## WATERTOWN MUNICIPAL UTILITIES

## ELECTRIC DEPARTMENT POLICIES

## INDEX

## (Updated February 26, 2018)

- 1. DEPARTMENT FACILITIES
  - CODE COMPLIANCE
  - ACCESS TO PROPERTY
  - LOCATING
- 2. CUSTOMER FACILITIES
  - RESIDENTIAL ELECTRIC SPACE HEATING
  - MOTOR INSTALLATIONS
  - BACK UP GENERATORS
- 3. METERING
  - UNIT OF MEASUREMENT
  - COST
  - LOCATION
  - ACCESS
  - ACCURACY
  - SUB METERING
  - CONDUIT
  - TRANSFORMERS
  - TRANSITION CABINET
  - GROUNDING
- 4. DELIVERY POINT
  - OVERHEAD
  - UNDERGROUND RESIDENTIAL
  - UNDERGROUND COMMERCIAL / INDUSTRIAL
  - MOBILE OR MANUFACTURED HOMES
  - RURAL SERVICE
- 5. CONTINUOUS SERVICE AND POWER QUALITY
- 6. RATES
  - RESIDENTIAL RATE
  - GENERAL SERVICE
  - POWER RATE
  - PRIMARY VOLTAGE

- 7. INSTALLATION OF TRANSMISSION / DISTRIBUTION LINES - COST
- 8. INSTALLATION OF SERVICES
  - COST
  - INDUSTRIAL / COMMERCIAL
  - INDUSTRIAL / COMMERCIAL CUSTOMER RESPONSIBILITY
  - LOT GRADE AND CONDITION
  - CUSTOMER UPGRADES
  - NUMBER OF SERVICES
  - SERVICE ENTRANCE
  - CONDUIT
  - RANGE "A" AND "B"
- 9. TEMPORARY SERVICE
  - COST
- 10. SECURITY LIGHTS - COST
- 11. STREET LIGHTING
  - LOCATION
  - RATES
- 12. TRAFFIC SIGNAL LIGHTS - MAINTENANCE
- 13. HOUSE OR BUILDING MOVES
- 14. ELECTRIC SERVICE TERRITORY AGREEMENT WITH CODINGTON-CLARK ELECTRIC COOPERATIVE
- 15. INTEGRATED RESOURCES PLAN
- 16. AGGREGATION OF RETAIL CUSTOMER DEMAND RESPONSE
- 17. ANCILLARY SERVICES PROVIDED BY DEMAND RESPONSE RESOURCES
- 18. DISTRIBUTED GENERATION WORKBOOK
- 19. ATTACHMENTS
  - DATA PULSE METERING AGREEMENT
  - SCHEDULE OF FEES

## WATERTOWN MUNICIPAL UTILITIES ELECTRIC DEPARTMENT POLICIES

Electric service by the Electric Department (Department) of the Watertown Municipal Utilities shall be provided under the following Policies:

#### 1. DEPARTMENT FACILITIES

#### (5491 - 6076)

- 1.1 The requirements contained herein are the minimum requirements and in addition to compliance with these rules, all electrical installations must comply with the National Electric Code of the National Board of Fire Underwriters, the National Electrical Safety Code, the North American Electric Reliability Corporation, the Midwest Reliability Organization, and ordinances in force by the State and Municipality.
- 1.2 The Department shall furnish and install items as necessary and as outlined in policy which may include primary and secondary cable, service lines, poles, transformers, switches, meters, and other such equipment as is necessary to adequately supply electricity to the Department's meter located on the premises of the Customer. All wiring, equipment, and installation beyond such meter shall be the responsibility of the Customer. The Department's liability for installation and maintenance shall terminate at its meter.
- 1.3 In accordance with City Ordinance 20.0202 (4), Department representatives, when properly identified, shall have access to Customers' premises at all reasonable times for the purpose of reading meters, making repairs, making inspections, turning service on or off, removing Department property, trim or remove trees that may interfere with the operation of the Department's facilities, or for any other purpose incident to the service.

- 1.4 The Customer is requested to call or notify the Department immediately when any of the Department's equipment appears unsafe or dangerous. This applies to equipment inside or outside the Customer's premises and particularly to broken or fallen wires. The Customer is requested, if possible, to post someone in a safe area in the vicinity of the dangerous location to warn individuals who may pass until the Department's representatives arrive.
- 1.5 Before being connected to the facilities of the Watertown Municipal Utilities, the Customer's installation shall comply with these policies, and with those of any other authority having jurisdiction. The Watertown Municipal Utilities reserves the right to refuse to connect a service where the Customer's installation does not comply with the provisions in this document.
- 1.6 The Watertown Municipal Utilities reserves the right to alter these policies in special cases where conditions warrant. Any departure from these policies will not be considered as establishing a precedent, and will not be considered as a waiver of the Watertown Municipal Utilities rights to enforce any of these Regulations.
- 1.7 The Department will paint and/or flag the underground locations of all electric facilities up to the meter in compliance with South Dakota Law Chapter 49-7A and Administrative Rules Article 20:25 when requested by the South Dakota One-Call system. The Department will attempt, to the best of our ability, to locate any private lines owned by the Customer, but will not be held responsible for any damages resulting in this practice.
- 1.8 In accordance with City Ordinance 20.0117, after the installation of facilities have been located on the premises of the Customer, if any changes made by the Customer that require the facilities to be relocated, the cost of any subsequent change in location will be at the Customer's expense. The Department may request a bond in an amount sufficient to cover the cost of such relocation.

## 2. CUSTOMER FACILITIES

2.1 Customer shall install and, at all times, maintain its wiring, fuse / breaker panel and other equipment in conformity with good electrical practice, and the requirement of the applicable codes.

- 2.2 The Department may at any time require Customer to make such changes in its equipment or wiring or use thereof as may be necessary to allow Department to turn service off and on, to eliminate any hazardous condition, or as may be necessary to remove any damaging effect which the operation of Customer's wiring or equipment may have on Department facilities or service. The Department shall have the right to terminate electrical service in the event of default of this provision.
- 2.3 The Department reserves the right, but assumes no duty, to inspect the Customer's installation. Any inspection of Customer's wiring or equipment by the Department is for the purpose of eliminating unsafe conditions, or avoiding unnecessary interruptions of service to its Customers, and for no other purpose, and shall not be construed to impose any liability upon the Department by reason thereof. The Department shall not be liable or responsible for any loss, injury, or damage which may result from the use of, or defects in Customer's wiring or equipment.
- 2.4 Occasionally the Department may make emergency and/or temporary repairs to the Customer's equipment to allow the Customer to continue their operations, with the understanding that permanent repairs must be made by the Customer as soon as possible. If such repairs are not made within the period agreed to, the Department reserves the right to disconnect service until permanent repairs have been made. The Customer will be billed for this service.
- 2.5 The Customer shall give notice to the Department before making changes or increases in their connected load or equipment, as Department's service wires, transformers, meters, and other facilities used in supplying service to the Customer have a definite limited capacity. The Customer shall be liable for damage to meters, transformers, wires and associated equipment resulting from increased load when proper notice is not given.

## 2.6 RESIDENTIAL ELECTRIC SPACE HEATING

2.6.1 Residential Electric Space Heating units will be so staged to permit no more than 15 Kilowatts to be switched at one time by heating controls.

#### 2.7 MOTOR INSTALLATIONS

- 2.7.1 The Department reserves the right to require the Customer to install, at Customer's expense, apparatus to correct objectionable conditions caused by Customer's equipment. This includes hiqh motor starting current, violently fluctuating loads, etc. When the Customer does not correct such conditions, the service may be discontinued by the Department until the corrections are made. The Department may also discontinue service if the Customer designs or operates equipment that adversely effects other Customer's service if the Customer does not correct such conditions.
- 2.7.2 Limitations of Size
  - a) Single Phase ac motors shall not exceed 10 horsepower.
  - b) Three phase ac motors rated at less than 50 horsepower may be started at full voltage (i.e. across the line).
  - c) Three phase ac motors rated at less than 200 horsepower, but greater than 49 horsepower shall have starting currents limited to 450 amps at 460 volts or 900 amps at 230 volts by reduced voltage starters or other acceptable starting devices.
  - d) For motors 200 horsepower and larger, the Department shall request technical data on the motor and starting system and load cycle information of the motor to determine if the motor can be installed at the location proposed and not adversely affect other customers on the Department's system.
- 2.7.3 The Customer shall be responsible for the protection against low voltage or phase loss wherever low voltage, phase loss, or unexpected restarting could cause damage to the Customer's equipment or result in personal injury.
- 2.7.4 Control apparatus equipped with reverse-phase relays shall be installed by the Customer on all polyphase motor installations for elevators, hoists, cranes, and those manufacturing processes where accidental reversal of rotation is liable to cause injury to persons or damage to machinery, equipment or work in progress.

Installations of generators or any other emergency type of electrical energy source must be installed in accordance to the National Electric Code (NEC). Transfer equipment, including manual and automatic transfer switches, shall be designed for transfer to a generator power source, identified for emergency use, and inspected and approved by the State of South Dakota Electrical inspector, as the authority having jurisdiction.

#### 3. METERING

6076

- 3.1 In accordance with City Ordinance 20.0104, the unit of measurement of electricity delivered by the Department shall be a kilowatt - hour (kWh) of electricity, as measured by meters of standard type.
- 3.2 The Department will furnish, install and maintain one watt-hour meter per Customer for each class of service supplied. Whenever there is more than one meter installed on any one premise, the area served by each meter, such as apartment number, floor or other area shall be neatly and plainly marked on the service entrance equipment, and if the meter is mounted outdoors, on the top of the meter enclosure (not on the meter socket cover) with some permanent means. Each meter shall have its own cover. Additionally, an address and customer name responsible for future energy charges for each meter is required before it is installed.
- 3.3 The Department will approve the location of the meter. The meter location must be accessible with a clear line of sight at all reasonable time to both the Customer and the Department's representatives. Generally, the meter will be located on the outside of the building. All electric meters for one Customer shall be grouped at the same location.
- 3.4 All meters for multi unit residential housing shall be located in one location. For structures requiring more than 3 meters, the customer shall provide ringless, lever bypass multiple position sockets approved by the Utilities.
- 3.5 The Customer shall provide and at all times maintain, at the place specified by the Department, space for the

installation of the Department's meter. The Customer shall install the necessary meter mounting facilities, when required by the Department, in a manner satisfactory to the Department and in full compliance with the provisions of applicable codes and the laws and governmental regulations. The Customers shall have continuous visual access to meter registers except where meters are located in hazardous locations or where vandalism is apparent. The Department may refuse service to a Customer if the installation does not meet the National Electric Code requirements, but in such case the Department shall supply the Customer with reasons for refusal in writing.

- 3.6 The Customer shall supply an unobstructed, clear space of not less than three feet in front of all metering equipment. In the case of unguarded moving machinery, changes in floor elevation, etc., a distance of six feet shall be provided in front of all metering equipment. For special layouts, contact the Electric Department. In all new installations, the meter will be mounted on an outside wall of the building. The meter shall be placed between 4½' and 5½' from the final grade to the center of the meter can.
- 3.7 Customer shall provide for the safekeeping of Department meters and other equipment and shall reimburse the Department for any loss of, or damage to Department property located on the premises when such loss or damage is not caused by any act of omission on the part of the Department or a result of an act of God.
- If the meter is found to be inoperative or inaccurate, 3.8 such equipment shall be adjusted to register correctly, repaired, or replaced and the amount of the error shall be determined by the most accurate method feasible. If the inaccuracy shall have resulted in an error of more than 2%, then the calculated deliveries shall be adjusted to par accuracy to compensate for such error. This adjustment shall be made for such period of inaccuracy as may be definitely known. If the period of inaccuracy shall not be know, then such adjustment shall be made for half of the period between the time the metering equipment was adjusted to register correctly and the date of the last previous meter test. Whether the period of inaccuracy be known or unknown, in no event shall the adjustment be for more than one year.
  - 3.8.1 Notwithstanding any other policy or ordinance, the General Manager or his designee may, upon learning

any meter or service has been tampered with and that service has been procured without making payment therefore, determine the total amount of service procured without regard to passage of time, and seek payment in full in a manner or proceeding to be determined by the General Manager. (Item 5903 March 2010)

- 3.9 Submetering is prohibited, such as when used for the purpose of third party billing.
- 3.10 Metered and unmetered wires shall not be run in the same conduit, raceway, or gutter. Coded conductors should always be used for positive identification.

3.11 TRANSFORMERS

6076

The following services shall generally be arranged for metering with instrument (current and/or voltage) transformers:

Volts 120/240	Single Phase Amps Greater than 400	Wire 3
Volts 120/208 120/240 277/480	Three Phase Amps Greater than 400 Greater than 400 Greater than 200	Wire 4 (4 wire wye meter) 4 (4 wire delta meter) 4 (4 wire wye meter)
240/480	Not available	4 (4 wire delta meter)

3.11.1 Current Transformers

- 3.11.2 Voltage Transformers All installations where the voltage of the incoming line is greater than 150 volts to ground or greater than 300 volts phase to phase, shall be arranged for metering with potential transformers.
- 3.11.3 For instrument transformer installations where the voltage does not exceed 600 volts, transition cabinets shall be supplied by the Customer. Minimum size of the cabinets are:

Width Height Depth

2	current	transformers	30″	30″	10″
3	current	transformers	36 <b>″</b>	36″	10″
3	current	and 2 potential transformers	36 <b>″</b>	36″	10″
3	current	and 3 potential transformers	48 <b>″</b>	48″	10

## 3.12 TRANSITION CABINET

3.12.1 The transition cabinet shall have split bus bar with provisions to bolt the CT's to bus, where the bus bar runs through the center hole of the CT's. The CT's shall be installed by the Customer/Contractor. CT bus bar(s) must be NEMA standard if any other hole pattern or length are used, then bus bars and mounting brackets for CT's must be provided by the manufacturer of the transition cabinet.

#### 3.13 GROUNDING

3.13.1 The grounding of electric installations is essential for the safety of those using electric service, and is a safeguard to the Customer's equipment used on the system. The Department does not permit the use of gas piping for a ground of the electric services because the gas piping may be isolated from ground to prevent electrolysis.

#### 4. DELIVERY POINT

#### 6076-6335

- 4.1 The energy supplied by the Department becomes the property of the Customer at the point of delivery. The delivery of electricity to the Customer varies, based on the "service" as follows:
  - 4.1.1 Overhead Residential/Industrial/Commercial Service: The point of delivery shall be the point where the Department's service line connects with the Customer's service entrance conductors (weatherhead) on the outside wall of the Customer's building or other support furnished by the Customer.
  - 4.1.2 Underground Residential Service: The point of delivery shall be a meter socket on the Customer's building or unit.

- 4.1.3 Underground Industrial/Commercial Service:
  - a) Services less than or equal to 200 amps: the point of delivery shall be a meter socket on the Customer's building.
  - b) Services more than 200 amps up to 1000 amps: The point of delivery shall be on the low side of the padmount at the transformer spade/stud.
  - c) Services greater than or equal to 1000 amps: The point of delivery shall be on the low side of the padmount transformer at the transformer spade.
- 4.1.4 Mobile or Manufactured Home: The point of delivery shall be at the meter pedestal furnished by the Customer. Meter pedestal shall be of ringless type with lever bypass and approved by the Utilities.
- 4.1.5 Rural Service: The point of delivery shall be at the meter pole furnished by the Customer, or other Customer owned attachment.

## 5. CONTINUOUS SERVICE AND POWER QUALITY

5.1 The Watertown Municipal Utilities will not be responsible for failure to supply electricity or for interruption of the supply if such failure is without willful fault on its part. When service is interrupted for the purpose of making necessary repairs or changes in service facilities, it shall be made in such a manner so as to not unreasonably inconvenience the Customer. Such interruption may be made without notice, but if possible or practical, those Customers affected shall be notified in advance. In accordance with City Ordinance 20.0202(2), the Department shall not be liable to the Customer for any damages occasioned by interruption of service.

(4155 - 4478 - 6076)

- 6.1 Electric rates shall be as set or adjusted from time to time by the Municipal Utilities Board. A copy of the current rate schedule for electricity is included with these policies.
- 6.2 The Watertown Municipal Utilities has electric rates for different classes. Residential Service Rate, General Service Rate, Power Rate and Primary Voltage.
- 6.3 Residential Service Rate is applied to buildings used for residential housing only. Garages that are metered separately but located on the same lot as a house may be put on the residential electric rate as long as the garage does not contain a business. All garages, storage garages, rental garages, and hangars that are not located on the same lot or adjacent lot as a house will be placed on the General Service electric rate.
- 6.4 General Service Rate is applied to buildings that are not used for a residence and have an electric load of less than 20 kW demand. In Multi-family dwelling units, where there are areas or items of common use, and the common area or item is electrically metered separately, the common meter shall be placed on the General Service rate. The individual dwelling units in the building will be placed on the residential rate.
- 6.5 Power Rate is applied to buildings that meet or exceed 20kW demand. The demand shall be the customer's greatest 15 minute demand incurred during the month the bill is rendered. For billing purposes, monthly peak demand may be adjusted to a 95% power factor.
- 6.6 If service is at Primary Voltage, Customer will pay all costs incurred in the ownership, operation and maintenance of transformers or other related substation equipment. A 2% discount on demand and energy charges shall be applied to the Power Rate Customer electing service at Primary Voltage.

## 7. INSTALLATION OF TRANSMISSION / DISTRIBUTION LINES

7.1 For an underground/overhead transmission/distribution system, the builder or developer will:

- 7.1.1 Furnish to the Department a complete plan of the development as recommended by the City Planning Commission and approved by the City Council. The plans to include grading, layout and dimensions of lots, sidewalks and curbs, and the location of other underground structures. The development shall be laid out in such a manner that there may be a continuous distribution system to the most remote location requiring service.
- 7.1.2 Install lot boundary pins or markers in the area under development prior to the start of trenching for the underground cable.
- 7.1.3 Notify the Department of the completion of rough grade, installation of other facilities at grades below the URD, and the schedule of desired electric service connections so that the Department has ample time for planning and installation.
- 7.1.4 Provide the necessary easements to cover the location of Department's facilities.
- 7.1.5 Provide bedding material in areas that are not virgin ground or have been filled with rubble. Additional cost to remove and dispose of rubble or debris from the trench shall be at the developers cost.
- 7.2 The Department will extend electric service to premises not adjacent to companies existing distribution facilities when the anticipated revenue from the sale of additional service is sufficient to justify the expenditure. If the Department determines that the project is not economically feasible, the customer may contribute monies to the Department in the amount needed to make project economically feasible.

#### 8. INSTALLATION OF SERVICES

6076-6335-6465

8.1 The fee structure as shown in the WMU - Schedule of Fees will be charged to the customers utility bill when a new electric service is requested and installed. Service upgrades will also be charged this fee, or actual cost when installation exceeds this amount, when the Watertown Municipal Utilities provides materials and performs work necessary for a customer requested upgrade.

- 8.2 For new Industrial/Commercial Installations, Watertown Municipal Utilities Electric Department will provide the following equipment (All items installed by Watertown Municipal Utilities unless noted otherwise):
  - a) Transformers
  - b) Secondary Lugs on Transformers
  - c) Current Transformers (CT's)
     Customer/Contractor mount the CT's, where service
     entrance conductors run through the CT's. Watertown
     Municipal Utilities will terminate secondary of the
     CT's, and also the meter
  - d) Meter
  - e) Meter Base
    - Customer/Contractor shall mount the Meter Base
  - f) Test Switch in Socket of Meter
  - g) For installations accessible to vehicle traffic, the Department will install bumper posts
- 8.3 Industrial/Commercial Customer will provide and install the following equipment:
  - a) Concrete Transformer Pad meeting Department specifications for that location
  - b) Conduit from the CT's to Meter

– Minimum size of conduit shall be  $34^{\prime\prime}$ 

- c) For services greater than or equal to 1000 amps:
  - A transition cabinet shall be supplied and installed by the Customer/Contractor

- Current Transformers can be mounted in the transition cabinet, or in Customer provided switchgear

- Watertown Municipal Utilities will provide all necessary labor and materials to make up the terminations on the secondary of the transformer. The Customer/Contractor is responsible for all labor and materials from the load side of the transition cabinet to their service entrance

- Additionally, the Customer/Contractor will supply and install the conductors between the transformer and transition cabinet. Those conductors will be sized with half as many conductors out of the load side of the transition cabinet plus one of the same size. - The Customer/Contractor shall provide a location, approved by Watertown Municipal Utilities, for the transition cabinet, and also shall provide a concrete pad for the cabinet meeting Department specifications for that location

d) For services greater than 200 amps to 1000 amps:
The Customer/Contractor is responsible for material and labor from the load side of the secondary lugs on the transformer to their service entrance
The CT's can be mounted in a CT box, transition cabinet or in switchgear. CT box, transition cabinet or switchgear shall be provided and owned by the Customer
400 amp services and less rated at 240 volts or less would require self contained metering not using CT's
If a transition cabinet is preferred, then Section (c) standards will apply

- e) For services less than or equal to 200 amps:
  - Current transformers are not required

- Watertown Municipal Utilities will provide the material and labor from the transformer to the meter socket

- f) Customer/Contractor shall provide a locking mechanism for all CT mounting assemblies, so only authorized Watertown Municipal Utility employees will have access to the CT's
- 8.4 In commercial and industrial installations, the Customer shall supply the transformer pad according to Department All secondary cable required must be specifications. provided by the customer, unless noted otherwise. The Customer will install the wire and the Department shall make the connection to the padmount transformer. Minimum clearances to buildings and other obstructions, including trees, shrubs, and fences, shall be a minimum of eight feet from the front opening of the transformer, all other sides shall have a minimum clearance of six feet. Padmount transformer locations shall be graded for proper drainage and be readily accessible by truck or other means They will be located far enough from the for removal. building overhang so that they will not be subject to damage by falling snow and ice. Where danger of snow plow or traffic damage exists, barriers will be installed by the Department.

- 8.5 Lot is to be to grade and all dirt piles cleared along route of electric service before installation to any building.
- 8.6 Service upgrades will be charged a fee as outlined in paragraph 8.1. Additionally, the Customer will be required to remove or repair patios, sidewalks or other obstructions that are in the way of the installation of the service at their own expense.
- 8.7 The Department may limit the number of services for each customer or group of customers housed in the same building or area. The Department requires that all new residential entrances meet the minimum requirements of the National Electrical Code. All new commercial or power service entrances shall have a service disconnect or disconnects that meet the above code requirements and shall have a rating not less than the load to be carried and with interrupting capacity no less than available fault current on the service entrance.
- 8.8 The service entrance for all buildings shall be located at a point approved by a Department representative. The Customer, builder, or their authorized representative should contact the Department and determine the location before any service entrance is installed in any building. A wiring certificate must be submitted, and on file with Watertown Municipal Utilities, before any work will begin.
- 8.9 The location of the service disconnect shall be on the load side of the metering (meter-switch-fuse/circuit breaker sequence). Exception #1 in multiple meter locations where the National Electric Code requires a main disconnect, the sequence shall be main disconnectmeter-switch-fuse/circuit breaker.
- 8.10 In general, the ground clearance for service drops shall not be less than 10 feet for spaces accessible to pedestrians only, 10 feet over sidewalks, 15 feet over residential driveways, 18 feet over public ways, 27 feet over railroads.
- 8.11 Conduit, meter enclosures, service entrance cable and drip loops shall be located so that proper clearances will be provided from rain gutters, fire escapes, telephone and cable TV wires, windows and service entrances, and vents for natural gas, propane, fuel oil,

or other flammable sources as required by the National Electric Code.

- 8.12 Where screw type service knobs can be used by the Department, the Contractor or owner shall indicate the exact location of the studding, joists or frame work of the building suitable to withstand the strain of the service wires. If the construction of the Customers' building is such that the Department cannot adequately anchor the service, the Department will not be responsible for damages. Service conduit or cable shall be securely fastened to the building with suitable rustproof fasteners. Expansion shields or their equivalent shall be used in brick, concrete, or other masonry construction.
- 8.13 Service masts shall be constructed of rigid steel conduit with an inside diameter of not less than two inches. Aluminum conduit, rigid non-metallic conduit or electrical metallic tubing (EMT) are not permitted for mast construction.
- 8.14 The service entrance for overhead Residential/Commercial/Industrial Service shall be supplied by the Customer or Contractor. The Department shall supply the Customer with a suitable device, where applicable, for the attachment of the service lines to the building and the Customer shall install same at their expense. The Department will supply a suitable meter socket or box for metering to be installed by the Customer at their expense. The Department will install meter and service lines. The Customer or builder shall extend their wire a minimum of three feet beyond the outer end of the entrance weatherhead (point of delivery) and the neutral wire shall be identified as required by the National Electrical Code.
- 8.15 The service entrance for all rural customers shall be located at a point mutually agreed upon by the Customer and the Department. The Customer, builder, or their authorized representative shall contact the Department and determine the location (usually a meter pole) before any service entrance or pole is installed. The service entrance shall be supplied by the Customer or Contractor. The Customer shall provide conduit for the meter loop. When transformer rated secondary metering is required, the Watertown Municipal Utilities will provide the instrument transformers, the Customer will provide the conduit and the wiring down pole subject to Department specification. The Department will supply the meter

socket for metering, and will be installed by the Customer at their expense. The Department will install meter and service lines.

8.16 All electric service will be supplied in the form of alternating current at primary and secondary voltages as available and as designated by Department. The secondary voltages offered to the Customer in the Department's standard rate schedules, are as follows:

120	2 wire	e, single phase	(2 wire meter)
120/240	3 wire	e, single phase	(3 wire meter)
120/208	4 wire	e, three phase	(4 wire wye meter)
120/240	4 wire	e, three phase	(4 wire delta meter)
277/480	4 wire	e, three phase	(4 wire wye meter)

The preferred three phase power is 120/208 or 277/480. On 120/240 Delta the high leg or wild leg must be on the right side of the meter socket and CT cabinet. If the termination is incorrectly made, then the Customer/Contractor will be required to correct the termination before new electrical service is connected. 120/240 Delta Service will only be provided when transformers are mounted overhead on a pole and only where it is an upgrade of service size. Under no circumstances will 120/240 Delta be provided for new construction.

- 8.17 Primary service is available under applicable rate schedules and service shall be provided at the primary voltage available. Where three phase service is not available, the cost of the third phase extension may be at the Customer's expense.
- 8.18 Voltage levels and types of service desired other than specifically covered here are subject to special negotiation. The Customer should submit plans and specifications to the Department in writing. Costs and rates will be negotiated.
- 8.19 Range A Service Voltage Electric supply systems shall be so designed and operated that most service voltages will be within the limits specified for Range A in the table below.

Range B - Service Voltage - Range B includes voltages above and below Range A limits that necessarily result from operating conditions on supply systems. Although such conditions are a part of practical operations, they shall be limited in extent, frequency, and duration. When they occur, corrective measures shall be undertaken within a reasonable time to improve voltages to meet Range A requirements. These limits shall apply to sustained voltage levels and not to momentary voltage excursions that may result from such causes as switching operations, motor starting currents and the like. The source of these rating is the "American National Standard for Electric Power Systems and Equipment-Voltage Ratings (60 Hertz)" [ANSI C84.1-1989].

Range A - Service Voltages		<u>Range B - Serv</u>	vice Voltages		
	<u>3-Wire</u>	Maximum	Minimum	Maximum	Minimum
	120/240	126/252	114/228	127/254	110/220
	<u>4-Wire</u> 208Y/120 240/120 480Y/277	218Y/126 252/126 504Y/291	197Y/114 228/114 456Y/263	220Y/127 254/127 508Y/293	191Y/110 220/110 440Y/254

\*Voltage levels measured at transformer spades

#### 9. TEMPORARY SERVICE

(5695 - 6076)

9.1 Single phase or three phase temporary service requirements will be supplied by the contractor or owner. Connection of temporary service units will be billed to the Customer at a one-time cost as shown in the WMU - Schedule of Fees, plus the applicable monthly rate. The Watertown Municipal Utilities will connect customer temporary to the closest suitable power source using the customer supplied wire from the meter socket on temporary service. Disconnect of temporary service units will be coordinated when the permanent service is energized to prevent additional charges to customer. If the contractor requires a pole to be set to supply temporary power, they will be charged as shown in the WMU - Schedule of Fees. The pole will be furnished by Watertown Municipal Utilities and will remain the property of Watertown Municipal Utilities. Temporary services are intended for building purposes where a permanent service will be installed. However, special

circumstances, where practical, may be given consideration at mutually agreed to charges.

9.2 A wiring certificate and Customer Information for Electric Service form must be submitted and on file with Watertown Municipal Utilities before any work will begin. Watertown Municipal Utilities will reserve the right to refuse connection of temporary services that appear to be unsafe, in disrepair, or do not meet metering requirements.

## 10. SECURITY LIGHTS (130-5695)

- 10.1 Security lights will be installed on existing poles where practical. If Customer installation requires a pole to be set, then they will be as shown in the WMU - Schedule of Fees. In all cases a good quality, thirty foot (30') maximum, used pole shall be used for the installation. The light and pole will remain the property of Watertown Municipal Utilities. Under no circumstances will Watertown Municipal Utilities install Metal/Steel poles for Commercial, Industrial, or Residential Customers.
- 10.2 If the Customer requires underground services for the security light, the installation costs of the underground conductor will be charged as shown in the WMU - Schedule of Fees to the person requesting underground service.
- 10.3 Watertown Municipal Utilities maintains an inventory of 100, 250 and 400 Watt High Pressure Sodium lamps for residential rental packages. It is our standard practice to install the rental packages for Residential Customer area lighting requirements.
- 10.4 Residential security lights are for residential purposes only. No security lights will be installed for commercial or industrial applications such as lighting parking lots
- 10.5 Rates for residential security lighting shall be as set or adjusted from time to time by the Municipal Utilities Board. A copy of the current rate schedule for residential security lighting is included with these policies.
- <u>11. STREET LIGHTING</u> (1783-2186-2242-3435-3859-4931-4944-4997-5222-6335)

- 11.1 Residential street lights will be installed only after curb and gutter has been installed to better the placement of the street lights.
- 11.2 Rates for street light billing to the City of Watertown shall be as set or adjusted from time to time by the Municipal Utilities Board. A copy of the current rate schedule for street lighting is included with these policies.
- 11.3 Street lighting is placed at a spacing that is deemed suitable by the Department.
- 11.4 In residential and commercial areas, 100 watt High Pressure Sodium lights are used.
- 11.5 Street lights along highways will be installed to South Dakota Department of Transportation standards.

## 12. TRAFFIC SIGNAL LIGHTS (1187-3871-3880-4466-4475)

12.1 Maintenance of the City's traffic signal lights has been reviewed by the Board with the Police Department and the Public Works Department, and it has been decided that the Public Works Department would maintain the signal lights. The Watertown Municipal Utilities will continue to provide a bucket truck when needed in emergencies.

## 13. HOUSE OR BUILDING MOVES (5957-6076-6335)

- 13.1 Persons moving any structure that require Department facilities to be moved to provide physical clearance must provide no less than forty-eight (48) hours notice/two business days.
- 13.2 Persons must inform Department of the approximate time they intend to move structure under facilities.
- 13.3 Person must render a minimum deposit to cover the expenses for moving Department facilities. The exception to this rule is when the homes are manufactured homes, built by a local lumberyard, or local contractor and the house move is in the local lumberyard's or local contractors name. Then the minimum deposit to submit is the minimum cost for the Department for that move. In all cases, the actual

cost of the move must be borne entirely by the persons requesting such moving of facilities. If the actual cost exceeds the deposit, the person will be billed the amount over the deposit. The minimum deposit fee will be as shown in the WMU - Schedule of Fees.

13.4 Only authorized Department employees may remove, cut, raise, or handle any wires belonging to the Department.

## 14. ELECTRIC SERVICE TERRITORY AGREEMENT WITH CODINGTON CLARK ELECTRIC COOPERATIVE (3496-3538-3805-4312-4684-5095-5515-5538, 6888)

14.1 The Municipal Utilities Board authorizes an electric service territory agreement with Codington-Clark Electric Cooperative that deviates from state law governing such matters. The Agreement is approved by the South Dakota Public Utilities Commission as required.

#### 15. INTEGRATED RESOURCES PLAN (4097-4731-5733-6516)

15.1 The Municipal Utilities Board adopts an Integrated Resources Plan as required under its long term firm power purchase program with Western Area Power Administration.

#### 16. AGGREGATION OF RETAIL CUSTOMER DEMAND RESPONSE (5776)

- 16.1 The Watertown Municipal Utilities or its authorized designee is the sole entity permitted to bid demand response on behalf of retail customers served by the Watertown Municipal Utilities directly into any Commission-approved independent system operator's or regional transmission organization's organized electric markets.
- 16.2 Retail customers served by the Watertown Municipal Utilities wishing to bid their demand response into a Commission-approved independent system operator's or regional transmission organization's organized electric markets may do so by participating in the program established by the Watertown Municipal Utilities or its authorized designee. Retail customers are not permitted to participate in the demand response program of any other

entity without the express prior authorization of the Watertown Municipal Utilities.

# 17. ANCILLARY SERVICES PROVIDED BY DEMAND RESPONSE RESOURCES (5776)

- 17.1 The Watertown Municipal Utilities or its authorized designee is the sole entity permitted to bid demand response on behalf of retail customers served by Watertown Municipal Utilities directly into any Commission-approved independent system operator's or regional transmission organization's organized markets for energy imbalance, spinning reserves, supplemental reserves, reactive power and voltage control, or regulation and frequency response ancillary services (or its functional equivalent in the Commission-approved independent system operator's or regional transmission organization's tariff).
- 17.2 Retail customers served by the Watertown Municipal Utilities wishing to bid their demand response into a Commission-approved independent system operator's or regional transmission organization's organized markets for energy imbalance, spinning reserves, supplemental reserves, reactive power and voltage control, or regulation and frequency response ancillary services (or its functional equivalent in the Commission-approved independent system operator's or regional transmission organization's tariff) may do so by participating in the program established by the Watertown Municipal Utilities or its authorized designee. Retail customers are not permitted to participate in the demand response program of any other entity without the express prior authorization of the Watertown Municipal Utilities.

## 18. DISTRIBUTED GENERATION WORKBOOK (5973)

18.1 The Municipal Utilities Board adopts the Distributed Generation Workbook that allows a procedure for Qualifying facilities to interconnect to the Department Electric System. An application review fee shall be assessed to the applicant upon submission of their application. The fee will be as shown in the WMU - Schedule of Fees.

#### DATA PULSE METERING AGREEMENT

Watertown Municipal Utilities (WMU) agrees to furnish, install and maintain equipment to supply Customer with data pulses proportionally to Customer's kilowatt hour (KWH) usage. Pulses can be Form C, or Form A, non-energized contact closures and have values of \_\_\_\_\_\_ per pulse. The number of pulse sources and the value per pulse will depend on WMU's metering system installed and is subject to change. Customer's equipment must be capable of re-adjustment to new sources and values due to change in WMU equipment. WMU will not furnish time pulses.

WMU reserves the right to interrupt the pulse circuit to perform routine or special tests or maintenance on metering equipment, and in so doing assumes no responsibility for affecting the operation of customer equipment. However, WMU will make a good faith effort to notify customer prior to any interruption of the pulse circuit.

The possible failure or malfunction of WMU's equipment or loss of pulse signal to Customer's equipment shall in no way abrogate the validity of WMU's meter in establishing the energy and demand record for billing purposes or relieve Customer of obligation to pay such billed energy or demand charges.

The accuracy of Customer's equipment is entirely the responsibility of the Customer. Should Customer's equipment malfunction, WMU will cooperate with Customer to the extent of assuring that no malfunction exists in WMU's equipment. Work of this nature will be payable by Customer to WMU unless actual trouble is found in WMU's equipment.

Customer shall pay for the installation of this equipment which amounts to \$\_\_\_\_\_\_. Such payment shall not give Customer ownership interest in or to any other equipment installed by WMU, and WMU may remove equipment at their discretion should Customer discontinue business operation or determine there is no longer a need for data information.

Customer	Date
Signed By	
m. + 1 -	

Title \_\_\_\_\_

## Watertown Municipal Utilities - Schedule of Fees

(Feb. 26, 2018)	(Feb.	. 26.	2018	3)
-----------------	-------	-------	------	----

Section		Board Action	Fee
	General Policy Fees	/ letion	
4.1	Residential Deposits Non-Heating	1/27/2014	\$75
4.1	Residential Deposits Heating	1/27/2014	\$200
4.1	Disconnect Charges per service call	1/26/2015	\$30
4.1	Reconnect Charges per service call	1/26/2015	\$30
4.1	Disconnect charges when linecrew is required	1/26/2015	\$125
4.1	Reconnect charges when linecrew is required	1/26/2015	\$125
4.8	Hydrant meter rental deposit - under 3 inch	2/25/2013	, \$150
4.8	Hydrant meter rental deposit - 3 inch and larger	2/25/2013	\$1,000
16.1	Delinquent Service Fee	12/31/2007	\$30
	Electric Department Policy Fees		
8.1	Residential Service Connection Fee - up to 200 amps	1/1/2018	\$175
8.1	Residential Service Connection Fee - over 200 amps	1/1/2018	\$350
8.1	Commercial Service Connection Fee - Single Phase	1/1/2018	\$580
8.1	Commercial Service Connection Fee - Three Phase	1/1/2018	\$1,400
9.1	Temporary Service Connection	5/31/2011	\$100
9.1	Cost per pole for temporary extension	9/29/2008	\$100
10.1	Set Security Light Pole - Cost Per Pole	9/29/2008	\$100
10.2	Cost per Foot for Installation of Security Light Wire	12/27/1961	\$1
13.3	House move minimum deposit	5/31/2011	\$500
13.3	House move minimum deposit local contractor	2/25/2013	\$250
18.1	Distributed Generation Application Review Fee	6/28/2010	\$100
	Water Department Policy Fees		
8.1	Water connection fee when lot is 15,000 ft <sup>2</sup> or less	4/28/2008	\$990
8.1	When lot area is greater than 15,000 ft <sup>2</sup> additional cost/ft2 up to 10 acres	4/28/2008	\$0.024
8.2	Water connection fee for Side-By-Side per unit charge	12/27/1999	\$990
8.3	Water connection fee for single dwelling home converted to duplex	11/25/2013	\$200
8.4	Basic water system charge	4/28/2008	\$990
8.4	Additional unit charge	11/25/2013	\$200
9.2	Total credit to run water to avoid frozen water service line	2/22/1982	\$15
12.1	Fire System charge per hydrant	1/1/2018	\$121
	Gas Department Policy Fees		
8.6	Transportation Service Surcharge for volumes supplied by the Department cost/CCF	7/26/2010	\$0.20