by modifications to the building design or materials used to lower the indoor temperature without the use of mechanical or electrical devices.

1. **Window coverings or tinting** can reduce heat gain in the summer.
2. **“Nature-based solutions”** like green roofs and exterior facades can reduce cooling needs by

¹⁴ For more detailed information, see the Department of Energy’s Energy Saver website on home cooling systems (<https://www.energy.gov/energysaver/home-cooling-systems>). Note also that pursuant to the Energy Policy Act of 2005, in purchasing appliances, PHAs shall purchase appliances that are Energy Star products or Federal Energy Management Program designed products, unless the PHA determines that the purchase of these appliances is not cost effective.

40-60%. A green roof is partially or completely covered with vegetation and plants.

3. **Reflective roofs and reflective paint** radiate heat away from the building, rather than absorbing it.

4. **Passive Venting** of excessive heat building up in unconditioned spaces, such as attics, can improve the efficiency of conditioned spaces.

5. **Site and Landscaping improvements** can include removing heat island effects by converting to “cool pavements” and/or adding tree cover or artificial shade to the grounds surrounding buildings.