



# City of Manistee Housing Commission

273 6th Avenue • Manistee, Michigan 49660

**Tuesday, September 22, 2020**  
**Meeting Agenda**  
**4:00 PM – VIRTUAL MEETING**

Good afternoon. Today is Tuesday, September 22, 2020. I am Clinton McKinven-Copus, Executive Director and Secretary for the City of Manistee Housing Commission. The Housing Commission's September 22, 2020, Regular Meeting is being conducted remotely. Members of the Board of Commissioners are in separate locations and not at the normal meeting location of the Harborview Community Room. President Priester will call the meeting to order shortly.

There will be no video associated with this meeting; it will be solely audio. The reason for this is projecting video through Zoom sometimes causes a delay, which makes communication in this scenario difficult and awkward.

In just a moment, we will start individually unmuting the microphones of each member of the Housing Commission Board. We are unmuting them individually to make sure there is no disruptive audio feedback coming from each of them. Individually unmuting the calls allows us to identify the source of any disruptive audio issues easily. Program Director Lindsay McIntyre is assisting me with this meeting, and you may hear her voice if we have an issue that requires her assistance.

The microphones of all members of the Housing Commission Board, Ms. McIntyre, and myself will always be live unless there is an audio disruption. Ms. McIntyre will now begin to unmute and check each microphone that will be live during the meeting.

***We will now activate microphones one by one and individually call on each Housing Commission Board member to confirm they can hear and be heard. Once complete, the Executive Director/Secretary will continue reading below.***

As a reminder, Housing Commission Board members, please clearly state your name before speaking or making a motion or a second. Roll call will be taken by the Executive Director/Secretary, as usual.

Now that activating the microphones is complete, President Dale Priester will call the meeting to order.

President Priester, we are ready to proceed with the meeting.

**1. Call to Order/Roll Call**

The Commission Secretary/Executive Director shall make a written record of Commissioner attendance.

**2. Amendments to Agenda**

**3. Public Comments on Agenda Related Items**

All individuals attending the virtual meeting will wait in a virtual waiting room, with their microphones muted. When it comes time for the public comment, each person waiting in the virtual waiting room will be called individually by the last four digits of their telephone number. Individuals will be asked if they have a comment on an agenda item or if they are passing.

It is **very important** that those giving comments have a good phone connection and no sound or noise whatsoever in the background (televisions and all forms of audio should be muted); otherwise, there will be disruptive audio. If the caller cannot correct the issue, we will move on to the next person in line.

Please be aware that for those calling, when they first call in, their full telephone number may be visible for a period of time on the recording, although we will work quickly to alter what's displayed so that it is just the last four digits of your telephone number.

*At this time, citizens who wish to comment on items related to the agenda may do so. The City of Manistee Housing Commission's Public Comment Policy limits each individual to a three [3] minute statement.*

***We will now unmute and call on each person who has called into the meeting by the last four digits of their phone number and ask if they would like to comment on an agenda related item. Once complete, the meeting back will be turned back over to President Priester.***

**4. Consent Agenda**

*Agenda items marked with an [\*] are on the consent agenda and considered by the Executive Director to be routine matters. Prior to approval of the Consent Agenda, Commissioners may remove an item from the Consent Agenda. Items removed from the consent agenda will come before the Commissioners, as stated on the agenda.*

*Consent Agenda items include:*

**a. Approval of Minutes\***

- i. Regular Meeting Minutes, August 25, 2020
- ii. Executive Session Minutes, August 25, 2020

**b. Financial Reports**

*Financial documents are redacted in compliance with the requirements of the Federal Privacy Act. All personally identifying information of current and past program participants has been redacted.*

**i. Public Housing Financial Statements\***

- 1. Public Housing Financial Statement
  - a. Not available from our accountant

- 2. **Public Housing Bank Reconciliation\***
  - a. Not available from our accountant
- 3. **Public Housing Current Year vs. Prior Year\***
  - a. Not available from our accountant

ii. **Domestic Violence Grant Program\***

- 1. **Domestic Violence Grant Program Financial Statement**
  - a. Not available from our accountant
- 2. **Domestic Violence Bank Reconciliation**
  - a. Not available from our accountant

iii. **Security Deposits Reconciliation\***

- 1. **Security Deposit Reconciliation**
  - a. To be published with financial statements received from our accountant

c. **Resolutions**

*Consent Agenda resolutions are matters of compliance with the U.S. Department of Housing and Urban Development or federal law that requires the adoption of a policy or provision of public housing benefits. The contents of these Resolutions, items of compliance, policy, and regulation are not debatable but are required to maintain regulatory compliance.*

- i. Resolution 2020-09 Passbook Savings Rate December 1, 2020 – November 30, 2021\*
- ii. Resolution 2020-10 Flat Rent Schedule January 1, 2021 – December 31, 2021\*
- iii. Resolution 2020-11 Resident Utility Allowance Effective December 1, 2021\*

5. **Old Business**

- a. *None*

6. **New Business**

- a. Resolution 2020-09 Passbook Savings Rate December 1, 2020 – November 30, 2021\*
- b. Resolution 2020-10 Flat Rent Schedule January 1, 2021 – December 31, 2021\*
- c. Resolution 2020-11 Resident Utility Allowance Effective December 1, 2021\*

7. **Reports and Communications**

*At this time, the Commissioners may receive reports or Communications from:*

- a. Executive Director Report
- b. Staff Reports
- c. Commissioner Reports/Comments
- d. Received Communications

8. **Public Comment**

*At this time, citizens may comment on general Housing Commission affairs. The Commission President may recognize citizens in attendance who wish to comment. Citizen comments are not limited to agenda items but should be directed to Housing Commission services, activities, or areas of involvement. The City of Manistee Housing Commission Public Comment Policy limits each individual to a three [3] minute statement. The City of Manistee Housing Commission will receive public comments at this time and will respond at a later date if the Housing Commission determines a response is appropriate.*

Every person waiting in the virtual waiting room will be called by the last four digits of their telephone number.

***We will now unmute and call on each person who has called into the meeting by the last four digits of their phone number and ask if they would like to comment on Housing Commission affairs. Once complete, the meeting back will be turned back over to President Priester for adjournment.***

**9. Adjournment**

**10. Announcements and Upcoming Meetings**

- a. Regular Commission Meeting  
October 13, 2020, 4:00 PM

## Report of the Executive Director

September 22, 2020

### Resolutions for Consideration

Resolution No.	Consent Agenda	Resolution Title	Resolution Attachments	Discussion & Recommendations of the Executive Director
2020-09	Y	Passbook Savings Rate December 1, 2020 – November 30, 2021	• 1	<ul style="list-style-type: none"> <li>• HUD regulatory requirement</li> <li>• <b>Recommendation – Approve</b></li> </ul>
2020-10	Y	Flat Rent Schedule January 1, 2021 – December 31, 2021	• 1	<ul style="list-style-type: none"> <li>• HUD regulatory requirement</li> <li>• <b>Recommendation – Approve</b></li> </ul>
2020-11	Y	Resident Utility Allowance Effective December 1, 2021	• 3	<ul style="list-style-type: none"> <li>• HUD regulatory requirement</li> <li>• <b>Recommendation – Approve</b></li> </ul>

### Financial Information

#### Financial Statements:

Financial statements for July and August were not available from our accountant at the time of this publication. I will forward these financial statements once I have received them and include them with the October Commission meeting packet.

#### Employee Wage Updates for 2020:

In a “normal” year, the wages for CMHC employees are determined much sooner than August. So far, 2020 has been anything but a normal year. In the normal course of events, Management Team employee’s wages are determined in January, while Maintenance Team employee’s wages are guided by the Collective Bargaining Agreement and aligned on May 1. The course of events for the 2020 employee wage updates followed this timeline:

- April
  - In the middle of Michigan’s Stay Home/Stay Safe order, CMHC and the Union realized that the current Collective Bargaining Agreement (CBA) was set to expire on May 1
  - On April 9, CMHC and the Union signed an agreement to extend the CBA until August 1
- July
  - Negotiations between CMHC and the Union for a new CBA begin
- August
  - The CMHC and the Union reach an agreement on the terms of the new CBA
  - The Board of Commissioners ratifies the terms of the new CBA
  - The Personnel Committee reviews and recommends the Management Team’s wages for 2020

A. What is the impact of the employee wage updates on the 2020 budget?

Employee Wages Budgeted 2020	Employee Wages Projected After 2020 Updates	Difference
\$267,752	\$235,389	(\$32,363)

B. Factors that contributed to the reduction of projected employee wage costs after 2020 updates:

- State of Michigan Public Employment Relations Act 337 of 1947, Section 423.215b prohibited the backdating of the CBA to May 1 and the payment of back wages for Union employees
- End of employment of one Maintenance Team employee
  - Currently, we are unsure of when this vacant position will be filled; however, we know that it will not be prior to the ending of the 2020 fiscal year

B. Information important to the process

- Per HUD regulations, CMHC procured the services of the Nelrod Consortium to perform the required wage study. The Personnel Committee used the information provided in the wage study for both negotiations of the CBA and determination of Management Team employee wages
- Management Team employee wages
  - are now in line with the bottom level recommendation for their position within the wage study
  - are considered adjustments for the fiscal years 2020 and 2021

### Notices and General Information

#### Important Upcoming Dates:

- Regular Commission Meeting  
October 13, 2020, 4:00 PM



# City of Manistee Housing Commission

273 6th Avenue • Manistee, Michigan 49660

Meeting Minutes  
August 25, 2020  
Regular Meeting

**NOTE:** This meeting was conducted as a “virtual meeting” using the Zoom application.

**Meeting Start Time:** 4:06 P.M.

**Roll Call:**

Commissioner	Present	Absent Excused	Absent Non-Excused
Dale Priester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doug Parkes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
James Bond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Karen Goodman	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kelly Tomaszewski	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Housing Commission Staff Present:**

Staff Member	Present
Clinton McKinven-Copus, Executive Director/Commission Secretary	<input checked="" type="checkbox"/>
Lindsay McIntyre, Program Director	<input checked="" type="checkbox"/>
Cindy Scott, Financial Analyst/Procurement Assistant	<input type="checkbox"/>
Kevin Helminiak, Maintenance Dept. Crew Leader	<input checked="" type="checkbox"/>

**Others Present:**

- None

**Public Comment on Agenda Related Items:**

- None

**Amendments to the Agenda:**

- None

# DRAFT

## Consent Agenda:

### **I. Approval of Minutes**

- a. Work Session Minutes, July 28, 2020
- b. Regular Session Minutes, July 28, 2020

### **II. Financial Reports**

#### **a. Public Housing Financial Statements**

- i. Public Housing Monthly Financial Statements
  1. May 31, 2020
  2. June 30, 2020
- ii. Public Housing Monthly Bank Reconciliations
  1. May 31, 2020
  2. June 30, 2020
- iii. Public Housing Monthly Current vs. Prior Year Statements
  1. May 31, 2020
  2. June 30, 2020

#### **b. Domestic Violence Grant Program**

- i. Domestic Violence Grant Program Monthly Financial Statements
  1. May 31, 2020
  2. June 30, 2020
- ii. Domestic Violence Grant Program Monthly Bank Reconciliations
  1. May 31, 2020
  2. June 30, 2020

#### **c. Security Deposits Reconciliations**

- i. Monthly Security Deposit Reconciliations
  1. May 31, 2020
  2. June 30, 2020

### **III. Resolutions**

- a. No resolutions on the Consent Agenda

# DRAFT

Consent Agenda		Motedioned By: Parkes			Second By: Goodman
Commissioner	Yes	No	Absent	Results	
Dale Priester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> <b>Approved</b>  <input type="checkbox"/> <b>Not Approved</b>	
Doug Parkes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
James Bond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Karen Goodman	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Kelly Tomaszewski	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

**Old Business:**

- None

**New Business:**

Resolution # 2020-08	Title: Ratification of Collective Bargaining			Motion By: Bond	Second By: Parkes
Commissioner	Yes	No	Absent	Results	
Dale Priester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> <b>Approved</b>  <input type="checkbox"/> <b>Not Approved</b>	
Doug Parkes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
James Bond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Karen Goodman	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Kelly Tomaszewski	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

**Executive Director's Report:**

- Executive Director Clinton McKinven-Copus reviewed the prepared report.

**Other Staff Reports:**

- None

**Finances:**

- Approved with Consent Agenda

**Committee Reports:**

- None

**Communications:**

- None received

# DRAFT

## **Public Comment:**

- None

## **Commissioner Report/Comments:**

- None

## **Adjournment of Regular Meeting for the Purpose of Entering into Executive Session:**

Moved by Vice President/Treasurer Parkes  
Seconded by Commissioner Bond  
Regular Meeting Adjourned at 4:16 P.M.  
Executive Session Called to Order at 4:16 P.M.

The purpose of the Executive Session was for the presentation of the negotiated Collective Bargaining Agreement between the City of Manistee Housing Commission and the United Steelworkers Local Union 14785-04.

Adjournment of Executive Session and Call to Order of Regular session moved by Vice/President Parkes and seconded by Commissioner Bond.

Executive Session Adjourned at 4:25 P.M.  
Regular Session Called to Order at 4:25 P.M.

President Priester directed the Commissioners to return to the New Business section of the Regular Meeting Agenda for consideration of Resolution 2020-08. Results of the consideration of Resolution 2020-08 is recorded in the New Business section of these minutes.

# DRAFT

**Meeting Adjourned**

<b>Adjournment</b> Time: 4:30 P.M.			<b>Motion By:</b> Bond		<b>Second By:</b> Parkes	
<b>Commissioner</b>	<b>Yes</b>	<b>No</b>	<b>Absent</b>		<b>Results</b>	
Dale Priester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/> <b>Approved</b>  <input type="checkbox"/> <b>Not Approved</b>	
Doug Parkes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
James Bond	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Karen Goodman	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Kelly Tomaszewski	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			

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Dale Priester  
President

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Clinton McKinven-Copus  
Executive Director/Secretary  
City of Manistee Housing Commission



# City of Manistee Housing Commission

273 6th Avenue • Manistee, Michigan 49660

Meeting Minutes  
August 25, 2020  
Executive Session

**NOTE: This meeting was conducted as a “virtual meeting” using the Zoom application.**

**Adjournment of Regular Meeting for the Purpose of Entering into Executive Session:**

Moved by Vice President/Treasurer Parkes  
Seconded by Commissioner Bond  
Regular Meeting Adjourned at 4:16 P.M.

**Executive Session:**

Executive Session Called to Order at 4:16 P.M.

The purpose of the Executive Session was for the presentation of the negotiated Collective Bargaining Agreement between the City of Manistee Housing Commission and the United Steelworkers Local Union 14785-04.

Executive Director Clinton McKinven-Copus presented the negotiated Agreement between the Union and CMHC. Vice-President/Treasurer Doug Parkes, a member of the Personnel Committee also provided information on the negotiated Agreement.

Adjournment of Executive Session and Call to Order of Regular session moved by Vice/President Parkes and seconded by Commissioner Bond.

Executive Session Adjourned at 4:25 P.M.  
Regular Session Called to Order at 4:25 P.M.

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Dale Priestler  
President

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Clinton McKinven-Copus  
Executive Director/Secretary  
City of Manistee Housing Commission



**RESOLUTION 2020-09**

**Passbook Savings Rate December 1, 2020 – November 30, 2021**

**WHEREAS**, the City of Manistee Housing Commission (CMHC), a Public Housing Authority (PHA) of the U.S. Department of Housing and Urban Development (HUD), is required by Public and Indian Housing (PIH) Notice 2012-29 to annually set the Passbook Savings Rate used to determine income earned on investments held by eligible program participants (residents); and

**WHEREAS**, PIH 2012-29 establishes that a PHA’s establishment of the Passbook Savings Rate is considered within “Safe Harbor” when based on the Savings National Rate as calculated by the Federal Deposit Insurance Corporation (FDIC), and

**WHEREAS**, the National Savings Rate calculated by the FDIC and updated on September 7, 2020, is 0.05;

**NOW, THEREFORE**, on the motion of **Commissioner - [Redacted]** supported by **Commissioner - [Redacted]** and voted upon as follows, **BE IT RESOLVED**, that the CMHC adopts the following resolution:

**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City of Manistee Housing Commission,

- Sets the December 1, 2020 – November 30, 2021, Passbook Savings Rate at 0.05, and
- approves the use of the Passbook Savings Rate, as herein set, for use in the calculation of income for eligible program participants (residents) of the Housing Commission

Commissioner	Approve	Against	Absent
Dale Priester	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doug Parkes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Karen Goodman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kelly Tomaszewski	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
James Bond	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**RESOLUTION DECLARED**

Passed       Failed

**CERTIFICATION**

By the signatures of the President and Executive Director below, it is CERTIFIED that on September 22, 2020, the City of Manistee Housing Commission Board of Commissioners approved Resolution 2020-09 and that the foregoing is a true and correct copy.

\_\_\_\_\_  
Dale Priester, President

\_\_\_\_\_  
Clinton McKinven-Copus, Executive Director

PENDING APPROVAL

## Weekly National Rates and Rate Caps - Weekly Update

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### ATTACHMENT 1 RESOLUTION 2020-09

On May 29, 2009, the FDIC Board of Directors approved a [final rule](#) making certain revisions to the interest rate restrictions applicable to less than well capitalized institutions under Part 337.6 of the FDIC Rules and Regulations. The final rule redefined the "national rate" as a simple average of rates paid by U.S. depository institutions as calculated by the FDIC. The national rates and rate caps for various deposit maturities and sizes are provided below.

For more information, see Financial Institution Letter [FIL-69-2009](#)

**Weekly rate cap information for the week of September 7, 2020.**

#### Non-Jumbo Deposits (< \$100,000)

Deposit Products	National Rate <sup>1</sup>	Rate Cap <sup>2</sup>
Savings	0.05	0.80
Interest Checking	0.04	0.79
Money Market	0.08	0.83
1 month CD	0.05	0.80
3 month CD	0.08	0.83
6 month CD	0.13	0.88
12 month CD	0.19	0.94
24 month CD	0.25	1.00
36 month CD	0.30	1.05
48 month CD	0.33	1.08
60 month CD	0.39	1.14

#### Jumbo Deposits (≥ \$100,000)

Deposit Products	National Rate <sup>1</sup>	Rate Cap <sup>2</sup>
Savings	0.05	0.80
Interest Checking	0.04	0.79
Money Market	0.14	0.89
1 month CD	0.06	0.81
3 month CD	0.09	0.84



**RESOLUTION 2020-10**

**Flat Rent Schedule January 1, 2021 – December 31, 2021**

**WHEREAS**, the Quality Housing and Work Responsibility Act of 1998, Section 523, requires that all Housing Agencies establish a Flat Rent, and

**WHEREAS**, Housing Agencies are required to review and update the Flat Rent Schedule to ensure that Flat Rents are no less than 80 percent of the fair market rent (FMR);

**NOW, THEREFORE**, on the motion of **Commissioner - [REDACTED]**, supported by **Commissioner - [REDACTED]**, and voted upon as follows, **BE IT RESOLVED**, that the CMHC adopts the following resolution:

**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City of Manistee Housing Commission, in accordance with HUD regulations, sets Flat Rents for the period of January 1, 2021 – December 31, 2021, as documented in the flat rent schedule for that period. The revised flat rent schedule shall be effective January 1, 2021, and implemented at the family’s next annual rent option or reexamination.

<b>Commissioner</b>	<b>Approve</b>	<b>Against</b>	<b>Absent</b>
Dale Priester	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doug Parkes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Karen Goodman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kelly Tomaszewski	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
James Bond	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**RESOLUTION DECLARED**

Passed     Failed

**CERTIFICATION**

By the signatures of the President and Executive Director below, it is CERTIFIED that on September 22, 2019, the City of Manistee Housing Commission Board of Commissioners approved Resolution 2020-10 and that the foregoing is a true and correct copy.

\_\_\_\_\_  
Dale Priester, President

\_\_\_\_\_  
Clinton McKinven-Copus, Executive Director

PENDING APPROVAL



**City of Manistee Housing Commission  
Flat Rent Schedule  
Effective: January 1, 2021 – December 31, 2021**

**ATTACHMENT 1 RESOLUTION 2020-10**

**All Properties:**

1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
\$480.00	\$632.80	\$823.20	\$858.40

Tenants who choose Flat Rent instead of Income-Based Rent also qualify for a utility allowance for tenant-paid utilities. Flat Rent shall be reduced by the appropriate utility allowance [please refer to the current CMHC utility allowance schedule] for qualifying tenants.

*Approving Resolution 2020-09*



## City of Manistee Housing Commission Flat Rent Schedule Comparison 2020 to 2021

**All Properties:**

### ATTACHMENT 2 RESOLUTION 2020-10

Year	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
2020 Flat Rent <sup>1</sup>	\$432.80	\$570.40	\$756.80	\$772.80
2021 Flat Rent Proposed <sup>1</sup>	\$480.00	\$632.80	\$823.20	\$858.40
Dollar Amount Change	+\$47.20	+62.40	+\$66.40	+\$85.60
Fair Market Rent 2020 <sup>2</sup>	\$541.00	\$713.00	\$946.00	\$966.00
Fair Market Rent 2021 <sup>2</sup>	\$600.00	\$791.00	1,029.00	\$1,073.00

Tenants who choose Flat Rent instead of Income-Based Rent also qualify for a utility allowance for tenant-paid utilities. Flat Rent shall be reduced by the appropriate utility allowance [please refer to the current CMHC utility allowance schedule] for qualifying tenants.

<sup>1</sup>HUD regulations require that Flat Rents are at least 80% of Fair Market Rent

<sup>2</sup>HUD sets the Fair Market Rent for every County throughout the U.S.



# FY 2021 FAIR MARKET RENT DOCUMENTATION

## SYSTEM : FIPS IS: 2610199999

### ATTACMENT 3 RESOLUTION 2020-10

## The FY 2021 Manistee County, MI FMRs for All Bedroom Sizes

Final FY 2021 & Final FY 2020 FMRs By Unit Bedrooms					
Year	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
FY 2021 FMR	\$542	\$600	\$791	\$1,029	\$1,073
<a href="#">FY 2020 FMR</a>	\$495	\$541	\$713	\$946	\$966

Manistee County, MI is a non-metropolitan county.

### Fair Market Rent Calculation Methodology

— [Show/Hide Methodology Narrative](#) —

Fair Market Rents for metropolitan areas and non-metropolitan FMR areas are developed as follows:

1. 2014-2018 5-year American Community Survey (ACS) estimates of 2-bedroom adjusted standard quality gross rents calculated for each FMR area are used as the new basis for FY2021 provided the estimate is statistically reliable. For FY2021, the test for reliability is whether the margin of error for the estimate is less than 50% of the estimate itself and whether the ACS estimate is based on at least 100 survey cases. HUD does not receive the exact number of survey cases, but rather a categorical variable known as the count indicator indicating a range of cases. An estimate based on at least 100 cases corresponds to a count indicator of 4 or higher.

If an area does not have a reliable 2014-2018 5-year, HUD checks whether the area has had at least minimally reliable estimate in any of the past 3 years, or estimates that meet the 50% margin of error test described above. If so, the FY2021 base rent is the average of the inflated ACS estimates.

If an area has not had a minimally reliable estimate in the past 3 years, the estimate State for the area's corresponding metropolitan area (if applicable) or State non-metropolitan area is used as the basis for FY2021.

2. HUD calculates a recent mover adjustment factor by comparing a 2018 1-year 40th percentile recent mover 2-bedroom rent to the 2014-2018 5-year 40th percentile adjusted standard quality gross rent. If either the recent mover and non-recent mover rent estimates are not reliable, HUD uses the recent mover adjustment for a larger geography. For metropolitan areas, the order of geographies examined is: FMR Area, Entire Metropolitan Area (for Metropolitan Sub-Areas), State Metropolitan Portion, Entire State, and Entire US; for non-metropolitan areas, the order of geographies examined is: FMR Area, State Non-Metropolitan Portion, Entire State, and Entire US. The recent mover adjustment factor is floored at one.
3. HUD calculates the appropriate recent mover adjustment factor between the 5-year data and the 1-year data and applies this to the 5-year base rent estimate.

4. Rents are calculated as of 2019 using the relevant (regional or local) change in gross rent Consumer Price Index (CPI) from annual 2018 to annual 2019.
5. All estimates are then inflated from 2019 to FY2021 using a trend factor based on the forecast of gross rent changes through FY2021.
6. FY2021 FMRs are then compared to a State minimum rent, and any area whose preliminary FMR falls below this value is raised to the level of the State minimum.
7. FY2021 FMRs may not be less than 90% of FY2020 FMRs.

**The results of the Fair Market Rent Step-by-Step Process**

1. The following are the 2018 American Community Survey 5-year 2-Bedroom Adjusted Standard Quality Gross Rent estimate and margin of error for Manistee County, MI.

Area	ACS <sub>2018</sub> 5-Year 2-Bedroom Adjusted Standard Quality Gross Rent	ACS <sub>2018</sub> 5-Year 2-Bedroom Adjusted Standard Quality Gross Rent Margin of Error	Ratio	Sample Size Category	Result
Manistee County, MI	\$717	\$44	\$44 / \$717=0.061	3	3 < 4 Check for reliable local ACS estimates from previous years

ACS <sub>2018</sub> 5-year Estimate	ACS <sub>2018</sub> 5-year Error	ACS <sub>2018</sub> 5-year Estimate Minimally Reliable?	ACS <sub>2017</sub> 5-year Estimate	ACS <sub>2017</sub> 5-year Error	ACS <sub>2017</sub> 5-year Estimate Minimally Reliable?	ACS <sub>2016</sub> 5-year Estimate	ACS <sub>2016</sub> 5-year Error	ACS <sub>2016</sub> 5-year Estimate Minimally Reliable?
\$717	\$44	\$44 / \$717=0.061	\$707	\$24	\$24 / \$707=0.034	\$624	\$53	\$53 / \$624=0.085

Since 3 of 3 ACS estimates are minimally reliable, the base rent is the average of those estimates, with each estimate first inflated to 2018 dollars (not shown).

Area	FY2021 Base Rent
Manistee County, MI	\$699

2. A recent mover adjustment factor is applied based on the smallest area of geography which contains Manistee County, MI and has an ACS<sub>2018</sub> 1-year Adjusted Standard Quality Recent-Mover estimate with a Margin of Error Ratio that is less than .5.

Area	ACS <sub>2018</sub> 1-Year Adjusted Standard Quality Recent-Mover Gross Rent	ACS <sub>2018</sub> 1-Year Adjusted Standard Quality Recent-Mover Gross Rent Margin of Error	Ratio	Sample Size Category	Result
Manistee County, MI – 2 Bedroom	N/A	N/A	N/A	N/A	No ACS <sub>2018</sub> 1-Year 2-Bedroom Adjusted Standard Quality Recent-Mover Gross Rent Produced For Manistee County, MI
Manistee County, MI – All Bedroom	N/A	N/A	N/A	N/A	No ACS <sub>2018</sub> 1-Year All Bedroom Adjusted Standard Quality Recent-Mover Gross Rent Produced For Manistee County, MI
Michigan Non-metropolitan Portion – 2 Bedroom	<a href="#">\$722</a>	\$25	0.035	6	0.035 < .5 6 ≥ 4 Use ACS <sub>2018</sub> 1-Year Non-metropolitan Portion 2-Bedroom Adjusted Standard Quality Recent-Mover Gross Rent

The smallest area of geography which contains Manistee County, MI and has an ACS<sub>2018</sub> 1-year Adjusted Standard Quality Recent-Mover estimate with a Margin of Error Ratio that is less than .5 and with a sufficient number of sample cases is the Michigan Non-metropolitan Portion.

3. The calculation of the relevant Recent-Mover Adjustment Factor for Manistee County, MI is as follows:

ACS <sub>2018</sub> 5-Year Area	ACS <sub>2018</sub> 5-Year 40th Percentile Adjusted Standard Quality Gross Rent	ACS <sub>2018</sub> 1-Year 40th Percentile Adjusted Standard Quality Recent-Mover Gross Rent
Michigan Non-metropolitan Portion – 2 Bedroom	<a href="#">\$679</a>	<a href="#">\$722</a>

Area	Ratio	Recent-Mover Adjustment Factor
Manistee County, MI	$\frac{\$722}{\$679} = 1.063$	$1.0633 \geq 1.0$ Use calculated Recent-Mover Adjustment Factor of 1.0633

4. The calculation of the relevant CPI Update Factors for Manistee County, MI is as follows: HUD updates the 2018 intermediate rent with the ratio of the annual 2019 local or regional CPI to the annual 2018 local or regional CPI to establish rents as of 2019.

Update Factor	Type
---------------	------

5. The calculation of the Trend Factor is as follows: HUD forecasts the change in national gross rents from 2019 to 2021 for each CPI area and Census Region. This makes Fair Market Rents "as of" FY2021.

Trend Factor	Trend Factor Type
<a href="#">1.0392</a>	Region

6. The FY 2021 2-Bedroom Fair Market Rent for Manistee County, MI is calculated as follows:

Area	<a href="#">ACS<sub>2018</sub> 5-Year Estimate</a>	<a href="#">Recent-Mover Adjustment Factor</a>	<a href="#">Annual 2018 to 2019 CPI Adjustment</a>	<a href="#">Trending 1.0392 to FY2021</a>	FY 2021 2-Bedroom FMR
Manistee County, MI	\$699	1.0633	1.0237	1.0392	\$699 * 1.063 * 1.0237 * 1.0392 = \$791

7. In keeping with HUD policy, the preliminary FY 2021 FMR is checked to ensure that it does not fall below the state minimum.

Area	Preliminary FY2021 2-Bedroom FMR	FY 2021 Michigan State Minimum	Final FY2021 2-Bedroom FMR
Manistee County, MI	\$791	<a href="#">\$734</a>	\$791 ≥ \$734 Use Manistee County, MI FMR of \$791

8. Bedroom ratios are applied to calculate FMRs for unit sizes other than two bedrooms.

Click on the links in the table to see how the bedroom ratios are calculated.

FY 2021 FMRs By Unit Bedrooms					
	<a href="#">Efficiency</a>	<a href="#">One-Bedroom</a>	<a href="#">Two-Bedroom</a>	<a href="#">Three-Bedroom</a>	<a href="#">Four-Bedroom</a>
FY 2021 FMR	\$542	\$600	\$791	\$1,029	\$1,073

9. The FY2021 FMR must not be below 90% of the FY2020 FMR.

	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
FY2020 FMR	\$495	\$541	\$713	\$946	\$966
FY2020 floor	\$446	\$487	\$642	\$852	\$870
FY 2021 FMR	\$542	\$600	\$791	\$1,029	\$1,073
Use FY2020 floor for FY2021?	No	No	No	No	No

## Final FY2021 Rents for All Bedroom Sizes for Manistee County, MI

The following table shows the Final FY 2021 FMRs by bedroom sizes.

Final FY 2021 FMRs By Unit Bedrooms					
	Efficiency	One-Bedroom	Two-Bedroom	Three-Bedroom	Four-Bedroom
Final FY 2021 FMR	\$542	\$600	\$791	\$1,029	\$1,073

The FMRs for unit sizes larger than four bedrooms are calculated by adding 15 percent to the four bedroom FMR, for each extra bedroom. For example, the FMR for a five bedroom unit is 1.15 times the four bedroom FMR, and the FMR for a six bedroom unit is 1.30 times the four bedroom FMR. FMRs for single-room occupancy units are 0.75 times the zero bedroom (efficiency) FMR.

Permanent link to this page:

[http://www.huduser.gov/portal/datasets/fmr/fmrs/FY2021\\_code/2021summary.odn?&year=2021&fmrtype=Final&selection\\_type=county&fips=2610199999](http://www.huduser.gov/portal/datasets/fmr/fmrs/FY2021_code/2021summary.odn?&year=2021&fmrtype=Final&selection_type=county&fips=2610199999)

### Select a different area

Press below to select a different county within the same state (same primary state for metropolitan areas):

- Alcona County, MI
- Alger County, MI
- Allegan County, MI
- Alpena County, MI
- Antrim County, MI

Press below to select a different state:

Select a Final FY 2021 Metropolitan FMR Area:

- Abilene, TX MSA

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Prepared by the [Program Parameters and Research Division](#), HUD. Technical problems or questions? [Contact Us](#).



## RESOLUTION 2020-11

### Resident Utility Allowance Effective December 1, 2020

**WHEREAS**, the City of Manistee Housing Commission is a Public Housing Authority of the U.S. Department of Housing and Urban Development, and

**WHEREAS**, the City of Manistee Housing Commission is required to provide an Allowance for Utilities to Tenants who pay the utility supplier directly for utilities (CFR 966.4 (b) (1)), and

**WHEREAS**, the City of Manistee Housing Commission lease requires that if the utility allowance exceeds the Total Tenant Payment (monthly rent), CMHC will pay a Utility Reimbursement each month directly to the utility company (Lease Part 1, Section VI. (b)), and

**WHEREAS**, the City of Manistee Housing Commission is required to provide Tenants a 60-day written notice of the revision of Utility Allowances (Lease Part 1, Section VI (b)), and

**WHEREAS**, the City of Manistee Housing Commission has entered into an Energy Performance Contract with the Siemens Corporation, which requires that Siemens provide CMHC with annually adjusted Utility Allowances, and

**WHEREAS**, the City of Manistee Housing Commission has received from the Siemens Corporation the current adjusted Utility Allowances,

**NOW, THEREFORE**, on the motion of **Commissioner - [REDACTED]**, supported by **Commissioner - [REDACTED]**, and voted upon as follows, **BE IT RESOLVED**, that the CMHC adopts the following resolution:

**NOW, THEREFORE, IT IS HEREBY RESOLVED** that the City of Manistee Housing Commission Board of Commissioners adopt the Utility Allowance rates as prepared by Siemens Corporation.

**IT IS FURTHER RESOLVED**, that

- The new Utility Allowances become effective December 1, 2020
- The new Utility Allowance calculation for the Total Tenant Payment (monthly rent) be effective at the time of the Tenant’s annual recertification

<b>Commissioner</b>	<b>Approve</b>	<b>Against</b>	<b>Absent</b>
Dale Priester	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doug Parkes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Karen Goodman	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kelly Tomaszewski	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
James Bond	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**RESOLUTION DECLARED**

Passed       Failed

**CERTIFICATION**

By the signatures of the President and Executive Director below, it is CERTIFIED that on September 22, 2020, the City of Manistee Housing Commission Board of Commissioners approved Resolution 2020-11 and that the foregoing is a true and correct copy.

\_\_\_\_\_  
Dale Priester, President

\_\_\_\_\_  
Clinton McKinven-Copus, Executive Director

**ATTACHMENT 1 RESOLUTION 2020-11**

**City of Manistee Housing Commission**

**Utility Allowance**

**Effective December 1, 2020**

**Scattered Sites**

	2 Bedroom	3 Bedroom	4 Bedroom
Electrical	\$ 48.00	\$ 55.00	\$ 60.00
Natural Gas	\$ 59.00	\$ 71.00	\$ 85.00
<b>TOTAL</b>	<b>\$107.00</b>	<b>\$126.00</b>	<b>\$145.00</b>
1703, 1703 ½, 1707, 1707 ½ Vine St.			
	2 Bedroom		
Electrical	\$ 64.00		
Natural Gas	\$ 61.00		
<b>TOTAL</b>	<b>\$125.00</b>		

**Water/Sewer**

**Scattered Sites: Residents pay excess water use at the rate of \$12.15/1000-gallons of water**

	2 Bedroom	3 Bedroom	4 Bedroom
Gallons/Month	3,000	5,000	6,000

**Harborview**

	1 Bedroom	2 Bedroom
Electrical	\$ 45.00	\$ 50.00
<b>TOTAL</b>	<b>\$ 45.00</b>	<b>\$ 50.00</b>

Approved by Resolution 2020-10: September 22, 2020  
 Effective December 1, 2020 (at time of annual tenant certification)

**ATTACHMENT 2 RESOLUTION 2020-11**

**City of Manistee Housing Commission**

**Utility Allowance**

**Comparison of 2019 vs. 2020**

**Scattered Sites**

	2 Bedroom		3 Bedroom		4 Bedroom	
	2020	2019	2020	2019	2020	2019
Electrical	\$ 48.00	\$ 48.00	\$ 55.00	\$ 54.00	\$ 60.00	\$ 60.00
Natural Gas	\$ 59.00	\$ 59.00	\$ 71.00	\$ 71.00	\$ 85.00	\$ 85.00
<b>TOTAL</b>	<b>\$107.00</b>	<b>\$107.00</b>	<b>\$126.00</b>	<b>\$125.00</b>	<b>\$145.00</b>	<b>\$145.00</b>
1703, 1703 ½, 1707, 1707 ½ Vine St.						
	2 Bedroom					
	2020	2019				
Electrical	\$ 64.00	\$ 60.00				
Natural Gas	\$ 61.00	\$ 64.00				
<b>TOTAL</b>	<b>\$125.00</b>	<b>\$124.00</b>				

**Water/Sewer**

**Scattered Sites: Residents pay excess water use at the rate of \$11.74/1,000-gallon of water effective December 1, 2020.**

The rate for 2020	\$12.15/1,000 gallon of water used in excess
The rate for 2019	\$11.74/1,000 gallon of water used in excess

	2 Bedroom	3 Bedroom	4 Bedroom
Gallons/Month	3,000	5,000	6,000

**Harborview**

	1 Bedroom		2 Bedroom	
	2020	2019	2020	2019
Electrical	\$ 45.00	\$ 45.00	\$ 50.00	\$ 50.00
<b>TOTAL</b>	<b>\$ 45.00</b>	<b>\$ 45.00</b>	<b>\$ 50.00</b>	<b>\$ 50.00</b>

Approved by Resolution 2020-10: September 22, 2020  
 Effective December 1, 2020 (at time of annual tenant certification)



# City of Manistee Housing Commission Resident Paid Allowances Report

Submitted: June 2020

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## Executive Summary

### Section 1.0

This report presents utility allowances for the public housing developments managed by the **City of Manistee Housing Commission (CMHC)** on a monthly and annual basis for each unit type.

## Our Process

The establishment of the building allowances is based on accepted engineering heat loss/gain calculation methods that recognize the thermal design characteristics of each representative unit type. The utility allowances are based on all building related requirements including heating, lighting, refrigeration, small appliances, water heating, and cooking, as required in 24 CFR, Part 965 of the Code of Federal Regulations.

This study is a result of two interrelated phases; the on-site survey and the analysis completed by Siemens industries. The on-site survey entails a combination of management and staff interviews, representative unit surveys to include but not be limited to: standard of living; building construction; type of HVAC equipment; peripheral equipment; use of building plans to determine wall, roof, ceiling and window areas; local climatological data; and operating hours for lighting, HVAC equipment, and Authority and tenant-supplied appliances. The on-site data is in turn analyzed combining essential as well as specific "standard of living" allowances to determine the total utility allowances for each particular unit type.

## Report Overview

This utility allowance report is divided into the following sections:

- **Methodology** – This section presents a detailed overview of how the allowances were created.
- **2020 Monthly Allowances** – This section includes summary tables of the 2020 updated, post-project utility allowances.
- **Pre vs. Post-Project Utility Allowances** – This table compares the allowances pre vs. post energy retrofit needed in order to capture the resident paid allowance incentive on the HUD 52723 form.
- **Electric Allowances** – Tables incorporating monthly and annual electrical consumption and cost allowances with itemized listings for each typical unit.
- **Natural Gas Allowances** – Tables incorporating monthly and annual natural gas consumption and cost allowances with itemized listings for each typical unit.
- **Water Allowances** – Tables incorporating monthly water consumption and cost allowances for each typical unit.
- **Appendix** – All back-up data, including 2020 utility rates, hot water, space heating, and lighting use tables.

# Allowance Study Methodology

## Section 2.0

There are several factors to be taken into account when creating utility allowances. The first of which is what type of methodology to use. There are two generally accepted approaches:

1. **Engineering-Based Methodology** – Allowances based on engineering calculations and standard consumption tables.
2. **Average Consumption-Based Methodology** – Allowances based on actual resident utility bills.

The second important consideration when creating an allowance study is to follow HUD's Federal Regulations concerning Resident Paid Utility Allowances. HUD gives the freedom to each housing authority to develop their allowances choosing the methodology that works best for their organization, however requirements are placed on which end uses are covered by the allowances.

The main goal of the allowances should be to encourage energy conservative households; the residents should be consuming energy in a fashion that meets their needs and affords them to live comfortably, while staying within the guidelines or regulations established by HUD.

### Operational Standards

Operational standards can be implemented as guidelines by each housing authority. For example, some operational characteristics that were standardized for CMHC were:

- Gallons per person per day of hot water
- Lighting burn-hours
- Domestic hot water heating set-point temperatures

Regardless of which methodology is chosen, steps have to be followed in developing the utility allowances. The first is identification of the equipment and allowable end-uses covered in the allowances. The equipment was identified by visiting each type of floor plan at all developments. After surveying these units, we developed an understanding of the most typical heating, cooking, lighting, and water heating equipment in each unit.

### Climatic Data

Besides determining approved end-uses, climatic data must also be incorporated into the study because depending on the region of the country, the heating and cooling requirement varies. Weather data used in this study can be found in Appendix 7.1 of this report. Conservative energy use as defined by HUD is energy use based on necessity and not luxury; for our purpose HUD has deemed air conditioning as not an approved end-use, therefore loads incurred by air-conditioning have been eliminated from our study. By taking into account climatic conditions, we can determine the amount of energy required for the load due to heating, specifically for Manistee, Michigan.

## Unit Data

Another factor considered when developing the allowances were the size of each unit, their construction type, and occupancy. Occupancy is important when developing a water consumption allowance and/or determining the energy consumed for water heating, because the amount of water required for a household rests heavily on its occupancy.

Below is a sample of the list of criteria examined while developing the CMHC 2020 Utility Allowances:

- Construction type of each dwelling unit
- Energy efficiency of retrofitted appliances and equipment
- Condition and age of dwelling unit
- Design heating temperature
- Hot water heating design temperature
- Occupancy
- Manistee, MI 30 Year weather data

For a detailed overview of the Engineering Based Methodology used to create this study, please refer to the U.S. Department of Housing and Urban Development's *"Utility Allowance Guidebook,"* 1998.

## 2020 Proposed (Post-Project) Utility Allowances

### Section 3.0

Tables 3.1 and 3.2 in this section reflect the proposed, Post-Project monthly dollar and consumption allowances, which will update the existing allowances implemented by CMHC. For a detailed breakdown of how values in Tables 3.1 and 3.2 were calculated, approved HUD end-uses, and utility rate application, please see Section 7.0 of this report. Post-Project utility allowances in this section reflect allowance levels representative of the energy conservation measures installed through the Energy Performance Contract between Siemens and CMHC.

**Table 3.1: 2020 Average Monthly Dollar Allowances**

Project Number & Project Name	Unit Type	Gas Monthly Avg	Electricity Monthly Avg	Total Monthly Avg
MI 78-3 Harbor View	1 BR	\$0	\$45	\$45
	2 BR	\$0	\$50	\$50
MI 78-3 Scattered Sites	2 BR	\$61	\$64	\$125
MI 78-3 Scattered Sites	2 BR	\$59	\$48	\$107
	3 BR	\$71	\$55	\$126
	4 BR	\$85	\$60	\$145

**Table 3.2: Average Monthly Consumption Allowances**

Project Number & Project Name	Unit Type	Gas Monthly Avg (ccf)	Electricity Monthly Avg (kWh)	Water Monthly Avg (gallons)
MI 78-3 Harbor View	1 BR	0	249	1345
	2 BR	0	285	2690
MI 78-3 Scattered Sites	2 BR	72	385	2690
MI 78-3 Scattered Sites	2 BR	69	272	2690
	3 BR	87	318	4280
	4 BR	108	356	5502

**Table 3.3: Monthly Water/Sewer Consumption & Dollar Allowances**

2BR	3 BR	4 BR
3,000 gal/mo.	5,000 gal/mo.	6,000 gal/mo.
\$36.45 / mo.	\$60.75 / mo.	\$72.90 / mo.

Residents pay for water exceeding consumption allowances listed in Table 3.3 above at a rate of \$12.15/1000-gallon of water.

## Pre vs Post-Project Monthly Allowances

### Section 4.0

Per the Energy Performance Contract between Siemens and CMHC, HUD approved the traditional allowance utility incentive in order for CMHC to capture the energy improvements via the utility allowances.

Table 4.1 below represents what the utility allowances would have been for 2020 had Siemens not completed an energy project, or they represent pre-project unit conditions.

Table 4.2 below illustrates the utility allowances that reflect the energy measures installed at the sites as part of the energy performance contract; these allowances match the allowances shown in Section 3.0 of this report.

MHC should implement the utility allowances listed in Table 4.2; however they should report rent levels based on Pre-Project utility allowances in Table 4.1 to capture the resident paid utility allowance incentive as part of the energy performance contract. Please see Appendix 7.8 of this report for instructions on how to capture the allowances incentive.

**Table 4.1: Pre Project Allowances using 2020 Rates**

Project Number/Name	Unit Type	Gas		Electricity		Total
		Pre \$	Pre ccf	Pre \$	Pre kWh	Pre \$
MI 78-3 Harbor View	1 BR	\$0	0	\$53	306	\$53
	2 BR	\$0	0	\$59	349	\$59
MI 78-3 Scattered Sites	2 BR	\$64	77	\$77	473	\$141
MI 78-1 Scattered Sites	2 BR	\$62	73	\$58	340	\$120
	3 BR	\$74	92	\$69	415	\$143
	4 BR	\$89	114	\$81	498	\$170

**Table 4.2: Post Project Allowances using 2020 Rates**

Project Number/Name	Unit Type	Gas		Electricity		Total
		Post	Post ccf	Post	Post kWh	Post
MI 78-3 Harbor View	1 BR	\$0	0	\$45	249	\$45
	2 BR	\$0	0	\$50	285	\$50
MI 78-3 Scattered Sites	2 BR	\$61	72	\$64	385	\$125
MI 78-1 Scattered Sites	2 BR	\$59	69	\$48	272	\$107
	3 BR	\$71	87	\$55	318	\$126
	4 BR	\$85	108	\$60	356	\$145

Table 4.3 compares the 2019 versus the 2020 Post-Project Utility Allowances. As shown below, the gas allowance at MI 78-3 Scattered Sites increased from 2019. The electric allowance at MI 78-1 Scattered Sites 3 BR unit types also increased from 2019.

**Table 4.3: 2019 vs 2020 Utility Allowances**

Project Number/Name	Unit Type	Gas		Electricity		Total	
		2019 \$	2020 \$	2019 \$	2020 \$	2019 \$	2020 \$
MI 78-3 Harbor View	1 BR	\$0	\$0	\$45	\$45	\$45	\$45
	2 BR	\$0	\$0	\$50	\$50	\$50	\$50
MI 78-3 Scattered Sites	2 BR	\$60	\$61	\$64	\$64	\$124	\$125
MI 78-1 Scattered Sites	2 BR	\$59	\$59	\$48	\$48	\$107	\$107
	3 BR	\$71	\$71	\$54	\$55	\$125	\$126
	4 BR	\$85	\$85	\$60	\$60	\$145	\$145

# Post-Project Electricity Allowances

## Section 5.0

The following describes the tables found in this section:

**Table 5.1: Annual Electricity Consumption Allowances** – This table combines the information calculated in the domestic hot water tables, lighting tables, and HUD standard consumption averages for cooking and small appliance loads. The total yearly consumption for each unit type is the combination of calculated and standard consumption levels.

**Table 5.2: Consumption Allowances by Month** – This table shows the annual electrical usage from Table 5.1 was prorated for each month for all weather dependant equipment and plug loads. The prorated monthly loads were then averaged to create the allowances presented in Section 3.0 of this report, the proposed monthly utility allowances.

**Table 5.3: Dollar Allowances by Month** – This table takes the monthly consumption allotments from Table 5.2 and applies the 2020 electricity rates to calculate the monthly dollar allowances.

**Table 5.1: Annual Electricity Consumption Allowances**

Project Number /Name	Unit Type	Range	Lighting	Refrig	Clothes Wash	Dryer	Bath Fan	Range Hood	Fan	Sm Appl	Furnace Motor	Total Annual
MI 78-3 Harbor View	1 BR ADA	931	367	521	0	0	0	35	25	1100	0	2979
	1 BR INT	931	369	536	0	0	0	35	25	1100	0	2996
	1 BR END	931	374	521	0	0	0	35	25	1100	0	2986
	2 BR	931	476	529	0	0	0	35	50	1400	0	3421
MI 78-3 Scattered Sites	2 BR DUP	744	323	723	100	600	35	35	50	1400	479	4490
	2 BR DET	744	414	723	100	600	35	35	50	1400	523	4625
MI 78-1 Scattered Sites	1 BR DUP	Gas	328	867	100	600	35	35	25	1100	0	3090
	½ BR DUP	Gas	328	867	100	600	35	35	25	1100	0	3090
	2 BR DUP	Gas	323	723	100	600	35	35	50	1400	0	3266
	3 BR DET	Gas	403	867	100	600	35	35	75	1700	0	3815
	4 BR DET	Gas	531	867	100	600	35	35	100	2000	0	4268

**Table 5.2: Monthly Electricity Consumption Allowances**

Project Number /Name	Unit Type	Jan kWh	Feb kWh	Mar kWh	Apr kWh	May kWh	Jun kWh	Jul kWh	Aug kWh	Sep kWh	Oct kWh	Nov kWh	Dec kWh	Avg kWh
MI 78-3 Harbor View	1 BR ADA	248	248	248	248	248	248	248	248	248	248	248	248	248
	1 BR INT	250	250	250	250	250	250	250	250	250	250	250	250	250
	1 BR END	249	249	249	249	249	249	249	249	249	249	249	249	249
	2 BR	285	285	285	285	285	285	285	285	285	285	285	285	285
MI 78-3 Scattered Sites	2 BR DUP	417	412	403	371	355	345	336	340	347	367	386	411	374
	2 BR DET	432	426	417	381	365	353	344	348	356	377	399	426	385
MI 78-1 Scattered Sites	1 BR DUP	257	257	257	257	257	257	257	257	257	257	257	257	257
	½ BR DUP	257	257	257	257	257	257	257	257	257	257	257	257	257
	2 BR DUP	272	272	272	272	272	272	272	272	272	272	272	272	272
	3 BR DET	318	318	318	318	318	318	318	318	318	318	318	318	318
	4 BR DET	356	356	356	356	356	356	356	356	356	356	356	356	356

**Table 5.3: Monthly Electricity Dollar Allowances**

Project Number /Name	Unit Type	Jan \$	Feb \$	Mar \$	Apr \$	May \$	Jun \$	Jul \$	Aug \$	Sep \$	Oct \$	Nov \$	Dec \$	Avg \$
MI 78-3 Harbor View	1 BR ADA	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44	\$44
	1 BR INT	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45
	1 BR END	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45	\$45
	2 BR	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
MI 78-3 Scattered Sites	2 BR DUP	\$69	\$68	\$67	\$62	\$60	\$58	\$57	\$58	\$59	\$62	\$65	\$68	\$63
	2 BR DET	\$71	\$70	\$69	\$64	\$61	\$60	\$58	\$59	\$60	\$63	\$66	\$70	\$64
MI 78-1 Scattered Sites	1 BR DUP	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46
	½ BR DUP	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$46
	2 BR DUP	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$48	\$48
	3 BR DET	\$55	\$55	\$55	\$55	\$55	\$55	\$55	\$55	\$55	\$55	\$55	\$55	\$55
	4 BR DET	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$60

## Post-Project Natural Gas Allowances

### Section 6.0

The following describes the tables found in this section:

**Table 6.1: Annual Gas Consumption Allowances** – This table combines the information calculated in the domestic hot water tables, lighting tables, and HUD standard consumption averages for cooking and small appliance loads. The total yearly consumption for each unit type is the combination of calculated and standard consumption levels.

**Table 6.2: Consumption Allowances by Month** – This table shows the annual electrical usage from Table 6.1 was prorated for each month for all weather dependant equipment and plug loads. The prorated monthly loads were then averaged to create the allowances presented in Section 3.0 of this report, the proposed monthly utility allowances.

**Table 6.3: Dollar Allowances by Month** – This table takes the monthly consumption allotments from Table 6.2 and applies the 2020 natural gas rates to calculate the monthly dollar allowances.

**Table 6.1: Annual Gas Consumption Allowances**

Project Number /Name	Unit Type	Heating (ccf)	Hot Water (ccf)	Range (ccf)	Total Annual (ccf)
MI 78-3 Scattered Sites	2 BR DUP	499	312	Electric	811
	2 BR DET	546	312	Electric	858
MI 78-1 Scattered Sites	1 BR DUP	342	185	54	581
	½ BR DUP	342	185	54	581
	2 BR DUP	465	308	54	827
	3 BR DET	536	437	66	1039
	4 BR DET	664	562	66	1292

**Table 6.2: Monthly Gas Consumption Allowances**

Project Number /Name	Unit Type	Jan ccf	Feb ccf	Mar ccf	Apr ccf	May ccf	Jun ccf	Jul ccf	Aug ccf	Sep ccf	Oct ccf	Nov ccf	Dec ccf	Avg ccf
MI 78-3 Scattered Sites	2 BR DUP	112	107	97	64	48	37	28	32	39	60	80	106	68
	2 BR DET	120	114	104	67	50	38	29	32	40	63	86	114	72
MI 78-1 Scattered Sites	1 BR DUP	79	75	69	46	35	28	22	24	29	43	57	75	48
	½ BR DUP	79	75	69	46	35	28	22	24	29	43	57	75	48
	2 BR DUP	111	105	97	65	51	41	32	35	42	62	81	105	69
	3 BR DET	135	129	119	83	65	54	44	48	56	78	100	128	87
	4 BR DET	167	160	147	103	82	67	55	60	70	97	125	159	108

**Table 6.3: Monthly Gas Dollar Allowances**

Project Number /Name	Unit Type	Jan \$	Feb \$	Mar \$	Apr \$	May \$	Jun \$	Jul \$	Aug \$	Sep \$	Oct \$	Nov \$	Dec \$	Avg \$
MI 78-3 Scattered Sites	2 BR DUP	\$88	\$84	\$78	\$56	\$45	\$38	\$32	\$34	\$39	\$53	\$67	\$84	\$58
	2 BR DET	\$93	\$89	\$83	\$58	\$46	\$39	\$32	\$35	\$40	\$55	\$70	\$89	\$61
MI 78-1 Scattered Sites	1 BR DUP	\$66	\$63	\$59	\$44	\$36	\$31	\$27	\$29	\$32	\$42	\$51	\$63	\$45
	½ BR DUP	\$66	\$63	\$59	\$44	\$36	\$31	\$27	\$29	\$32	\$42	\$51	\$63	\$45
	2 BR DUP	\$87	\$83	\$78	\$57	\$47	\$40	\$35	\$37	\$41	\$54	\$67	\$83	\$59
	3 BR DET	\$103	\$99	\$92	\$68	\$57	\$49	\$43	\$45	\$50	\$65	\$80	\$99	\$71
	4 BR DET	\$125	\$120	\$111	\$82	\$68	\$58	\$50	\$53	\$60	\$78	\$96	\$119	\$85

### Appendix 7.1: 30 Normal Heating Degree Days

<b>MONTH</b>	<b>HDD</b>
JANUARY	1340
FEBRUARY	1255
MARCH	1109
APRIL	588
MAY	341
JUNE	173
JULY	37
AUGUST	89
SEPTEMBER	204
OCTOBER	527
NOVEMBER	847
DECEMBER	1248
<b>TOTAL</b>	<b>7758</b>

## Appendix 7.2: Annual Lighting Use Tables

**Formula:** Lighting Load (KWH/YR) = #fixtures X watts/fixture X hours/yr X (1KW/1000W)

**Given:** Number of fixtures = 1  
Watts/fixture = 60  
Hours per year = 1,825

**Find:** The annual KWH per year load for the “Kitchen” from Table 1.0 below.

Lighting Load = 1 Fixture x 60 Watts/Fixture x 1,825 hours/year x 1KW/1000W = 110 kwh/yr

The lighting load for an apartment dwelling is the total annual consumption for all lighting fixtures. As you can see from the Table below, this unit has an annual lighting load of 637 kwh/year.

<b>PROJECT NAME:</b>		Harbor View			
<b>PROJECT NUMBER:</b>		MI 78-1			
<b>NUMBER OF BEDROOMS:</b>		1 BR ADA			
AREA NAME	NUMBER OF FIXTURES	WATTS/ FIXTURE	HOURS /DAY	HOURS/ YEAR	KWH/ YEAR
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Living Room	0.4	39	5	1825	28
Bedroom	1	60	4	1460	88
Ceiling Fan	0.6	39	3	1095	26
Night Light	1	7	8	2920	20
Kitchen	1	60	5	1825	110
Bedroom 2	0	0	4	1460	0
Hall	0	0	3	1095	0
Entry	1	13	3	1095	14
Utility	1	13	2	730	9
Range Hood	0	0	1	365	0
				TOTAL...	367

<b>PROJECT NAME:</b>		Harbor View			
<b>PROJECT NUMBER:</b>		MI 78-1			
<b>NUMBER OF BEDROOMS:</b>		1 BR INT			
<b>AREA NAME</b>	<b>NUMBER OF FIXTURES</b>	<b>WATTS/ FIXTURE</b>	<b>HOURS /DAY</b>	<b>HOURS/ YEAR</b>	<b>KWH/ YEAR</b>
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Living Room	0.5	39	5	1825	36
Bedroom	1	60	4	1460	88
Ceiling Fan	0.5	39	3	1095	21
Night Light	1	7	8	2920	20
Kitchen	1	60	5	1825	110
Bedroom 2	0	0	4	1460	0
Hall	0	0	3	1095	0
Entry	1	13	3	1095	14
Utility	1	13	2	730	9
Range Hood	0	0	1	365	0
				TOTAL...	369

<b>PROJECT NAME:</b>		Harbor View			
<b>PROJECT NUMBER:</b>		MI 78-1			
<b>NUMBER OF BEDROOMS:</b>		1 BR END			
<b>AREA NAME</b>	<b>NUMBER OF FIXTURES</b>	<b>WATTS/ FIXTURE</b>	<b>HOURS /DAY</b>	<b>HOURS/ YEAR</b>	<b>KWH/ YEAR</b>
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Living Room	0.6666	39	5	1825	47
Bedroom	1	60	4	1460	88
Ceiling Fan	0.3333	39	3	1095	14
Night Light	1	7	8	2920	20
Kitchen	1	60	5	1825	110
Bedroom 2	0	0	4	1460	0
Hall	0	0	3	1095	0
Entry	1	13	3	1095	14
Utility	1	13	2	730	9
Range Hood	0	0	1	365	0
				TOTAL...	374

<b>PROJECT NAME:</b>		Harbor View			
<b>PROJECT NUMBER:</b>		MI 78-1			
<b>NUMBER OF BEDROOMS:</b>		2 BR			
AREA NAME	NUMBER OF FIXTURES	WATTS/ FIXTURE	HOURS /DAY	HOURS/ YEAR	KWH/ YEAR
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Living Room	0.66667	39	5	1825	47
Bedroom	1	60	4	1460	88
Ceiling Fan	0.3333	39	3	1095	14
Night Light	1	7	8	2920	20
Kitchen	1	60	5	1825	110
Bedroom 2	1	60	4	1460	88
Hall	1	13	3	1095	14
Entry	1	13	3	1095	14
Utility	1	13	2	730	9
Range Hood	0	0	1	365	0
				TOTAL...	476

<b>PROJECT NAME:</b>		Scattered Sites			
<b>PROJECT NUMBER:</b>		MI 78-3			
<b>NUMBER OF BEDROOMS:</b>		2			
AREA NAME	NUMBER OF FIXTURES	WATTS/ FIXTURE	HOURS /DAY	HOURS/ YEAR	KWH/ YEAR
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Bedroom	2	26	4	1460	76
Bed Fan	0	0	4	1460	0
Living Room	0	0	5	1825	0
Ceiling Fan	0	0	3	1095	0
Dining Room	1	60	3	1095	66
Kitchen	0	0	5	1825	0
Kitchen Other	0	0	5	1825	0
Hall	1	26	3	1095	28
Porch	1	13	8	2920	38
Utility/Other	1	60	2	730	44
				TOTAL...	323

<b>PROJECT NAME:</b>		<b>Scattered Sites</b>			
<b>PROJECT NUMBER:</b>		<b>MI 78-3</b>			
<b>NUMBER OF BEDROOMS:</b>		<b>2</b>			
<b>AREA NAME</b>	<b>NUMBER OF FIXTURES</b>	<b>WATTS/ FIXTURE</b>	<b>HOURS /DAY</b>	<b>HOURS/ YEAR</b>	<b>KWH/ YEAR</b>
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Bedroom	2	26	4	1460	76
Bed Fan	0	0	4	1460	0
Living Room	0	0	5	1825	0
Ceiling Fan	0	0	3	1095	0
Dining Room	1	26	3	1095	28
Kitchen	1	60	5	1825	110
Kitchen Other	0	0	5	1825	0
Hall	1	26	3	1095	28
Porch	1	13	8	2920	38
Utility/Other	2	43	2	730	63
				TOTAL...	414

<b>PROJECT NAME:</b>		<b>Scattered Sites</b>			
<b>PROJECT NUMBER:</b>		<b>MI 78-1</b>			
<b>NUMBER OF BEDROOMS:</b>		<b>1 BR DUP &amp; ½ BR DUP</b>			
<b>AREA NAME</b>	<b>NUMBER OF FIXTURES</b>	<b>WATTS/ FIXTURE</b>	<b>HOURS /DAY</b>	<b>HOURS/ YEAR</b>	<b>KWH/ YEAR</b>
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Bedroom	0.75	26	4	1460	28
Bed Fan	0.25	52	4	1460	19
Living Room	0.5	26	5	1825	24
Ceiling Fan	0.25	52	3	1095	14
Dining Room	1	44	3	1095	48
Kitchen	0.5	26	5	1825	24
Kitchen Other	0.5	20	5	1825	18
Hall	0.75	26	3	1095	21
Porch	1	13	8	2920	38
Utility/Other	1.25	23	2	730	21
				TOTAL...	328

<b>PROJECT NAME:</b>		Scattered Sites			
<b>PROJECT NUMBER:</b>		MI 78-1			
<b>NUMBER OF BEDROOMS:</b>		2 BR DUP			
AREA NAME	NUMBER OF FIXTURES	WATTS/ FIXTURE	HOURS /DAY	HOURS/ YEAR	KWH/ YEAR
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Bedroom	2	26	4	1460	76
Bed Fan	0	0	4	1460	0
Living Room	0	0	5	1825	0
Ceiling Fan	0	0	3	1095	0
Dining Room	1	60	3	1095	66
Kitchen	0	0	5	1825	0
Kitchen Other	0	0	5	1825	0
Hall	1	26	3	1095	28
Porch	1	13	8	2920	38
Utility/Other	1	60	2	730	44
				TOTAL...	323

<b>PROJECT NAME:</b>		Scattered Sites			
<b>PROJECT NUMBER:</b>		MI 78-1			
<b>NUMBER OF BEDROOMS:</b>		3 BR DET			
AREA NAME	NUMBER OF FIXTURES	WATTS/ FIXTURE	HOURS /DAY	HOURS/ YEAR	KWH/ YEAR
Bath Vanity	1	52	3	1095	57
Bath Overhead	1	13	3	1095	14
Bedroom	3	26	4	1460	114
Bed Fan	0	0	4	1460	0
Living Room	0.5	26	5	1825	24
Ceiling Fan	0	0	3	1095	0
Dining Room	1	60	3	1095	66
Kitchen	0.5	26	5	1825	24
Kitchen Other	0	0	5	1825	0
Hall	2	16	3	1095	36
Porch	1	13	8	2920	38
Utility/Other	1	43	2	730	31
				TOTAL...	403

<b>PROJECT NAME:</b>		<b>Scattered Sites</b>			
<b>PROJECT NUMBER:</b>		<b>MI 78-1</b>			
<b>NUMBER OF BEDROOMS:</b>		<b>4 BR DET</b>			
<b>AREA NAME</b>	<b>NUMBER OF FIXTURES</b>	<b>WATTS/ FIXTURE</b>	<b>HOURS /DAY</b>	<b>HOURS/ YEAR</b>	<b>KWH/ YEAR</b>
Bath Vanity	1	52	3	1095	57
Bath Overhead	3	26	3	1095	85
Bedroom	4	26	4	1460	152
Bed Fan	0	0	4	1460	0
Living Room	0	0	5	1825	0
Ceiling Fan	0	0	3	1095	0
Dining Room	1	60	3	1095	66
Kitchen	1	26	5	1825	47
Kitchen Other	0	0	5	1825	0
Hall	2	26	3	1095	57
Porch	1	13	8	2920	38
Utility/Other	2	20	2	730	28
				TOTAL...	531

## APPENDIX 7.3: Sample Domestic Water Heating Calculation

Find: The annual hot water heating load for a 2BR unit at MI 78-1 using the information listed below. See Table 1.0 on the following page for tabulated results.

### Known Information:

# Of Bedrooms = 2  
 Water Heater Efficiency 70%  
 Consumption = 30 gal/per/day  
 Fuel Type = Natural Gas  
 Specific Volume of Water = 62.32 *lb/cf*  
 Specific Heat of Water = 0.999 *BTU/(lb\*°F)*  
 $\Delta T = 120^{\circ}F - 55^{\circ}F = 65^{\circ}F$   
 Heuristic Exponent = 0.68  
 R-Value of Tank Insulation = 10  $(^{\circ}F * ft^2 * hr) / BTU$   
 R-Value of Tank and Air Film = 0.6208  $(^{\circ}F * ft^2 * hr) / BTU$

### Assumptions:

3 Occupants live in a 2 BR  
 Temp of Ground Water = 55 °F  
 Exit Temp of Water = 120 °F  
 Air Temp of Tank = 72 °F  
 Surface area of tank = 23 square feet

### General Formulas Used:

- Total Energy Required =  $\Sigma$  (Consumption Energy Req'd + Pilot Consumption + Total Energy Lost (kBTU/yr)
- Primary Fuel Required = Total energy Required (kBTU/yr) x 1ccf/103,000 BTU x 1,000BTU/1kBTU) / Water Heater Efficiency

Project Name:	Scattered Sites	
Project Number:	MI 78-3	
Unit Type:	2 BR DUP & 2 BR DET	
Number of Bedrooms:	2	Bedrooms
Estimated Number of Occupants:	3	Occupants
Estimated Consumption Rate:	30	Gallons/Occupant/Day
Specific Heat of Water:	1.00	Btu/lb/F
Specific Volume of Water:	62.32	lb/cf
Volume Conversion:	7.48	gal/cf
Heuristic Exponent:	0.68	
Estimated Service Water Inlet Temperature:	55	F
Hot Water Supply Temperature:	120	F
Delta T:	65	F
Calendar Schedule:	365	days/yr
Daily Schedule:	24	hrs/day
Total Operating Hours:	8,760	hrs/yr
Estimated Air Temperature At Tank:	72	F
Estimated Tank Size	30	Gal
Assumed Tank Insulation (R-value)	7.0	F sf hr/Btu
R-Value of Shell Plus Air	0.62	F sf hr/Btu
Water Heater Energy Factor:	70%	
Assumed Standing Pilot?	Yes	
Pilot Consumption Rate:	400	Btu/hr
Fuel Type:	Natural Gas	

Pilot Consumption Rate:	3504	kBtu/yr
Total Energy Lost:	1,221	kBtu/yr
Consumption Energy Required:	17,771	kBtu/yr
Total Energy Required:	22,496	kBtu/yr
<b>Primary Fuel Required:</b>	<b>312</b>	<b>CCF/Year</b>

<b>Project Name: Scattered Sites</b>		
<b>Project Number: MI 78-1</b>		
Unit Type:	1 BR DUP & ½ BR DUP	
Number of Bedrooms:	1	Bedrooms
Estimated Number of Occupants:	2	Occupants
Estimated Consumption Rate:	30	Gallons/Occupant/Day
Specific Heat of Water:	1.00	Btu/lb/F
Specific Volume of Water:	62.32	lb/cf
Volume Conversion:	7.48	gal/cf
Heuristic Exponent:	0.68	
Estimated Service Water Inlet Temperature:	55	F
Hot Water Supply Temperature:	120	F
Delta T:	65	F
Calendar Schedule:	365	days/yr
Daily Schedule:	24	hrs/day
Total Operating Hours:	8,760	hrs/yr
Estimated Air Temperature At Tank:	72	F
Estimated Tank Size	20	Gal
Assumed Tank Insulation (R-value)	7.00	F sf hr/Btu
R-Value of Shell Plus Air	0.62	F sf hr/Btu
Water Heater Energy Factor:	70%	
Assumed Standing Pilot?	yes	
Pilot Consumption Rate:	400	Btu/hr
Fuel Type:	Natural Gas	
Pilot Consumption Rate:	3,504	kBtu/yr
Total Energy Lost:	926	kBtu/yr
Consumption Energy Required:	8,885	kBtu/yr
Total Energy Required:	13,315	kBtu/yr
<b>Primary Fuel Required:</b>	<b>185</b>	<b>CCF/Year</b>

<b>Project Name: Scattered Sites</b>		
<b>Project Number: MI 78-1</b>		
Unit Type:	2 BR DUP	
Number of Bedrooms:	2	Bedrooms
Estimated Number of Occupants:	3	Occupants
Estimated Consumption Rate:	30	Gallons/Occupant/Day
Specific Heat of Water:	1.00	Btu/lb/F
Specific Volume of Water:	62.32	lb/cf
Volume Conversion:	7.48	gal/cf
Heuristic Exponent:	0.68	
Estimated Service Water Inlet Temperature:	55	F
Hot Water Supply Temperature:	120	F
Delta T:	65	F
Calendar Schedule:	365	days/yr
Daily Schedule:	24	hrs/day
Total Operating Hours:	8,760	hrs/yr
Estimated Air Temperature At Tank:	72	F
Estimated Tank Size	20	Gal
Assumed Tank Insulation (R-value)	7.00	F sf hr/Btu
R-Value of Shell Plus Air	0.62	F sf hr/Btu

Water Heater Energy Factor:	70%	
Assumed Standing Pilot?	yes	
Pilot Consumption Rate:	400	Btu/hr
Fuel Type:	Natural Gas	
Pilot Consumption Rate:	3,504	kBtu/yr
Total Energy Lost:	926	kBtu/yr
Consumption Energy Required:	<u>17,771</u>	kBtu/yr
Total Energy Required:	22,201	kBtu/yr
<b>Primary Fuel Required:</b>	<b>308</b>	<b>CCF/Year</b>

<b>Project Name: Scattered Sites</b>		
<b>Project Number: MI 78-1</b>		
Unit Type:	3 BR DET	
Number of Bedrooms:	3	Bedrooms
Estimated Number of Occupants:	5	Occupants
Estimated Consumption Rate:	30	Gallons/Occupant/Day
Specific Heat of Water:	1.00	Btu/lb/F
Specific Volume of Water:	62.32	lb/cf
Volume Conversion:	7.48	gal/cf
Heuristic Exponent:	0.68	
Estimated Service Water Inlet Temperature:	55	F
Hot Water Supply Temperature:	120	F
Delta T:	65	F
Calendar Schedule:	365	days/yr
Daily Schedule:	24	hrs/day
Total Operating Hours:	8,760	hrs/yr
Estimated Air Temperature At Tank:	72	F
Estimated Tank Size	35	Gal
Assumed Tank Insulation (R-value)	7.00	F sf hr/Btu
R-Value of Shell Plus Air	0.62	F sf hr/Btu
Water Heater Energy Factor:	70%	
Assumed Standing Pilot?	yes	
Pilot Consumption Rate:	400	Btu/hr
Fuel Type:	Natural Gas	
Pilot Consumption Rate:	3,504	kBtu/yr
Total Energy Lost:	1,355	kBtu/yr
Consumption Energy Required:	<u>26,656</u>	kBtu/yr
Total Energy Required:	31,515	kBtu/yr
<b>Primary Fuel Required:</b>	<b>437</b>	<b>CCF/Year</b>

<b>Project Name: Scattered Sites</b>		
<b>Project Number: MI 78-1</b>		
Unit Type:	4 BR DET	
Number of Bedrooms:	4	Bedrooms
Estimated Number of Occupants:	6	Occupants
Estimated Consumption Rate:	30	Gallons/Occupant/Day
Specific Heat of Water:	1.00	Btu/lb/F
Specific Volume of Water:	62.32	lb/cf
Volume Conversion:	7.48	gal/cf
Heuristic Exponent:	0.68	
Estimated Service Water Inlet Temperature:	55	F

Hot Water Supply Temperature:	120	F
Delta T:	65	F
Calendar Schedule:	365	days/yr
Daily Schedule:	24	hrs/day
Total Operating Hours:	8,760	hrs/yr
Estimated Air Temperature At Tank:	72	F
Estimated Tank Size	40	Gal
Assumed Tank Insulation (R-value)	7.00	F sf hr/Btu
R-Value of Shell Plus Air	0.62	F sf hr/Btu
Water Heater Energy Factor:	70%	
Assumed Standing Pilot?	yes	
Pilot Consumption Rate:	400	Btu/hr
Fuel Type:	Natural Gas	
Pilot Consumption Rate:	3,504	kBtu/yr
Total Energy Lost:	1,484	kBtu/yr
Consumption Energy Required:	<u>35,542</u>	kBtu/yr
Total Energy Required:	40,530	kBtu/yr
<b>Primary Fuel Required:</b>	<b>562</b>	<b>CCF/Year</b>

## Appendix 7.4: Sample Annual Space Heating Calculation

### Calculations

The following calculation shows the methodology used to estimate the quantity of energy required to heat a two bedroom.

$$Total\_Fuel\_Reqd = \frac{qL(DD)24}{\mu(HV)(DTD)} * Cd + (Annual\_Pilot\_Consumption)$$

#### Where:

qL = Designed heat loss rate = 21,401 btu/hr – see Table 1.0 on the following page

DD = Annual Heating Degree Days = 7,758, See Appendix 7.1

Cd = Correction factor = 0.77

$\mu$  = equipment efficiency = 78% Furnace Efficiency

HV = Heating Value, conversion factor from BTU to CCF = 103,000

DTD = Design Temperature Difference = Indoor thermostat set point minus 99% dry bulb heating temperature of Manistee, MI.

These calculations take into consideration:

- Type of heating fuel (natural gas or electric),
- Type of heating system
  - Electric resistance heat
  - Natural gas-fired hot water boiler
  - Conventional vented natural gas furnace
  - Electric Heat Pump

The tables also show the consumption of any electricity required to drive the fan motor, if the system operates with a fan.

### Thermal Resistance Factor

The following items are taken into consideration to generate a Thermal Resistance Factor to determine the design heat loss rate, qL.

- Construction materials
- Construction type
- Unit size
- Number of Windows
- Size of windows
- Size of doors
- Air infiltration

This factor is then combined with climatological data to calculate the amount of energy required by that particular heating system. This is completed for each unit type in each development.

## Heat Load Calculation

PROJECT NAME: <b>Scattered Sites</b>	Heating Degree Days =	<b>7758</b>
PROJECT NUMBER: <b>MI 78-3</b>	Balance Pt. Temp Diff.(F)=	<b>63</b>
UNIT TYPE: <b>2 BR DUP</b>	Design Temp. Diff.(F) =	<b>70</b>
	Correction Factor (CD) =	<b>0.77</b>
<b>APARTMENT DATA:</b>		
Number of Stories:		<b>1</b>
Perimeter Linear Footage:		<b>88</b> ft.
Perimeter HTM:		<b>3</b> Btuh/lf
Perimeter Heat Loss:		<b>279</b> Btu/h
Roof Square Footage:		<b>761</b> ft <sup>2</sup>
Roof U-Value:		<b>0.033</b> Btuh/F- ft <sup>2</sup>
Roof Heat Loss:		<b>1775</b> Btu/h
Exterior Wall Area:		<b>579</b> ft <sup>2</sup> .
Wall U-Value:		<b>0.053</b> Btuh/F- ft <sup>2</sup>
Wall Heat Loss		<b>2134</b> Btu/h
Window Area:		<b>86</b> ft <sup>2</sup> .
Window U-Value:		<b>0.720</b> Btuh/F- ft <sup>2</sup>
Window Heat Loss:		<b>4344</b> Btu/h
Door Area:		<b>36</b> ft <sup>2</sup> .
Door U-Value:		<b>0.580</b> Btuh/F- ft <sup>2</sup>
Door Heat Loss:		<b>1453</b> Btu/h
Window Crack Length:		<b>84</b> Ft
Window Infiltration Loss Factor:		<b>1.05</b> CFM/Lf
Infiltration Loss:		<b>6668</b> Btu/h
Door Crack Length:		<b>37</b> Ft
Door Infiltration Loss Factor:		<b>1.05</b> CFM/Lf
Infiltration Loss:		<b>2937</b> Btu/h
Total Apartment Heat Loss Rate:		<b>19591</b> Btu/h
Estimated Heating System Overall Efficiency:		<b>78%</b>
Standing Pilot?		<b>No</b>
Pilot BTU/hr.:		<b>0</b> Btu/h
Pilot Operating Hours:		<b>0</b> hrs/yr
Pilot Consumption:		<b>0</b> kBTU/yr
Heating Fuel? (Natural Gas, Electric, Propane)		<b>Natural Gas</b>
Estimated Heating System Consumption:		<b>499</b> CCF
Heating System Fan?		<b>Yes</b>
Heating Output:		<b>80000</b> Btu/h
Fan Size:		<b>746</b> Watts
Fan Operating Hours:		<b>643</b> hours
Fan Energy:		<b>479</b> KWH

## Heat Load Calculation

PROJECT NAME: <b>Scattered Sites</b>	Heating Degree Days =	<b>7758</b>
PROJECT NUMBER: <b>MI 78-3</b>	Balance Pt. Temp Diff.(F)=	<b>63</b>
UNIT TYPE: <b>2 BR DET</b>	Design Temp. Diff.(F) =	<b>70</b>
	Correction Factor (CD) =	<b>0.77</b>
APARTMENT DATA:		
Number of Stories:		<b>1</b>
Perimeter Linear Footage:		<b>119</b> ft.
Perimeter HTM:		<b>3</b> Btuh/lf
Perimeter Heat Loss:		<b>380</b> Btu/h
Roof Square Footage:		<b>854</b> ft <sup>2</sup>
Roof U-Value:		<b>0.033</b> Btuh/F- ft <sup>2</sup>
Roof Heat Loss:		<b>1993</b> Btu/h
Exterior Wall Area:		<b>833</b> ft <sup>2</sup> .
Wall U-Value:		<b>0.053</b> Btuh/F- ft <sup>2</sup>
Wall Heat Loss		<b>3069</b> Btu/h
Window Area:		<b>86</b> ft <sup>2</sup> .
Window U-Value:		<b>0.720</b> Btuh/F- ft <sup>2</sup>
Window Heat Loss:		<b>4329</b> Btu/h
Door Area:		<b>36</b> ft <sup>2</sup> .
Door U-Value:		<b>0.580</b> Btuh/F- ft <sup>2</sup>
Door Heat Loss:		<b>1453</b> Btu/h
Window Crack Length:		<b>91</b> Ft
Window Infiltration Loss Factor:		<b>1.05</b> CFM/Lf
Infiltration Loss:		<b>7239</b> Btu/h
Door Crack Length:		<b>37</b> Ft
Door Infiltration Loss Factor:		<b>1.05</b> CFM/Lf
Infiltration Loss:		<b>2937</b> Btu/h
Total Apartment Heat Loss Rate:		<b>21401</b> Btu/h
Estimated Heating System Overall Efficiency:		<b>78%</b>
Standing Pilot?		<b>No</b>
Pilot BTU/hr.:		<b>0</b> Btu/h
Pilot Operating Hours:		<b>0</b> hrs/yr
Pilot Consumption:		<b>0</b> kBTU/yr
Heating Fuel? (Natural Gas, Electric, Propane)		<b>Natural Gas</b>
Estimated Heating System Consumption:		<b>546</b> CCF
Heating System Fan?		<b>Yes</b>
Heating Output:		<b>80000</b> Btu/h
Fan Size:		<b>746</b> Watts
Fan Operating Hours:		<b>702</b> hours
Fan Energy:		<b>523</b> KWH

## Heat Load Calculation

PROJECT NAME: <b>Scattered Sites</b>	Heating Degree Days =	<b>7758</b>
PROJECT NUMBER: <b>MI 78-1</b>	Balance Pt. Temp Diff.(F)=	<b>63</b>
UNIT TYPE: <b>1 BR &amp; ½ BR</b>	Design Temp. Diff.(F) =	<b>70</b>
	Correction Factor (CD) =	<b>0.77</b>
<b>APARTMENT DATA:</b>		
Number of Stories:		<b>1</b>
Perimeter Linear Footage:	65	ft.
Perimeter HTM:	3	Btuh/lf
Perimeter Heat Loss:	207	Btu/h
Roof Square Footage:	500	ft <sup>2</sup>
Roof U-Value:	0.033	Btuh/F- ft <sup>2</sup>
Roof Heat Loss:	1167	Btu/h
Exterior Wall Area:	439	ft <sup>2</sup> .
Wall U-Value:	0.053	Btuh/F- ft <sup>2</sup>
Wall Heat Loss	1616	Btu/h
Window Area:	64	ft <sup>2</sup> .
Window U-Value:	0.720	Btuh/F- ft <sup>2</sup>
Window Heat Loss:	3205	Btu/h
Door Area:	18	ft <sup>2</sup> .
Door U-Value:	0.580	Btuh/F- ft <sup>2</sup>
Door Heat Loss:	727	Btu/h
Window Crack Length:	63	Ft
Window Infiltration Loss Factor:	1.05	CFM/Lf
Infiltration Loss:	5009	Btu/h
Door Crack Length:	19	Ft
Door Infiltration Loss Factor:	1.05	CFM/Lf
Infiltration Loss:	1469	Btu/h
Total Apartment Heat Loss Rate:	13399	Btu/h
Estimated Heating System Overall Efficiency:	78%	
Standing Pilot?	No	
Pilot BTU/hr.:	0	Btu/h
Pilot Operating Hours:	0	hrs/yr
Pilot Consumption:	0	kBTU/yr
Heating Fuel? (Natural Gas, Electric, Propane)	Natural Gas	
Estimated Heating System Consumption:	342	CCF
Heating System Fan?	No	
Heating Output:	26520	Btu/h
Fan Size:	0	Watts
Fan Operating Hours:	0	hours
Fan Energy:	0	KWH

## Heat Load Calculation

PROJECT NAME: <b>Scattered Sites</b>	Heating Degree Days =	<b>7758</b>
PROJECT NUMBER: <b>MI 78-1</b>	Balance Pt. Temp Diff.(F)=	<b>63</b>
UNIT TYPE: <b>2 BR DUP</b>	Design Temp. Diff.(F) =	<b>70</b>
	Correction Factor (CD) =	<b>0.77</b>
<b>APARTMENT DATA:</b>		
Number of Stories:		<b>1</b>
Perimeter Linear Footage:	65 ft.	
Perimeter HTM:	3 Btuh/lf	
Perimeter Heat Loss:	207 Btu/h	
Roof Square Footage:	500 ft <sup>2</sup>	
Roof U-Value:	0.033 Btuh/F- ft <sup>2</sup>	
Roof Heat Loss:	1167 Btu/h	
Exterior Wall Area:	398 ft <sup>2</sup> .	
Wall U-Value:	0.053 Btuh/F- ft <sup>2</sup>	
Wall Heat Loss	1466 Btu/h	
Window Area:	86 ft <sup>2</sup> .	
Window U-Value:	0.720 Btuh/F- ft <sup>2</sup>	
Window Heat Loss:	4344 Btu/h	
Door Area:	36 ft <sup>2</sup> .	
Door U-Value:	0.580 Btuh/F- ft <sup>2</sup>	
Door Heat Loss:	1453 Btu/h	
Window Crack Length:	84 Ft	
Window Infiltration Loss Factor:	1.05 CFM/Lf	
Infiltration Loss:	6668 Btu/h	
Door Crack Length:	37 Ft	
Door Infiltration Loss Factor:	1.05 CFM/Lf	
Infiltration Loss:	2937 Btu/h	
Total Apartment Heat Loss Rate:	18243 Btu/h	
Estimated Heating System Overall Efficiency:	<b>78%</b>	
Standing Pilot?	<b>No</b>	
Pilot BTU/hr.:	0 Btu/h	
Pilot Operating Hours:	0 hrs/yr	
Pilot Consumption:	0 kBTU/yr	
Heating Fuel? (Natural Gas, Electric, Propane)	Natural Gas	
Estimated Heating System Consumption:	465 CCF	
Heating System Fan?	No	
Heating Output:	<b>53040</b> Btu/h	
Fan Size:	0 Watts	
Fan Operating Hours:	0 hours	
Fan Energy:	0 KWH	

## Heat Load Calculation

PROJECT NAME: <b>Scattered Sites</b>	Heating Degree Days =	<b>7758</b>
PROJECT NUMBER: <b>MI 78-1</b>	Balance Pt. Temp Diff.(F)=	<b>63</b>
UNIT TYPE: <b>3 BR DET</b>	Design Temp. Diff.(F) =	<b>70</b>
	Correction Factor (CD) =	<b>0.77</b>
<b>APARTMENT DATA:</b>		
Number of Stories:		<b>1</b>
Perimeter Linear Footage:	150 ft.	
Perimeter HTM:	3 Btuh/lf	
Perimeter Heat Loss:	477 Btu/h	
Roof Square Footage:	1250 ft <sup>2</sup>	
Roof U-Value:	0.033 Btuh/F- ft <sup>2</sup>	
Roof Heat Loss:	2917 Btu/h	
Exterior Wall Area:	1067 ft <sup>2</sup> .	
Wall U-Value:	0.053 Btuh/F- ft <sup>2</sup>	
Wall Heat Loss	3931 Btu/h	
Window Area:	106 ft <sup>2</sup> .	
Window U-Value:	0.720 Btuh/F- ft <sup>2</sup>	
Window Heat Loss:	5347 Btu/h	
Door Area:	27 ft <sup>2</sup> .	
Door U-Value:	0.580 Btuh/F- ft <sup>2</sup>	
Door Heat Loss:	1088 Btu/h	
Window Crack Length:	101 Ft	
Window Infiltration Loss Factor:	0.75 CFM/Lf	
Infiltration Loss:	5698 Btu/h	
Door Crack Length:	28 Ft	
Door Infiltration Loss Factor:	0.75 CFM/Lf	
Infiltration Loss:	1576 Btu/h	
Total Apartment Heat Loss Rate:	21035 Btu/h	
Estimated Heating System Overall Efficiency:	<b>78%</b>	
Standing Pilot?	<b>No</b>	
Pilot BTU/hr.:	0 Btu/h	
Pilot Operating Hours:	0 hrs/yr	
Pilot Consumption:	0 kBTU/yr	
Heating Fuel? (Natural Gas, Electric, Propane)	Natural Gas	
Estimated Heating System Consumption:	536 CCF	
Heating System Fan?	No	
Heating Output:	<b>53040</b> Btu/h	
Fan Size:	0 Watts	
Fan Operating Hours:	0 hours	
Fan Energy:	0 KWH	

## Heat Load Calculation

PROJECT NAME: <b>Scattered Sites</b>	Heating Degree Days =	<b>7758</b>
PROJECT NUMBER: <b>MI 78-1</b>	Balance Pt. Temp Diff.(F)=	<b>63</b>
UNIT TYPE: <b>4 BR DET</b>	Design Temp. Diff.(F) =	<b>70</b>
	Correction Factor (CD) =	<b>0.77</b>
<b>APARTMENT DATA:</b>		
Number of Stories:		<b>1</b>
Perimeter Linear Footage:	150	ft.
Perimeter HTM:	23	Btuh/lf
Perimeter Heat Loss:	3500	Btu/h
Roof Square Footage:	1250	ft <sup>2</sup>
Roof U-Value:	0.033	Btuh/F- ft <sup>2</sup>
Roof Heat Loss:	2917	Btu/h
Exterior Wall Area:	1049	ft <sup>2</sup> .
Wall U-Value:	0.053	Btuh/F- ft <sup>2</sup>
Wall Heat Loss	3863	Btu/h
Window Area:	116	ft <sup>2</sup> .
Window U-Value:	0.720	Btuh/F- ft <sup>2</sup>
Window Heat Loss:	5826	Btu/h
Door Area:	36	ft <sup>2</sup> .
Door U-Value:	0.580	Btuh/F- ft <sup>2</sup>
Door Heat Loss:	1453	Btu/h
Window Crack Length:	113	Ft
Window Infiltration Loss Factor:	0.75	CFM/Lf
Infiltration Loss:	6396	Btu/h
Door Crack Length:	37	Ft
Door Infiltration Loss Factor:	0.75	CFM/Lf
Infiltration Loss:	2098	Btu/h
Total Apartment Heat Loss Rate:	26053	Btu/h
Estimated Heating System Overall Efficiency:	78%	
Standing Pilot?	No	
Pilot BTU/hr.:	0	Btu/h
Pilot Operating Hours:	0	hrs/yr
Pilot Consumption:	0	kBTU/yr
Heating Fuel? (Natural Gas, Electric, Propane)	Natural Gas	
Estimated Heating System Consumption:	664	CCF
Heating System Fan?	No	
Heating Output:	53040	Btu/h
Fan Size:	0	Watts
Fan Operating Hours:	0	hours
Fan Energy:	0	KWH

## Appendix 7.5: Consumers 2020 Electricity Rates

<b>Power Supply Charges</b>				
	2019 Rates		Rider Reference	<b>2020 Rates</b>
Energy Charge:	\$0.095585	/kWh for the first 600 kWh (June – September)	D-9.00	\$0.095585
	\$0.126408	/kWh over 600 kWh (June – September)	D-9.00	\$0.126408
	\$0.095585	/kWh for the first 600 kWh (October - May)	D-9.00	\$0.095585
Power Supply Cost Recovery (PSCR):	-\$0.001978	/kWh (average)	D-4.00	-\$0.001978
<b>Delivery Charges:</b>				
System Access Charge:	\$7.50	/customer/ month	D-9.00	\$7.50
Distribution Charge:	\$0.047054	/kWh for all kWh	D-9.00	\$0.047054
Renewable Energy Surcharge:	\$0.00	/billing meter	D-2.10	\$0.00
Energy Efficiency Surcharge:	\$0.003101	/kWh	D-2.10	\$0.003284
Distribution Credit:	0	/kWh	D-2.20	0
Securitization Charge:	\$0.001144	/kWh	D-5.00	\$0.001163
Low-Income Eng Assist Fund	\$0.93	/customer/ month	D-3.00	\$0.92
<b>Total Monthly Charge:</b>	<b>\$8.43</b>	<b>/customer/ month</b>		<b>\$8.42</b>
<b>Total \$/kWh</b>	<b>\$0.144907</b>	<b>/kWh for the first 600 kWh</b>		<b>\$0.145109</b>
	\$0.175730	/kWh over 600 kWh (June – September)		<b>\$0.175932</b>
	\$0.144907	/kWh for the first 600 kWh (October - May)		<b>\$0.145109</b>

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To reformat Rate Book)

Original Sheet No. D-19.00

## RESIDENTIAL SERVICE SECONDARY RATE RS

### Availability:

Subject to any restrictions, this rate is available to any customer desiring electric service for any usual residential use in: (i) private family dwellings; (ii) tourist homes, rooming houses, dormitories, nursing homes and other similarly occupied buildings containing sleeping accommodations for up to six persons; or (iii) existing multifamily dwellings containing up to four households served through a single meter. Service for single-phase or three-phase equipment may be included under this rate, provided the individual capacity of such equipment does not exceed 3 hp or 3 kW, nor does the total connected load of the home exceed 10 kW, without the specific consent of the Company.

As of January 1, 2020 this rate is closed to new business. After January 1, 2020 this rate is only available to customers electing a Non-Transmitting Meter in accordance with Rule C5.5, Non-Transmitting Meter Provision or customers determined to be eligible at the Company's sole discretion.

This rate is not available for: (i) resale purposes; (ii) multifamily dwellings containing more than four living units served through a single meter; (iii) tourist homes, rooming houses, dormitories, nursing homes and similarly occupied buildings containing sleeping accommodations for more than six persons; or (iv) any other Non-Residential usage.

Residences in conjunction with commercial or industrial enterprises and mobile home parks may take service on this rate only under the Rules and Regulations contained in the Company's Electric Rate Book.

### Nature of Service:

Service under this rate shall be alternating current, 60-Hertz, single-phase or three-phase (at the Company's option) Secondary Voltage service. The Company will determine the particular nature of the voltage in each case.

The Company will schedule meter readings on a monthly basis and attempt to obtain an actual meter reading for all tourist and/or occasional residence customers at intervals of not more than six months.

### Monthly Rate:

**Power Supply Charges:** These charges are applicable to Full Service customers.

#### Energy Charge:

Non-Capacity	Capacity	Total	
\$ 0.060483	\$ 0.035102	\$0.095585	per kWh for the first 600 kWh per month during the billing months of June - September
\$ 0.079987	\$ 0.046421	\$0.126408	per kWh for all kWh over 600 kWh per month during the billing months of June - September
\$ 0.060483	\$ 0.035102	\$0.095585	per kWh for all kWh during the billing months of October-May

This rate is subject to the Power Supply Cost Recovery (PSCR) Factor shown on Sheet No. D-6.00.

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

System Access Charge:	\$7.50	per customer per month
Distribution Charge:	\$0.047054	per kWh for all kWh

This rate is subject to the Surcharges shown on Sheet Nos. D-2.00 through D-5.00 and the Power Plant Securitization Charges shown on Sheet No. D-7.00.

(Continued on Sheet No. D-20.00)

Issued December 13, 2019 by  
 Patti Poppe,

Effective for service rendered on  
 and after November 15, 2019

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To remove Energy Efficiency Surcharge Language  
 and reformat page)

Second Revised Sheet No. D-2.00  
 Cancels First Revised Sheet No. D-2.00

### SURCHARGES

<b>Rate Schedule</b>	<b>Renewable Energy Plan Surcharge (Case No. U-17301) Effective beginning the July 2014 Billing Month<sup>(2)</sup></b>
Residential Rates	\$ 0.00/billing meter
Rate GS, GSTU, and GSD <sup>(1)</sup>	
Tier 1: 0 – 1,250 kWh/mo.	\$ 0.00/billing meter
Tier 2: 1,251 – 5,000 kWh/mo.	0.00/billing meter
Tier 3: 5,001 – 30,000 kWh/mo.	0.00/billing meter
Tier 4: 30,001 – 50,000 kWh/mo.	0.00/billing meter
Tier 5: > 50,000 kWh/mo.	0.00/billing meter
Rate GP, GPD, GPTU and EIP <sup>(1)</sup>	
Tier 1: 0 – 5,000 kWh/mo.	\$ 0.00/billing meter
Tier 2: 5,001 – 10,000 kWh/mo.	0.00/billing meter
Tier 3: 10,001 – 30,000 kWh/mo.	0.00/billing meter
Tier 4: 30,001 – 50,000 kWh/mo.	0.00/billing meter
Tier 5: > 50,000 kWh/mo.	0.00/billing meter
Rate GSG-2	NA
Rate GML	
Tier 1: 0 – 1,250 kWh/mo.	\$ 0.00/billing meter
Tier 2: 1,251 – 5,000 kWh/mo.	0.00/billing meter
Tier 3: > 5,000 kWh/mo.	0.00/billing meter
Rate GUL	0.00/luminaire
Rate GU-XL	0.00/luminaire
Rate GU	
Tier 1: 0 – 1,250 kWh/mo.	0.00/billed account
Tier 2: 1,251 – 5,000 kWh/mo.	0.00/billed account
Tier 3: > 5,000 kWh/mo.	0.00/billed account
Rate PA	NA
Rate ROA-R, ROA-S, ROA-P	NA

All Surcharges shall be applied on a monthly basis. The customer's consumption will be reviewed annually in the January bill month. Following the annual review, the customer may be subsequently moved to the Surcharge level for their applicable rate for the next billing period based on the customer's average consumption for the previous year. In situations where no historical consumption is available, the monthly Surcharge level will be based on the lowest consumption category for the secondary rate schedules or the lowest consumption category for primary rate schedules. No retroactive adjustment will be made due to the application of the REP Surcharges associated with increases or decreases in consumption.

<sup>(1)</sup>Municipal Pumping customers shall be excluded from the Renewable Energy Plan Surcharge.

<sup>(2)</sup>A Renewable Energy Plan Surcharge will be in effect for the period of the September 2009 Bill Month through the August 2020 Bill Month. The amount may vary during specific months as authorized by the Michigan Public Service Commission. Applicable cases include Case Nos. U-15805, U-16543, U-16581 and U-17301.

Issued March 13, 2020 by  
 Patti Poppe,

Effective for bills rendered on and after  
 the Company's April 2020 Billing Month

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To reformat Rate Book and  
 add Energy Efficiency Program Surcharge)

Original Sheet No. D-2.10

**SURCHARGES**

<u>Rate Schedule</u>	<u>Energy Efficiency Program Surcharge (Case No. U-20365) Effective from January 2020 to June 2020</u>		<u>Distribution Charge for all Residential Rate Schedules</u>		<u>Total Distribution Charge <sup>(5)</sup></u>	
	<u>January 2020 to June 2020</u>	<u>Billing Month <sup>(1)</sup></u>	<u>System Access Charge for each Non-Residential Rate Schedule</u>	<u>System Access Charge <sup>(5)</sup></u>		
Residential Rates	\$ 0.003284/kWh	+	\$0.047054/kWh	=	\$0.050338/kWh	
Rate GS and GSTU						
Tier 1: 0-1,250 kWh/mo.	\$ 4.44/billing meter	+	\$ 20.00/month	=	\$ 24.44/month	
Tier 2: 1,251 – 5,000 kWh/mo.	25.10/billing meter	+	20.00/month	=	45.10/month	
Tier 3: 5,001 – 30,000 kWh/mo.	154.54/billing meter	+	20.00/month	=	174.54/Month	
Tier 4: 30,001 – 50,000 kWh/mo.	154.54/billing meter	+	20.00/month	=	174.54/Month	
Tier 5: >50,000 kWh/mo.	154.54/billing meter	+	20.00/month	=	174.54/Month	
Rate GSD						
Tier 1: 0-1,250 kWh/mo.	\$ 4.44/billing meter	+	\$ 30.00/month	=	\$ 34.44/month	
Tier 2: 1,251 – 5,000 kWh/mo.	25.10/billing meter	+	30.00/month	=	55.10/month	
Tier 3: 5,001 – 30,000 kWh/mo.	154.54/billing meter	+	30.00/month	=	184.54/Month	
Tier 4: 30,001 – 50,000 kWh/mo.	154.54/billing meter	+	30.00/month	=	184.54/Month	
Tier 5: >50,000 kWh/mo.	154.54/billing meter	+	30.00/month	=	184.54/Month	
Rate GP						
Tier 1: 0-5,000 kWh/mo.	\$ 5.95/billing meter	+	\$ 100.00/month	=	\$ 105.95/month	
Tier 2: 5,001 – 10,000 kWh/mo.	45.74/billing meter	+	100.00/month	=	145.74/Month	
Tier 3: 10,001 – 30,000 kWh/mo.	216.03/billing meter	+	100.00/month	=	316.03/Month	
Tier 4: 30,001 – 50,000 kWh/mo.	559.63/billing meter	+	100.00/month	=	659.63/Month	
Tier 5: >50,000 kWh/mo.	1118.70/billing meter	+	100.00/month	=	1218.70/Month	
Rate GPD, GPTU, and EIP						
Tier 1: 0-5,000 kWh/mo.	\$ 5.95/billing meter	+	\$ 200.00/month	=	\$ 205.95/month	
Tier 2: 5,001 – 10,000 kWh/mo.	45.74/billing meter	+	200.00/month	=	245.74/Month	
Tier 3: 10,001 – 30,000 kWh/mo.	216.03/billing meter	+	200.00/month	=	416.03/Month	
Tier 4: 30,001 – 50,000 kWh/mo.	559.63/billing meter	+	200.00/month	=	759.63/Month	
Tier 5: >50,000 kWh/mo.	1118.70/billing meter	+	200.00/month	=	1318.70/Month	
Rate GSG-2 <sup>(3)</sup>	NA		NA		NA	
Rate GML <sup>(3)(4)</sup>	NA		NA		NA	
Rate GUL <sup>(3)(4)</sup>	\$ 0.27/fixture per month <sup>(2)</sup>		NA		NA	
Rate GU-XL	NA		NA		NA	
Rate GU	NA		NA		NA	
Rate PA	NA		NA		NA	
Rate ROA-R, ROA-S, ROA-P	Same as Full Service Delivery Rate Schedule		Same as Full Service Delivery Rate Schedule		Same as Full Service Delivery Rate Schedule	

<sup>(1)</sup> This is subject to all general terms and conditions as shown in Rule C12, Energy Efficiency. The Energy Efficiency Program Surcharge amount may vary during specific months as authorized by the Michigan Public Service Commission. The Company will file a new tariff sheet to reflect any change in surcharges once the financial incentive recovery period has been completed.  
<sup>(2)</sup> Company-Owned lighting fixture customers served on General Service Unmetered Lighting Rate GUL shall pay this surcharge. Rate codes 1455 and 1460 will not be charged this surcharge.  
<sup>(3)</sup> Additional Rate Schedules can opt-in to the Energy Efficiency Program as described in Rule C12., Energy Efficiency.  
<sup>(4)</sup> Lighting rates that choose to opt-in to the Energy Efficiency Program shall be assessed \$0.27 per fixture per month.  
<sup>(5)</sup> This charge will be shown on the monthly utility bill using the methodology as described in Rule C12, Energy Efficiency.

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 Patti Poppe,

Effective for bills rendered on and after  
 the Company's May 2020 Billing Month

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To reformat Rate Book and  
 add Energy Efficiency Self-Directed Customer Surcharge)

Original Sheet No. D-2.20

**SURCHARGES**

<u>Rate Schedule</u>	<b>Energy Efficiency Self-Directed Customer Surcharge (Case No. U-20365) Effective from January 2020 to June 2020</b>				
	<u>Billing Month <sup>(1)</sup></u>				
Residential Rates	N/A				
				<b>System Access Charge for each Non-Residential Rate Schedule</b>	<b>Total System Access Charge <sup>(2)</sup></b>
<b>Rate GS and GSTU</b>					
Tier 1: 0-1,250 kWh/mo.	\$ 0.11/billing meter	+	\$ 20.00/month	=	\$ 20.11/month
Tier 2: 1,251 – 5,000 kWh/mo.	0.65/billing meter	+	20.00/month	=	20.65/month
Tier 3: 5,001 – 30,000 kWh/mo.	3.87/billing meter	+	20.00/month	=	23.87/month
Tier 4: 30,001 – 50,000 kWh/mo.	3.87/billing meter	+	20.00/month	=	23.87/month
Tier 5: >50,000 kWh/mo.	3.87/billing meter	+	20.00/month	=	23.87/month
<b>Rate GSD</b>					
Tier 1: 0-1,250 kWh/mo.	\$ 0.11/billing meter	+	\$ 30.00/month	=	\$ 30.11/month
Tier 2: 1,251 – 5,000 kWh/mo.	0.65/billing meter	+	30.00/month	=	30.65/month
Tier 3: 5,001 – 30,000 kWh/mo.	3.87/billing meter	+	30.00/month	=	33.87/month
Tier 4: 30,001 – 50,000 kWh/mo.	3.87/billing meter	+	30.00/month	=	33.87/month
Tier 5: >50,000 kWh/mo.	3.87/billing meter	+	30.00/month	=	33.87/month
<b>Rate GP</b>					
Tier 1: 0-5,000 kWh/mo.	\$ 0.20/billing meter	+	\$ 100.00/month	=	\$ 100.20/month
Tier 2: 5,001 – 10,000 kWh/mo.	1.75/billing meter	+	100.00/month	=	101.75/month
Tier 3: 10,001 – 30,000 kWh/mo.	4.52/billing meter	+	100.00/month	=	104.52/month
Tier 4: 30,001 – 50,000 kWh/mo.	9.04/billing meter	+	100.00/month	=	109.04/month
Tier 5: >50,000 kWh/mo.	43.62/billing meter	+	100.00/month	=	143.62/month
<b>Rate GPD, GPTU, and EIP</b>					
Tier 1: 0-5,000 kWh/mo.	\$ 0.20/billing meter	+	\$ 200.00/month	=	\$ 200.20/month
Tier 2: 5,001 – 10,000 kWh/mo.	1.75/billing meter	+	200.00/month	=	201.75/month
Tier 3: 10,001 – 30,000 kWh/mo.	4.52/billing meter	+	200.00/month	=	204.52/month
Tier 4: 30,001 – 50,000 kWh/mo.	9.04/billing meter	+	200.00/month	=	209.04/month
Tier 5: >50,000 kWh/mo.	43.62/billing meter	+	200.00/month	=	243.62/month
Rate GSG-2	N/A		N/A		N/A
Rate GML	N/A		N/A		N/A
Rate GUL	N/A		N/A		N/A
Rate GU-XL	N/A		N/A		N/A
Rate GU	N/A		N/A		N/A
Rate PA	N/A		N/A		N/A
Rate ROA-R, ROA-S, ROA-P	Same as Full Service Delivery Rate Schedule		Same as Full Service Delivery Rate Schedule		Same as Full Service Delivery Rate Schedule

<sup>(1)</sup> An eligible customer who files and implements a self-directed plan in compliance with Rule C12 is required to pay the Energy Efficiency Self-Directed Program Surcharge.

<sup>(2)</sup> This charge will be shown on the monthly utility bill using the methodology as described in Rule C12, Energy Efficiency.

Issued March 13, 2020 by  
 Patti Poppe,

Effective for bills rendered on and after  
 the Company's May 2020 Billing Month

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To reformat Rate Book and  
 add Energy Efficiency Program Surcharge)

Original Sheet No. D-2.30

**SURCHARGES**

<b>Rate Schedule</b>	<b>Energy Efficiency Program Surcharge (Case No. U-20372) Effective beginning the July 2020 Billing Month<sup>(1)</sup></b>	<b>Distribution Charge for all Residential Rate Schedules</b>	<b>Total Distribution Charge<sup>(5)</sup></b>
Residential Rates	\$ 0.003485/kWh	\$0.047054/kWh	\$0.050539/kWh
		<b>System Access Charge for each Non-Residential Rate Schedule =</b>	<b>Total System Access Charge<sup>(5)</sup></b>
<b>Rate GS and GSTU</b>			
Tier 1: 0-1,250 kWh/mo.	\$ 17.16/billing meter	\$ 20.00/month	\$ 37.16/month
Tier 2: 1,251 – 5,000 kWh/mo.	68.65/billing meter	20.00/month	88.65/month
Tier 3: 5,001 – 30,000 kWh/mo.	208.46/billing meter	20.00/month	228.46/month
Tier 4: 30,001 – 50,000 kWh/mo.	339.29/billing meter	20.00/month	359.29/month
Tier 5: >50,000 kWh/mo.	560.89/billing meter	20.00/month	580.89/month
<b>Rate GSD</b>			
Tier 1: 0-1,250 kWh/mo.	\$ 17.16/billing meter	\$ 30.00/month	\$ 47.16/month
Tier 2: 1,251 – 5,000 kWh/mo.	68.65/billing meter	30.00/month	98.65/month
Tier 3: 5,001 – 30,000 kWh/mo.	208.46/billing meter	30.00/month	238.46/month
Tier 4: 30,001 – 50,000 kWh/mo.	339.29/billing meter	30.00/month	369.29/month
Tier 5: >50,000 kWh/mo.	560.89/billing meter	30.00/month	590.89/month
<b>Rate GP</b>			
Tier 1: 0-5,000 kWh/mo.	\$ 21.02/billing meter	\$ 100.00/month	\$ 121.02/month
Tier 2: 5,001 – 10,000 kWh/mo.	74.22/billing meter	100.00/month	174.22/month
Tier 3: 10,001 – 30,000 kWh/mo.	303.85/billing meter	100.00/month	403.85/month
Tier 4: 30,001 – 50,000 kWh/mo.	626.24/billing meter	100.00/month	726.24/month
Tier 5: >50,000 kWh/mo.	1414.01/billing meter	100.00/month	1514.01/month
<b>Rate GPD, GPTU, and EIP</b>			
Tier 1: 0-5,000 kWh/mo.	\$ 21.02/billing meter	\$ 200.00/month	\$ 221.02/month
Tier 2: 5,001 – 10,000 kWh/mo.	74.22/billing meter	200.00/month	274.22/month
Tier 3: 10,001 – 30,000 kWh/mo.	303.85/billing meter	200.00/month	503.85/month
Tier 4: 30,001 – 50,000 kWh/mo.	626.24/billing meter	200.00/month	826.24/month
Tier 5: >50,000 kWh/mo.	1414.01/billing meter	200.00/month	1614.01/month
Rate GSG-2 <sup>(3)</sup>	NA	NA	NA
Rate GML <sup>(3)(4)</sup>	NA	NA	NA
Rate GUL <sup>(3)(4)</sup>	\$ 0.27/fixture per month <sup>(2)</sup>	NA	NA
Rate GU-XL	NA	NA	NA
Rate GU	NA	NA	NA
Rate PA	NA	NA	NA
Rate ROA-R, ROA-S, ROA-P	Same as Full Service Delivery Rate Schedule	Same as Full Service Delivery Rate Schedule	Same as Full Service Delivery Rate Schedule

<sup>(1)</sup> This is subject to all general terms and conditions as shown in Rule C12., Energy Efficiency. The Energy Efficiency Program Surcharge amount may vary during specific months as authorized by the Michigan Public Service Commission. The Company will file a new tariff sheet to reflect any change in surcharges once the financial incentive recovery period has been completed.

<sup>(2)</sup> Company-Owned lighting fixture customers served on General Service Unmetered Lighting Rate GUL shall pay this surcharge. Rate codes 1455 and 1460 will not be charged this surcharge.

<sup>(3)</sup> Additional Rate Schedules can opt-in to the Energy Efficiency Program as described in Rule C12., Energy Efficiency.

<sup>(4)</sup> Lighting rates that choose to opt-in to the Energy Efficiency Program shall be assessed \$0.27 per fixture per month.

<sup>(5)</sup> This charge will be shown on the monthly utility bill using the methodology as described in Rule C12., Energy Efficiency.

Issued March 13, 2020 by  
 Patti Poppe,

Effective for bills rendered on and after  
 the Company's July 2020 Billing Month

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To reformat Rate Book and  
 add Energy Efficiency Self-Directed Customer Surcharge)

Original Sheet No. D-2.40

**SURCHARGES**

<u>Rate Schedule</u>	<b>Energy Efficiency Self-Directed Customer Surcharge (Case No. U-20372) Effective beginning the July 2020</b>		
	<u>Billing Month<sup>(1)</sup></u>		
Residential Rates	N/A		
		<b>System Access Charge for each Non-Residential Rate Schedule</b>	<b>Total System Access Charge<sup>(2)</sup></b>
<b>Rate GS and GSTU</b>			
Tier 1: 0-1,250 kWh/mo.	\$ 1.12/billing meter +	\$ 20.00/month	= \$ 21.12/month
Tier 2: 1,251 – 5,000 kWh/mo.	4.56/billing meter +	20.00/month	= 24.56/month
Tier 3: 5,001 – 30,000 kWh/mo.	15.48/billing meter +	20.00/month	= 35.48/month
Tier 4: 30,001 – 50,000 kWh/mo.	21.89/billing meter +	20.00/month	= 41.89/month
Tier 5: >50,000 kWh/mo.	34.57/billing meter +	20.00/month	= 54.57/month
<b>Rate GSD</b>			
Tier 1: 0-1,250 kWh/mo.	\$ 1.12/billing meter +	\$ 30.00/month	= \$ 31.12/month
Tier 2: 1,251 – 5,000 kWh/mo.	4.56/billing meter +	30.00/month	= 34.56/month
Tier 3: 5,001 – 30,000 kWh/mo.	15.48/billing meter +	30.00/month	= 45.48/month
Tier 4: 30,001 – 50,000 kWh/mo.	21.89/billing meter +	30.00/month	= 51.89/month
Tier 5: >50,000 kWh/mo.	34.57/billing meter +	30.00/month	= 64.57/month
<b>Rate GP</b>			
Tier 1: 0-5,000 kWh/mo.	\$ 1.31/billing meter +	\$ 100.00/month	= \$ 101.31/month
Tier 2: 5,001 – 10,000 kWh/mo.	4.61/billing meter +	100.00/month	= 104.61/month
Tier 3: 10,001 – 30,000 kWh/mo.	21.55/billing meter +	100.00/month	= 121.55/month
Tier 4: 30,001 – 50,000 kWh/mo.	48.52/billing meter +	100.00/month	= 148.52/month
Tier 5: >50,000 kWh/mo.	84.99/billing meter +	100.00/month	= 184.99/month
<b>Rate GPD, GPTU, and EIP</b>			
Tier 1: 0-5,000 kWh/mo.	\$ 1.31/billing meter +	\$ 200.00/month	= \$ 201.31/month
Tier 2: 5,001 – 10,000 kWh/mo.	4.61/billing meter +	200.00/month	= 204.61/month
Tier 3: 10,001 – 30,000 kWh/mo.	21.55/billing meter +	200.00/month	= 221.55/month
Tier 4: 30,001 – 50,000 kWh/mo.	48.52/billing meter +	200.00/month	= 248.52/month
Tier 5: >50,000 kWh/mo.	84.99/billing meter +	200.00/month	= 284.99/month
Rate GSG-2	NA	NA	NA
Rate GML	NA	NA	NA
Rate GUL	NA	NA	NA
Rate GU-XL	NA	NA	NA
Rate GU	NA	NA	NA
Rate PA	NA	NA	NA
Rate ROA-R, ROA-S, ROA-P	Same as Full Service Delivery Rate Schedule	Same as Full Service Delivery Rate Schedule	Same as Full Service Delivery Rate Schedule

<sup>(1)</sup> An eligible customer who files and implements a self-directed plan in compliance with Rule C12 is required to pay the Energy Efficiency Self-Directed Program Surcharge.

<sup>(2)</sup> This charge will be shown on the monthly utility bill using the methodology as described in Rule C12., Energy Efficiency.

Issued March 13, 2020 by  
 Patti Poppe,

Effective for bills rendered on and after  
 the Company's July 2020 Billing Month

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To add Rate RSM)

First Revised Sheet No. D-3.00  
 Cancels Original Sheet No. D-3.00

**SURCHARGES**

<u>Rate Schedule</u>	<u>Low-Income Energy Assistance Fund Surcharge (Case No. U-17377) Effective beginning with the September 2019 Billing Month</u>
Rate RSP <sup>(1)</sup>	\$0.92/billing meter
Rate RS <sup>(1)</sup>	0.92/billing meter
Rate RDP <sup>(1)</sup>	0.92/billing meter
Rate RDPR <sup>(1)</sup>	0.92/billing meter
Rate REV-1 <sup>(1)</sup>	0.92/billing meter
Rate REV-2 <sup>(1)</sup>	NA
Rate RT <sup>(1)</sup>	0.92/billing meter
Rate RSH <sup>(1)</sup>	0.92/billing meter
Rate RPM <sup>(1)</sup>	0.92/billing meter
Rate RSM <sup>(1)</sup>	0.92/billing meter
Rate GS	0.92/billing meter
Rate GSTU	0.92/billing meter
Rate GSD	0.92/billing meter
Rate GP	0.92/billing meter
Rate GPD	0.92/billing meter
Rate GPTU	0.92/billing meter
Rate EIP	0.92/billing meter
Rate G5G-2	0.92/billing meter
Rate GML	0.92/billing meter
Rate GUL	NA
Rate GU-XL	NA
Rate GU	NA
Rate PA	NA
Rate ROA-R	0.92/billing meter
Rate ROA-S	0.92/billing meter
Rate ROA-P	0.92/billing meter

<sup>(1)</sup> The Low Income Energy Assistance Fund Surcharge, authorized by 2013 PA 295 and the Orders in Case No. U-17377, shall be applied to one residential meter per residential site.

Issued February 7, 2020 by  
 Patti Poppe,

Effective for service rendered on and  
 after June 1, 2020

M.P.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To add Interim Rate Increase Residual  
 Balance Reconciliation)

Second Revised Sheet No. D-4.00  
 Cancels First Revised Sheet No. D-4.00

### SURCHARGES

<u>Rate Schedule</u>	<u>Interim Rate Increase Residual Balance Reconciliation (Case No. U-20275) Effective for the May 2020 Billing Month</u>
Rate RSP	NA
Rate RS	NA
Rate RDP	NA
Rate RDPR	NA
Rate REV-1	NA
Rate REV-2	NA
Rate RT	NA
Rate RSH	NA
Rate RPM	NA
Rate RSM	NA
Rate GS	NA
Rate GSTU	NA
Rate GSD	NA
Rate GP	\$(55.52)/customer
Rate GPD	(710.47)/customer
Rate GPTU	(710.47)/customer
Rate EIP	NA
Rate GSG-2	(710.47)/customer
Rate GML	NA
Rate GUL	NA
Rate GU-XL	NA
Rate GU	NA
Rate PA	NA
Rate ROA-R	NA
Rate ROA-S	NA
Rate ROA-P	(190.65)/customer

Issued April 17, 2020 by  
 Patti Poppe, \_\_\_\_\_

Effective for bills rendered on and after  
 the Company's May 2020 Billing Month

M.P.S.C. No. 14 - Electric  
Consumers Energy Company  
(To add Rate RSM)

First Revised Sheet No. D-5.00  
Cancels Original Sheet No. D-5.00

### SURCHARGES

<u>Rate Schedule</u>	<u>Tax Reform Credit (C) Power Supply-Capacity (Case No. U-20309) Effective for service beginning October 1, 2019</u>	<u>Tax Reform Credit (C) Distribution (Case No. U-20309) Effective for service beginning October 1, 2019</u>
Rate RS, RSP, RSM	\$ (0.000472)/kWh	\$ (0.000883)/kWh
Rate RT	(0.000444)/kWh	(0.000883)/kWh
Rate RDP	(0.000434)/kWh	(0.000883)/kWh
Rate RDPR	(0.000472)/kWh	(0.000883)/kWh
Rate REV	(0.000462)/kWh	(0.000883)/kWh
Rate GS	(0.000446)/kWh	(0.000848)/kWh
with GEI	(0.000493)/kWh	(0.001025)/kWh
Rate GSTU	(0.000446)/kWh	(0.000848)/kWh
Rate GSD	(0.16)/kW	(0.000564)/kWh
with GEI	(0.11)/kW	(0.000827)/kWh
Rate GP-CVL 1	(0.000344)/kWh	(0.000131)/kWh
with GEI	(0.000344)/kWh	(0.000131)/kWh
Rate GP-CVL 2	(0.000385)/kWh	(0.000154)/kWh
with GEI	(0.000385)/kWh	(0.000154)/kWh
Rate GP-CVL 3	(0.000424)/kWh	(0.000273)/kWh
with GEI	(0.000408)/kWh	(0.000348)/kWh
Rate GPD-CVL 1	(0.000297)/kWh	(0.01)/kW
with GEI	(0.000227)/kWh	(0.01)/kW
Rate GPD-CVL 2	(0.000325)/kWh	(0.03)/kW
with GEI	(0.000484)/kWh	(0.03)/kW
Rate GPD-CVL 3	(0.000372)/kWh	(0.07)/kW
with GEI	(0.000400)/kWh	(0.08)/kW
Rate GPTU-CVL 1	(0.000373)/kWh	(0.02)/kW
Rate GPTU-CVL 2	(0.000335)/kWh	(0.02)/kW
Rate GPTU-CVL 3	(0.000375)/kWh	(0.08)/kW
Rate EIP-CVL 1	(0.000107)/kWh	(0.01)/kW
Rate EIP-CVL 2	(0.000120)/kWh	(0.03)/kW
Rate EIP-CVL 3	(0.000108)/kWh	(0.02)/kW
Rate GSG-2 CVL 1	NA	(0.00)/kW
Rate GSG-2 CVL 2	NA	(0.00)/kW
Rate GSG-2 CVL 3	NA	(0.02)/kW
Rate GML-Secondary	(0.000118)/kWh	(0.000879)/kWh
Rate GML-Primary	(0.000059)/kWh	(0.000665)/kWh
Rate GUL	(0.000115)/kWh	(0.002322)/kWh
Rate GU-XL	(0.000117)/kWh	(0.003841)/kWh
Rate GU	(0.000311)/kWh	(0.000289)/kWh
Rate PA	NA	NA
Rate ROA-R, ROA-S, ROA-P	NA	As in Delivery Rate Schedule

Issued February 7, 2020 by  
Patti Poppe,  
President and Chief Executive Officer

Effective for service rendered on  
and after June 1, 2020

MP.S.C. No. 14 – Electric  
 Consumers Energy Company  
 (To self-implement the 2020 Maximum Allowable Factor  
 and the actual June 2020 PSCR Factor)

Sixth Revised Sheet No. D-6.00  
 Cancels Fifth Revised Sheet No. D-6.00

**POWER SUPPLY COST RECOVERY (PSCR) FACTORS**

<u>Billing Months</u>	<u>Maximum Allowable Factor</u> \$/kWh	<u>Actual Factor Billed</u> \$/kWh
<u>Year 2019</u>		
January	\$0.00106	\$ 0.00106
February	0.00106	0.00047
March	0.00059	(0.00004)
April	0.00059	(0.00049)
May	0.00059	(0.00089)
June	0.00059	(0.00192)
July	0.00059	(0.00225)
August	0.00059	(0.00366)
September	0.00059	(0.00489)
October	0.00059	(0.00520)
November	0.00059	(0.00497)
December	0.00059	(0.00639)
<u>Year 2020</u>		
January	\$0.00008	\$(0.00048)
February	0.00008	(0.00211)
March	0.00008	(0.00263)
April	0.00008	(0.00336)
May	0.00008	(0.00365)
June	0.00008	(0.00296)
July		
August		
September		
October		
November		
December		

The listed monthly power supply cost recovery factors are authorized pursuant to Rule C8., Power Supply Cost Recovery (PSCR) Clause. The Company will file a revised Sheet No. D-6.00 at least 10 days before the actual PSCR factor is billed to its customers in the subsequent billing month.

Issued May 15, 2020 by  
 Patti Poppe,

Effective for bills rendered  
 for the 2020 Plan Year

M.P.S.C. No. 14 – Electric  
Consumers Energy Company  
(To add Rate RSM)

First Revised Sheet No. D-7.00  
Cancel: Original Sheet No. D-7.00

### POWER PLANT SECURITIZATION CHARGE

The actual Power Plant Securitization Charge is authorized pursuant to Rule C9.1, Power Plant Securitization Charges, Initial Implementation and True-up Methodology. The Power Plant Securitization Charge is billed to all full service customers, shown in the rate schedules identified below, based upon usage. This charge shall be shown separately on the customer's bill.

The actual Power Plant Securitization Charge applied to customers' bills is as follows:

<u>Rate Schedule</u>	<u>Power Plant Securitization Charge (Case No. U-17473) Effective beginning with the August 2019 Billing Month</u>
Rate RSP	\$ 0.001163 /kWh
Rate RS	0.001163 /kWh
Rate RDP	0.001163 /kWh
Rate RDPR	0.001163 /kWh
Rate REV-1	0.001163 /kWh
Rate REV-2	0.001163 /kWh
Rate RT	0.001163 /kWh
Rate RSH	0.001163 /kWh
Rate RPM	0.001163 /kWh
Rate RSM	0.001163 /kWh
Rate GS	0.001213 /kWh
Rate GSTU	0.001213 /kWh
Rate GSD	0.001213 /kWh
Rate GP	
CVL 1	0.000836 /kWh
CVL 2	0.000836 /kWh
CVL 3	0.000836 /kWh
Rates GPD, GPTU, EIP and GSG-2	
CVL 1	0.000836 /kWh
CVL 2	0.000836 /kWh
CVL 3	0.000836 /kWh
Rate GML	0.000618 /kWh
Rate GUL	0.000618 /kWh
Rate GU-XL	0.000618 /kWh
Rate GU	0.000618 /kWh
Rate PA	NA
Rate ROA-R <sup>(1)</sup>	NA
Rate ROA-S <sup>(1)</sup>	NA
Rate ROA-P <sup>(1)</sup>	NA

<sup>(1)</sup> Customers taking ROA service on December 6, 2013 are excluded from the Power Plant Securitization Charge. This exclusion does not apply to customers first taking ROA service after December 6, 2013 or to customers taking service on December 6, 2013 who discontinue taking ROA service any time after December 6, 2013. Customers who discontinue taking ROA service any time after December 6, 2013 and who return to ROA service will pay the Power Plant Securitization Charge applicable to the customer's otherwise applicable Company Full Service Rate Schedule.

Issued February 7, 2020 by  
Patti Poppe,

Effective for service rendered on  
and after June 1, 2020

## Appendix 7.6: DTE Energy 2020 Gas Rates



	2019 Monthly Charges	June 2019 \$/ccf	2020 Monthly Charges	June 2020 \$/ccf	
Customer Charge	\$11.25		\$11.25		\$/ccf
Gas Distribution Charge		\$0.31371		\$0.33683	\$/ccf
Energy Optimization		\$0.01988		\$0.02003	\$/ccf
Gas Cost Recovery 12 Month Average		\$0.2850		\$0.2430	\$/ccf
Monthly U-16999 IRM Surcharge	\$0.35		\$1.85		\$/ccf
U-17103 RDM Surcharge/Credit					\$/ccf
U-17214 UETM Surcharge/Credit					\$/ccf
U-17216 RDM Surcharge/Credit					\$/ccf
U-17131 Reservation Surcharge		\$0.0338		\$0.0420	\$/ccf
		<b>\$0.65739</b>		<b>\$0.64186</b>	<b>\$/ccf</b>
Sales Tax 4%		\$0.0263		\$0.0257	\$/ccf
Total \$/ccf		<b>\$0.6837</b>		<b>\$0.6675</b>	<b>\$/ccf</b>
Total Monthly Charges:	<b>\$11.60</b>		<b>\$13.10</b>		

	Total Rate
<b>Gas Cost Recovery 12 Month Average</b>	<b>\$0.2523</b>
July 2019	\$0.2800
August	\$0.2800
September	\$0.2800
October	\$0.2800
November	\$0.2650
December 2019	\$0.2650
January 2020	\$0.2550
February	\$0.2200
March	\$0.2200
April	\$0.2200
May	\$0.2200
June 2020	\$0.2430

RATES EFFECTIVE FOR GAS SERVICE



Issued By: Regulatory Affairs: Gas Strategy

June 2020

Rate Schedule No.	Rate Schedules	COMMODITY CHARGE PER 100 CUBIC FEET (Ccf) 1/											Total Rate Applicable to June 2020 Cycle		
		Monthly Customer Charge 2/	Monthly IRM Surcharge 3/	RDM (Credit)/ Surcharge 4/	Credit B (Credit)/ Surcharge 8/	Distribution Charge (Non-Gas) 2/	GCR Factor 5/	Energy Waste Reduction Surcharge 6/	Reservation Charge 7/	Held for Future Use 10/	Calc C (Credit)/ Surcharge 9/				
A	Residential Rate 11/														
	GCR	\$ 11.25	\$ 1.85	\$ -	\$ -	\$ 0.33683	\$ 0.24300	\$ 0.02003	\$ 0.04200	\$ -	\$ -	\$ (0.00576)	\$ -	\$ -	0.63610
	GCC	\$ 11.25	\$ 1.85	\$ -	\$ -	\$ 0.33683	\$ -	\$ 0.02003	\$ 0.02800	\$ -	\$ -	\$ (0.00576)	\$ -	\$ -	0.37910

Month	Rate per Ccf	Month	Rate per Ccf
January 2019	\$ 0.2920	January 2020	\$ 0.2550
February	\$ 0.2860	February	\$ 0.2200
March	\$ 0.2860	March	\$ 0.2200
April	\$ 0.2800	April	\$ 0.2200
May	\$ 0.2800	May	\$ 0.2200
June	\$ 0.2800	June	\$ 0.2430
July	\$ 0.2800	July	
August	\$ 0.2800	August	
September	\$ 0.2800	September	
October	\$ 0.2800	October	
November	\$ 0.2650	November	
December	\$ 0.2650	December	

## Appendix 7.7: City of Manistee 2020-2021 Water & Sewer Rates

	2019	2020	
Water	\$3.14	\$3.25	/1,000 gal
Sewer	\$8.60	\$8.90	/1,000 gal
Base Charge Usage	\$11.74	\$12.15	/1,000 gal
Meter Charge			
Water	\$4.45	\$4.60	/month
Sewer	\$12.79	\$13.24	/month
Total meter charge	\$17.24	\$17.84	/month



### Schedule of Fees

#### WATER / SEWER RATES (monthly)

Metered Water (per 1,000)	\$3.25	Inside City
Metered Sewer (per 1,000)	\$8.90	Inside City
Water Ready-To-Serve 5/8" & 3/4"	\$4.60	Higher fees for larger meters per RTS schedule
Sewer Ready-To-Serve 5/8" & 3/4"	\$13.24	Higher fees for larger meters per RTS schedule
> 2" Fire Suppression	\$10	
2" Fire Suppression	\$15	
4" Fire Suppression	\$20	per month
6" Fire Suppression	\$25	per month
8" Fire Suppression	\$30	per month
10" Fire Suppression	\$40	
Unmetered Water	\$25	per month
Unmetered Sewer	\$60	per month
Escrow Deposit	\$300	
Regular Turn On / Off Service	\$25	
Delinquent Turn On / Off Service	\$100	
After Hours Service Call	\$100	
Install Meter	\$50	
Install 1" Service (Long)	\$1,850	
Install 1" Service (Short)	\$1,750	
New/Sprinkling Meter	Cost	Cost recovery
New Water Connection 5/8" & 3/4"	\$200	Higher fees for larger meters per SDC schedule
New Sewer Connection 5/8" & 3/4"	\$3,700	Higher fees for larger meters per SDC schedule
WWTP - accept contaminated discharge/gal	\$0.03	
(after hours rate)	\$0.05	
WWTP - Industrial Pretreatment Program	varies	+ operator cost \$30/hr + operator cost \$45/hr

