

CHAPTER 14 ELECTRIC UTILITY¹

ARTICLE 14-1 RATES AND CHARGES

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14-1-2	Load Restrictions
14-1-3	Minimum Charges
14-1-4	Security Lights
14-1-5	Special Transformers
14-1-6	Late Charges
14-1-7	Disconnect/Reconnect Charges

Section 14-1-1 Rates

- A. Service Rates. Applicable to all single and three phase residential service for individual private premises and individually metered apartments when all service is supplied at one point of delivery and energy is measured through one meter. This schedule is not applicable to resale, breakdown or standby service for customers operating their own generating facilities.

Rate: \$.088 per K.W.H. per month
Minimum monthly charge\$5.00 per month

- B. General Service Rates. This schedule of rates is applicable to all general power and lighting service for which no specific schedule of rates is provided and when all energy is supplied at one point of delivery and measured by one meter.

Rate: \$.088 per K.W.H. per month
Minimum monthly charge\$2.00 per kilowatt on connected load

- C. Temporary Service Rates. This rate schedule is applicable to all types of light and power service for temporary service which shall be in service for less than one month. Applicant shall pay all costs incurred for such installation.

Rate: \$.15 per K.W.H. per month
Minimum monthly charge\$11.00 per month

- D. Irrigation Service Rates. This rate schedule is for irrigation pumping applicable to three phase service of ten horsepower or more.

Rate: \$.088 per K.W.H. per month
Minimum monthly charge\$11.00 per month on pumps 10 horsepower and above
\$ 5.00 per month on pumps less than 10 horsepower

- E. Contract and Emergency Service Rates. Rates and conditions for such service shall be determined by the town council.

¹Article 14-1 from Ordinance #65 as amended by Ordinance #80-1992; remainder of Chapter from Ordinance #52

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- F. State and Local Sales Taxes. The rate schedules for purchasing electricity shall add all applicable state and local sales taxes to each customer's bill. The sales tax shall be shown as a separate item on the bill.

Section 14-1-2 Load Restrictions²

Motors or other services requiring more than three horsepower, or equivalent, of operating current for single phase or more than ten horsepower, or equivalent, of operating current for three phase, shall have proper starting windings on equipment as approved by authorized personnel of Thatcher. If the power factor falls below 95 percent lagging at any metering point during any billing period, Thatcher may:

1. Adjust kilowatt-hours and kilowatts during this period, for billing purposes, to equal 95 percent of kilovolt-ampere-hours and 95 percent of kilovolt-amperes.
2. Require the customer to correct the power factor to an acceptable level.
3. Require the customer to be continuously metered with a separate meter that registers kilovolt-amperes, kilovars, or actual power factor.

At Thatcher's discretion, customer may be required to pay all costs associated with additional metering.

Section 14-1-3 Minimum Charges

The minimum monthly charge as set forth in Section 14-1-1, subsection A and B are based on 3 K.V.A. or less of installed transformer capacity. When more than 3 K.V.A. of transformer is required, the minimum monthly charge shall be increased at the rate of seventy-five cents (\$0.75) for each additional K.V.A. or fractional part thereof required.

Section 14-1-4 Security Lights

This section is applicable to all security lights. The customer shall pay for the actual cost of installing the light - to include the pole, light fixture and labor. Thereafter the town will maintain the security light.

Rate: \$8.00 per month

Section 14-1-5 Special Transformers

²Ordinance #124-2004

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This section is for all special order transformers, transformers that are installed for exclusive use of a customer or at the specific request of a customer. The customer shall pay for the first transformer and the town will stock a replacement transformer thereafter.

Section 14-1-6 Late Charges³

- A. A late fee of one and a half percent of the total bill with a \$5.00 minimum will be added to all electric bills not paid by the last day of each month, unless the last day falls on a Saturday, Sunday or a legal holiday, which would then put the last day to make a utility payment on the next regular working day. This penalty applies to all commercial, irrigation and residential customers when they are past due, regardless if they enter into a payment extension agreement with the Utility office and will continue to accrue to an account for each month that late payments are made.
- B. A person is only eligible to enter into a payment extension agreement when they are able to show how they will make the delinquent payments to the Utility supervisor or town manager, and it will be at their discretion and judgment whether to allow an account to enter into a payment extension agreement. It shall be understood that an essential element of a payment extension agreement is that all future electricity payments must be made by their due date in conjunction with any delinquent payments. Should a customer not comply with the terms of the payment extension agreement, including becoming delinquent on future utility bills, then the payment extension agreement shall become null and void and this electric service subject for shut off. Payment extension agreements are not to continue beyond three months in any calendar year for any customer or single account.

Section 14-1-7 Disconnect/Reconnect Charges⁴

A disconnect/reconnect charge will be assessed for all disconnects/reconnects. The council from time to time will review and adopt by resolution the amount of these disconnect/reconnect charges for electric service after it has been terminated due to nonpayment of a utility bill or for any other valid reason caused by the customer.

³Ordinance #98-1997

⁴Ordinance #98-1997

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ARTICLE 14-2 GENERAL PROVISIONS FOR CUSTOMER GENERATING FACILITIES

14-2-1	Purpose
14-2-2	Introduction
14-2-3	Definitions

Section 14-2-1 Purpose

The town hereby undertakes to define a policy for the connection of generating facilities within the boundaries of the Town of Thatcher Electric Utility ("Utility") service area that are owned by current retail or commercial customers who desire to connect this generation to the Utility distribution system.

Section 14-2-2 Introduction

- A. The Town of Thatcher Electric Utility is a non-regulated electric utility. The Utility will implement, to the extent possible, the connection of qualified Distributed Generation facilities to the Utility's electric distribution system. Distributed Generation for these purposes will be defined as generation located at a Utility customer site and meeting the necessary requirements to be connected to the Utility distribution system. This generation may include any of various types of renewable energy. All generation facilities must meet Utility requirements prior to connection.
- B. These rules apply to all entities willing and able to enter into an agreement with the Utility. Provisions of these rules shall not supersede existing contracts.
- C. These rules represent general guidelines since the nature, size and character of Distributed Generation facilities can vary widely. The Utility reserves the right to evaluate each Distributed Generation facility on a case by case basis.

Section 14-2-3 Definitions

- A. The following definitions apply to Article 14-2 through Article 14-5.
- B. In this chapter, unless the context otherwise requires:
 - 1. "Accredited capacity" means the electrical rating given to generating equipment that meets the Utility's criteria for uniform rating of equipment. These criteria include but are not limited to reliability, availability, type of equipment and the degree of coordination between the Distributed Generation and the Utility.

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2. "Capacity costs" means the costs associated with providing the capability to deliver energy. They consist of the capital costs of facilities used to generate and transmit electricity or the cost to purchase such capacity from other utilities.
3. "Demand" means the average rate in kilowatts at which electric capacity is made available as determined at the point of measurement during any thirty minute period or any other period to be determined by the Utility.
4. "Distributed Generation" means generation located at a Utility customer site and meeting the necessary requirements to be connected to the Utility distribution system.
4. "Energy" means electric energy as measured in kilowatt hours at the point of measurement.
5. "Energy costs" means the variable costs associated with the production of electric energy. They represent energy related cost only or the average cost of purchased energy. Identifiable capacity charges included in purchased power agreements shall not be included in the calculation of the cost of purchased energy.
6. "Point of interconnection" means the point or points at which the Distributed Generation facility is to receive and/or deliver energy or capacity and energy under normal operating conditions.
7. "Point of measurement" means the point or points where energy and/or demand are metered.
8. "Present Utility practice" means any of the practices, methods and acts engaged in or approved by a significant portion of the electrical Utility industry consistent with reliability, safety and expedition.

ARTICLE 14-3 CONDITIONS OF SERVICE FOR CUSTOMER GENERATING FACILITIES

The conditions listed in this article shall apply to all Distributed Generation served under these rules.

- A. The Utility shall purchase energy or capacity and energy from any approved Distributed Generation customer who offers to sell energy or capacity and energy from their generation facilities under 100 kW. The generation may use renewable resources, a Fuel Cell, cogeneration or a hydrocarbon fueled unit to generate electricity. It shall be intended to provide part or all of the customer's requirements for electricity and have a generating capacity that is less than or equal to 125% of the customer's total connected load at the site where the Distributed Generation is located. Generation that is not consistent with these limits shall be required to obtain a negotiated contract with the Utility. Nothing in this article shall limit the Utility's ability to evaluate such Distributed Generation and determine terms and conditions that are mutually satisfactory to all parties and in no way shall be detrimental to the operation of the Utility's facilities and customers.

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- B. The Utility shall sell any capacity and energy that is required by the customer who owns Distributed Generation to that customer. The customer shall be billed under the applicable residential, general, industrial or contractual service schedule.
- C. The Utility shall offer to provide maintenance, interruptible, supplementary and back-up power to the Distributed Generation site if requested by the Distributed Generation owner.
- D. The Distributed Generation owner shall execute a written agreement with the Utility. The Utility reserves the right to waive this requirement. The waiving of this requirement by the Utility does not relinquish the Utility's right to require the execution of a written agreement in the future.
- E. The Distributed Generation shall comply with all requirements of the National Electrical Safety Code, American National Standards Institute, Institute of Electrical and Electronic Engineers, American Society of Mechanical Engineers, and any other applicable local, state or national code, including IEEE 1547-2003 STD 06 14 07, and operate its equipment according to prudent Utility practice. In case of any conflict in the foregoing codes or standards, the Utility shall decide which shall govern.
- F. Switching equipment capable of isolating the Distributed Generation from the Utility's system shall be accessible to the Utility or its agent at all times.
- G. At its option, the Utility or its agent may choose to operate, without notice or liability, the switching equipment described in subsection F of this article if, in the opinion of the Utility or its agent, continued operation of the Distributed Generation in connection with the Utility's system may create or contribute to a system emergency or safety hazard. The Utility's obligation to purchase from the Distributed Generation system ceases when the Utility or its agent operates the switching equipment described in subsection F of this article. The Utility shall endeavor to minimize any adverse effects of such operation on the Distributed Generation system.
- H. The Distributed Generation owner shall indemnify and hold harmless the Utility from any and all liability arising from the operation and interconnection of the customer's facilities. The Distributed Generation owner shall bear full responsibility for the installation and safe operation of the equipment required to generate and deliver energy or capacity and energy to the point of interconnection.
- I. The owner of a Distributed Generation facility who employs operations, maintenance, or other personnel in relation to the Distributed Generation shall maintain worker's compensation insurance as required by law, and all Distributed Generation facilities shall maintain public liability insurance covering bodily injury and property damage in an amount not less than \$5,000,000 per occurrence. Each public liability policy shall name the Utility as an additional insured.
- J. The Utility shall not be liable whether in contract or in tort or under any other legal theory to the owner of a Distributed Generation facility, the owner's customers or any other person or entity for:
 - 1. Lost generation revenue;
 - 2. Loss of use, revenue or profit;

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3. Cost of capital;
 4. Substitute use or performance; or
 5. Any other incidental, indirect, special or consequential damages.
- K. The Utility shall provide upon request sufficient data to allow the customer to determine the cost effectiveness of the Distributed Generation if it goes into operation pursuant to these rules.
- L. The Distributed Generation owner shall provide an advance payment to the Utility if in the opinion of the Utility the costs of interconnection will be excessive or the amount of work that must be done by the Utility to provide the interconnection facilities will be excessive.
- M. Any costs of interconnection which are over and above the interconnection costs that would be incurred due to the connection of a comparable non-generating customer and which are incurred by the Utility due to the interconnection of the Distributed Generation shall be the responsibility of the Distributed Generation owner. Interconnection costs may be amortized over a period of time not greater than the length of the contract between the Utility and the Distributed Generation owner, at the option of the Utility.
- N. The Utility may discontinue sales to the Distributed Generation customer during a system emergency, providing that such discontinuance is on a nondiscriminatory basis.
- O. Should the owner of a Distributed Generation facility request the Utility to wheel its power to an adjacent Utility, the Utility may do so, at its option.
- P. If the Utility agrees to wheel such power, a charge may be made to the Distributed Generation owner for interconnection costs, any modifications to the Utility's facilities to accommodate such wheeling, use of the Utility's facilities to wheel and any associated administrative costs.
- Q. The amount of power wheeled may be adjusted up or down according to the effect on the Utility's system losses due to wheeling.

ARTICLE 14-4 RATES FOR PURCHASES FROM CUSTOMER GENERATING FACILITIES

- A. The Utility does not offering any subsidies to support the capital cost of the installation of Distributed Generation facilities. The Utility may revise this policy in the future without any retroactive payments to then existing facilities.
- B. For Distributed Generation facilities of 100 kW or less, the kWh supplied by the Utility will be compared each month, during the normal billing cycle, with the kWh from the customer generation. If the electricity supplied by the Utility exceeds the customer generation, the customer shall be billed for the net kWh by the Utility according to the customer's standard rate schedule. If the customer generation exceeds the electricity

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supplied by the Utility, the customer shall be credited during the next billing period for the excess kWh generated, and this credit will be applied to reduce the kWh supplied in that month in addition to the customer generation supplied in that month. At the end of the calendar year (December 31), any credit balance, carried from month to month will be zeroed out and will not be carried forward or otherwise credited to the customer's account.

- C. Once each calendar year, the Utility shall issue a check or billing credit to the customer for any balance due to accumulating generation credits described in B. above.
- D. The standard rates for purchases from Distributed Generation facilities shall be based on the Utility's "avoided costs" for energy (kWh)
- E. Such rates may be adjusted for the Distributed Generation's effect on the Utility's system losses, administrative costs, dispatch ability, reliability, term of contract and other factors which impact the Utility's costs.
- F. Should the Utility's actual avoided costs as determined in subsection D of this section drop below a previously contracted rate, the Utility retains the right to cancel such contract and offer to renegotiate or wheel such power from a Distributed Generation facility. Sixty days notice shall be provided to the owner of the Distributed Generation of use of this provision.
- G. The Utility shall review annually its avoided costs as determined above and publish standard rates for purchase.
- HC. Capacity payments shall be made in any case in which the Distributed Generation owner enters into a legally enforceable contract to provide accredited capacity. The payment for the capacity purchase from the Distributed Generation facility shall take into account the following items:
 - 1. Length of the contract term.
 - 2. Reasonable scheduling of maintenance.
 - 3. Willingness and ability of the customer to allow the Utility to dispatch the customer's generation.
 - 4. The Utility's ability to defer a purchase from another source or to defer construction of a facility or a portion of a facility.
 - 5. Sanctions imposed for noncompliance with these rules and any contract between the Utility and the Distributed Generation owner.
 - 6. Availability and reliability of the Distributed Generation facility.
- ID. Any tax or payment in lieu thereof imposed on the Utility by any lawful authority on the production, transmission, sale or purchase of energy or capacity and energy that would not occur due to a comparable non-generating customer shall be the responsibility of the Distributed Generation owner.

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ARTICLE 14-5 CONNECTION WITH DISTRIBUTED GENERATION FACILITIES

14-5-1	Conditions of Interconnection
14-5-2	Interconnection
14-5-3	Protective Relaying
14-5-4	Power Factor
14-5-5	Metering
14-5-6	System Disturbances
14-5-7	Daily Reporting

Section 14-5-1 Conditions of Interconnection

- A. The Utility shall allow interconnection between its facilities and Distributed Generation facilities on a continuing basis as long as the parallel operation of the Distributed Generation does not degrade, in any way, the quality of the electric service provided to the Utility's other customers. The Distributed Generation owner shall insure that its operation in no way creates unsafe conditions either at its facility or on the Utility's facilities.
- B. The owner of the Distributed Generation shall enter into a written agreement with the Utility for interconnections, sale or wheeling of its power prior to actual connection and operation of its facilities.
- C. The Distributed Generation shall comply with all requirements of the National Electrical Safety Code, American National Standards Institute (ANSI), Institute of Electrical and Electronic Engineers (IEEE), American Society of Mechanical Engineers (ASME), the National Electric Code, General Order 95, including IEEE 1547-2003 STD 06 14 07, and all local, state and federal rules and regulations or codes which may be applicable.

Section 14-5-2 Interconnection

- A. The owner of the Distributed Generation shall, to the point of interconnection, furnish, install, operate and maintain in good repair and without cost to the Utility such relays, locks and seals, breakers, automatic synchronizers and other control and protective equipment as shall be designated by the Utility as suitable for the operation of the Distributed Generation in parallel with the Utility's system. The Distributed Generation operator shall take appropriate steps to insure that operating in parallel will not degrade in any fashion the quality of service that is normally maintained on the Utility's system.
- B. The owner of the Distributed Generation shall provide at no cost to the Utility a manually operated and lockable, visual disconnect device that shall be for the exclusive use of the Utility and accessible by Utility representatives at all times. Usually such device will be an air switch or fused cutouts located near the point of interconnection.
- C. The protective switching equipment outlined above in subsection B of this section may be operated without notice or liability by the Utility or Utility representative if, in the opinion of the Utility or its representative, continued operation of the Distributed Generation in connection with the Utility's system may create or contribute to a system emergency or safety hazard. The Utility shall endeavor to minimize any adverse effects of such operation on the Distributed Generation.

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- D. The Utility shall be advised of the proposed start up and parallel time for such facilities and a Utility representative shall be in attendance and shall approve parallel operation.

Section 14-5-3 Protective Relaying

- A. All generating units must be equipped with short circuit interrupting devices consisting of thermal-magnetic overcurrent devices on each phase as well as undervoltage release and solenoid tripping accessories.
- B. Over and under voltage and frequency protection shall be provided to effectively isolate the Distributed Generation from the Utility's facilities should its power output not be within the Utility's normal operating tolerances. The normal tolerances for under and over voltage are 80% with 10 second time delay and 120% with no time delay of normal. Under and over frequency limits are 58 Hz and 62 Hz with one second time delay. Frequency relays are not required for solid state inverters which are line commutated.
- C. For Distributed Generation facilities, primary, ground fault sensing equipment shall be required to isolate the Distributed Generation from the Utility's facilities unless otherwise specified by the Utility.

Section 14-5-4 Power Factor

The power output of the Distributed Generation must approach a unity power factor when operated in parallel with the Utility's facilities. Equipment shall be installed to correct any deficiencies in power factor by the owner of the Distributed Generation at the owner's expense.

Section 14-5-5 Metering

- A. The Utility shall provide metering equipment capable of registering and accumulating the kWh of electricity flowing in both directions and the customer kW in each billing period. The customer shall be responsible for the difference in cost between a standard Utility supplied meter and the bi-directional meter required for Distributed Generation. A separate meter may be installed by the Utility on the generation unit to determine the amount of generation (kWh) contributed to the Utility's system.
- B. The Utility shall own and maintain all necessary meters and associated equipment utilized for billing and monitoring the customer's load and generation.

Section 14-5-6 System Disturbances

Disturbances to the Utility's facilities shall be minimized to the greatest extent possible. Such disturbances shall include but not be limited to lagging or leading power factors, unacceptable

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voltage regulation, voltage flicker and harmonics.

Section 14-5-7 Daily Reporting

- A. The owner or operator of a Distributed Generation facility shall maintain a daily operations log for all facilities. Such log shall contain information on unit parallel and separation times, maintenance outages, trip operation and other unusual events. KW operating level may also be required.
- B. The Utility shall have the right to periodically review these logs.