Utility Allowances

March 2023

ANN ARBOR HOUSING COMMISSION

Ann Arbor, Michigan









INITIAL REPORT

PUBLIC HOUSING
UTILITY ALLOWANCE SURVEY AND STUDY







3301 West Freeway Fort Worth, TX 76107



Phone: 817-922-9000 Fax: 817-922-9100

Email: ResidentLife@nelrod.com - Website: www.nelrod.com

April 6, 2023 Weneshia Brand, Deputy Director Ann Arbor Housing Commission 727 Miller Avenue Ann Arbor, MI 48103

Re: Public Housing Utility Allowances Survey and Study - 2023

Dear Ms. Brand:

ResidentLife Utility Allowances® is pleased to enclose a draft copy of the Public Housing Utility Allowances Survey and Study. The Proposed Utility Allowances are located in the Survey and Study Results section of your study analysis.

ResidentLife Utility Allowances is putting our seal of compliance on the work we perform for your agency certifying that we have developed your Utility Allowances in compliance with HUD Regulations and guidelines. We recommend that you post your adopted utility allowance schedule(s) on your webpage. We have made this process easy for you by providing, by email, an electronic version of your currently updated Utility Allowances in a pdf format that is ready to upload directly to your website. This format displays our Seal of Certified Compliance assuring residents, Agency staff, HUD representatives, or other interested parties, that an approved method was used to efficiently and accurately develop your utility allowances and that the utility allowances are current.

HUD regulations state that the Agency shall give notice to all residents of proposed utility allowances, scheduled surcharges and revisions not less than 60 days before the proposed effective date of the allowances. The Agency shall also provide all residents an opportunity to submit written comments during a period expiring not less than 30 days before the proposed effective date of the allowances.

As a reminder: HUD regulations state that housing authorities shall **review allowances at least annually** and revise allowances established if there has been a 10% increase or decrease in utility rate and charges. Please contact ResidentLife Utility Allowances® about this time next year to see if we can be of service for your annual review.

Please note that notice of the availability of relief from surcharges or payment of utility supplier billings in excess of the allowances for resident-purchased utilities should be included in each notice to residents given in accordance with §965.502(c) and in the information given to new residents upon admission.

Please carefully review this draft report for any identifiable problems, changes, corrections, and/or special needs and let me know if you have any changes or questions as soon as possible. If no changes are requested this report will serve as a final report. **Please see the attached Closure Acceptance Statement, sign and return as soon as possible.** You can contact me at (817) 922-9000 ext 103 or emma@nelrod.com. It is a pleasure working with your agency.

Sincerely,

Emma McLemore

Emma McLemore ResidentLife Utility Allowances® Specialist

Enclosure

Disclaimer: ResidentLife Utility Allowances® will make any necessary corrections to work previously performed prior to submission of final report. It is important to note that many local communities have different rate structures, weather patterns, types of charges, etc. ResidentLife Utility Allowances® has made every effort to be as accurate as possible, but will not be held responsible for changes involving different methodologies, rate structures, regulatory changes, omission and/or misinformation of cost calculation data from utility providers, selection of most advantageous cost calculation methodology in areas with multiple costing methods, and inaccurate allowances resulting from lack of information or data not provided by the agency.

3301 West Freeway Fort Worth, TX 76107



Phone: 817-922-9000 Fax: 817-922-9100

Email: ResidentLife@nelrod.com – Website: www.nelrod.com

Closure Acceptance Statement

| Re: | Public Housing Utility Allov | wances Survey and Study - | 2023 |
|----------------|--|------------------------------|--|
| | g this Closure Statement I, _ nmission, MI acknowledge red | | _, on behalf of the Ann Arbor ly report. |
| additions if n | 3 , | pts this survey study report | have requested edits, changes or as final. This does not mean that |
| Signed | | | |
| Signature | | Title | |
| Print Name | | Date | |

Please sign and return within 30 days fax to: (817) 922-9100 or email to residentlife@nelrod.com

Job#1750-RU-009

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INTRODUCTION

Public Housing Authorities are responsible for establishing allowances for utilities (natural gas, electricity, water, etc.) purchased directly by residents from utility providers. These allowances represent fixed dollar amounts that are deducted from residents' monthly Total Tenant Payment. Additionally, Housing Agencies may provide monthly or quarterly consumption allowances for PHA-furnished utilities where dwelling units are individually check-metered, and residents may be surcharged for excess usage.

Allowances are established for each dwelling unit category and unit size and should approximate reasonable consumption by an energy-conservative household of modest circumstances consistent with requirements of a safe, sanitary and healthful living environment.

Housing Agencies shall review allowances at least annually and revise established allowances if there has been a ten percent (10%) increase or decrease in <u>utility rates</u> and charges since the last time the utility allowances were adjusted.

The **Ann Arbor Housing Commission, MI** has recognized the need for a review and update of its Public Housing consumptions and utility allowances and has contracted with ResidentLife Utility Allowances® to develop updated utility allowances for each dwelling unit category and unit size for 1 dwelling unit at the Garden Circle development where all utilities are resident-paid. This study will utilize an Engineering-based methodology to determine monthly utility consumptions. ResidentLife Utility Allowances specialists will conduct a Public Housing Utility Allowance Survey and Study based on the following: (1) a fair estimate of the work and cost required to conduct the survey and study, (2) an experienced consulting team that has extensive working knowledge of PHA operations, utility allowance development, and application experience, and (3) quality client service.

Our goals in undertaking this work are: (1) to deliver practical products that staff can use in completing their day-to-day activities, (2) to write and communicate clearly in order to be accurate in what we write and say with regard to analysis, description of conditions, and costs, (3) not to recommend a change unless it has a clear benefit to the agency and residents, and (4) to work with the Executive Director, Agency staff, Commissioners, and residents in an open and professional manner and include their input to the maximum extent possible.

This Public Housing Utility Allowance study will be conducted in accordance with 24 CFR Part 965, Subpart E, Resident Allowances for Utilities, the Utility Allowance Guidebook, and all applicable federal, state, and local laws and regulations.

Note: In the course of providing services, copyrighted materials existing prior to this study may be utilized. This material is being provided for the use of the Ann Arbor Housing Commission, MI staff only and may not be used by other agencies without written permission from The Nelrod Company. The Nelrod Company retains the rights to all copyrighted materials.

OBJECTIVES AND METHODOLOGY

OBJECTIVES AND METHODOLOGY PUBLIC HOUSING - 2023

This study was conducted in compliance with the Public Housing Utility Allowance HUD Regulations 24 CFR 965, Subpart E – Resident Allowances for Utilities, and HUD's Utility Allowance Guidebook.

Objective

The objective of this survey and study is to develop Public Housing utility allowances with current utility rates and charges for resident-paid electric, natural gas, water, and sewer utilities. The **Ann Arbor Housing Commission**, **MI** has 1 dwelling unit at the **Garden Circle** development. We will utilize an acceptable engineering-based methodology which takes into consideration structure type, unit size, and equipment. **Additionally, the development has energy efficient vinyl windows, heaters, insulation, and water saving appliances. These allowances are based upon a reasonable consumption of an energy conservative family of modest circumstances and to provide for the basic essentials needed for a living environment that is safe, sanitary and healthful.**

Methodology

1. Data Gathering

The Agency completed and returned ResidentLife Utility Allowance's Public Housing Development Characteristics chart for their development with resident-paid utilities. The Agency also completed and returned a separate ResidentLife Utility Allowances' **Customization & Energy Efficient Measures for Base Ekotrope Models** form. These completed forms contain site-specific information, data, and characteristics which include, but are not limited to, building type, bedroom sizes, approximate age of development, fuel types, construction materials, window types, mechanicals, and energy efficiencies.

Also collected was a copy of the Agency's currently adopted utility allowances for Public Housing.

2. Create Customized Models

The Ekotrope software program utilized to develop these building structure models is HUD compliant. Sources for developing these models include: HUD Regulations 24 CFR Part 965, Subpart E, Resident Allowances for Utilities, Ekotrope Home Energy Rating

software program, Energy Conservation for Housing...A Workbook – 1998, IECC (International Energy Conservation Code) – 2000, Utility Allowance Guidebook – 2008, Calculating Consumptions and Utility Allowances – 1986, Mechanicals – 1992, and PIH Notice 90-8 T.D.C. For more information see Introduction to Software Program Support Documentation section of this study.

A ResidentLife Utility Allowances specialist analyzed the criteria provided by the Agency on the Development Characteristics chart and Customization & Energy Efficient Measures for Base Models forms. The specialist then input the site-specific criteria into the ResidentLife Utility Allowance software database.

Note: HUD regulations for Public Housing (24 CFR 965.505 (e)) do not allow for air conditioning in the utility allowances, therefore air conditioning consumptions were eliminated from the models and consumption totals.

3. Computation of Average Monthly Consumption

The following was performed by a utility allowance specialist to develop the utility allowances:

a. **Electric and Natural Gas Consumptions**

A utility allowance specialist exported and analyzed the reports generated by the software database. These reports contain consumption usage for **electric and natural gas** utilities for the **Garden Circle** development, by building type, and for applicable bedroom sizes. The monthly average consumption contained heating usage, thus these consumptions were climatically adjusted in the software program. Generated reports are provided in the Support Documentation section at the back of the study.

Next, the utility allowance specialist entered these adjusted monthly electric and adjusted monthly natural gas consumptions into the **Monthly Utility Consumptions Totals** chart and into the **Cost of Consumption** calculation forms, for the **Garden Circle** development.

b. Water Consumptions

A utility allowance specialist obtained average monthly water consumption (gallons) from national average models and entered them into the Monthly Utility Consumptions Totals chart and into the Cost of Consumption calculation forms

for the **Garden Circle** development, by structure type and applicable bedroom size. The water consumption totals are also used for calculating sewer allowances.

Residents do not pay for trash collection services.

4. Obtain Utility Rates and Charges

The following information was gathered by a rate specialist and input in the Utility Providers Residential Rates and Charges document:

- a. Documentation on current residential **electric** rates and charges from **DTE Energy** through their internet website and telephone inquiries.
- b. Documentation on current residential **natural gas** rates and charges from **DTE Energy** through their internet website and telephone inquiries.
- c. Documentation on current residential **water and sewer** rates and charges from the **City of Ann Arbor** through their internet website and telephone inquiries.

5. Computation of Utility Allowances

The following process was conducted by a utility allowance specialist to develop utility allowances: (See Cost of Consumptions)

- a. DTE Energy's current residential rates and charges for electric usage (kwh) were applied to the adjusted monthly average consumption figures to determine an average cost of consumption for each size unit at the Garden Circle development. A weighted average was then calculated and applied to the utility allowance totals.
- b. **DTE Energy's** current residential rates and charges for **natural gas** usage (therms) were applied to the adjusted monthly average consumption figures to determine an average cost of consumption for each size unit at the **Garden Circle** development. A weighted average was then calculated and applied to the utility allowance totals.
- c. The City of Ann Arbor's current residential rates and charges for water and sewer usage were applied to the adjusted monthly average consumption figures to determine an average cost of consumption for each size unit at the Garden Circle development.

See Chart 1 for Proposed Public Housing Monthly Utility Allowances found in the Survey and Study Results section of this report.

6. Utility Allowance Schedule

Utility Allowance and Consumption Allowance Schedules <u>are not</u> subject to approval by HUD before becoming effective, but will be reviewed in the course of audits or reviews of Agency operations (24 CFR 965.502(d)).

7. Notification, Display and Comment Period

Per HUD regulations (24 CFR 965.502(c)), the Agency shall give notice to all residents of proposed allowances, scheduled surcharges, and revisions <u>not less than 60 days</u> before the proposed effective date of the allowances. The Agency should provide all residents an opportunity to submit written comments during a period expiring <u>not less than 30 days</u> before the proposed effective date of the allowances.

Additionally, for your convenience we have provided a SAMPLE Resident Notice for the agency to adjust to their needs. See sample and instructions in the back of this study.

8. Support Documentation

Per HUD regulations (24 CFR 965.502(b)) the Agency must maintain a record that documents the basis on which allowances and scheduled surcharges, and revisions thereof, are established and revised. Such record shall be available for inspection by residents and HUD.

This report contains a copy of all such supporting documentation, including a copy of HUD Regulations: 24CFR 965.501-508, Subpart E – Resident Allowances for Utilities.

9. Annual Update

HUD regulations (24 CFR 965.507) state that housing authorities **shall review allowances at least annually** and **revise allowances established if there has been a 10% increase or decrease in utility rates** and charges. If an annual adjustment is not made to the current utility allowances, the agency must monitor utility rates and charges to see if a rate has changed, by itself or together with prior rate change, not adjusted for, resulting in a change of 10% or more since the last utility allowance update. This interim adjustment helps Agencies avoid costly back charges and rent adjustments. ResidentLife Utility Allowances® provides a quarterly Rate Monitoring Service.

If annual revisions are only a result of rate changes, such rate changes are not subject to the 60-day notice requirement of sec. 965.502(c). The Agency should give at least a 30-day notice to residents.

10. Individual Relief

We have included Individual Relief Medical Equipment Allowances in the Survey and Study Results section of this report.

Please note that notice of the availability of relief from surcharges or payment of utility provider billings in excess of the allowances for resident-purchased utilities should be included in each notice to residents given in accordance with §965.502(c) and in the information given to new residents upon admission. Agencies should have written procedures regarding Individual Relief in their Admission and Continued Occupancy (ACOP) policies.

SURVEY AND STUDY RESULTS

SURVEY AND STUDY RESULTS PUBLIC HOUSING - 2023

Public Housing (Conventional) utility allowances were calculated for electric, natural gas, water, and sewer utilities for the **Ann Arbor Housing Commission**, **MI.** The Agency has 1 dwelling unit at the **Garden Circle** development where allowances are developed by structure type and unit size, for resident-paid utilities. **Additionally, the development has energy efficient vinyl windows, heaters, insulation, and water saving appliances.**

The proposed Public Housing Monthly Utility Allowances are shown in Chart 1on the following page.

This study was conducted in compliance with the Public Housing Utility Allowance HUD Regulations 24CFR 965, Subpart E – Resident Allowances for Utilities.

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PUBLIC HOUSING

PROPOSED MONTHLY UTILITY ALLOWANCES Chart 1

INITIAL 2023

Building Type: Detached House

| Garden Circle MI-64 | | | | | | |
|---------------------------|-----|-----|-----|----------|-----|-----|
| (EE Equip:Win-V,H,Ins,WS) | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR |
| Electricity (L&A,F,C) | | | | \$95.00 | | |
| Natural Gas (H,WH) | | | | \$57.00 | | |
| Water | | | | \$24.00 | | |
| Sewer | | | | \$52.00 | | |
| Totals | | | | \$228.00 | | |

A monthly average cost of the summer and winter adjustments were used for the electric and natural gas costs.

H= Space Heating Win-V= Windows-Vinyl

WH= Water Heating Ins= Insulation

C= Cooking WS= Water Saving Appliances

Note: Public Housing utility allowances are calculated similar to the method used by each utility provider. These allowances are not calculated by end use (like Section 8 HCV), but by total usage for each utility type. Utility providers' monthly charges are included in the calculations.

Individual Relief

Medical Equipment Allowances

Electric Provider: DTE Energy

| ltem | Hours per Day | Wattage | Monthly kWh | Energy Charge | Utility Allowance |
|----------------------------|------------------|---------|----------------|------------------|----------------------|
| Oxygen Concentrator | 18 | 400 | 223 | 0.178015 | \$40.00 |
| Nebulizer | 2 | 75 | 5 | 0.178015 | \$1.00 |
| Electric Hospital Bed | 0.2 | 200 | 1 | 0.178015 | \$1.00 |
| Alternating Pressure Pad | 24 | 70 | 52 | 0.178015 | \$9.00 |
| Low Air-Loss Mattress | 24 | 120 | 89 | 0.178015 | \$16.00 |
| Power Wheelchair/Scooter | 3 | 360 | 33 | 0.178015 | \$6.00 |
| Feeding Tube Pump | 24 | 120 | 89 | 0.178015 | \$16.00 |
| CPAP Machine | 10 | 30 | 9 | 0.178015 | \$2.00 |
| Leg Compression Pump | 24 | 30 | 22 | 0.178015 | \$4.00 |
| Dialysis Machine/Equipment | 2 | 710 | 44 | 0.178015 | \$8.00 |

Oxygen Concentrator

Use per day varies, assume 12-14 hours a day.

The 5-Liter model uses 400 W, the 3-Liter model uses 320 W.

Nebulizer

A medicine delivery system used mostly for pediatric care.

Used 4-6 times a day for 20 minutes at a time at 75W.

Semi/Fully Electric Hospital Bed

Use depends on adjustments. 200 W.

Alternating Pressure Pad

An air-filled mattress overlay.

Used 24 hours a day for someone who is bed-ridden.

Low Air-Loss Mattress

Takes the place of mattress - air -filled pressurized mattress.

Cycles air around every 15-20 minutes.

Power Wheelchairs and Scooters

Need to be charged approximately 8 hours every 3 days.

Batteries are 120 V, 3 Amp, 360 W.

Feeding Tube Pump (Continuous Feed)

A pump delivers a constant amount of formula throughout the day or night.

CPAP Machine

Used for Sleep Apnea. Machines run only at night for people who have a tendency to stop breathing at night. At maximum pressure use is 40 Watts. On average - 30 Watts.

Leg Compression Pump

Provides intensive compression therapy. Use varies, generally from 8-24 hours daily.

Dialysis Machine/Equipment (Small/Portable)

Filters a patient's blood to remove excess water and waste products. Used 2 hours daily.

MONTHLY CONSUMPTION TOTALS & BUILDING TYPE DESCRIPTIONS

PUBLIC HOUSING

MONTHLY UTILITY CONSUMPTION TOTALS

Consumptions developed using an engineering method - 2023 (Water consumptions based on national averages.)

Building Type: Detached House

| Garden Circle MI-64 | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR |
|------------------------------|------|------|------|------|------|-----|
| (EE Equip:Win-V,H,Ins,WS) | ODIX | IDIX | LDIX | JDI | TDIX | JUK |
| Electricity (kWh) S(L&A,C) | | | | 424 | | |
| Electricity (kWh) W(L&A,F,C) | | | | 478 | | |
| Natural Gas (ccfs) S(WH) | | | | 15 | | |
| Natural Gas (ccfs) W(H,WH) | | | | 65 | | |
| Water (gallons) | | | | 5052 | | |

Residents also pay sewer.

L&A= Lights & Appliances

H= Space Heating

WH= Water Heating

C= Cooking

EE Equip= Energy Efficient Equipment

Win-V= Vinyl Windows

Ins= Insulation

WS= Water Saving Appliances

S= Summer W= Winter

Summer: June - September (4), Winter: October - May (8)

Seasons based on climatic data.

Building Type (Structure) Descriptions

1. Apartment/Walk-Up/Condominium/Garden Apartment/Low-Rise/Flat (Apt)

- a. Building with a group of 3 individual **units** with common walls; attached to other units; separate entrances, and may have common staircases.
- b. Each **building** may have an end unit, inside unit, top unit, bottom unit, etc. **Building** will have 2 or more stories.
- c. Usually, but not always, there will be units on both sides of building.

2. High Rise Apartment (H-R)

A multi-unit building; 5 or more stories; sharing one or more common entrances. May have an elevator.

3. Row House/Townhouse/Triplex/Fourplex/Multiplex (RH)

- a. An individual unit attached to other individual units; 2 or more common walls; separate ground level entrances; 1 or 2 story **units**.
- b. Each building will have end units and inside units.
- c. Fourplex units usually share 2 common walls; can be square-shaped or L-shaped.
- d. Triplex building can be V-shaped.

4. Semi-Detached/Duplex (S-D or SD)

Building with 2 individual housing units; with separate entrances; one common wall; 1 or 2 story units.

5. Detached House (DH)

A detached building intended to house one family; sits on its own piece of land; not attached to another dwelling.

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UTILITY ALLOWANCE COST OF CONSUMPTION CALCULATIONS

PUBLIC HOUSING

UTILITY ALLOWANCE COST OF CONSUMPTION CALCULATIONS

ELECTRICITY - DTE Energy

INITIAL 2023

Garden Circle MI-64

Building Type: Detached House

| | | 3 31 | | | | | | |
|-----------------------------|-------------------|------|-----|-----|---------|-----|-----|--|
| Monthly Average Uni | it | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR | |
| Consumption kWh | | | | | | | | |
| for all bedroom types | s - Summer | | | | 424 | | | |
| Total Monthly Charge | es | | | | | | | |
| Per Month | \$9.40 | | | | \$9.40 | | | |
| Total Energy Charges | (0-527) | | | | | | | |
| Per KWH | 0.178015 | | | | \$75.48 | | | |
| | Subtotal | | | | \$84.88 | | | |
| State Sales Tax | | | | | | | | |
| % of Total | 4% | | | | \$3.40 | | | |
| Total Monthly Cost | - Summer | | | | \$88.28 | | | |

| Monthly Average Unit | | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR |
|------------------------------|----------|-----|-----|-----|---------|-----|-----|
| Consumption kWh | | | | | | | |
| for all bedroom types - I | Winter | | | | 478 | | |
| Total Monthly Charges | | | | | | | |
| Per Month | \$9.40 | | | | \$9.40 | | |
| Total Energy Charges (0-527) | | | | | | | |
| Per KWH | 0.178015 | | | | \$85.09 | | |
| | Subtotal | | | | \$94.49 | | |
| State Sales Tax | | | | | | | |
| % of Total | 4% | | | | \$3.78 | | |
| Total Monthly Cost - W | /inter | | | | \$98.27 | | |

| Averaging | Months | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR |
|---------------------------|--------|-----|-----|-----|----------|-----|-----|
| Summer Annual Avg | 4 | | | | \$353.12 | | |
| Winter Annual Avg | 8 | | | | \$786.16 | | |
| Total Monthly Cost | | | | | | | |
| (Based on Annual Avera | ge) | | | | \$94.94 | | |

Summer: June - September (4), Winter: October - May (8)

Seasons based on climatic data.

PUBLIC HOUSING

UTILITY ALLOWANCE COST OF CONSUMPTION CALCULATIONS

NATURAL GAS - DTE Energy

INITIAL 2023

Garden Circle MI-64

Building Type: Detached House

| | | 3 31 | | | | | | |
|---------------------------|----------|------|-----|-----|---------|-----|-----|--|
| Monthly Average Uni | t | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR | |
| Consumption ccf | | | | | | | | |
| for all bedroom types | - Summer | | | | 15 | | | |
| Total Monthly Charge | es | | | | | | | |
| Per Month | \$15.69 | | | | \$15.69 | | | |
| Total Energy Charges | | | | | | | | |
| Per CCF | 0.80543 | | | | \$12.08 | | | |
| | Subtotal | | | | \$27.77 | | | |
| State Sales Tax | | | | | | | | |
| % of Total | 4% | | | | \$1.11 | | | |
| Total Monthly Cost | - Summer | | | | \$28.88 | | | |

| Monthly Average Unit | | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR |
|-------------------------------------|---------|-----|-----|-----|---------|-----|-----|
| Consumption ccf | | | | | | | |
| for all bedroom types - Wint | ter | | | | 65 | | |
| Total Monthly Charges | | | | | | | |
| Per Month | \$15.69 | | | | \$15.69 | | |
| Total Energy Charges | | | | | | | |
| Per CCF (| 0.80543 | | | | \$52.35 | | |
| S | ubtotal | | | | \$68.04 | | |
| State Sales Tax | | | | | | | |
| % of Total | 4% | | | | \$2.72 | | |
| Total Monthly Cost - Winte | er | | | | \$70.76 | | |

| Averaging | Months | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR |
|---------------------------|--------|-----|-----|-----|----------|-----|-----|
| Summer Annual Avg | 4 | | | | \$115.52 | | |
| Winter Annual Avg | 8 | | | | \$566.08 | | |
| Total Monthly Cost | | | | | | | |
| (Based on Annual Avera | age) | | | | \$56.80 | | |

Summer: June - September (4), Winter: October - May (8)

Seasons based on climatic data.

PUBLIC HOUSING

UTILITY ALLOWANCE COST OF CONSUMPTION CALCULATIONS

WATER & SEWER - City of Ann Arbor

INITIAL 2023

Garden Circle MI-64

| Building Type: Det | tached House |
|---------------------------|--------------|
|---------------------------|--------------|

| | 2 31 | | | | | | |
|-------------------------------|------|-----|-----|---------|-----|-----|--|
| Monthly Average Unit | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR | |
| Consumption ccf | | | | | | | |
| for all bedroom types - Water | | | | 5052 | | | |
| convert to ccf | | | | 6.75 | | | |
| Water Customer Charge | | | | | | | |
| Per Month \$8.91 | | | | \$8.91 | | | |
| Water Rate (0-9) | | | | | | | |
| Per CCF \$2.27 | | | | \$15.32 | | | |
| Total Monthly Average Cost | | | | \$24.23 | | | |

| Monthly Average Unit | 0BR | 1BR | 2BR | 3BR | 4BR | 5BR |
|--------------------------------------|-----|-----|-----|---------|-----|-----|
| Consumption ccf | | | | | | |
| for all bedroom types - Sewer | | | | 5052 | | |
| convert to ccf | | | | 6.75 | | |
| Total Monthly Charges | | | | | | |
| Per Month \$9.63 | | | | \$9.63 | | |
| Sewer Rate | | | | | | |
| Per CCF \$6.33 | | | | \$42.73 | | |
| Total Monthly Average Cost | | | | \$52.36 | | |

SUPPORT DOCUMENTATION

UTILITY PROVIDER RATES AND CHARGES

PUBLIC HOUSING

Utility Providers Residential Rates and Charges As of March 2023

ELECTRICITY INITIAL 2023

Source: DTE Energy

800-477-4747 www.dteenergy.com*

| Year Round | | | | (D1) |
|---------------------------------------|------------|----------|----------|------|
| Service Charge | Per Month | \$8.50 | | |
| Low Income Energy Assist Fund (LIEAF) | Per Month | \$0.90 | | |
| Total Monthly Charges | Per Month | \$9.40 | | |
| | Tiers* | 0 - 527 | over 527 | |
| Capacity Energy Charge* | Per KWH | 0.04405 | 0.06347 | |
| Non-Capacity Energy Charge | Per KWH | 0.03945 | 0.03945 | |
| Distribtution Charge | Per KWH | 0.06879 | 0.06879 | |
| Total Power Supply Surcharges | Per KWH | 0.01771 | 0.01771 | |
| Total Delivery Surcharges | Per KWH | 0.008015 | 0.008015 | |
| Total Energy Charges | Per KWH | 0.178015 | 0.197435 | |
| State Sales Tax | % of Total | 4% | _ | |

NATURAL GAS

Source: DTE Energy

800-477-4747 www.dteenergy.com*

| Year Round | | | (A) |
|----------------------------------|------------|---------|-----|
| Customer Charge | Per Month | \$13.50 | |
| IRM Surcharge | Per Month | \$2.19 | |
| Total Monthly Charges | Per Month | \$15.69 | |
| | Tiers | All | |
| Distribution Charge | Per CCF | 0.38859 | |
| GCR Factor | Per CCF | 0.34 | |
| Energy Waste Reduction Surcharge | Per CCF | 0.03184 | |
| Reservation Charge | Per CCF | 0.045 | |
| Total Energy Charges | Per CCF | 0.80543 | |
| State Sales Tax | % of Total | 4% | |

WATER, SEWER & TRASH COLLECTION

Source: City of Ann Arbor

734-794-6000 www.a2gov.org*

| Water | | | |
|---------------------------------------|-----------|--------|---|
| Water Customer Charge (\$26.74 qtrly) | Per Month | \$8.91 | |
| | Tiers* | 0 - 9 | |
| Water Rate* | Per CCF | \$2.27 | |
| Sewer | | | |
| Sewer Customer Charge (\$15.96 qtrly) | Per Month | \$5.32 | |
| Stormwater Charge | Per Month | \$4.31 | |
| Total Monthly Charges | Per Month | \$9.63 | |
| Sewer Rate | Per CCF | \$6.33 | • |

UTILITY PROVIDER DOCUMENTATION



UTILITY PROVIDER LIST

Housing Agency/Property: Ann Arbor Housing Commission

Please Specify ALL Applicable Resident-Paid Utility Types Below:

E = Electric, **NG** = Natural Gas, **BG** = Bottled Gas/Propane, **F** = Fuel Oil, **W** = Water, **S** = Sewer, **T** = Trash

For TENANT-PAID Utilities Only

RESIDENT-PAID PUBLIC HOUSING

Number of Units:

| Utility | | | - |
|---------|------------------------------|-------------------|--------------------------|
| Type | Utility Provider Name | Optional: Phone # | Optional: Website |
| E | DTE | 800-477-4747 | dteenergy.com |
| NG | DTE | 800-477-4747 | dteenergy.com |
| W | City of Ann Arbor | 734-794-6333 | a2gov.org |
| S | City of Ann Arbor | 734-794-6333 | a2gov.org |
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Fax: 817-922-9100 Email: ResidentLife@nelrod.com



Sales and Use Tax FAQs

Sales & Use Tax - List of Topics

> Sales Tax License

> Filing Requirements

> General Sales & Use

- > Sales & Use Tax Exemptions
- > Sales Tax License Verification Search

Sales Tax

Individuals or businesses that sell tangible personal property to the final consumer are required to remit a 6% sales tax on their taxable retail sales to the State of Michigan. Sales of electricity, natural or artificial gas and home heating fuels for residential use are taxed at the 4% rate. Michigan does not allow city or local units to impose sales or use taxes.

Use Tax

The use tax is a companion tax to the sales tax. Use tax of 6% must be paid on the total price (including shipping and handling charges) of all taxable items brought into Michigan or purchases by mail from out-of-state retailers. Credit is given for tax paid to another state. Use tax is also applied to certain services such as telecommunications and hotel/motel accommodations.

RATE SCHEDULE NO. D1

RESIDENTIAL SERVICE RATE - NON-TRANSMITTING METER

AVAILABILITY OF SERVICE: Available to customers desiring service for all residential purposes through one meter to a single or double occupancy dwelling unit including farm dwellings. A dwelling unit consists of a kitchen, bathroom, and heating facilities connected on a permanent basis. Service to appurtenant buildings may be taken on the same meter.

This rate is not available for common areas of separately metered apartments and condominium complexes, nor to a separate meter which serves a garage, boat well or other non-dwelling applications. After the implementation of Rate Schedule D1.11 (Residential Service Rate – Standard TOU), this rate is only available for residential customers with a non-transmitting meter.

HOURS OF SERVICE: 24 hours.

CURRENT, PHASE AND VOLTAGE: Alternating current, single-phase, nominally at 120/240 volts, three-wire. Where available, and the demand justifies, three-phase four-wire, Y connected service may be had at 208Y/120 volts nominally.

In certain city districts, alternating current is supplied from a Y connected secondary network from which 120/208 volts, three-wire service may be taken.

RATE PER DAY:

Full Service Customers:

Power Supply Charges:

Capacity Energy Charges: 4.405¢ per kWh for the first 17 kWh per day

6.347¢ per kWh for excess over 17 kWh per day

Non-Capacity Energy Charge: 3.945¢ per kWh for all kWh

Delivery Charges:

Service Charge: \$8.50 per month

Distribution Charge: 6.879¢ per kWh for all kWh

Surcharges and Credits: As approved by the Commission. See Sections C8.5 and C9.8. Applies only to actual consumption and not to the minimum charge.

Retail Access Service Customers:

Power Supply Charges for Retail Access Customers taking Utility Capacity service for DTE:

Capacity Energy Charges: 4.405¢ per kWh for the first 17 kWh per day

6.347¢ per kWh for excess over 17 kWh

Delivery Charges:

Service Charge: \$8.50 per month

Distribution Charge: 6.879¢ per kWh for all kWh

(Continued on Sheet No. D-2.00)

Issued December 12, 2022 M. Bruzzano Senior Vice President

Corporate Strategy & Regulatory Affairs

Detroit, Michigan

Michigan Public Service Commission

January 3, 2023

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RATE SCHEDULE NO. D1 (Contd.) RESIDENTIAL SERVICE RATE – NON-TRANSMITTING METER

Surcharges and Credits: As approved by the Commission. See Section C9.8. Applies only to actual consumption and not to the minimum charge. Capacity related surcharges and credits applicable to power supply, excluding PSCR, as approved by the Commission. See Sections C8.5.

BILLING FREQUENCY: Based on a nominal 30-day month. See Section C4.5.

MINIMUM CHARGE: The Service Charge plus any applicable per meter per month surcharges.

CONTRACT TERM: Open order, terminable on three days' notice by either party. Where special services are required, the term will be as specified in the applicable contract rider.

LATE PAYMENT CHARGE: See Section C4.8.

INTERRUPTIBLE SPACE-CONDITIONING PROVISION: Rate D1.1 is available on an optional basis.

WATER HEATING SERVICE: Water heating service is available on an optional basis. See Schedule Designation No. D5.

INCOME ASSISTANCE SERVICE PROVISION (RIA): When service is supplied to a Principal Residence Customer, where the household receives a Home Heating Credit (HHC) in the State of Michigan, a credit shall be applied during all billing months. For an income assistance customer to qualify for this credit, the Company shall require annual evidence of the HHC energy draft or warrant. The customer may also qualify for this credit upon confirmation by an authorized State or Federal agency verifying that the customer's total household income does not exceed 150% of the poverty level as published by the United States department of health and human services or if the customer receives any of the following: i) Assistance from a state emergency relief program; ii) Food stamps or iii) Medicaid.

The monthly credit for the residential Income Assistance Service Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers. **Income Assistance Credit:** \$(8.50) per customer per month

RESIDENTIAL SERVICE SENIOR CITIZEN PROVISION: When service is supplied to a Principal Residence Customer, who is 65 years of age or older and head of household, a credit shall be applied during all billing months. The monthly credit for the Residential Service Senior Citizen Provision shall be applied as follows:

Delivery Charges: These charges are applicable to Full Service and Retail Open Access customers.

Senior Citizen Credit: \$(4.25) per customer per month

This credit shall not be taken in conjunction with a credit for the Income Assistance Service Provision (RIA).

(Continued on Sheet No. D-2.01)

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Michigan Public Service
Commission

January 3, 2023

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Detroit, Michigan

(Continued from Sheet No. C-64.00)

C8 SURCHARGES AND CREDITS APPLICABLE TO POWER SUPPLY SERVICE (Contd.)

C8.5 SURCHARGES AND CREDITS APPLICABLE TO POWER SUPPLY SERVICE: Summary of surcharges and credits including PSCR, pursuant to <u>sub-rules C8.1</u>, C8.4 of this rule. (Cents per kilowatthour or percent of base bill unless otherwise noted).

| | PSCR (¢/kWh) | Securitization Charge (¢/kWh) | Total Power Supply Surcharges (excludes REPS) (g/kWh) |
|--|-----------------|-------------------------------------|--|
| Residential D1 Non Transmitting Meter | 1.750 | 0.0210 | 1.771 |
| D1.1 Int. Space Conditioning | 1.750 | 0.0210 | 1.7666 |
| D1.1 Int. Space Conditioning D1.2 Enhanced TOU | 1.750 | 0.0166 | 1.7641 |
| D1.6 Special Low Income Pilot | 1.750 1.750 | 0.0141 | 1.7641 1.771 |
| D1.7 Geothermal Time-of-Day | 1.750 | 0.0122 | 1.7622 |
| D1.8 Dynamic Peak Pricing | 1.750 | 0.0122 | 1.768 |
| D1.9 Electric Vehicle | 1.750 | 0.0164 | 1.7664 |
| D1.11 Standard TOU | 1.750 | 0.0104 | 1.771 |
| D2 Space Heating | 1.750 | 0.0210 | 1.7633 |
| D5 Water Heating | 1.750 | 0.0133 | 1.7612 |
| | | | 1.7532 |
| D9 Outdoor Lighting | 1.750 | 0.0032 | 1.7552 |
| Commercial | | | |
| D1.1 Int. Space Conditioning | 1.750 | 0.0145 | 1.7645 |
| D1.7 Geothermal Time-of-Day | 1.750 | 0.0096 | 1.7596 |
| D1.8 Dynamic Peak Pricing | 1.750 | 0.0169 | 1.7669 |
| D1.9 Electric Vehicle | 1.750 | 0.0177 | 1.7677 |
| D3 General Service | 1.750 | 0.0168 | 1.7668 |
| D3.1 Unmetered | 1.750 | 0.0144 | 1.7644 |
| D3.2 Educ. Inst. | 1.750 | 0.0138 | 1.7638 |
| D3.3 Interruptible | 1.750 | 0.0140 | 1.764 |
| D3.5 Charging | 1.750 | 0.0168 | 1.7668 |
| D4 Large General Service | 1.750 | 0.0149 | 1.7649 |
| D5 Water Heating | 1.750 | 0.0099 | 1.7599 |
| D9 Outdoor Lighting | 1.750 | 0.0032 | 1.7532 |
| R3 Standby (Secondary) | 1.750 | 0.0114 | 1.7614 |
| R7 Greenhouse Lighting | 1.750 | 0.0096 | 1.7596 |
| R8 Space Conditioning | 1.750 | 0.0144 | 1.7644 |
| Industrial | | | |
| D6.2 Educ. Inst. | 1.750 | 0.0166 | 1.7666 |
| D8 Interruptible Primary | 1.750 | 0.0086 | 1.7586 |
| D10 Schools | 1.750 | 0.0149 | 1.7649 |
| D11 Primary Supply | 1.750 | 0.0118 | 1.7618 |
| D12 Large Low Peak | 1.750 | 0.0118 | 1.7618 |
| D13 XL | NA | 0.0036 | 0.0036 |
| R1.1 Metal Melting | 1.750 | 0.0076 | 1.7576 |
| R1.2 Electric Process Heating | 1.750 | 0.0075 | 1.7575 |
| R3 Standby (Primary) | 1.750 | 0.0114 | 1.7614 |
| R10 Interruptible Supply | NA | 0.0036 | 0.0036 |
| Governmental | | | |
| E1 Streetlighting | 1.750 | 0.0038 | 1.7538 |
| E1.1 Energy Only | 1.750 | 0.0116 | 1.7616 |
| E2 Traffic Lights | 1.750 | 0.0110 | 1.7609 |
| | 1.750 | 0.0107 | 1.,00> |

(Continued on Sheet No. C-66.00)

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Michigan Public Service
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Detroit, Michigan

(Continued from Sheet No. C-69.00)

C9 SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)

SURCHARGES AND CREDITS APPLICABLE TO DELIVERY SERVICE: (Contd.)

C9.8 Summary of Surcharges and Credits: Summary of surcharges and credits, pursuant to sub-rules C9.1, C9.2, C9.6, C9.7.9, and C.9.7.14. Cents per kilowatthour or percent of base bill, unless otherwise noted.

.

| | <u>NS</u> ¢/kWh | EWRS ¢/kWh | Base Securitization &/kWh | Total Delivery Surcharges ¢/kWh | LIEAF Factor \$/Billing Meter |
|-------------------------------|--------------------|---------------|---------------------------------|---------------------------------|----------------------------------|
| Residential | | | | | |
| D1 Non Transmitting Meter | 0.08 5 2 | 0.5461 | 0.1792 | 0.8105 | \$0.90 |
| D1.1 Int. Space Conditioning | 0.08 5 2 | 0.5461 | 0.1677 | 0.7990 | N/A |
| D1.2 Enhanced TOU | 0.08 5 2 | 0.5461 | 0.1640 | 0.7953 | \$0.90 |
| D1.6 Special Low Income Pilot | 0.0852 | 0.5461 | 0.1792 | 0.8105 | \$0.90 |
| D1.7 Geothermal Time-of-Day | 0.0852 | 0.5461 | 0.1553 | 0.7866 | N/A |
| D1.8 Dynamic Peak Pricing | 0.0852 | 0.5461 | 0.1798 | 0.8111 | \$0.90 |
| D1.9 Electric Vehicle | 0.0852 | 0.5461 | 0.1763 | 0.8076 | N/A |
| D1.11 Standard TOU | 0.0852 | 0.5461 | 0.1792 | 0.8105 | \$0.90 |
| D2 Space Heating | 0.0852 | 0.5461 | 0.1736 | 0.8049 | \$0.90 |
| D5 Wtr Htg | 0.0852 | 0.5461 | 0.1727 | 0.8040 | N/A |
| D9 Outdoor Lighting | 0.0852 | 0.5461 | 0.1375 | 0.7688 | N/A |
| D) Gutdoor Eighting | 0.0032 | 0.3401 | 0.1373 | 0.7000 | 1071 |
| Commercial | | | | | |
| D1.1 Int. Space Conditioning | 0.0852 | See C9.6 | 0.1053 | | \$0.90 |
| D1.7 Geothermal Time –of- day | 0.0852 | See C9.6 | 0.0798 | | \$0.90 |
| D1.8 Dynamic Peak Pricing | 0.0852 | See C9.6 | 0.0956 | | \$0.90 |
| D1.9 Electric Vehicle | 0.0852 | See C9.6 | 0.2417 | | \$0.90 |
| D3 General Service | 0.0852 | See C9.6 | 0.1129 | | \$0.90 |
| D3.1 Unmetered | 0.0852 | See C9.6 | 0.1006 | | N/A |
| D3.2 Educ. Inst. | 0.0852 | See C9.6 | 0.0924 | | \$0.90 |
| D3.3 Interruptible | 0.0852 | See C9.6 | 0.0939 | | \$0.90 |
| D3.5 Charging | 0.0852 | See C9.6 | 0.1129 | | \$0.90 |
| D4 Large General Service | 0.0852 | See C9.6 | 0.1010 | | \$0.90 |
| D5 Wtr Htg | 0.0852 | See C9.6 | 0.1045 | | \$0.90 |
| D9 Outdoor Lighting | 0.0852 | See C9.6 | 0.1375 | | N/A |
| R3 Standby Secondary | 0.0852 | See C9.6 | 0.0274 | | \$0.90 |
| R7 Greenhouse Lighting | 0.0852 | See C9.6 | 0.0943 | | \$0.90 |
| R8 Space Conditioning | 0.0852 | See C9.6 | 0.1055 | | \$0.90 |
| | | | | | |
| Industrial | | | | | |
| D6.2 Educ. Inst. | 0.08 5 2 | See C9.6 | 0.0145 | | \$0.90 |
| D8 Interruptible Primary | 0.0852 | See C9.6 | 0.0096 | | \$0.90 |
| D10 Schools | 0.0852 | See C9.6 | 0.0173 | | \$0.90 |
| D11 Primary Supply | 0.0852 | See C9.6 | 0.0074 | | \$0.90 |
| D12 Large Low Peak | 0.0852 | See C9.6 | 0.0074 | | \$0.90 |
| D13 XL | N/A | See C9.6 | 0.0036 | | \$0.90 |
| R1.1 Metal Melting | 0.0852 | See C9.6 | 0.0085 | | \$0.90 |
| R1.2 Electric Process Heating | 0.0852 | See C9.6 | 0.0141 | | \$0.90 |
| R3 Standby Primary | 0.0852 | See C9.6 | 0.0274 | | \$0.90 |
| R10 Interruptible Supply | 0.08 5 2 | See C9.6 | 0.0036 | | \$0.90 |

(Continued on Sheet No. C-71.00)

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Michigan Public Service
Commission

January 25, 2023

Filed DW

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Detroit, Michigan

RATES EFFECTIVE FOR GAS SERVICE



This rate card is provided as a convenient reference. The MPSC approved Rate Book is the authoritative source for all rate information.

Issued By: Regulatory Affairs: Gas Strategy

March 2023

| | | | | | | | COMMODITY CHARGE PER 100 CUBIC FEET (Ccf) 1/ | | | | | | | | | | | |
|-------------------------|--------------------------------------|---------|----------------------------------|------------------------------------|----|--------------------------|--|---------------------------------------|----|------------------|----|---|----|--------------------------|----|---------------------------|----|--|
| Rate Schedule No. | Rate Schedules | | Monthly Customer Charge 2/ | Monthly IRM Surcharge 3/ | F | Held for uture Use 4/ | | Distribution Charge Non-Gas) 2/ | | GCR Factor 5/ | | Energy ste Reduction Surcharge 6/ | | Reservation Charge 7/ | F | Held for Future Use 8/ | Αp | Total Rate oplicable to larch 2023 Cycle |
| Α | Residential Rate 11/ | | | | | | | | | | | | | | | | | |
| | GCR | \$ | 13.50 | \$ 2.19000 | \$ | - | \$ | 0.38859 | \$ | 0.34000 | \$ | 0.03184 | \$ | 0.04500 | \$ | - | \$ | 0.80543 |
| | GCC | \$ | 13.50 | \$ 2.19000 | \$ | - | \$ | 0.38859 | \$ | - | \$ | 0.03184 | \$ | 0.01500 | \$ | - | \$ | 0.43543 |
| 2A | Multi-Family Dwelling Service Rate | | | | | | | | | | | | | | | | | |
| | Meter Class I | \$ | 13.50 | \$ 14.03000 | \$ | - | \$ | 0.38859 | \$ | 0.34000 | \$ | 0.05498 | \$ | 0.04500 | \$ | - | \$ | 0.82857 |
| | Meter Class II | \$ | 40.00 | \$ 14.03000 | \$ | - | \$ | 0.38859 | \$ | 0.34000 | \$ | 0.05498 | \$ | 0.04500 | \$ | - | \$ | 0.82857 |
| GS-1 | Non-Residential General Service 12/ | \$ | 40.00 | \$ 10.06000 | \$ | - | \$ | 0.38069 | \$ | 0.34000 | \$ | 0.05498 | \$ | 0.04500 | \$ | - | \$ | 0.82067 |
| GS-2 | Large Volume Rate 12/ | | | | | | | | | | | | | | | | | |
| | < 100,000 Mcf | \$ | 750.00 | \$ 10.06000 | \$ | _ | \$ | 0.31984 | \$ | 0.34000 | \$ | 0.05498 | \$ | 0.04500 | \$ | - | \$ | 0.75982 |
| | > 100,000 Mcf | \$ | 750.00 | \$ 10.06000 | \$ | - | \$ | 0.31984 | \$ | 0.34000 | \$ | 0.00470 | \$ | 0.04500 | \$ | - | \$ | 0.70954 |
| S | School Rate 12/ | \$ | 225.00 | \$ 133.5800 | \$ | - | \$ | 0.27736 | \$ | 0.34000 | \$ | 0.05498 | \$ | 0.04500 | \$ | - | \$ | 0.71734 |
| ST | Small Volume Transportation 13/ thru | 18/ | | | | | | | | | | | | | | | | |
| | Cost Based | \$ | 2,780.00 | \$ 507.240 | \$ | _ | \$ | 0.14906 | \$ | - | \$ | 0.00470 | \$ | - | \$ | - | \$ | 0.15376 |
| | Optional - Minimum | \$ | 2,780.00 | \$ 507.240 | \$ | - | \$ | 0.02300 | \$ | - | \$ | 0.00470 | \$ | - | \$ | - | \$ | 0.02770 |
| | Optional - Maximum | \$ | 2,780.00 | \$ 507.240 | \$ | - | \$ | 0.27512 | \$ | - | \$ | 0.00470 | \$ | - | \$ | - | \$ | 0.27982 |
| LT | Large Volume Transportation 13/ thru | 18/ | | | | | | | | | | | | | | | | |
| | Cost Based | \$ | 6,780.00 | \$ 2,466.620 | \$ | - | \$ | 0.09427 | • | - | \$ | 0.00470 | \$ | - | \$ | - | \$ | 0.09897 |
| | Optional - Minimum | \$ | -, | • | | - | \$ | 0.02300 | | - | \$ | 0.00470 | - | - | \$ | - | \$ | 0.02770 |
| | Optional - Maximum | \$ | 6,780.00 | \$ 2,466.620 | \$ | - | \$ | 0.16554 | \$ | - | \$ | 0.00470 | \$ | - | \$ | - | \$ | 0.17024 |
| XLT | Extra Large Volume Transportation 1 | 3/ thru | | | | | | | | | | | | | | | | |
| | Cost Based | \$ | 17,250.00 | 14,011.30 | | - | \$ | 0.07060 | | - | \$ | 0.00470 | | - | \$ | - | \$ | 0.07530 |
| | Optional - Minimum | \$ | 17,250.00 | 14,011.30 | | - | \$ | 0.01800 | | - | \$ | 0.00470 | • | - | \$ | - | \$ | 0.02270 |
| | Optional - Maximum | \$ | 17,250.00 | \$ 14,011.30 | \$ | - | \$ | 0.12321 | \$ | - | \$ | 0.00470 | \$ | - | \$ | - | \$ | 0.12791 |
| XXLT | Double Extra Large Volume Transporta | | 13/ thru 18/ | | | | _ | | | | | | | | | | | |
| | Cost Based | \$ | 169,835.00 | 3,502.510 | | - | \$ | 0.01933 | - | - | \$ | 0.00470 | - | - | \$ | - | \$ | 0.02403 |
| | Optional - Minimum | \$ | , | 3,502.510 | | - | \$ | 0.00500 | - | - | \$ | 0.00470 | - | - | \$ | - | \$ | 0.00970 |
| | Optional - Maximum | \$ | 169,835.00 | \$ 3,502.510 | \$ | - | \$ | 0.12321 | \$ | - | \$ | 0.00470 | \$ | - | \$ | - | \$ | 0.12791 |

Water, Sewer & Stormwater Rates

Effective July 1, 2022 Ann Arbor water bills will be charged according to the following rate structure, based on water meter readings.

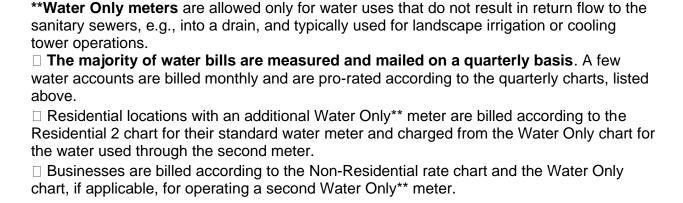


| | Residential 1 | Residential 2 | Water Only** | Non-Residential | Multi Family |
|---------------|--------------------|------------------|-------------------|------------------|-------------------|
| | Rate is based on | Rate when a | Rate for the | Rate | Rate |
| | a single water | second Water- | second meter | (Locations may | Locations with 3 |
| | meter used in a | Only meter is | for non-sewer | also have a | or more units |
| | home | also used in a | water uses, such | second, Water | |
| | | home | as for irrigation | Only** meter) | |
| 1-9 CCFs* | \$2.27 per CCF | \$2.27 per CCF | \$11.17per CCF | \$4.90 per CCF | \$2.73 per CCF |
| 10-18 CCFs* | \$3.63 per CCF | \$3.63 per CCF | \$11.17 per CCF | \$4.90 per CCF | \$2.73 per CCF |
| 19-36 CCFs* | \$8.41 per CCF | \$3.63 per CCF | \$11.17 per CCF | \$4.90 per CCF | \$2.73 per CCF |
| Over 36 CCFs* | \$18.02 per CCF | \$3.63 per CCF | \$11.17 per CCF | \$4.90 per CCF | \$2.73 per CCF |
| | | | | | |
| Water | \$26.74/quarter | \$26.74/quarter | \$26.74/quarter | Customer | Customer charge |
| Customer | for 5/8 inch and | for 5/8 inch and | for 5/8 inch and | charge varies by | varies by size of |
| Charge | 3/4 short | 3/4 short | 3/4 short | size of water | water meter |
| | standard | standard | standard | meter | |
| | residential | residential | residential | | |
| | meter; charge | meter; charge | meter; charge | | |
| | varies by meter | varies by meter | varies by meter | | |
| | size | size | size | 1 | 4 |
| Sewer Service | \$6.33 per CCF | \$6.33 per CCF | No sewer fees | \$6.33 per CCF | \$6.33 per CCF |
| Rate per CCF* | Resident 1 | | | | |
| | Summer sewer | | | | |
| | usage is | | | | |
| | calculated at | | | | |
| | winter water use | | | | |
| | rate, so the | | | | |
| | water used for | | | | |
| | outdoor activities | | | | |
| | is not charged to | | | | |
| _ | sewer | 17.00/ | | | |
| Sewer | 15.96/quarter for | 15.96/quarter | No charge | Customer | Customer charge |
| Customer | 5/8 inch and 3/4 | for 5/8 inch and | | charge varies by | varies by size of |
| Charge | short standard | 3/4 short | | size of water | water meter |
| | residential | standard | | meter | |
| | meter; charge | residential | | | |
| | varies by meter | meter; charge | | | |
| | size | varies by meter | | | |
| | | size | | | |

| Stormwater Discharge Fee | Refer to Stormwater section below | Not Applicable | Not Applicable | Refer to Stormwater section below | Refer to Stormwater section below |
|------------------------------------|---|--------------------------|--------------------------|---|---|
| Stormwater Charge+ | \$4.31 | Not Applicable | Not Applicable | \$4.31 | \$4.31 |
| Discount for bill paid by due date | 10% Savings available | 10% Savings available | 10% Savings available | 10% Savings available | 10% Savings available |

Notes to the above chart:

^{*1}CCF = 100 cubic feet = 748 gallons = a standard measurement of water.



+Stormwater Charge Rates

Stormwater rates are assessed based on the amount of impervious area—or hard surfaces such as roofs, driveways, patios—on the property. Individual property stormwater assessments are available online at www.a2gov.org/storm.

Single- and two-family residential properties are grouped into one of four tiers. The average percentage impervious square feet area for that tier is then used to calculate their quarterly storm water discharge fee. The impervious area is charged \$929.77/acre.

Tier 1: Less than or equal to 2187 square feet: will be billed for 3.706% of an impervious acre. (\$34.46)

Tier 2: Greater than 2187 to less than or equal to 4175 square feet will be billed for 6.486% of an impervious acre. (\$60.30)

Tier 3: Greater than 4175 to less than or equal to 7110 square feet will be billed for 11.118% of an impervious acre. (\$103.36)

Tier 4: Greater than 7110 square feet will be billed for 19.456% of an impervious acre. (\$180.90)

Commercial properties will be charged on their impervious area measurement, based on the same rate as the single- and two-family tiers (\$929.77 per impervious acre per quarter) plus the \$4.31 quarterly customer charge.

DEVELOPMENT CHARACTERISTICS

| HOUSING AGENCY Ann Arbor Housing | ı Commission |
|----------------------------------|--------------|
| | |

DEVELOPMENT CHARACTERISTICS CHART For Low-Rent Public Housing Program

| Developme | nt | Year | Building | Total # | # o | # of Units by Bedroom Size Resident-Paid Utilities (See* below) | | | | low) | Α/ | C? | | | | | |
|---------------|---------|-------|-------------------|---------|-----|---|---|---|---|------|----------|-------|-------|-------|-------|---------|--------|
| Name | HA Code | Built | Type** | Units | 0 | 1 | 2 | 3 | 4 | 5 | Electric | N Gas | Water | Sewer | Trash | Central | Window |
| Garden Circle | MI064 | 1971 | Detached House | 1 | - | - | - | 1 | - | - | m | m | m | m | m | m | - |
| | | | | | | | | | | | | | | | | | |
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^{*} Please indicate one of the following under each utility:

M (Master-Metered): The development has one master-meter per building and the Agency pays the utility bills.

I (Resident-Paid): There are individual meters for each unit and the resident pays the utility directly to the utility provider.

C (Check-Metered by agency): There are individual meters for each unit but the Agency pays the utility company and charges the resident for excess utility usage.

** Building Types: Apartment; Row House/Townhouse; Semi-Detached/Duplex; Detached House

Please provide a copy of your current utility allowances.

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CUSTOMIZATION FOR BASE REM/RATE MODELS

Housing Agency:

Ann Arbor Housing Commission

Customization & Energy Efficiency Measures for Base Ekotrope Models

Please check appropriate box(s) for **each development/property** and note if different for other bedroom sizes in property. NOTE: Use separate form if criteria is different for BR sizes or more than one building type per property. **Blue text represents energy efficiency measures/equipment.**

| Dev | elopment Name & No |) .: | | | GARDEN CIRCLE | | |
|-------|------------------------------------|-------------|--------------------------|------------|---------------------------------------|------------|---------------------------|
| Build | | | Structure Type: A | • | ☐ High-Rise ☐ RH ☐ | | |
| Resi | dent-Paid Utilities: | | | | | Tra: | |
| | | | I Utilities: Electric | | | 11 0. | 511 |
| _ | | | | | ency) (Stop here if ALL utilities | are N | Master Metered) |
| Bec | lroom Sizes: ☐ OBR/E | EFF (_ | _) 🛘 1BR () 🗘 2BR (_ | _) > | X 3BR () □ 4BR () □ 5BF | २ () | ☐ 6BR (<u></u>) |
| 1 | Foundation Type: | | Concrete Slab | | Pier-Beam (Crawl Space) | X | Basement |
| 2 | Window Type: | | Single Pane | | Double Pane Low-E | X | Double Pane/Vinyl |
| 3 | U-Factor: # of Stories in Unit: | SHG | • | r He | at Gain Coefficient) | | Building has multiple |
| 4 | Exterior Veneer/Clad | lding | : Siding A Brick | Stu | cco 🗆 Other: | | stories |
| | HVAC Heating Fuel: | | Electric | Y | Natural Gas | | Other: |
| | Is Heating Individual | v Me | • | | Yes | Y | No |
| | Heating Type: | | Electric Baseboard | | Forced Air Furnace/Wall unit (80 AFUE | | Central Boiler (radient) |
| | Energy Efficiencies | | Heat Pump | | Forced Air Furnace w/duc | | |
| | | leat | Pump Efficiency Rating | g: S | EER: HSPF: | | |
| | | | Solar Panels Installed | X | (High Efficiency) Gas Furna | ace | (90 AFUE) |
| 5d | Heating Equipment L | _ | ion: | u , | _ | | |
| | | X | Conditioned Space | | Unconditioned Space (att | ic/g | arage) |
| 5e | Air Conditiioning: | X | 'es ∐ No Type: □ |] W | indow Unit X Central | Ton | age: |
| 6 | Air Ducts: | X | Yes | | No | | |
| | If Yes, Location: | X | Conditioned Space | | Unconditioned Space (att | ic) | |
| 7a | Water Heater: | | Electric (30 gal) | X | Natural Gas (30 gal) | | Oil |
| | 40-50 gallon | | Elec Tank .90 EF | | Gas Tank .58 EF | (add | Solar Water Heating |
| | | | Elec Tank .95 EF | | Gas Tank .62 EF | tuuu | monar mormanon is needed? |
| | | | Elec Tankless | | Gas Tankless .80 EF or high | er | |
| 7b | Water Heater Type: | X | Individual units | | Central Boiler | | |
| 7c | Water Htr Location: | | Conditioned Space | | Unconditioned Space (att | ic/g | arage) |
| 8 | Stove/Range: | X | Electric | | Natural Gas | | |
| 9 | Energy Efficiencies: | | | | 1 | | 1 |
| | Insulation: | | Ceiling (R-20) (min.) | | Ceiling (R-38) | X | Wall (R-13) |
| | | X | Ceiling (R-30) | | Ceiling (R-49) | <u></u> | Wall (R-19) |
| | Low Flow Water: | X | Shower, Faucets, Toilets | | Lighting: 100% CFL | 1 0 | 0% LED |
| 10 | ☐ GeoThermal (H | VAC | and DHW) COP Rating | g: _ | | | |
| Note | es/Comments: | | | | | | |
| | | | | | | | |

DEVELOPMENT REPORTS

Fuel Summary

Property

Ann Arbor Housing Commission, MI Ann Arbor, MI 48103 Model: DH_3BR

Garden Circle_DH_3BR

Organization

Fox Energy Specialists James Rodriguez

Builder

Ann Arbor Housing Commission

Inspection Status Results are projected



Default Gas Provider

| Annual | Energy | Cost |
|----------|---------|------|
| Alliluai | Lileigy | CUSI |

Natural Gas

| Natural Gas | \$346 |
|--|--------------------------|
| Electric | \$501 |
| Electric | \$501 |
| Annual End-Use Cost | |
| Heating | \$233 |
| Cooling | \$0 |
| Water Heating | \$88 |
| Lights & Appliances | \$407 |
| Onsite Generation | -\$0 |
| Service Charges | \$120 |
| Total | \$847 |
| Annual End-Use Consumption | |
| Heating [Natural Gas Therms] | 396.2 |
| Heating [Electric kWh] | 430.6 |
| Hot Water [Natural Gas Therms] | 176.0 |
| Lights & Appliances [Electric kWh] | 5,084.7 |
| Total [Natural Gas Therms] | 572.2 |
| Total [Electric kWh] | 5,515.3 |
| Total Onsite Generation [Electric kWh] | 0.0 |
| Peak Electric Consumption | |
| Peak Winter kW | 0.67 |
| Peak Summer kW | 0.89 |
| Utility Rates | |
| Electricity | Default Electric Provide |
| | |

Lighting and Appliances

Property

Ann Arbor Housing Commission, MI Ann Arbor, MI 48103 Model: DH 3BR

Garden Circle_DH_3BR

Organization

Fox Energy Specialists James Rodriguez

Builder

Ann Arbor Housing Commission

Inspection Status Results are projected



ANNUAL SUMMARY

| Summary | Consumption | Annual Cost [\$] |
|------------------------------------|-------------|------------------|
| Lighting [kWh/Year] | 1,428.5 | 114 |
| Electric Appliances [kWh/Year] | 3,656.2 | 292 |
| Fossil Fuel Appliances [MBtu/Year] | 0.0 | 0 |
| Total | - | 407 |

LIGHTING

| Lighting Scheme | Consumption [kWh/Year] | Annual Cost [\$] |
|-------------------|------------------------|------------------|
| Interior Lighting | 1,282.2 | 103 |
| Exterior Lighting | 146.3 | 12 |
| Garage Lighting | 0.0 | 0 |
| Total | 1,428.5 | 114 |

FOSSIL FUEL APPLIANCES

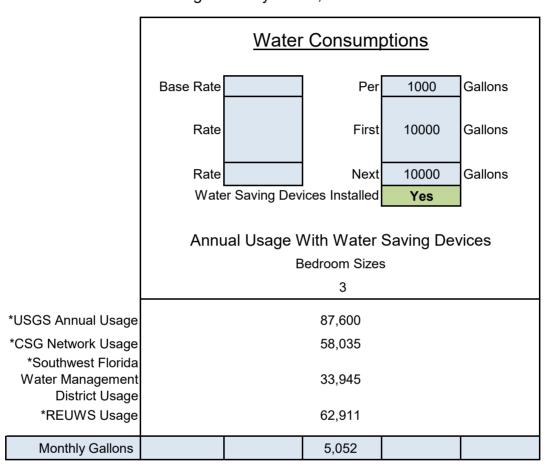
| Appliance Type | Consumption [MBtu/Year] | Annual Cost [\$] |
|----------------|-------------------------|------------------|
| Clothes Dryer | 0.0 | 0 |
| Range/Oven | 0.0 | 0 |
| Total | 0.0 | 0 |

ELECTRIC APPLIANCES

| Appliance Type | Consumption [kWh/Year] | Annual Cost [\$] |
|------------------------|------------------------|------------------|
| Dishwasher | 266.7 | 21 |
| Range/Oven | 448.0 | 36 |
| Refrigerator | 529.0 | 42 |
| Clothes Dryer | 736.7 | 59 |
| Clothes Washer | 99.1 | 8 |
| Mechanical Ventilation | 0.0 | 0 |
| Ceiling Fan | 115.0 | 9 |
| Television | 620.0 | 50 |
| Miscellaneous | 841.8 | 67 |
| Total | 3,656.2 | 292 |

Average Water Consumptions

Housing Authority Name, State



^{*}Source: Highlighted Cells are using an average of the USGS, CSG Network, Southwest Florida Water Management Calculators and Residential End Uses Water Study

CURRENTLY ADOPTED UTILITY ALLOWANCES

Utility Allowance Schedule

See Public Reporting and Instructions on back.

U.S Department of Housing and Urban Development

Office of Public and Indian Housing

OMB Approval No. 2577-0169 exp. 7/31/2022

The following allowances are used to determine the total cost of tenant-furnished utilities and appliances.

| Locality/PHA | Unit Type | Date (mm/dd/yyyy) |
|------------------------------|---------------|-------------------|
| | | |
| Ann Arbor Housing Commission | Single Family | 07/01/2021 |

| Utility or Service | 0 BR | 1 BR | 2 BR | 3 BR | 4 BR | 5 BR | 6 BR | 7 BR | 8 BR | 9 BR |
|---------------------------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | |
| Heat Natural gas | 32 | 43 | 51 | 65 | 73 | 85 | 98 | 111 | 0 | 0 |
| Heat Electric | 68 | 92 | 110 | 139 | 157 | 183 | 210 | 238 | 0 | 0 |
| Heat bottle gas | 73 | 99 | 118 | 149 | 168 | 196 | 225 | 254 | 0 | 0 |
| Heat Fuel Oil | 81 | 110 | 131 | 165 | 187 | 217 | 250 | 283 | 0 | 0 |
| Cooking Bottle Gas | 8 | 11 | 14 | 18 | 22 | 24 | 27 | 31 | 0 | 0 |
| Cooking Electric | 11 | 14 | 19 | 24 | 29 | 32 | 36 | 41 | 0 | 0 |
| Water Fuel Oil | 11 | 14 | 19 | 24 | 30 | 32 | 37 | 41 | 0 | 0 |
| Refrigerator | 4 | 4 | 5 | 5 | 5 | 7 | 7 | 7 | 0 | 0 |
| Electric | 39 | 49 | 66 | 82 | 102 | 110 | 126 | 143 | 0 | 0 |
| water | 16 | 20 | 24 | 32 | 37 | 44 | 50 | 59 | 0 | 0 |
| Range | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 |
| Sewer | 36 | 49 | 63 | 80 | 90 | 103 | 116 | 129 | 0 | 0 |
| Cooking Natural Gas | 4 | 5 | 6 | 8 | 10 | 10 | 12 | 13 | 0 | 0 |
| Water Heating Bottle gas | 10 | 13 | 18 | 22 | 27 | 29 | 34 | 38 | 0 | 0 |
| Water Heater Electric | 14 | 17 | 23 | 29 | 36 | 39 | 45 | 50 | 0 | 0 |
| Water Heating Natural Gas | 4 | 6 | 8 | 10 | 12 | 13 | 15 | 17 | 0 | 0 |
| Air Conditioning | 15 | 19 | 25 | 32 | 38 | 42 | 48 | 54 | 0 | 0 |

| Actual Family Allowances – May be used by the family to compute allowance while | Utility/Service/Appliance | Allowance |
|---|---------------------------|-----------|
| searching for a unit. | | |
| Unit 2072GARD | | |
| Head of Household Name | | |
| MONIKA Martinez-Oviedo | | |
| Unit Address | | |
| | | |
| 2072 GARDEN CIRCLE | | |
| ANN ARBOR, MI48103 | | |
| Number of Bedrooms | | |
| 3 | | |
| | | |

PHAs must maintain a completed HUD Form-52667 Utility Allowance Schedule for each unit type that is typical in the PHA's jurisdiction. The utility allowance schedule is based on the typical cost of utilities and services paid by energy-conservation households that occupy housing of similar size and type in the same locality. In developing the schedule, the PHA must use normal patterns of consumption for the community as a whole and current utility rates.

This form includes the utilities that the PHA must consider: heating (space), cooking, other electric (e.g. lights, appliances, general usage), air conditioning (if the majority of housing units in the market provide centrally air-conditioned units or there is appropriate wiring for tenant-installed air conditioners), water heating, water, sewer, trash, the cost to provide a range, and the cost to provide a refrigerator. This form includes several fuel types, however, the PHA is not required to have a utility allowance for every fuel type listed on the form. The PHA is only required to have an allowance for the fuel types that are typical in the PHA's jurisdiction.

Electric resistance vs. electric heat pump: The most recent update to the HUD-52667 includes "Electric Heat Pump" as a fuel type under "Heating". PHAs may choose to provide an allowance on the schedule for electric (resistance), electric heat pump, or both. Heat pumps are more efficient and are associated with lower consumption. By adding this to the form, HUD is not requiring PHAs to consider both. This is up to the PHA, however, the HUD Utility Schedule Model tool available on HUDUser.gov provides an allowance for both electric resistance and electric heat pump.

Determining Allowances: In general, PHAs use local sources of information on the cost of utilities and services, such as:

- 1. Electric utility suppliers
- 2. Natural gas utility suppliers
- 3. Water and sewer suppliers
- 4. Fuel oil and bottled gas suppliers
- 5. Public service commissions
- 6. Real estate and property management firms
- 7. State and local agencies
- 8. Appliance sales and leasing firms

PHAs may use the HUD Utility Schedule Model (HUSM) available on HUDuser.org to determine their Utility Allowance Schedules. The tool uses geographic-specific utility consumption rates combined with user entered data on utility rates to determine the overall monthly allowance.

The public reporting burden for this information collection is estimated to be up to 0.25 hours, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The Department of Housing and Urban Development (HUD) is authorized to collect the information on this form by Section 8 of the U.S. Housing Act (42 U.S.C. 1437f). Form is only valid if it includes an OMB Control Number.

Privacy Act Statement: The Department of Housing and Urban Development (HUD) is authorized to collect the information required on this form by Section 8 of the U.S. Housing Act of 1937 (42 U.S.C. 1437f). Collection of family members' names and unit address, and owner's name and payment address is mandatory. The information is used to provide Section 8 tenant-based assistance under the Housing Choice Voucher program in the form of housing assistance payments. The information also specifies what utilities and appliances are to be supplied by the owner, and what utilities and appliances are to be supplied to the tenant. HUD may disclose this information to Federal, State, and local agencies when relevant to civil, criminal, or regulatory investigations and prosecutions. It will not be otherwise disclosed or released outside of HUD, except as permitted or required by law. Failure to provide any of the information may result in delay or rejection of family or owner participation in the program.



INTRODUCTION TO EKOTROPETM SOFTWARE PROGRAM

1. EkotropeTM Software Design Objective

Ekotrope – Residential Energy Analysis and Rating Software Program is a sophisticated, residential energy analysis, code compliance and rating software program. Ekotrope calculates heating, cooling, hot water, lighting, and appliance energy loads, consumption and costs for new and existing single and multi-family homes.

Ekotrope operates in Windows and has many unique features, including a simplified input procedure, extensive component libraries, automated energy efficient improvement analysis, duct conduction and leakage analysis, latent and sensible cooling analysis, lighting and appliance audit, and active and passive solar analysis.

A home energy rating is calculated based on the proposed Department of Energy (DOE) Home Energy Rating System (HERS) guidelines (10 CFR 437) as modified by the RESNET/NASEO (Residential Energy Service Network/National Association of State Energy Officials) HERS Technical Committee. Ekotrope also creates value added information including energy appraisal addendum, energy code compliance (Model Energy Code (MEC) and American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)), improvement analysis (existing homes), design optimization (new homes), heating and cooling equipment sizing and U.S. Environmental Protection Agency (EPA) Energy Star Home analysis.

2. Use of Ekotrope in Utility Allowance Development

Ekotrope utilizes an Engineering approach to calculate the consumption allowance for various types of new and existing homes. The Ekotrope software program is recognized and approved by EPA, DOE and HUD.

The Nelrod Company is accredited and licensed by HERS/RESNET and a certified and licensed Ekotrope provider and user. We have successfully conducted energy home rating and energy audits using this software for over 31,550 reports. The information from our past experience and these reports is used to develop models for the most common building types and bedroom sizes, which in turn are utilized in developing average monthly utility allowances.

3. Basic Procedures

The data needed for this program is collected either from the building/site plans provided and/or from a site visit. Building type models are developed for the most common building types (Single-Family Detached House, Semi-Detached/Duplex, Row/Townhouse, Multi-Family Walk-Up, and Manufactured Homes) and bedroom sizes. The program

calculates heating, cooling, hot water, lighting and appliances energy load, consumption and cost based on home's design and construction features as well as climate and energy cost data.

The calculations are conducted following the Residential Energy Services Network (RESNET) Home Energy Rating System (HERS) technical guidelines, developed in cooperation with, US DOE, US Department of Veterans Affairs (USVA), HUD, and the National Association of State Energy Officials (NASEO) as the rating system used to determine energy usage in new and existing construction. The guidelines were established as the only national standard for determining energy savings based on construction types and local (community-wide) geographical locations. It estimates the annual energy quantity a home will require and the cost of that energy based on local utility rates. The guidelines make assumptions about the size and lifestyle of the family who will occupy the home. These assumptions are based on nationally accepted standards developed by the US DOE, American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and US EPA. Such assumptions include occupancy rates of 2 persons for the first bedroom and one additional person for each additional bedroom; thermostat setting of 68° Fahrenheit for heating and 78° Fahrenheit for cooling, which is the recommended setting for an energy conserving household. To determine water heater energy usage, tap water temperatures are adjusted for local geographical locations and 120° thermostat settings are used, which is considered energy conservative. In addition, architectural components are considered such as square footages, number of stories, insulation R-values, wall materials, mechanical equipment types and efficiencies.

The Ekotrope software utilizes default standards based on national trends. (See details following this introduction.) If there are no local surveys available regarding residential lifestyles, a residential rental market study can be conducted to gather data on the most common household amenities, such as, dishwashers, clothes washers and dryers, microwaves, and size of refrigerators.

Additionally, the Agency can provide architectural characteristics concerning common foundation types, exterior siding, and other structure features for their area. This information will be used to further adjust the building type models.

4. Input Values and Determination

Ekotrope provides two levels of inputs: simplified and detailed. Simplified inputs use general design characteristics and built–in algorithms to determine the results. We use detailed inputs which provide the user greater control over calculational values and development of common building type models.

The various input parameters are as follows:

- Location List of US and Canadian locations;
- Energy costs create or modify various utility rates based on the existing market;
- Building Component data Foundation type, Opaque wall constructional details, window/skylights conduction and solar gain values, type of ceilings and doors, heating equipment, cooling equipment, water heating equipment, various types of lights and appliances used.

These values are determined either from verified conditions/site visits or from the building plans. A Certified IECC (International Energy Conservation Code) Inspector/HERS/RESNET (Home Energy Rating Systems/Residential Energy Services Network) Rater inputs characteristics from building plans and/or from documentation gathered from an on-site inspection of the physical, structural and mechanical details. We use the criteria from our past experience to develop models for common building types and bedroom sizes.

Climate data is available for cities and towns throughout North America. This data is updated periodically with new versions of the Ekotrope software program.

Extensive utility libraries can be created and maintained for specific utility provider rates and charges and are available to apply to consumption data to determine local utility allowances.

5. Output Values, Interpretation and Use for Utility Allowances

Fifty-six preformatted reports are available for viewing on screen or printing. Reports include energy use, energy cost, design loads, rating, quick report, improvement analysis, code compliance, and economic analysis of energy upgrades.

Reports are generated from the building type models in the Ekotrope software program and analyzed for consumption usage totals by energy end-use categories. (Fuel Summary and Lights & Appliance Summary.)

PUBLIC HOUSING HUD REGULATIONS 24 CFR 965. SUBPART E RESIDENT ALLOWANCES FOR UTILITIES

TITLE 24--HOUSING AND URBAN DEVELOPMENT

CHAPTER IX OFFICE OF ASSISTANT SECRETARY FOR PUBLIC AND INDIAN HOUSING, DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

PART 965: PHA-OWNED OR LEASED PROJECTS GENERAL PROVISIONS

Subpart E--Resident Allowances for Utilities

Source: 61 FR 7971, Feb. 29, 1996, unless otherwise noted.

Sec. 965.501 Applicability.

- (a) This subpart E applies to public housing, including the Turnkey III Homeownership Opportunities program. This subpart E also applies to units assisted under sections 10(c) and 23 of the U. S. Housing Act of 1937 (42 U.S.C. 1437 et seq.) as in effect before amendment by the Housing and Community Development Act of 1974 (12 U.S.C. 1706e) and to which 24 CFR part 900 is not applicable. This subpart E does not apply to Indian housing projects (see 24 CFR part 950).
- **(b)** In rental units for which utilities are furnished by the PHA but there are no checkmeters to measure the actual utilities consumption of the individual units, residents shall be subject to charges for consumption by resident-owned major appliances, or for optional functions of PHA-furnished equipment, in accordance with Sec. 965.502(e) and 965.506(b), but no utility allowance will be established.

Sec. 965.502 Establishment of utility allowances by PHAs.

- (a) PHAs shall establish allowances for PHA-furnished utilities for all check-metered utilities and allowances for resident-purchased utilities for all utilities purchased directly by residents from the utilities suppliers.
- **(b)** The PHA shall maintain a record that documents the basis on which allowances and scheduled surcharges, and revisions thereof, are established and revised. Such record shall be available for inspection by residents.
- (c) The PHA shall give notice to all residents of proposed allowances, scheduled surcharges, and revisions thereof. Such notice shall be given, in the manner provided in the lease or homebuyer agreement, not less than 60 days before the proposed effective date of the allowances or scheduled surcharges or revisions; shall describe with reasonable particularity the basis for determination of the allowances, scheduled surcharges, or revisions, including a statement of the specific items of equipment and function whose utility consumption requirements were included in determining the amounts of the allowances or scheduled surcharges; shall notify residents of the place where the PHA's record maintained in accordance with paragraph (b) of this section is available for inspection; and shall provide all residents an opportunity to submit written comments during a period expiring not less than 30 days before the proposed effective date of the allowances or scheduled surcharges or revisions. Such written comments shall be retained by the PHA and shall be available for inspection by residents.

- **(d)** Schedules of allowances and scheduled surcharges shall not be subject to approval by HUD before becoming effective, but will be reviewed in the course of audits or reviews of PHA operations.
- **(e)** The PHA's determinations of allowances, scheduled surcharges, and revisions thereof shall be final and valid unless found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.

Sec. 965.503 Categories for establishment of allowances.

Separate allowances shall be established for each utility and for each category of dwelling units determined by the PHA to be reasonably comparable as to factors affecting utility usage.

Sec. 965.504 Period for which allowances are established.

- (a) PHA-furnished utilities. Allowances will normally be established on a quarterly basis; however, residents may be surcharged on a monthly basis. The allowances established may provide for seasonal variations.
- **(b)** Resident-purchased utilities. Monthly allowances shall be established. The allowances established may provide for seasonal variations.

Sec. 965.505 Standards for allowances for utilities.

- (a) The objective of a PHA in designing methods of establishing utility allowances for each dwelling unit category and unit size shall be to approximate a reasonable consumption of utilities by an energy-conservative household of modest circumstances consistent with the requirements of a safe, sanitary, and healthful living environment.
- **(b)** Allowances for both PHA-furnished and resident-purchased utilities shall be designed to include such reasonable consumption for major equipment or for utility functions furnished by the PHA for all residents (e.g., heating furnace, hot water heater), for essential equipment whether or not furnished by the PHA (e.g., range and refrigerator), and for minor items of equipment (such as toasters and radios) furnished by residents.
- **(c)** The complexity and elaborateness of the methods chosen by the PHA, in its discretion, to achieve the foregoing objective will depend upon the nature of the housing stock, data available to the PHA and the extent of the administrative resources reasonably available to the PHA to be devoted to the collection of such data, the formulation of methods of calculation, and actual calculation and monitoring of the allowances.
- **(d)** In establishing allowances, the PHA shall take into account relevant factors affecting consumption requirements, including:
- (1) The equipment and functions intended to be covered by the allowance for which the utility will be used. For instance, natural gas may be used for cooking, heating domestic water, or space heating, or any combination of the three;
 - (2) The climatic location of the housing projects;
 - (3) The size of the dwelling units and the number of occupants per dwelling unit;

- (4) Type of construction and design of the housing project;
- (5) The energy efficiency of PHA-supplied appliances and equipment;
- **(6)** The utility consumption requirements of appliances and equipment whose reasonable consumption is intended to be covered by the total resident payment;
- (7) The physical condition, including insulation and weatherization, of the housing project;
- (8) Temperature levels intended to be maintained in the unit during the day and at night, and in cold and warm weather; and
 - (9) Temperature of domestic hot water.
- (e) If a PHA installs air conditioning, it shall provide, to the maximum extent economically feasible, systems that give residents the option of choosing to use air conditioning in their units. The design of systems that offer each resident the option to choose air conditioning shall include retail meters or check-meters, and residents shall pay for the energy used in its operation. For systems that offer residents the option to choose air conditioning, the PHA shall not include air conditioning in the utility allowances. For systems that offer residents the option to choose air conditioning but cannot be check-metered, residents are to be surcharged in accordance with Sec. 965.506. If an air conditioning system does not provide for resident option, residents are not to be charged, and these systems should be avoided whenever possible.

Sec. 965.506 Surcharges for excess consumption of PHA-furnished utilities.

- (a) For dwelling units subject to allowances for PHA-furnished utilities where checkmeters have been installed, the PHA shall establish surcharges for utility consumption in excess of the allowances. Surcharges may be computed on a straight per unit of purchase basis (e.g., cents per kilowatt hour of electricity) or for stated blocks of excess consumption, and shall be based on the PHA's average utility rate. The basis for calculating such surcharges shall be described in the PHA's schedule of allowances. Changes in the dollar amounts of surcharges based directly on changes in the PHA's average utility rate shall not be subject to the advance notice requirements of this section.
- **(b)** For dwelling units served by PHA-furnished utilities where Check-meters have not been installed, the PHA shall establish schedules of surcharges indicating additional dollar amounts residents will be required to pay by reason of estimated utility consumption attributable to resident-owned major appliances or to optional functions of PHA-furnished equipment. Such surcharge schedules shall state the resident-owned equipment (or functions of PHA-furnished equipment) for which surcharges shall be made and the amounts of such charges, which shall be based on the cost to the PHA of the utility consumption estimated to be attributable to reasonable usage of such equipment.

Sec. 965.507 Review and revision of allowances.

(a) Annual review. The PHA shall review at least annually the basis on which utility allowances have been established and, if reasonably required in order to continue

adherence to the standards stated in Sec. 965.505, shall establish revised allowances. The review shall include all changes in circumstances (including completion of modernization and/or other energy conservation measures implemented by the PHA) indicating probability of a significant change in reasonable consumption requirements and changes in utility rates.

(b) Revision as a result of rate changes. The PHA may revise its allowances for resident-purchased utilities between annual reviews if there is a rate change (including fuel adjustments) and shall be required to do so if such change, by itself or together with prior rate changes not adjusted for, results in a change of 10 percent or more from the rates on which such allowances were based. Adjustments to resident payments as a result of such changes shall be retroactive to the first day of the month following the month in which the last rate change taken into account in such revision became effective. Such rate changes shall not be subject to the 60 day notice requirement of Sec. 965.502(c).

Sec. 965.508 Individual relief.

Requests for relief from surcharges for excess consumption of PHA-purchased utilities, or from payment of utility supplier billings in excess of the allowances for resident-purchased utilities, may be granted by the PHA on reasonable grounds, such as special needs of elderly, ill or disabled residents, or special factors affecting utility usage not within the control of the resident, as the PHA shall deem appropriate. The PHA's criteria for granting such relief, and procedures for requesting such relief, shall be adopted at the time the PHA adopts the methods and procedures for determining utility allowances. Notice of the availability of such procedures (including identification of the PHA representative with whom initial contact may be made by residents), and the PHA's criteria for granting such relief, shall be included in each notice to residents given in accordance with Sec. 965.502(c) and in the information given to new residents upon admission.

SAMPLE NOTICE

HOUSING AUTHORITY OF THE CITY OF _______ NOTICE OF PROPOSED UTILITLY ALLOWANCES

DATE:

| DATE | |
|--|--|
| O: ALL PUBLIC HOUSING RESIDENTS | |
| he PHA has completed its annual review of the Public Housing Utility Allowances and ncourages residents to review the proposed utility allowances and support documentation. esidents may also provide written comments. | |
| ursuant to regulation 24 CFR 965.502, the Housing Authority of the City of hereby provides 60 days' notice to the public housing residents of the proposed utility llowances. | |
| ATES AVAILABLE FOR REVIEW: TO | |
| he PHA records and documents that provide the basis for the proposed utility allowances are vailable for review and comment during the dates listed above and at the following location: | |
| NOTE to PHA: Dates reflected above should be 30 days from date of notice. Below choose a location and provide address and time available for review. | |
| PHA's main administrative office (provide address) PHA development site management office (provide address) Other: (provide address) | |
| hanges were made due to: | |
| ANNUAL UPDATE (for Resident-paid utilities directly to utility companies) NEW SCHEDULED SURCHAGES (for Check-metered utilities surcharged for | |
| excess usage of PHA-paid utilities) REVISIONS TO: (UTILITY ALLOWANCES OR SCHEDULED SURCHARGES) | |
| asis of determination: | |
| NOTE to PHA: specific items of equipment and function whose utility consumption requirements were included in determining the amount of the allowances is stated in the review documents | |
| he PHA will gather all comments and review them at the close of the comment period. The HA will respond to comments within days of the close of the comment period. Such written comments will be retained by the PHA and shall be available for espection by residents. | |
| ROPOSED EFFECTIVE DATE OF IMPLEMENTATION: | |
| | |

*Requests for relief from surcharges for excess consumption, payment of supplier billings in excess of the allowances for resident purchased utilities, may be granted by the PHA on reasonable grounds, such as special needs for the elderly, ill or disabled residents, or special factors, on a case by case basis. Such relief may be initiated by the verbal or written making of such request as an accommodation.

INSTRUCTIONS FOR RESIDENT NOTICE OF PROPOSED UTILITY ALLOWANCES

Dear Housing Agency:

Attached is a Sample Notice for the 60-Day Notice of Proposed Utility Allowances with 30-Day Comment Period (required in HUD regulations 24 CFR 965.502),

Please adapt this sample notice to your needs and copy onto your Agency's letterhead. Be sure to remove all red and blue written print (these are notes to the Agency for explanation and completion of this form). Check boxes have also been provided to give the Agency choices to fit their needs.

Note: be sure to check your policies and Lease Agreement/homebuyer agreement for compliance regarding providing notification.

Review documents should be kept in a central location.

The PHA should get Board approval before setting an effective date of implementation.

Special Note: HUD regulations do not say that the PHA has to change the proposed utility allowances due to a resident's comment, but that "The PHA's determinations of allowances, scheduled surcharges, and revisions thereof shall be final and valid unless found to be arbitrary, capricious, an abuse of discretion or otherwise not in accordance with the law."