

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Power Cost Adjustment Clause

All metered rates shall be subject to a positive or negative power cost adjustment charge equivalent to the amount by which the current cost of power (per kilowatt-hour of sales) is greater or lesser than the base cost of power purchased and produced (per kilowatt-hour of sales).

The current cost per kilowatt-hour of energy billed is equal to the cost of power purchased and produced for the most recent month, divided by the kilowatt-hours of energy sold. The monthly adjustment (rounded to the nearest one one-hundredth of a cent) is equal to the current cost less the base cost. The base cost of power (U) is \$0.0643 per kilowatt-hour.

Periodic changes shall be made to maintain the proper relative structure of the rates and to insure that power costs are being equitably recovered from the various rate classes. If the monthly adjustment (A) exceeds \$0.0150 per kilowatt-hour, for more than three times in a 12-month period (current plus preceding 11-months), the company shall notify the Public Service Commission of Wisconsin separate from its monthly PCAC report of the need to evaluate a change in rates to incorporate a portion of the power cost adjustment into the base rates.

For purposes of calculating the power cost adjustment charge, the following formula shall be used:

$$A = \frac{C}{S} - U$$

- A is the power cost adjustment rate in dollars per kilowatt-hour rounded to four decimal places applied on a per kilowatt-hour basis to all metered sales of electricity.
- S is the total kilowatt-hours sold during the most recent month.
- U is the base cost of power, which equals the average cost of power purchased and produced per kilowatt-hour of sales for the test year period. This figure remains constant in each subsequent monthly calculation at \$0.0643 per kilowatt-hour until otherwise changed by the Public Service Commission of Wisconsin.
- C is the cost of power purchased and produced in dollars in the most recent month net of market revenue. Cost of power purchased and produced for calculation of C are the monthly amounts which would be recorded in the following accounts of the Uniform System of Accounts:

Class A & B utilities	Accounts 501, 536, 547 and 555
Class C utilities	Accounts 501, 531, 539 and 545

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Residential Service – Optional Time of Day

Application: This rate schedule is optional to all Rg-1, Residential Service customers. Customers that wish to be served on this rate schedule must apply to the utility for service. Once an optional customer begins service on this rate schedule, the customer shall remain on the rate for a minimum of one year. Any customer choosing to be served on this rate schedule waives all rights to billing adjustments arising from a claim that the bill for service would be less on another rate schedule than under this rate schedule.

Once on this rate, the utility will review billing annually according to Wis. Admin. Code ch. PSC 113.

Customer Charge: Single-phase: \$13.00 per month.
 Three-phase: \$24.00 per month.

Energy Charge: On-peak: \$0.1485 per kilowatt-hour (kWh).
 Off-peak: \$0.0635 per kWh.

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Pricing Periods: On-peak: 7:00 a.m. to 9:00 p.m., October through May
 8:00 a.m. to 8:00 p.m., June through September
 Monday through Friday, excluding holidays, specified below.

 Off-peak: All times not specified as on-peak including all day
 Saturday and Sunday, and the following holidays: New Year’s Day, Good
 Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day,
 the Friday after Thanksgiving, the day before Christmas, Christmas Day,
 and the day before New Year’s Day.

Prompt Payment of Bills: Same as Rg-1.

Minimum Monthly Bill: The minimum monthly bill shall be the customer charge.

Moving Provision: If a customer moves within the utility’s service territory, both the original and the new customer have the option to retain time-of-day billing or to transfer to the Residential Service rate, Rg-1, at no cost to the customer.

Joint Residential/Commercial Customers: A customer occupying a building or apartment for residential and commercial purposes jointly shall be billed on another rate which is determined based on the customer’s load.

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

General Service

Application: This rate will be applied to single and three-phase customers. This includes commercial, institutional, government, farm, and other customers. The monthly Maximum Measured Demand of customers served on this rate shall not exceed 50 kilowatts for three or more months in a consecutive 12-month period.

Customers with monthly energy usage greater than 11,000 kWh and an average Load Factor greater than 43 percent for three or more months in a consecutive 12-month period have the option of transferring to the Cp-1 rate schedule if such a transfer would result in lower bills. Customers who transfer must remain on the Cp-1 rate schedule for a minimum of 12 months.

The utility shall notify any Gs-1 customer that exceeds 50 kW and provide the customer with the Gs and Cp tariffs and a comparison showing their latest 12 months bill calculated under both rates. The utility shall provide similar information again if the customer exceeds 50 kW within a subsequent consecutive 12-month period. Gs-1 customers shall be transferred into the appropriate demand class as soon as the application conditions of that class have been met.

Customer Charge: Single-phase: \$16.00 per month.
 Three-phase: \$30.00 per month.

Energy Charge: \$0.0900 per kilowatt-hour (kWh).

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Minimum Monthly Bill: The minimum monthly bill shall be the customer charge.

Prompt Payment of Bills: Same as Rg-1.

Farm Customer: Defined as a person or organization using electric service for the operation of an individual farm, or for residential use in living quarters on the farm occupied by persons principally engaged in the operation of the farm and by their families. A farm is a tract of land used to raise or produce agricultural and dairy products, for raising livestock, poultry, game, fur-bearing animals, or for floriculture, or similar purposes, and embracing not less than 3 acres; or, if small, where the principal income of the operator is derived therefrom. (Otherwise, the service used for residential purposes is classed as residential, and that used for commercial is classed as general service.)

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

General Service

Determination of Maximum Measured Demand: The Maximum Measured Demand in any month shall be that demand in kilowatts necessary to supply the average kilowatt-hours in 15 consecutive minutes of greatest consumption of electricity during each month. Such Maximum Measured Demand shall be determined from readings of permanently installed meters or, at the option of the utility, by any standard methods or meters. Said demand meter shall be reset to zero when the meter is read each month.

Load Factor: Is defined in the following formula, where kWh = Monthly Energy usage and kW = Maximum Measured Demand and 730 represents the average number of hours in a month.

$$\text{Load Factor} = \frac{kWh}{(kW * 730)}$$

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

General Service – Optional Time of Day

Application: This rate schedule is optional to all Gs-1, General Service customers. Customers that wish to be served on this rate schedule must apply to the utility for service. Once an optional customer begins service on this rate schedule, the customer shall remain on the rate for a minimum of one year. Any customer choosing to be served on this rate schedule waives all rights to billing adjustments arising from a claim that the bill for service would be less on another rate schedule than under this rate schedule. Once on this rate, the utility will review billing annually according to Wis. Admin. Code ch. PSC 113.

Customers with monthly energy usage greater than 11,000 kWh and an average Load Factor greater than 43 percent for three or more months in a consecutive 12-month period have the option of transferring to the Cp-1 rate schedule if such a transfer would result in lower bills. Customers who transfer must remain on the Cp-1 rate schedule for a minimum of 12 months.

Gs-2 customers shall be transferred to the appropriate demand class as soon as the application conditions of that class have been met.

Customer Charge: Single-phase: \$16.00 per month.
 Three-phase: \$30.00 per month.

Energy Charge: On-peak: \$0.1482 per kilowatt-hour (kWh).
 Off-peak: \$0.0632 per kWh.

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Pricing Periods: On-peak: 7:00 a.m. to 9:00 p.m., October through May
 8:00 a.m. to 8:00 p.m., June through September
 Monday through Friday, excluding holidays, specified below.

Off-peak: All times not specified as on-peak including all day Saturday and Sunday, and the following holidays: New Year’s Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving, the day before Christmas, Christmas Day, and the day before New Year’s Day.

Prompt Payment of Bills: Same as Rg-1.

Minimum Monthly Bill: The minimum monthly bill shall be the customer charge.

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

General Service – Optional Time of Day

Moving Provision: If a customer moves within the utility’s service territory, both the original and the new customer have the option to retain time-of-day billing or to transfer to the General Service rate, Gs-1, at no cost to the customer.

Determination of Maximum Measured Demand: The Maximum Measured Demand in any month shall be that demand in kilowatts necessary to supply the average kilowatt-hours in 15 consecutive minutes of greatest consumption of electricity during each month. Such Maximum Measured Demand shall be determined from readings of permanently installed meters or, at the option of the utility, by any standard methods or meters. Said demand meter shall be reset to zero when the meter is read each month.

Load Factor: Is defined in the following formula, where kWh = Monthly Energy usage and kW = Maximum Measured Demand and 730 represents the average number of hours in a month.

$$\text{Load Factor} = \frac{kWh}{(kW * 730)}$$

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Small Power Service

Application: This rate will be applied to customers for all types of service if their monthly Maximum Measured Demand is in excess of 50 kilowatts (kW) per month for three or more months in a consecutive 12-month period, but not greater than 200 kW per month for three or more months in a consecutive 12-month period.

Customers billed on this rate shall continue to be billed on this rate until their monthly Maximum Measured Demand is less than 50 kW per month for 12 consecutive months. The utility shall offer customers billed on this rate a one-time option to continue to be billed on this rate for another 12 months if their monthly Maximum Measured Demand is less than 50 kW per month. However, this option shall be offered with the provision that the customer waives all rights to billing adjustments arising from a claim that the bill for service would be less on another rate schedule than under this rate schedule.

Customer Charge: \$50.00 per month.

Distribution Demand Charge: \$1.50 per kW of distribution demand.

Demand Charge: \$6.75 per kW of billed demand.

Energy Charge: \$0.0780 per kilowatt-hour (kWh).

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Prompt Payment of Bills: Same as Rg-1.

Minimum Monthly Bill: The minimum monthly bill shall be equal to the customer charge, plus the distribution demand charge.

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Small Power Service

Discounts: The monthly bill for service will be subject to the following discounts applied in the sequence listed below.

Primary Metering Discount: Customers metered on the primary side of the transformer shall be given a 1.50 percent discount on the monthly energy charge, distribution demand charge, and demand charge. The PCAC and the monthly customer charge will not be eligible for the primary metering discount.

Transformer Ownership Discount: Customers who own and maintain their own transformers or substations shall be given a credit of \$0.27 per kW of distribution demand. Customer-owned substation equipment shall be operated and maintained by the customer. Support and substation equipment is subject to utility inspection and approval.

Determination of Maximum Measured Demand: The Maximum Measured Demand in any month shall be that demand in kilowatts necessary to supply the average kilowatt-hours in 15 consecutive minutes of greatest consumption of electricity during each month. Such Maximum Measured Demand shall be determined from readings of permanently installed meters or, at the option of the utility, by any standard methods or meters. Said demand meter shall be reset to zero when the meter is read each month.

Determination of Distribution Demand: The Distribution Demand shall be the highest monthly Maximum Measured Demand occurring in the current month or preceding 11-month period.

Determination of Billed Demand: The Billed Demand shall be the Maximum Measured Demand.

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Small Power Service – Optional Time of Day Service

Application: This rate schedule is optional to all Cp-1 customers. Customers that wish to be served on this rate schedule must apply to the utility for service. Once an optional customer begins service on this rate schedule, the customer shall remain on the rate for a minimum of one year. Any customer choosing to be served on this rate schedule waives all rights to billing adjustments arising from a claim that the bill for service would be less on another rate schedule than under this rate schedule.

Once on this rate, the utility will review billing annually according to Wis. Admin. Code ch. PSC 113.

Customer Charge: \$50.00 per month.

Distribution Demand Charge: \$1.50 per kW of distribution demand.

Demand Charge: \$6.75 per kW of on-peak billed demand.

Energy Charge: On-peak: \$0.0900 per kilowatt-hour (kWh).
Off-peak: \$0.0700 per kWh.

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Prompt Payment of Bills: Same as Rg-1.

Minimum Monthly Bill: The minimum monthly bill shall be equal to the customer charge, plus the distribution demand charge.

Pricing Periods: On-peak: 7:00 a.m. to 9:00 p.m., October through May
8:00 a.m. to 8:00 p.m., June through September
Monday through Friday, excluding holidays, specified below.

Off-peak: All times not specified as on-peak including all day Saturday and Sunday, and the following holidays: New Year’s Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving, the day before Christmas, Christmas Day, and the day before New Year’s Day.

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Small Power Service – Optional Time of Day Service

Discounts: The monthly bill for service will be subject to the following discounts applied in the sequence listed below.

Primary Metering Discount: Customers metered on the primary side of the transformer shall be given a 1.50 percent discount on the monthly energy charge, distribution demand charge, and demand charge. The PCAC and the monthly customer charge will not be eligible for the primary metering discount.

Transformer Ownership Discount: Customers who own and maintain their own transformers or substations shall be given a credit of \$0.27 per kW of distribution demand. Customer-owned substation equipment shall be operated and maintained by the customer. Support and substation equipment is subject to utility inspection and approval.

Determination of Maximum Measured Demand and On-peak Maximum Demand: The Maximum Measured Demand in any month shall be that demand in kilowatts necessary to supply the average kilowatt-hours in 15 consecutive minutes of greatest consumption of electricity during each month. Such Maximum Measured Demand shall be determined from readings of permanently installed meters or, at the option of the utility, by any standard methods or meters. Said demand meter shall be reset to zero when the meter is read each month. The Maximum Measured Demand that occurs during the On-peak period shall be the On-peak Maximum Demand.

Determination of Distribution Demand: The Distribution Demand shall be the highest monthly Maximum Measured Demand occurring in the current month or preceding 11-month period.

Determination of On-peak Billed Demand: The Maximum Measured Demand that occurs during the On-peak period shall be the On-peak Billed Demand.

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Large Power Time of Day Service

Application: This rate will be applied to customers for all types of service, if their monthly Maximum Measured Demand is in excess of 200 kilowatts (kW) per month for three or more months in a consecutive 12-month period, but not greater than 500 kW per month for three or more months in a consecutive 12-month period.

Customers billed on this rate shall continue to be billed on this rate until their monthly Maximum Measured Demand is less than 200 kW per month for 12 consecutive months. The utility shall offer customers billed on this rate a one-time option to continue to be billed on this rate for another 12 months if their monthly Maximum Measured Demand is less than 200 kW per month. However, this option shall be offered with the provision that the customer waives all rights to billing adjustments arising from a claim that the bill for service would be less on another rate schedule than under this rate schedule.

Customer Charge: \$150.00 per month.

Distribution Demand Charge: \$1.75 per kW of distribution demand.

Demand Charge: \$8.00 per kW of on-peak billed demand.

Power Factor Charge: \$8.00 per kW of power factor demand

Energy Charge: On-peak: \$0.0757 per kilowatt-hour (kWh).
Off-peak: \$0.0657 per kWh.

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Minimum Monthly Bill: The minimum monthly bill shall be equal to the customer charge, plus the distribution demand charge.

Prompt Payment of Bills: Same as Rg-1.

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Large Power Time of Day Service

Pricing Periods:

On-peak: 7:00 a.m. to 9:00 p.m., October through May
8:00 a.m. to 8:00 p.m., June through September
Monday through Friday, excluding holidays, specified below.

Off-peak: All times not specified as on-peak including all day Saturday and Sunday, and the following holidays: New Year’s Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving, the day before Christmas, Christmas Day, and the day before New Year’s Day.

Discounts: The monthly bill for service will be subject to the following discounts applied in the sequence listed below.

Primary Metering Discount: Customers metered on the primary side of the transformer shall be given a 1.50 percent discount on the monthly energy charge, distribution demand charge, and demand charge. The PCAC and the monthly customer charge will not be eligible for the primary metering discount.

Transformer Ownership Discount: Customers who own and maintain their own transformers or substations shall be given a credit of \$0.27 per kW of distribution demand. Customer-owned substation equipment shall be operated and maintained by the customer. Support and substation equipment is subject to utility inspection and approval.

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Large Power Time of Day Service

Determination of Maximum Measured Demand and On-peak Maximum Demand: The Maximum Measured Demand in any month shall be that demand in kilowatts necessary to supply the average kilowatt-hours in 15 consecutive minutes of greatest consumption of electricity during each month. Such Maximum Measured Demand shall be determined from readings of permanently installed meters or, at the option of the utility, by any standard methods or meters. Said demand meter shall be reset to zero when the meter is read each month. The Maximum Measured Demand that occurs during the On-peak period shall be the On-peak Maximum Demand.

Determination of Distribution Demand: The Distribution Demand shall be the highest monthly Maximum Measured Demand occurring in the current month or preceding 11-month period.

Determination of On-Peak Billed Demand: The On-Peak Billed Demand shall be the On-Peak Maximum Demand.

Determination of Power Factor Demand: Power Factor Demand shall be determined each month by the following formula:

$$\text{Power Factor Demand} = \frac{\text{On-Peak Maximum Demand} \times 95\%}{\text{Average Monthly Power Factor}} - \text{On-Peak Maximum Demand}$$

The Average Monthly Power Factor is obtained by the following formula, where A = monthly use of kilowatt-hours and B = monthly use of lagging reactive kilovolt-ampere-hours as obtained from a reactive component meter. Any reactive component meter used shall be equipped with ratchets to prevent registration of leading Power Factor.

$$\text{Average Monthly Power Factor} = \frac{A}{\sqrt{A^2 + B^2}}$$

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Industrial Power Time-of-Day Service

Application: This rate will be applied to customers for all types of service if their monthly Maximum Measured Demand is in excess of 500 kilowatts (kW) per month for three or more months in a consecutive 12-month period. Service is supplied and metered at primary voltage of 13,200 volts and 24,900 volts, or at secondary voltage for an additional monthly charge.

Customers billed on this rate shall continue to be billed on this rate until their monthly Maximum Measured Demand is less than 500 kW per month for 12 consecutive months. The utility shall offer customers billed on this rate a one-time option to continue to be billed on this rate for another 12 months if their monthly Maximum Measured Demand is less than 500 kW per month. However, this option shall be offered with the provision that the customer waives all rights to billing adjustments arising from a claim that the bill for service would be less on another rate schedule than under this rate schedule.

Customer Charge: \$200.00 per month.

Distribution Demand Charge: \$2.00 per kW of distribution demand.

Demand Charge: \$10.00 per kW of on-peak billed demand.

Power Factor Charge: \$10.00 per kW of power factor demand

Energy Charge: On-peak: \$0.0715 per kilowatt-hour (kWh).
Off-peak: \$0.0615 per kWh.

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Minimum Monthly Bill: The minimum monthly bill shall be equal to the customer charge, plus the distribution demand charge.

Prompt Payment of Bills: Same as Rg-1.

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Industrial Power Time-of-Day Service

Pricing Periods:

On-peak: 7:00 a.m. to 9:00 p.m., October through May
8:00 a.m. to 8:00 p.m., June through September
Monday through Friday, excluding holidays, specified below.

Off-peak: All times not specified as on-peak including all day Saturday and Sunday, and the following holidays: New Year’s Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving, the day before Christmas, Christmas Day, and the day before New Year’s Day.

Secondary Voltage Metering: Customers metered on the secondary side of the transformer shall be given a 1.50 percent increase on the monthly energy charge, distribution demand charge, and demand charge to reflect transformer losses. This charge will not be applied to the PCAC and the monthly customer charge.

Secondary Voltage Service: Customers who do not own and maintain their own transformers or substations shall be given a charge of \$0.27 per kW of distribution demand.

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MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Industrial Power Time-of-Day Service

Determination of Maximum Measured Demand and On-peak Maximum Demand: The Maximum Measured Demand in any month shall be that demand in kilowatts necessary to supply the average kilowatt-hours in 15 consecutive minutes of greatest consumption of electricity during each month. Such Maximum Measured Demand shall be determined from readings of permanently installed meters or, at the option of the utility, by any standard methods or meters. Said demand meter shall be reset to zero when the meter is read each month. The Maximum Measured Demand that occurs during the On-peak period shall be the On-peak Maximum Demand.

Determination of Distribution Demand: The Distribution Demand shall be the highest monthly Maximum Measured Demand occurring in the current month or preceding 11-month period.

Determination of On-Peak Billed Demand: The On-Peak Billed Demand shall be the On-Peak Maximum Demand.

Determination of Power Factor Demand: Power Factor Demand shall be determined each month by the following formula:

$$\text{Power Factor Demand} = \frac{\text{On-Peak Maximum Demand} \times 95\%}{\text{Average Monthly Power Factor}} - \text{On-Peak Maximum Demand}$$

The Average Monthly Power Factor is obtained by the following formula, where A = monthly use of kilowatt-hours and B = monthly use of lagging reactive kilovolt-ampere-hours as obtained from a reactive component meter. Any reactive component meter used shall be equipped with ratchets to prevent registration of leading Power Factor.

$$\text{Average Monthly Power Factor} = \frac{A}{\sqrt{A^2 + B^2}}$$

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Coincident Demand Metering Rider

(This Schedule is Closed to New Customers)

Application: This rider may be applied to Cp-3 customers with multiple service entrances on contiguous properties, which are separately metered, who’s combined Maximum Coincident Demand is in excess of 500 kilowatts (Cp-3) for three or more months in a consecutive 12-month period, and who meet all of the appropriate provisions described below.

Customer Charge: The monthly customer charge shall apply to each separately metered location, as if they were served individually on the Cp-3 rate schedule.

Determination of Distribution Demand: The Distribution Demand shall equal the sum of the distribution demands of each metered location, as if they were served individually.

Determination of Maximum Measured Demand: The Maximum Measured Demand in any month shall be that demand in kilowatts necessary to supply the average kilowatt-hours in the 15 consecutive minutes of greatest consumption of electricity to a single metered service point during each month. The Maximum Measured Demand shall be determined from individual readings of a permanently installed meter. Said demand meter shall be reset to zero when the meter is read each month.

Determination of Maximum Coincident Demand and Maximum Coincident On-Peak Demand: The Maximum Coincident Demand shall be the greatest single demand which occurs in 15 consecutive minutes during the month resulting from the combination of all separately metered services. The Maximum Coincident Demand that occurs during the On-peak period shall be the Maximum Coincident On-Peak Demand.

Determination of Billed Demand: Same as Cp-3 with Maximum On-peak Demand replaced with Maximum Coincident On-Peak Demand.

Determination of Energy Charge: Same as Cp-3.

Determination of Minimum Monthly Bill: Same as Cp-3.

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Coincident Demand Metering Rider

General Provisions:

1. The determination of customer class for billing purposes shall be based on the maximum coincident demand.
2. Customers selecting service under this rider shall make a one-time, nonrefundable payment of \$100 at the time service is initiated.
3. Customers selecting service under this rider may terminate it by providing 30 days' written notice to the utility. The utility shall notify the customer that they are responsible for any increases in bills that may result by eliminating coincident billing.
4. Primary metered services may only be combined with other primary metered services for the purposes of coincident billing.
5. Customers with multiple service entrances may be served under this rider only if all metering points that can be combined are combined together for coincident billing.
6. The utility shall annually notify all customers served on the Cp-3 rate schedule that coincident billing is available upon request.

Public Service Commission of Wisconsin

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Street Lighting Service

Application: This schedule will be applied to lighting service. The utility will furnish, install, and maintain lighting units.

This rate schedule is closed to new mercury vapor lights.

Investment charge:

Overhead:

100 W HPS	\$7.00 per lamp per month
150 W HPS	\$7.50 per lamp per month
250 W HPS	\$9.00 per lamp per month
≤ 50 W LED	\$6.00 per lamp per month
51-100 W LED	\$7.00 per lamp per month

Ornamental:

100% Contributed & Utility Maintained:

150 W HPS	\$6.50 per lamp per month
250 W HPS	\$6.75 per lamp per month

Decorative:

100% Contributed & Utility Maintained:

150 W LED	\$8.00 per lamp per month
150 W HPS	\$7.00 per lamp per month
250 W HPS	\$7.50 per lamp per month

Meter Charge: \$6.00 per meter per month

Energy Charge: \$0.0486 per kilowatt-hour (kWh).

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Prompt Payment of Bills: Same as Rg-1.

Note:

LED = Light Emitting Diode

HPS = High Pressure Sodium

RATE FILE

Sheet No. 1 of 1

Schedule No. Ms-2

Amendment No. 134

Public Service Commission of Wisconsin

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Security Lighting Service

Application: This schedule will be applied to area lighting. The utility will furnish, install, and maintain area lighting units. Energy consumption will be estimated based on lamp wattage and the hours of darkness for the billing period.

Up to 100 feet of wire will be furnished by the utility. The customer will furnish a safe and suitable pole to mount the fixture. A contract for a minimum of one year is required. If a separate pole is necessary to mount the fixture, the customer will be billed for such a pole and its installation.

This rate schedule is closed to new mercury vapor lights.

Investment charge:

Overhead:	
100 W HPS	\$7.75 per lamp per month
250 W HPS	\$8.75 per lamp per month
25-60 W LED	\$7.75 per lamp per month
> 60 W LED	\$8.75 per lamp per month
(All without pole.)	

Energy Charge: \$0.0486 per kilowatt-hour (kWh).

Power Cost Adjustment Clause: Charge per all kWh varies monthly. See schedule PCAC.

Prompt Payment of Bills: Same as Rg-1.

Note: HPS = High Pressure Sodium

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Other Charges and Billing Provisions

Budget Payment Plan: A budget payment plan, which is in accordance with Wis. Admin. Code ch. PSC 113, is available from the utility. The utility uses a fixed budget year that begins on May 1 and ends on April 30. The utility will calculate the monthly budgeted amount by spreading the estimated annual bill over eleven months, with the last month consisting of any end of year adjustments. For customers that request a budget plan during the middle of a budget year, the utility will calculate the monthly billing amount by spreading the estimated bill for the remainder of the budget year over one month less than the months remaining in the budget year. The last month’s bill will consist of end of budget year adjustments.

Reconnection Billing: All customers whose service is disconnected in accordance with the disconnection rules as outlined in Wis. Admin. Code ch. PSC 113, shall be required to pay a reconnection charge. The charge shall be **\$40.00** during regular office hours. After regular office hours the minimum reconnection charge of **\$40.00** applies plus any overtime labor costs, not to exceed a total maximum charge of **\$80.00**.

Reconnection of a Seasonal Customer’s Service: Reconnection of a service for a seasonal customer who has been disconnected for less than one year shall be subject to the same reconnection charges outlined above. A seasonal customer shall also be charged for all minimum bills that would have been incurred had the customer not temporarily disconnected service.

Payment Not Honored by Financial Institution Charge: The utility shall assess a **\$25.00** charge when a payment rendered for utility service is not honored by the customer’s financial institution. This charge may not be in addition to, but may be inclusive of, the water utility’s insufficient fund charge when the check was for payment of both electric and water service.

Average Depreciated Embedded Cost: The embedded cost of the distribution system (excluding the standard transformer and service facilities), for each customer classification, is determined based on methodology authorized by the Public Service Commission of Wisconsin, and described in the utility’s Electric Rules. The average depreciated embedded cost by customer classification is as follows:

Residential Service: **\$335.00.**

Apartment and Rental Units Separately Metered: **\$335.00** per unit metered.

Subdividers and Residential Developers: **\$335.00** per unit.

General Service: (Including Multi-Unit Dwellings If Billed on One Meter): **\$553.00.**

Power Service: **\$194.00** per kW (Cp-1 & Cp-1 TOD), **\$184.00** per kW (Cp-2), **\$134.00** per kW (Cp-3), of average billed demand

Lighting: **34.00.**

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Parallel Generation (20 kW or less) -- Net Energy Billing

1. Effective In

All territories served by the utility.

2. Availability

Available for single-phase and three-phase customers where a part or all of the electrical requirements of the customer are supplied by the customer’s generating facilities, where such facilities have a total generating capability of 20 kW or less, where such facilities are connected in parallel with the utility and where such facilities are approved by the utility.

3. Rate

Customers shall be billed on a monthly net energy basis. When the energy produced exceeds energy consumed for the billing month, the customer shall be credited for the excess energy volumes at the avoided cost rate in Pgs-2.

The following customers will continue to be paid for net monthly excess generation at the rate specified in the rate schedule under which the customer purchases energy until December 31, 2027: a) customers taking service under this rate schedule prior to July 1, 2017; or b) customers who have submitted a complete application to the utility by June 6, 2017. A customer that makes changes to the capacity or type of its generation facilities after July 1, 2017 will be treated as a new customer and shall be subject to the standard credit provisions.

If, in any month, the customer’s bill has a credit balance of \$25 or less, the amount shall be credited to subsequent bills until a debit balance is reestablished. If the credit balance is more than \$25, the utility shall reimburse the customer by check upon request. Monthly credits shall be computed by taking the net excess kilowatt-hours produced times the sum of the applicable energy charge plus monthly power cost adjustment clause (PCAC).

4. Metering and Services Facilities

A customer who is served under a regular rate schedule shall have any ratchet and/or other device removed from his meter to allow reverse power flow and measurement of net energy used. Customers eligible for net energy billing but with existing metering facilities equipped with ratchets or other devices preventing reverse registration (i.e. time-of-use metering facilities) may request that the utility install the necessary metering to permit such billing.

5. Customer Obligation

See Wis. Admin. Code ch. PSC 119.

Public Service Commission of Wisconsin

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Customer-Owned Generation Systems (Greater than 20 kW)Effective In

All territories served by the utility.

1. Availability

Available for single-phase and three-phase customers where a part or all of the electrical requirements of the customer are supplied by the customer's generating facilities, where such facilities have a total generating capability of greater than 20 kW, where such facilities are connected in parallel with the utility. Customers not desiring to sell energy under this rate have the right to negotiate a buy-back rate.

The energy rate indicated below is the minimum for electrical energy. Should the utility be unwilling to pay the minimum rate for electrical energy, the utility shall agree to transport such electrical energy to another utility that will pay such minimum rate. The utility shall recover actual costs of such transportation from the generating customer.

2. Rate

Customers shall receive monthly payments at the avoided cost rate of **\$0.0551** per kilowatt-hour for all electricity delivered to the utility. The utility shall update this rate annually by filing the average avoided cost with the Commission.

3. On-Peak and Off-Peak Hours and Holidays

On-peak and off-peak hours and holidays are those specified in the wholesale suppliers latest rates.

4. Minimum Charge

The monthly minimum charge paid by the customer shall be the customer charge.

5. Power Factor

The customer shall operate on a net power factor of not less than 90 percent.

Public Service Commission of Wisconsin

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Customer-Owned Generation Systems (Greater than 20 kW)6. Negotiated Rates

Customers with generation systems greater than 20 kW have the right to negotiate a buy-back rate. The buy-back rate cannot be less than the full avoided cost.

The following are the required procedure guidelines:

- a. The utility must respond to the customer-owned generating system within 30 days of the initial written receipt of the customer-owned generating system proposal and within 30 days of receipt of a subsequent customer-owned generating system proposal,
- b. The utility's rejection of the customer-owned generating system proposal must be accompanied by a counter-offer relating to the specific subject matter of the customer-owned generating system proposal, and
- c. If the utility is unable to respond to the customer-owned generating system proposal within 30 days it shall inform the customer-owned generating system of:
 - 1) Specific information needed to evaluate the customer-owned generating system proposal.
 - 2) The precise difficulty encountered in evaluating the customer-owned generating system proposal.
 - 3) The estimated date that it will respond to the customer-owned generating system proposal.
- d. The Commission may become involved in the utility negotiations upon showing by either utility or the customer-owned generating system that a reasonable conclusion cannot be reached under the above guidelines. The Commission may provide a waiver to the guidelines and order new negotiation requirements so that a reasonable conclusion can be reached.
- e. A copy of all negotiated buy-back rates shall be sent to the Commission. These rates shall not be effective until the contract is placed on file at the Commission.

7. Charges for Energy Supplied by the Utility

Energy supplied by the utility to the customer shall be billed in accordance with the standard applicable rate schedules of the utility.

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Customer-Owned Generation Systems (Greater than 20 kW)

8. Maintenance Rate

A customer-owned generation facility may be billed lower demand charges for energy purchased during scheduled maintenance provided written approval is obtained in advance from the utility. Demand charges other than “Customer Demand” shall be prorated if maintenance is scheduled such that the utility does not incur additional capacity costs. Said probation shall be the demand charge times the number of authorized days of scheduled maintenance divided by the number of days in the billing period.

9. Application Process and Customer Obligation

See Wis. Admin. Code ch. PSC 119, Rule for Interconnecting Distributed Generation Facilities.

10. Utility Obligation

a. Metering Facilities

The utility shall install appropriate metering facilities to record all flows of energy necessary to bill in accordance with the charges and credits of the rate schedule.

b. Notice to Communication Firms

Each electric utility shall notify telephone utility and cable television firms in the area when it knows that customer-owned generating facility is to be interconnected with its system. This notification shall be as early as practicable to permit coordinated analysis and testing in advance of interconnection, if considered necessary by the electric or telephone utility or cable television firm.

11. Right to Appeal

The owner of the generating facility interconnected or proposed to be interconnected with a utility system may appeal to the Commission should any requirement of the utility service rules filed in accordance with the provisions of Wis. Admin. Code § PSC 119.40, or the required contract be considered to be excessive or unreasonable. Such appeal will be reviewed and the customer notified of the Commission’s determination.

MARSHFIELD ELECTRIC AND WATER DEPARTMENT

Commitment to Community Program Rider

Under provisions of 1999 Wisconsin Act 9 and 2005 Wisconsin Act 141, a municipal electric utility shall charge each customer a low-income assistance and energy efficiency fee. Fifty percent of the fees charged by the municipal utility shall be used for low-income assistance programs and the remainder will be used for energy efficiency programs. Low-income programs may include assistance to low-income households for weatherization and other energy conservation services, payment of energy bills or early identification or prevention of energy crises. Energy efficiency programs may include those programs designed to reduce the demand for natural gas or electricity or improving the efficiency of its use during any period.

Pursuant to Wis. Stat. §§ 16.957(5) and 196.374(7), each municipal electric utility must collect an average of \$16 per meter per year. The actual amount of fees paid by a customer cannot exceed the lesser of 3 percent of all other billed electric charges or \$750 per month. These fees are not subject to Gross Receipts or Sales Taxes. A municipal utility may determine the amount that a particular class of customers is required to pay and may charge different fees to different classes of customers.

Marshfield Municipal Electric Utility, in compliance with these laws and, as of the “Effective Date” established below, has set the fees for each retail electric customer rate classification as follows:

Rg-1 Residential Service	3.00% of the total electric bill not to exceed \$1.07 per month
Residential Service Optional TOD	3.00% of the total electric bill not to exceed \$1.07 per month
Gs-1 General Service	3.00% of the total electric bill not to exceed \$1.08 per month
Gs-2 General Service Optional TOD	3.00% of the total electric bill not to exceed \$1.08 per month
Cp-1 Small Power Service	3.00% of the total electric bill not to exceed \$10.00 per month
Cp-1 TOD – Small Power Service Optional TOD	3.00% of the total electric bill not to exceed \$10.00 per month
Cp-2 Large Power Service	3.00% of the total electric bill not to exceed \$30.00 per month
Cp-3 Industrial Power Service	3.00% of the total electric bill not to exceed \$50.00 per month

Marshfield Municipal Electric Utility has elected to send 100 percent of the low-income assistance and energy efficiency fees collected from its retail electric customers to the State of Wisconsin to participate in the state’s low-income energy assistance and Focus on Energy programs. Questions regarding low-income assistance and energy efficiency fees should be directed to the Customer Service Manager at (715) 387-1195.

Marshfield Electric and Water Department

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101.3 Application of Rates and Combined Metering

The schedules of rates apply when electricity is furnished in any month to one customer at one location for a class of service through one meter. The schedules of rates are based on delivery and billing service to the ultimate user for retail service and do not permit resale or distribution.

For all extensions of new or increased service, each unit must be separately metered before service will be rendered.

Where a customer occupies more than one unit of space, each unit will be metered separately and a separate bill will be computed and rendered based on the readings of each individual meter unless a customer makes arrangements with a utility to provide the approved circuits and loops by which the different units can be connected and all energy metered through one meter.

Where a commercial and one or more residential units are combined so as to obtain electric service through one meter, the general service rate will be applied.

101.4 Availability of Service Voltages

Service may be taken at the following service voltages:

Singe-phase	120/240 volt 3 wire
Three-phase	120/208 volt 4 wire-wye
	120/240 volt 4 wire-delta*
	277/480 volt 4 wire-wye

* Limited to existing customers

Other specific voltages may be available, if approved by the utility.

101.5 Dual Voltages

If a customer requires service at a voltage other than that offered by the utility or at more than one voltage, the customer shall furnish and maintain the additional equipment required. If the customer's service requires two or more transformer settings or points of delivery to a structure, the customer shall also furnish and maintain the additional equipment required.

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105.4 Right-of-way For Extensions

105.4a Overhead Facilities

The applicant(s) for service shall furnish right-of-way easements and permits with clearing rights, without cost to the utility adequate for the line extensions necessary to serve them and along a route approved by the utility. Clearing shall either:

- (1.) Be done by the applicant(s); or
- (2.) Be done by the utility. In this case, the applicant shall, in advance of the clearing work, make a contribution to the utility in an amount equal to the utility’s estimate of the cost thereof. Such a contribution shall be nonrefundable, except that after completion of the extension the utility will determine the actual cost of clearing work, recompute the contribution required, and will refund the excess, if any, of the contribution over that required as based on such actual cost.

105.4b Underground Facilities

The applicant(s) shall secure for the utility, without cost to the utility, such easements as the utility may require for the installation, maintenance or replacement of the underground lateral and necessary distribution line extension.

The applicant shall inform the utility of any known or expected underground obstructions within the cable routes on their property (septic tanks, drainage tile, etc.). Any earth fill added to bring the cable route to final grade prior to the underground construction shall not contain large rocks, boulders, debris or rubbish.

In the event of future changes in grade levels by the customer that would materially change the depth of cover over underground conductors, or affect transformer locations, the landowner shall notify the utility in advance of grading, and shall pay the utility its cost of moving or replacing its equipment to accommodate the change in grade. Such charge will also be made for changes in buildings, structures, foundations, walls, or other obstructions.

105.5 Construction Standards and Facilities Provided by Utility

The utility shall provide safe, reliable service with extensions that conform, to the extent possible, to each of the following standards:

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on the receiving side of the transformers, and all necessary control and regulating facilities on the load side of the transformers, subject to the company’s inspection and approval.

105.7 Meters

Meters will be furnished and installed by the utility. The customer, however, must furnish the meter socket and all necessary extra wiring to meet the meter connection and must furnish a safe and convenient place for the meter(s).

In the event a customer desires an additional meter installed for his or her own convenience, the installation shall be entirely at the cost of the customer, including the cost of the meter.

105.8 Metering Facilities

The customer shall install the meter socket on the exterior of the building.

In rural areas, a yard pole may be furnished by the utility and located at a point central to the buildings to be served. In this case, the customer shall install the meter socket on the yard pole. All service equipment beyond this point is the responsibility of the customer.

When only a residence is built in the rural area and underground service is used, the meter may be placed on the pole if permission is obtained from the utility prior to installation. A customer-owned yard light may not be installed on this pole unless permission is obtained from the utility. The customer is responsible for the location of the meter socket. If it is located other than as described above, the customer must obtain writing permission from the utility prior to installation or the customer shall move the meter socket to conform to the utility standards.

105.9 Number of Service Drops or Laterals Per Customer

The utility shall provide standard overhead service drops and standard underground service laterals at no charge to the customers.

Not more than one service drop or service lateral will be installed to the same building or utilization point except:

- (1.) Where more than one point of delivery is necessary because of voltage regulation, governmental requirements or regulatory orders.
- (2.) In a large installation (large power only) where, in the opinion of the utility, more than one service drop or lateral is necessary to meet the load requirements.

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(3.) In row houses and other multiple occupancy buildings having areas separated by firewalls in compliance with the Wisconsin State Electrical Code.

105.9 Number of Service Drops or Laterals Per Customer (continued)

If an existing customer with a single-phase service drop or lateral requests three-phase service, the customer shall rewire their equipment to operate from the three-phase service drop or lateral before three-phase service will be extended. The single-phase service drop or lateral will be removed from service after the three-phase service has been extended.

105.10 Overhead Service Drop

A standard overhead service drop shall be furnished by the utility to a suitable support on the customer’s premises. The utility will provide supplemental information to the customer indicating the equipment that the customer shall install, own and maintain. This material will also indicate what Wisconsin State Electric Code provisions and city ordinances must be complied with for the installation of this equipment.

105.11 Underground Service Lateral

A standard underground service lateral shall be furnished by the utility to suitable service equipment on the customer’s premises. This equipment shall be installed on the customer’s building at a location approved by the utility.

The utility will provide supplemental information indicating what equipment the customer shall install, own and maintain for underground service and indicate what provisions of the Wisconsin State Electric Code and city ordinances must be complied with for the installation of this equipment.

105.12 Transformers

The utility shall provide standard design transformers necessary to serve the customer’s load at no charge.

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105.13 Nonstandard Service Facilities

If the proposed extension requires nonstandard service facilities or if the customer requests nonstandard facilities, the utility may require that the customer pay a contribution in advance of construction for the cost of the facilities in excess of the cost of standard design facilities.

105.14 Extraordinary Investment by Utility for Extension

Proposed extensions may be reviewed for economic considerations. If the cost of an extension exceeds five times the average embedded cost to serve a customer in the same class as the customer for whom the extension is to be made, the utility may require a contract with the customer. Under the terms of the contract, the customer may be required to pay the recurring estimated operation and maintenance expenses associated with that portion of the extension that is in excess of five times the average embedded cost at the time the extension was made. The reasons and supporting analysis for each contract will be furnished the customer and the Public Service Commission of Wisconsin (Commission), in writing. The utility will inform the customer of the customer’s right to ask the Commission for a review of the extension costs and contract provisions. The utility will notify the Commission in writing, when a service extension is denied, including the reasons for denial.

106 INSTALLATION CHARGES AND EMBEDDED COST CREDITS

106.1 Definition of Equipment, Installation Charges and Embedded Cost Credits

For purposes of implementing these installation charges the following definitions shall apply:

106.1a Customer Classifications

Customer classifications are based on usage characteristics. Each classification has a distinct installation charge and embedded cost credit. For definitions of distribution and service facilities installed in new installations see Section 103. Examples of customer classifications are as follows:

- (1.) Residential Service
- (2.) General Service
- (3.) Power Service
- (4.) Street Lighting

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106.1b Total Cost of Installation

The total cost of an extension shall be defined as the cost of the extension of primary and secondary lines, (excluding the standard meter, the necessary standard service drop or service lateral and individual standard transformer capacity); reconstruction of existing main feeders including changing from single-phase to three-phase or construction of new feeders made necessary solely by addition of such customers; the cost of tree trimming or right of way clearing; securing easements; moving conflicting facilities; and all other costs incidental to furnishing service. The customer is responsible for the cost of restoration of the property after the utility has completed installation and backfilling where applicable. This definition applies to both overhead and underground distribution systems. If it is found to be advisable for the utility to install facilities in excess of that required to serve the new customer applying for service, the added cost of these facilities will not be used in determining the cost of the extension.

106.1c Installation Charge

The installation charge is the total cost of installation less the average depreciated embedded cost of the distribution system (excluding cost of the standard transformer and service facilities). Seasonal customers shall receive one-half the average embedded cost allowance of a year-round customer for the same customer classification.

106.1d Average Depreciated Embedded Cost

The Public Service Commission of Wisconsin determines the embedded cost of the distribution system (excluding the standard transformer and service facilities) for each customer classification, as indicated below. The average depreciated embedded cost by customer classification is listed in Schedule OC-1.

- (1.) Residential Service: The average depreciated embedded cost is determined by dividing the original cost less the estimated accrued depreciation of the distribution system and less customer contributions and advances for construction allocated to this customer classification by the number of customers in the group.
- (2.) Apartment and Rental Units Separately Metered: The owner of an apartment or rental unit applying for an extension of service shall receive the same average depreciated embedded cost credit, that applies for residential service, per unit metered.

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106.1d Average Depreciated Embedded Cost (continued)

- (3.) Subdividers and Residential Developers: The same average depreciated embedded cost credit, that applies for residential service, would apply per unit energized within five years from the installation of the contributed extension.
- (4.) General Service (Including Multi-Unit Dwellings If Billed on One Meter): The average depreciated embedded cost credit is determined the same way as Residential.
- (5.) Power Service: The embedded allowance is determined by dividing the original cost less the estimated accrued depreciation of the distribution system and less customer contributions and advances for construction allocated to this customer classification by the estimated average billed demand of these customers. When there is an upgrade, the average billed demand is the difference between the averaged billed demand before and after the upgrade.
- (6.) Street Lighting: The dollar amount per fixture is determined by dividing the overall depreciated cost of the distribution facilities allocated to the street lighting class, less credits for past customer contributions and advances for construction, by the total number of lighting fixtures in that classification.

All average depreciated embedded costs (by rate class) shall be subject to review by the Public Service Commission of Wisconsin, as part of each general rate case proceeding.

106.2 Total Cost of Installation by Customer Classification

106.2a Residential, General Service, Power Service, and Street Lighting Classes:

Will be charged the total installation cost less the average depreciated embedded cost as defined in Section 106.1d.

106.2b Residential and Commercial Developers and Subdividers:

Residential and Commercial developers and subdividers of single- and two-family subdivisions shall pay, as a minimum, a partially refundable contribution which is the estimated cost of distribution facilities to be installed for the area being developed. The average depreciated embedded cost is refundable as structures are built and connected to the electric utility facilities, as defined in Section 106.1d.

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106.2c Installation Charges for Multi-Family Residential Housing Units:

Will be the total installation cost less the average depreciated embedded cost, as defined in Section 106.1d, per each living unit in the multi-family building.

106.2d Other Installation Charges

In addition to the installation charges provided above, the utility may require the customer to pay, in advance of construction, the estimated direct costs for those distribution service facilities which,

- (1.) Are in excess of standard utility design and construction,
- (2.) Follow a route different than the most direct route as in Wis. Admin. Code ch. PSC 113, as determined by the utility, or
- (3.) Require abnormally high installation costs due to abnormal soil conditions, including trenching in rocky soil, frozen ground, or other similar conditions. (Winter construction will normally apply between December 1 and April 1.)

All such payments for these conditions are subject to partial refund as additional customers connect.

106.2e Adjustments to Estimates of the Total Cost of Installation

Section 106.2 explains the method for estimating the total cost of installation. The utility shall adjust its estimate of construction costs to reflect the costs that are actually incurred. If the cost of installation differs from the utility’s original cost estimate, a recalculation of the customer contribution shall be made.

107 REFUNDS OF CUSTOMER CONTRIBUTIONS BY TYPE OF CUSTOMER

107.1 Eligibility for Refunds

The utility shall make refunds to a customer who made a contribution for an extension (a contributed extension) when the utility makes an extension from the contributed extension to a second customer that does not require a contribution from the second customer (a non-contributed extension).

In all cases, refunds to the customer making the original contributions shall be limited to the first five years from the installation date. The utility shall make the refund to the customer who made the original contribution or the current property owner of record unless it has a written record from that customer assigning the refund rights to another customer.

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108.3 Combination Single-Phase and Three-Phase Construction

In the event an extension is partially or completely supported on structures used for supporting transmission circuits, or in the event the extension is built to serve both single-phase customers and three-phase customers, the utility will compute, and apportion among the customers served, the extension contribution requirements and contribution refund rights in a fair and equitable manner consistent with the pertinent facts, and will retain in its files a memorandum of such computation and apportionment. The contribution requirement of the single-phase customers shall not be greater than would have been the case if an extension (complying with present engineering standards) had been constructed to serve only the single-phase customers.

109 UNDERGROUND SERVICE EXTENSIONS

109.1 General Rules on Underground Service Extensions

The utility will extend utility-standard underground service to all classes of retail customers requesting new service in all areas served by the utility.

109.2 Stipulations on Availability of Underground Service Extensions

Underground service extensions to be furnished by the utility are limited to those which may be placed in locations where grade levels and other conditions are satisfactory to the utility, such as across residential or farm yards or commercial premises or along driveways. The route of the underground construction must be clear of any trees, brush, fences or other surface obstructions that would interfere with normal operation of trenching equipment. Trench backfill shall consist of the original soil and shall not be power tamped. Lawn and landscaping restoration shall be the applicant's responsibility.

Underground service extension in locations such as beneath undeveloped land, quarries, gravel pits, swamps and water will not be furnished except by written approval of the utility for each installation.

The utility will not install an underground service extension where engineering, operating, construction, safety or legal problems would, in the utility's judgment, make it inadvisable to perform the installation, unless these problems can be resolved by the payment of contributions and/or the charges as provided for in these extension rules.

Notification must be given to the utility sufficiently in advance of construction so that a sequence of construction can be provided for and the work coordinated with other utilities involved.

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109.5 Combination of Overhead and Underground Extension

In accepting an application for underground electric service under this schedule, the utility does not undertake to avoid the construction of overhead lines in the neighborhood, which may be necessary to serve customers who demand and have the right to receive service from overhead lines. However, in order to avoid duplication of facilities, applicants for electric service whose premises can be served from an underground distribution system that has previously been installed adjacent to the applicant’s premises shall be required to be served by an underground lateral from such system and shall pay the contributions and charges required in these extension rules.

109.6 Underground Distribution Areas

109.6a General Rules on Underground Distribution Areas

The utility will install utility-standard single-phase underground electric distribution system in accordance with this schedule where required by ordinance or when requested by and agreed to by the property owner(s) or developer or subdivider of the land area to be served. (However, all lines exceeding 15,000 volts in such areas may be overhead.)

Electric distribution facilities provided for under this rule are only for providing service to permanent buildings. The utility will own and maintain the underground conductors and appurtenances, and the character and location of such facilities shall be at the discretion of the utility.

109.6b Establishment of Underground Distribution Areas

(1.) Subdivisions

- a. For purposes of this schedule a subdivision shall be defined as a division of lands consisting of five or more contiguous lots. Lots directly across a street from each other are considered to be contiguous.
- b. To qualify as an underground distribution area the property owner(s) or land developer or subdivider shall have provided a suitable recorded plat of the subdivision with deed restrictions, all satisfactory to the utility, to require all utility service to be supplied by underground lines and prohibiting overhead lines, except for lines exceeding 15,000 volts, and with easements shown.

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- 109.6b Establishment of Underground Distribution Areas (continued)
- c. An area that qualifies as a subdivision may be established as an underground distribution area in either of the two following ways:
 - (1) All new subdivisions not already receiving electric service are defined as underground distribution areas where by ordinance the electric distribution systems are required to be underground.
 - (2) A group of property owners or land developer or subdivider may request that an area be served by an underground distribution system. Such area shall be specifically defined and of reasonably regular shape.
 - (2.) Mobile Home Courts: A new mobile home court or an expansion of an existing mobile home court, may be established as an under-ground distribution area where:
 - a. The court consists of five or more established mobile home locations, all of which are contiguous.
 - b. Occupancy of the mobile homes is to be on a year-round basis.
 - c. The owner of the mobile home court provides the utility a written commitment that all utility service will be supplied by underground lines and prohibiting any overhead lines, except for lines exceeding 15,000 volts.
 - (3.) Condominium Developments and Apartment House Complexes: A new residential condominium development, apartment house complex or an expansion of an existing such housing facility may be established as an underground distribution area where:
 - a. The condominium or apartment complex consists of five or more dwelling units.
 - b. The developer provides the utility a written commitment that all utility service will be supplied by underground lines and prohibiting any overhead lines, except for lines exceeding 15,000 volts.

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109.6b Establishment of Underground Distribution Areas (continued)

- (4.) Easements: The property owner(s) or land developer or subdivider shall have secured for the utility, at no cost to the utility, such easements as the utility may require for the installation, operation and maintenance of its facilities including but not limited to easements for its transformers and switches. The property owner(s) or land developer or subdivider shall inform the utility of any known or expected underground obstructions within the cable routes. Any earth fill added to easements to bring the grade to final level shall not contain any large rocks, boulders, debris or rubbish.

In subdivisions, easements shall be provided along side lot lines as necessary for underground cables to street light locations approved by appropriate governmental authority.

- (5.) Expansion of Underground Distribution Areas: An established underground distribution area may be expanded to include such lots or building sites as are contiguous to it which are not already served by overhead lines. The owners of such lots shall be responsible for seeing that the lots meet the requirements specified above for the underground distribution area to which it is contiguous.

109.6c Contribution and Charges for Extension

- (1.) Contribution for Construction Within Underground Distribution Area: All of the provisions of contributions for construction of underground extensions will apply except that the extension allowance will apply to those lots at which dwelling units are occupied or under construction (construction has proceeded above the foundation level) only. The utility may require that the contribution in aid of construction be paid in advance of construction or may, at the utility's option, offer the property owner(s), land developer, or subdivider an installment payment plan.
- (2.) Distribution Line to Underground Distribution Area: Where an extension of the utility's existing distribution system is required in order to reach the underground distribution area, said extension will normally be overhead construction. The extension allowance for the overhead distribution line will apply to those lots on which dwelling units are occupied or under construction (construction beyond the foundation level) only. The utility may require that the contribution in aid of construction be paid in advance of construction or may, at the utility's option, offer customers an installment payment plan. If required by statute or ordinance, or if required by the conditions in the judgment of the utility, all or a portion of the extension will be underground. A refundable contribution as provided in Section 110.6c(1), will apply.

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116 MOTORS AND MOTOR CONTROL

In order to prevent impairment of service to other customers, it is necessary to establish limits for the allowable starting currents for motors. Before selecting motor equipment, the customer should consult the utility to determine the specific voltages available at any location.

When a motor is used to drive equipment that requires varying torque during each cycle of operation, such as a compressor or reciprocating pump, the combined installation should have enough momentum in its moving parts so that its operation will not interfere unduly with service to other customers.

- (1.) Types of motor service available on general service lighting rates, single-phase only are as follows:
- a. Single-phase fractional horsepower motors: Automatically controlled and frequently started, whose locked rotor currents do not exceed 23 amperes may be connected to 120-volt circuits.
 - b. Single-phase motors, one horsepower or less: Manually controlled or infrequently started, whose locked rotor currents do not exceed 50 amperes may be connected to 120-volt circuits. No single-phase motor larger than 1 horsepower shall be operated on a 120-volt circuit.
 - c. Infrequently started single-phase motors of 10 horsepower or less may be connected to 240-volt other circuits if their locked rotor currents do not exceed the values shown in the next section describing motor service available on power rates.
 - d. In urban areas infrequently started three-phase motors of 10 horsepower or less; connected through single-phase to three-phase converters may be used on other circuits.
 - e. Single-phase motors above 10 horsepower are not permitted in rural areas.

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ELECTRIC RULES

116 MOTORS AND MOTOR CONTROL (continued)

(2.) Types of motor service available on power rates and combined light and power rates, single-phase and three-phase are as follows:

- a. Motors with long periods of continuous operation under maximum load conditions and having not more than four starts per hour may be connected if their locked rotor currents do not exceed those listed in the following table. Consult the utility where these conditions cannot be met, or where equipment ratings and/or starting characteristics exceed the values in the table below:

Motor Starting Table

<u>Motors Rated</u>	<u>Total Locked Rotor Current Not to Exceed</u>
120 Volts, Single-Phase	50 Amperes
240 Volts, Single-Phase 2 Horsepower or Less	60 Amperes
2 to 6.5 Horsepower	60 Amperes Plus 20 Amperes Per Horsepower in Excess of 2 Horsepower
6.5 to 15 Horsepower	150 Amperes Plus 10 Amperes Per Horsepower in Excess of 6.5 Horsepower
240 Volts, Three-Phase 2 Horsepower or Less	50 Amperes
2 to 19.9 Horsepower	50 Amperes Plus 14 Amperes Per Horsepower in Excess of 2 Horsepower
20 to 40 Horsepower	300 Amperes Plus 4 Amperes Per Horsepower in Excess of 20 Horsepower
50 Horsepower and Over	8 Amperes Per Horsepower

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ELECTRIC RULES

- (3.) If a customer requests stray voltage investigative analysis more than two times in a 12-month period, and the utility has not found stray voltage above the level of concern in any of these analyses, the utility may charge a fee for any further stray voltage analyses it performs during the remainder of the 12-month period. The fee may not exceed \$320, which is estimated to be the cost of the additional requested service.

- (4.) Following a determination by the utility that, under normal operating conditions, the contribution to animal contact current from off-farm sources is in excess of 1 mA, the utility shall implement, at its expense, measures to reduce this contribution to below 1.0 mA. For farm facilities housing livestock where stray voltage from off-farm sources is a concern, it may be necessary under certain conditions to modify the farm or utility electrical system, or both.

- (5.) The utility shall, based on a technical and economic analysis of acceptable alternatives for lowering levels of stray voltage at the given location, determine whether long-term system modification should be on-farm, off-farm or both. If the utility, with the consent of the customer, chooses to install a long-term mitigation device (e.g., an electronic grounding system or equipotential plane) on farm property, the customer will assume ownership of the device. The utility will respond to reasonable customer requests regarding maintenance of the device. The customer is responsible for the daily monitoring and energy costs of the on-farm mitigation device, if any. The customer may be required to sign a Stray Voltage Reduction Agreement prior to installation of an on-farm mitigation device.

- (6.) The utility will not install any mitigation device(s) where its stray voltage investigation reveals unsafe conditions, or the inspection report of a state certified commercial electrical inspector or a state certified master electrician reveals that conditions do not comply with applicable electrical codes. If the utility's investigation reveals unsafe conditions, the utility shall notify the customer of the problems found and the potential hazards, and shall recommend the customer take prompt action to remedy the hazard.

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- (7.) In the event modification of on-farm or off-farms systems, to reduce off-farm stray voltage contribution, is not required, the customer may request separation of primary and secondary neutrals. The neutral reconnection device(s) [“isolator(s)”] used for this purpose shall be approved for use by the utility and the Public Service Commission of Wisconsin. Prior to installation, the customer shall submit an application form, a satisfactory farm wiring inspection report which has been issued by a state certified commercial electrical inspector or a state certified master electrician, and submit payment for all costs associated with the neutral separation. The customer may be required to sign a Customer Requested Neutral Separation Agreement and may also be required to sign a Hold Harmless/Indemnification Agreement and Release approved by the Public Service Commission of Wisconsin. Separation costs shall include labor, equipment, and materials [excluding the isolator(s)] necessary for both isolator(s) installation and a post-separation analysis of possible bypass circuitry. Costs may vary and may, therefore, be subject to a specific determination for each farm location. The isolator(s) shall be owned by the utility and shall be leased to the customer at a lease rate of \$35.00 per isolator, per month. This lease rate includes an appropriate amortized fee to cover the cost of an annual inspection designed to assess isolator effectiveness and to ensure that the isolator(s) continues to perform its intended function of neutral reconnection under fault conditions. Lease agreement shall require monthly billings.
- (8.) If within one year of the date of installation of a customer-requested isolator(s), the customer requests isolator(s) removal, the utility shall refund to the customer all lease amounts which the customer has paid to date.
- (9.) Where modifications to on-farm or off-farm systems to reduce off-farm contribution is required but cannot be accomplished within five working days, the utility may install a temporary isolator(s). The customer may be required to sign a Temporary Neutral Separation Agreement prior to installation. The utility must remove the isolator(s) and reconnect the neutrals within 90 days, unless it receives a waiver from the Public Service Commission of Wisconsin or the customer completes a Customer Requested Neutral Separation Agreement. Upon receiving a completed Customer Requested Neutral Separation Agreement, the utility (not the customer) will provide the inspection of farm wiring by a state certified master electrician or state certified commercial electrical inspector. If any wiring code violations are found and the customer corrects them within 60 days, the utility will keep the isolator(s) in place. Otherwise, it must remove the isolator(s) and substitute another mitigation technique to reduce off-farm stray voltage to 1.0 mA or less.

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ELECTRIC RULES

- (10.) Should the customer whose neutrals were temporarily separated as provided for in (9.) above desire the isolator(s) be left in place following the required reduction of off-farm stray voltage contribution, the customer may request the continuation of this service in accordance with the terms and conditions established in (7.) above. The agreement shall be contingent on receipt of a satisfactory wiring inspection report issued by a state certified commercial electrical inspector or a state certified master electrician. Initial installation costs will be waived.
- (11.) At farm locations where primary and secondary neutrals have been separated at the request of the customer as provided for in (7.) and (9.) above, cost-free stray voltage investigative services may be limited to an annual investigation that determines the effectiveness of the isolator and isolation and an analysis of utility facilities only. If the customer requests on-farm stray voltage analysis or additional determinations of isolation effectiveness, the Utility may charge a \$320 analysis fee.
- (12.) Numerous locations exist where primary and secondary neutrals have been separated for various reasons prior to the order date, July 16, 1996. As stray voltage investigations are performed at these locations, either at customer request or incident to existing utility isolator removal efforts or system modifications, and the utility's stray voltage contribution under normal operating conditions is determined to be less than 1.0 mA, these customers shall become subject to all of the conditions set forth above.
- (13.) Prior to July 16, 1996, the utilities shall perform the required stray voltage investigation and separate the primary and secondary neutrals within 45 days of the receipt of a Public Service Commission of Wisconsin approved Isolation Request form and a satisfactory farm wiring inspection report which has been issued by a state certified commercial electrical inspector or a state certified master electrician. Subsequent to July 16, 1996, the utilities shall perform the investigation and separation within 30 days of the receipt of the above-referenced documentation. The utility shall not be required to initiate the neutral separation work requested prior to receipt by the utility of full payment for all costs associated with the neutral separation, as specified in (7.) above.
- (14.) The utility may not install, or permit the continued use of, an isolator(s) at locations where livestock are not and/or no longer will be housed.
- (15.) The company may supply service at one point to a customer for distribution by the customer to a number of buildings owned by the customer, provided that such buildings are located on contiguous properties including those directly across public thoroughfares.

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ELECTRIC CUSTOMER SUPPLEMENTAL RULES

201.1 LATE PAYMENT CHARGE
See Wis. Admin. Code § PSC 113.0406.

201.2 DISCONNECTION AND REFUSAL OF SERVICE
See Wis. Admin. Code § PSC 113.0301.

201.3 DEFERRED PAYMENT AGREEMENT
See Wis. Admin. Code § PSC 113.0404.

Marshfield Utilities shall offer deferred payment agreements to residential accounts and may offer such agreements to other customers. However, Marshfield Utilities will not offer a deferred payment agreement to a residential customer who is a tenant if any of the following criteria applies:

1. The residential tenant has greater than \$100 of account arrearages that are more than 90 days past due for utilities that bill monthly.
2. The tenant has defaulted on a deferred payment agreement in the past 12 months. This criterion only applies to deferred payment agreements and not to other types of payment extensions or agreements.
3. The residential tenant is responsible for account arrearages that were placed on any property owner’s tax bill in the utility’s service territory in the past 24 months.
4. The residential tenant has a balance that accrued during the winter moratorium that is more than 80 days past due.

201.4 NOTICE OF DISCONNECTION
See Wis. Admin. Code § 113.0301.

201.5 CUSTOMER RESPONSIBILITY FOR UTILITY’S EQUIPMENT

- (a) The customer shall be responsible for all damage to the Utility's equipment, and for all loss resulting from interference or tampering therewith, caused by the customer or the customer's permittees, including compensation for consumed energy not recorded upon the meter.
- (b) Meters, service entrance switches, and service entrance outlets are sealed by the utility and such seals shall not be broken or tampered with in any manner without the consent of the Utility except in cases of emergency.

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ELECTRIC CUSTOMER SUPPLEMENTAL RULES

(c) The Utility should be notified as soon as possible after a seal has been broken.

(d) Upon the discovery of damage or interference, the Utility shall have the right to terminate service. The service shall be restored upon the customer's demand and upon payment of the following:

- (1) the cost of reconnection, as specified in Schedule OC-1;
- (2) the cost of making the installation tamperproof;
- (3) the reasonable cost of investigation;
- (4) the cost of repairing the damage to the Utility's property; and
- (5) the amount due the Utility for all energy consumed, including that not recorded on the meter as the result of tampering or damage. Where the Utility, in its judgment, does not have adequate historical usage data upon which to estimate the energy consumed, the Utility may use 25 kWh per day for each day of the period in which the Utility in its judgment believes adequate usage data is not available.

In the event any tamper-proof installation so installed shall be the subject of further damage or interference by the customer, or the customer's permittees, the Utility shall have the right to terminate service without further notice.