ELECTRIC SERVICE RULES
AND REGULATIONS

Detroit Lakes
Public Utilities Department

Effective March 1, 2016
Mission Statement
Detroit Lakes Public Utilities

The purpose of the Detroit Lakes Public Utilities is to serve, promote, preserve and protect the electric, water, and wastewater utilities in and around the Detroit Lakes area in an environmentally and financially responsible manner.
ELECTRIC SERVICE RULES AND REGULATIONS

Detroit Lakes Public Utilities Department
Effective March 1, 2016

Introduction

It is the intent of the Detroit Lakes Public Utilities Department (hereafter referred to as DLPUD) to provide through these service rules and regulations a guide by which its customers and their architects, engineers, or electrical contractors can plan for and obtain the most prompt and satisfactory electric service possible.

These rules and regulations are established with the intent to supplement the requirements of the National Electrical Code and all other applicable federal, state and municipal codes, regulations, laws and ordinances. Specific requirements of the DLPUD do not intentionally conflict with any other requirements known to be in effect when these rules and regulations were established. Any apparent conflicts of this nature should be brought to the attention of DLPUD for interpretation.

DLPUD wishes to serve its customers promptly and satisfactorily. We will endeavor to cooperate with customers and their authorized representatives to the fullest extent in completing service connections with as little delay and inconvenience as possible.

The Detroit Lakes Public Utilities Commission reserves the right to amend or make changes to these service rules and regulations, at any time and without prior notice, as might be necessary to provide more efficient, equitable or safe electric service, or due to regulations which may come into conflict with federal, state or local requirements.

DLPUD invites all customers, their agents or others desiring information concerning these rules and regulations or any other electrical service matters to contact DLPUD’s business office as follows:

Detroit Lakes Public Utilities
1025 Roosevelt Avenue
P. O. Box 647
Detroit Lakes, Minnesota 56502-0647

Telephone: (218) 846-7139   FAX: (218) 847-8969

City of Detroit Lakes
Public Utilities Commission
dlpublic@ci.detroit-lakes.mn.us
website: www.ci.detroit-lakes.mn.us
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Revised (March, 2016)
SECTION 100
DEFINITIONS

Application for Service: The agreement or contract between DLPUD and the Customer under which electric service is supplied and taken.

Accessible: Admitting access by not being guarded or blocked by locked doors or gates, dangerous or protective animals, plant growth, elevations, or other effective means.

Approved: Acceptable to DLPUD, state electrical inspector, electrical codes and other authorities having jurisdiction.

Connected Load: The combined manufacturer's rated capacity of all motors and other electric energy consuming devices on the Customer's premises.

Customer: Any individual, partnership, corporation, or other legal entity now being served or to be served, using the electric service of DLPUD at any specified location.

Customer's Service Equipment: The necessary equipment and accessories, located near the point of entrance of supply conductors to a building, which constitute the main control and means of disconnecting the supply to that building. This equipment usually consists of a circuit breaker or a switch and fuses.

Disconnection Means: A device, or group of devices, or other means by which the conductors of a circuit can be disconnected from their source of supply.

Distribution Lines: DLPUD's lines located along streets, alleys, highways, or easements on private property, when used or intended for use for general distribution of electric service to Customers of DLPUD.

DLPUD: Detroit Lakes Public Utilities Department

Dwelling:

  Dwelling Unit: One or more rooms for the use of one or more persons as a housekeeping unit with space for eating, living and sleeping, and permanent provisions for cooking and sanitation.

  One-Family Dwelling: A building consisting solely of one dwelling unit.

  Two-Family Dwelling: A building consisting solely of two dwelling units.

  Multi-Family Dwelling: A building containing three or more dwelling units.

Electric Service: The availability of electric power and energy, regardless of whether any electric power and energy is actually used. The supplying of electric service by DLPUD consists of the maintenance of power, at the point of delivery, of approximately the agreed voltage, phase and frequency by means of facilities adequate for carrying the load, which DLPUD is thereby obligated to supply by reason of the known requirements.

Fault Current: The current that will flow through the system to a point where a piece of equipment or a conductor has failed, such as bare conductors touching together or a bare conductor touching a ground.
point.

**LCR:** Load Control Receiver.

**Meter Set:** An instrument or instruments, together with auxiliary equipment, for measuring the electric power and energy supplied to a Customer.

**National Electrical Code:** The current edition of the National Electrical Code by the National Fire Protection Association (NFPA No. 70).


**Overhead Distribution Areas:** The area or areas served by DLPUD's overhead distribution system as differentiated from the underground systems.

**Points of Delivery:** The point where the electric energy first leaves the line or apparatus owned by DLPUD and enters the line or apparatus owned by the Customer unless specified in the Customer's Agreement for Service. **This is not necessarily the point of location of DLPUD's meter**

**Rate Schedule Classification:** The classification of the use of electricity into categories considering the amount of power supplied and the purpose of its use.

**Secondary Terminal:** The secondary side of a pad mounted transformer, a secondary terminal box at the base of a riser pole, a secondary junction box, or power pole, whichever is designated by DLPUD.

**Service:** The conductors and equipment for delivering energy from DLPUD's system to the wiring system of the Customer.

**Service Drop:** The overhead service conductors from the last pole or other aerial support to and including splices, if any, connecting to the service entrance conductors at the building or other structure.

**Service Entrance Conductors, Overhead System:** The service conductors between the terminals of the service equipment and a point usually outside the building, clear of building walls, where joined by tap or splice to the service drop.

**Service Equipment:** The necessary equipment, usually consisting of a circuit breaker or switch and fuses, and their accessories, located near the point of entrance of supply conductors to a building or other structure, or an otherwise defined area, and intended to constitute the main control and means of cutoff of the supply.

**Service Lateral (URD):** The underground service conductors from the DLPUD distribution system, including any risers at a pole or other structure or from transformers, to the first point of connection with the service entrance conductors in a terminal box or meter or other enclosures with adequate space, inside or outside the building wall. Where there is no terminal box, meter, or other enclosure with adequate space, the point of connection shall be considered to be the point of entrance of the service conductors into the building.

**Type of Service:** The characteristics of electric service described in terms of frequency, phase, nominal system voltage and number of wires.

  **Primary Service:** Any type of service with a nominal voltage greater than 600 volts.

  **Secondary Service:** Any type of service with a nominal voltage less than or equal to 600 volts.
**Underground Residential Distribution (URD) Area**: Those residential subdivisions or other specified areas within which all customers are served by underground distribution lines.

**Voltage, Nominal**: The value, expressed in volts, which is assigned to a circuit or system for the purpose of conveniently designating its voltage class (as 120/240, 120/208Y, 277/480Y, 600, etc.). The actual voltage at which a circuit operates can vary from the nominal within a range that permits satisfactory operation of equipment.

**Voltage to Ground**: For grounded circuits, the voltage between the given conductor and that point or conductor of the circuit that is grounded; for ungrounded circuits, the greatest voltage between the given conductor and any other conductor of the circuit.
SECTION 200

GENERAL INFORMATION

201 Service Jurisdiction

DLPUD has been established by the City of Detroit Lakes for the purpose of providing electricity, water and waste water treatment service to the residents of the City. DLPUD also provides electricity to residents outside of the city limits but within the service area boundaries established by the State of Minnesota. Service will be provided to all eligible applicants only when all applications, agreements, easements, deposits, payments, and other required information has been provided to DLPUD.

202 Application of Service

Application for new, additional, or temporary electric service must be made by the Customer, in person, or a designated representative, to DLPUD, 1025 Roosevelt Avenue, P. O. Box 647. At the time of application, the Customer will be required to provide, in writing on the form(s) provided, information relating to the service request, including the following:

1) Exact location of premises to be served including building street address, lot and block numbers and name of subdivision.

2) The type of service desired (e.g. temporary, permanent, residential, commercial, industrial, off-peak (dual-fuel), etc.).

3) The approximate date that electric service is required.

4) The name, address, and telephone number of the Customer's designated representative who will be responsible for working with DLPUD representatives in providing the electric service (e.g. customer employee, engineer, contractor).

5) The name, address, and telephone number of the party who will be responsible for paying associated costs and usage charges.

6) Electrical Load Data Statement specifying the type of service required by the Customer, connected load and expected peak load. Additional data in the form of construction drawings and the proposed service entrance may also be necessary for DLPUD to adequately determine the capacity and arrangement of service to the Customer. The statement must be received by DLPUD before a work order for the project can be issued and the necessary planning and design of the project can begin.

DLPUD should be advised of planning and installations as early as possible so that details for furnishing service may be arranged and construction completed by the desired date.

See Section 206 for connections and disconnection.

203 Ownership of Equipment

203.1 DLPUD - Owned Equipment

The meter and associated metering equipment furnished or installed by DLPUD are the property
of DLPUD.

1) **Overhead Service** - In addition to the metering equipment, the overhead service drop installed by DLPUD is the property of DLPUD.

2) **Underground Service** - In addition to the metering equipment, all equipment up to and including the designated secondary terminal installed by DLPUD is the property of DLPUD. Unless service is taken at primary voltage or otherwise specified by written agreement, all conductors and equipment operating at nominal voltages in excess of 600V are the property of DLPUD.

3) A minimum of 200 Amp conductor, raceway and lever bypass meter socket are required.

### 203.2 Customer-Owned Equipment

The meter socket, instrument transformer (C.T.) compartment, the service entrance conductors and conduit from the meter socket to the service entrance disconnect, the service entrance switch or circuit breaker and the service entrance ground equipment are the property of the Customer.

1) **Overhead Service** - In addition to the equipment on the customer side of the meter socket, the service drop wire holder or bracket, the weatherhead and the service mast and conduit with entrance wires are the property of the Customer.

2) **Underground Service** - In addition to the equipment on the Customer side of the meter, all conduit and cable required to extend the secondary service lateral from DLPUD's secondary terminals to the meter are the property of the Customer. After installation by customer, DLPUD will maintain all residential service cable in underground services which meet DLPUD policies and specifications. DLPUD will maintain to line side of meter or C.T. cabinet. For residential services refer to Section 603 and for commercial & industrial refer to Section 604 and 903.

3) All service cable, which shall be built over by hard surfaced drives or roadways, porches, decks or any other building or structure shall be placed in conduit as per DLPUD specifications. Conduit must extend 24” from edge of hard surface areas.

4) The customer and DLPUD are responsible for the installation, maintenance, repair and replacement of the electric service equipment, which each owns.

### 204 Easements

Whenever DLPUD determines that service to a customer requires DLPUD-owned underground and/or overhead facilities and equipment to be located on or above the customer's property, the customer shall grant an easement to DLPUD. (This does not include secondary service drops or service laterals.)

### 205 Inspection of Customer's Facilities

As a minimum, wiring and electrical equipment of the Customer shall be installed in accordance with the latest edition of the National Electrical Code (NFPA No. 70).

Customers of DLPUD requesting connection of a new service or re-connection of service after making additions to or reworking of their electrical system must have their wiring inspected by a state electrical inspector. DLPUD will make connection before authorization from the state
inspector only if the electrical contractor agrees in writing to be responsible for said wiring until such time that it can be inspected and approved by the state inspector ("Certificate for Connection by Utility").

206 **Service Connection, Disconnection, and Re-connection**

After the Customer’s installation has been inspected and approved by the proper authority, a meter will be installed by DLPUD and the electric service made available provided that all applications, agreements, and deposits have been submitted by the Customer and approved by DLPUD. See Section 304 for charges on establishment and re-establishment of service accounts.

Customer requests for disconnection or re-connection of existing services must be received by DLPUD at least 24 hours in advance of the desired time of disconnection or re-connection (weekends excluded). See Section 304 for charges for requested disconnects or reconnects.

For the mutual protection of the Customer and DLPUD, only authorized employees of DLPUD are permitted to set and remove meters, or to make and energize or break and de-energize the connection between DLPUD’s service drop or secondary terminals and the Customer's service entrance conductors or service laterals. No one, other than a DLPUD employee or designated representative, is allowed to cut, remove or to install a meter seal on any meter, meter socket or other metering device used for metering of DLPUD supplied electricity. The customer or those found responsible may be held liable for costs of inspections and resealing of any metering where seals are found to be removed or cut by parties other than those designated by DLPUD.

207 **Liability**

DLPUD does not engage in the practice of doing interior wiring on Customer’s premises except for the installation and maintenance of its own property, and therefore is not responsible for service beyond the point of delivery. DLPUD shall not be liable for damage to any Customer or to any third part resulting from the use of the service or from the presence of DLPUD's appliances or equipment on the Customer's premises.

The Customer is solely responsible for any accidents, fires or failures resulting from the condition and use of his wiring installation or equipment.

208 **Service Interruptions**

DLPUD reserves the right to interrupt service at any time. Interruptions for maintenance and system improvements will be prearranged and advance notice will be given to the Customer whenever practical.

The DLPUD will endeavor to provide continuous service, but does not guarantee an uninterrupted or undisturbed supply of utility services. The DLPUD will not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the DLPUD. The DLPUD will not be liable for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.

209 **Unauthorized Use of Electricity**

DLPUD is a public utility engaged in the business of supplying electric service to ultimate consumers. Electric service is furnished for the use of the Customer only, and the Customer shall
not resell nor permit other persons to use it.

**Sub-metering for resale of electricity is an unauthorized use of electrical service.** The Customer shall not sub-meter any portion of such service in any manner for resale.

### 210 Access

Employees of DLPUD shall have the right of access to the Customer’s premises at all reasonable times for the purpose of installing, reading, inspecting, maintaining, or removing any of its meters, devices, or other equipment which is used in connection with the furnishing of the Customer’s electric and water service.

An inaccessible or obstructed meter can cause issues beyond limiting access to our meter readers. Customers may not realize that quick access to the meter may be critical in an emergency situation. DLPUD may need to turn off the meter for safety purposes, or repair or replace a malfunctioning meter. Please make every effort to keep your meter accessible, or to fix any current situation that is preventing DLPUD from accessing the meter. After a visit to your location when we are unable to access the meter, DLPUD will leave a door hanger to let you know of the specific reason the meter was inaccessible or obstructed. This may be followed by additional communication about your meter. If the meter continues to be inaccessible, this will lead to a charge for inaccessible meter at a rate established annually by the DLPUD Commission.

### 211 Customer Responsibility

Failure of the Customer to notify DLPUD in a timely manner of any planned alteration of electric service facilities or increased electrical load, and failure to comply with DLPUD’s published rules, regulations, and rate schedules may result in delayed connections, interruption of service, or damage to equipment, for which DLPUD disclaims all responsibility.

### 212 Tree Trimming Policy

DLPUD easement rights allow for the construction, operation and maintenance of its lines. This includes the right to enter the easement area to remove or trim trees and to remove or trim trees adjacent to the right-of-way that threaten the line due to their height or condition. DLPUD will take reasonable precautions to avoid damage to fences, crops and other private property.

For reliability and safety, we strive to have our entire system trimmed every three (3) to four (4) years by rotation of affected areas. On all utility lines, we trim to provide ten (10) feet of side clearance and no overhang dependent upon species. Work is based on OSHA 1910.269 requiring anyone trimming within ten (10) feet of an energized conductor be trained in live line trimming procedures. In addition, we remove diseased, weakened, or leaning trees that pose a risk to our system or threaten to cause safety problems. The affected customers will be contacted via door hangers in advance and not later than the 24 hour prior to tree trimming work. The door hanger will include a local contact number so details of the work can be discussed.

Revised March 2016
SECTION 300
RATES, CONNECTION CHARGES, CREDIT POLICY

301 Rate Schedule Classification

Electric service is supplied to Customers under various rate schedule classifications as determined by the type of service, the amount of electric power supplied, and the purpose for which the electric service is to be used.

302 Payment

DLPUD will, to such extent as possible, read all meters every month and bill the Customer for service used during the period. Payment of the bill is due on the date noted on the bill.

If the meter cannot be read during a billing period, or the reading seems erroneous, an estimate will be made for that billing period. Any adjustments to the estimate will be made during the following billing period. (See section 210 for inaccessible meter)

303 Minimum Bill

There is a minimum bill charged to each Customer receiving electric service. The amount of this bill varies as to the type of service, which the Customer receives. The minimum bill for each type of service is listed in the appropriate rate schedule.

304 Service Connections

A fee shall be charged each customer when opening a new service account or when service is being transferred from one account to another.

A reconnection fee shall also be charged when reconnection service which was previously disconnected at the customer’s request or disconnected by DLPUD as per Section 305.

A schedule of fees is available from the DLPUD.

305 Service Disconnection/Re-connection

DLPUD may disconnect a Customer's service, with notice, for any of the following reasons:

- Nonpayment of billings or issuance of non-negotiable check
- Failure to meet credit requirements
- Failure to provide access to DLPUD owned metering equipment

Without notice, the Customer's service may be disconnected for:

- A condition determined to be hazardous - to the Customer; to other customers or to DLPUD
- Unauthorized use of electricity, water or equipment belonging to DLPUD

In the event service has been disconnected for a valid cause, the Customer will be required to pay a re-connection fee, any outstanding utility bills and, if required, a deposit before the service
is restored.

306 Service Deposit Policy

To establish credit with the Detroit Lakes Public Utility, a deposit may be required at the time of application for service. The required deposit will be an amount approximately equal to two (2) month average billing (electric, water & sewer) with a minimum amount of $70. All deposits bear interest at a rate as annually set by the Minnesota Department of Revenue and will be credited back to the customer upon one year of good payment history or otherwise held until applied to customer’s delinquent account or refunded to upon termination of service, providing all obligations to the Detroit Lakes Public Utility have been discharged.

Customers may obtain service without a deposit if the customer has previously established a satisfactory payment history with the utility or provides a favorable credit reference from their most recent previous utility (electric, water or gas) within 15 days of application of services. However the customer shall be billed for deposit if a favorable credit reference is not received within the 15 days.

Deposits will be required from:
1. New customers with poor or no previous utility credit history
2. Present customers
   a. With poor credit history
   b. Unpaid utility bills from previous address
   c. Who have been liable for service disconnection per Detroit Lakes Public Utility rules

A new additional deposit may be required in cases where the deposit has been refunded or where the current deposit is inadequate. All deposits are non-transferable from one applicant to another and are payable only to the original applicant under proper identification.

307 Temporary Service Charges

Customers receiving temporary service provided for construction purposes, special events or other customer needs shall be charged a connection fee and monthly or daily usage charges as determined by DLPUD. Also see Section 500, Subsection 501. Temporary Services.

308 Temporary Electric Service for Construction or Special Events

Customer shall provide an approved temporary installation including protective devices, wiring, enclosures, raceways, outlets and meter socket as necessary. Any customer requiring a temporary service in excess of 200 amps shall be charged an additional fee based on actual additional costs to the utility. Non-metered, single-phase service may be available at the discretion of the utility for temporary usage which does not exceed three (3) days. All metered temporary usage shall be billed the customer under the applicable rate schedule.

Revised March 2016
SECTION 400

STANDARD SERVICES

401 Availability of Service

Although the types of service listed below are generally available through the area served by DLPUD, service of the type requested by a Customer may not be available at the location where such service is desired, and in certain cases may be available only through special contractual arrangements and at the expense of the Customer. Each Customer will generally be allowed only one type of service and one point of connection for each location.

402 Secondary Service Voltages

The following types of secondary service are generally available to Customers served under DLPUD's Standard Rate Schedules:

402.1 Single Phase Service

120/240 Volt, 3-Wire, Grounded Neutral. Generally available where the total load is less than 100 kVA.

402.2 Three Phase Service

1) 120/208Y Volt, 4-Wire, Grounded Neutral. Generally available where the total load is 45 kVA or greater for pad-mounted transformer service, or 45 kVA or greater for pole-mounted transformer service.

2) 120/240 Volt, Delta, 4-Wire, Grounded Neutral. Service provided only from pole-mounted transformer installations and only where installed capacity and facilities or current needs exist.

3) 240 Volt (and 480 Volt), Delta, 3-Wire service provided only where current needs exist.

4) 277/480Y Volt, 4-Wire, Grounded Neutral. Generally available where the total load is 45 kVA or greater for a pad-mounted transformer service.

403 Primary Service Voltages

Three-Phase, 12470/7200 Volt, 4-Wire, Grounded Neutral Service: Available only by special request where the total load is 300 kVA or greater.

404 Fault Current

It shall be the responsibility of the customer and/or electrical contractor to install proper overcurrent protective equipment.

Revised March 2016
SECTION 500
SPECIAL SERVICES

501 Temporary Service

Temporary service is intended to be supplied at existing secondary voltages only to customers for use during the construction of permanent facilities and before the permanent service can be installed. The Customer shall provide an approved meter socket, protective devices, and all necessary wiring, outlets, enclosures, or raceways, which may be required. DLPUD shall charge a flat fee for providing and connecting the service drop and meter for the first single-phase temporary service of 200 amps or less installed at the customer's premise. The customer shall be charged a fee based on actual cost of installation and removal for any additional single phase temporary service of 200 amps or less, any single phase temporary service in excess of 200 amps, any three phase temporary service or for any other special temporary facilities requested by the customer. Temporary three phase service requiring transformer installations shall be billed a minimum connection fee as established by DLPUD.

All electric usage metered at the temporary service shall be billed to the customer under the applicable rate schedule.

Unmetered single phase temporary service not exceeding three days may be provided at DLPUD's discretion upon payment of a connection fee and a per day charge as established by DLPUD.

502 Services for Unusual Load Characteristics

The operation of Customer equipment having a relatively high load of short or intermittent duration, such as welders, compressor motors, elevators, and X-ray equipment, may cause serious fluctuations of voltage and interfere with the service being provided by DLPUD to other customers. If such a load is anticipated, the Customer must consult with DLPUD and agree to install such protective devices as may be required so as not to cause damage to any of DLPUD's equipment or in any way inhibit service to other customers. In addition, special compensation may be required by DLPUD from the Customer in those cases where it is necessary for DLPUD to install special or larger facilities than would normally be required to provide satisfactory service.

503 Redundant Facilities

DLPUD will normally provide one set of facilities (such as a set of primary cables and a transformer) to one point of service for each Customer. If a Customer requires redundant facilities (more than one set of facilities to the same point of service), DLPUD must be advised as soon as possible so the feasibility of such service can be determined. If DLPUD determines that redundant facilities can and will be provided, the Customer will normally be required to reimburse DLPUD for the entire cost of additional facilities, including labor, materials, vehicle charges and Admin and General charges. An agreement between the Customer and DLPUD may also be required.

504 Relocation or Protection of DLPUD Facilities

It is the responsibility of the Customer to arrange for the relocation and/or protection of DLPUD's facilities whenever such action is appropriate. Any intended relocation or protection of DLPUD facilities must be reviewed with and approved by DLPUD in advance. The cost of any change or
relocation of DLPUD's facilities for the benefit only of the Customer, which has been initiated by the Customer, shall be borne solely by the Customer. A deposit by the Customer may also be required before the changes are made. DLPUD will bear costs to the extent that a change or relocation will benefit DLPUD. The Customer shall not be required to pay for changes necessitated through public improvements by the City, County or State.

505 Security Lighting

Security lighting is available under its own rate schedule classification for those Customers requesting it.

506 Underground Locations

506.1 Minnesota Statue, Chapter 216D, requires an excavator to contact the utility notification center (Gopher State One Call) at least 48 hours before beginning an excavation. The excavation notice may be made by calling the center at 1-800-252-1166 and providing information conforming to Gopher State One Call requirements. The proposed excavation area shall be clearly marked with white paint to distinguish excavation area from non-excavated areas. Refer to Gopher State One Call requirements for details.

506.2 Any contact with an electric cable during excavation must be reported immediately, day or night, by calling DLPUD directly at 218-847-7609

507 Load Management

1) Availability - DLPUD makes available to customers various special rates, rebates, credits or other programs for interruptible power supply to electrical loads of appliances as agreed to by the Customer and during such times as benefit DLPUD.

The following are some programs currently available:

a) Dual Heating whereby customers utilize permanently connected electric space heat with an 8,000 watt minimum capacity as their primary heating source. A secondary heating source must also be available to provide the total heating requirements during controlled periods. The secondary heating system must be propane, oil, natural gas, electric thermal storage heat, or properly sized and installed electric fueled floor storage heat systems as approved by DLPUD.

b) Interruptible commercial or industrial power requirements of 100 KW demand or more for customers whose average monthly usage is in excess of 100,000 KWhs. Customer to provide all high voltage equipment including wire, connectors, metering and transformers. All high voltage equipment shall be installed and maintained by DLPUD and billed at actual cost to the customer.

c) DLPUD has two programs available for controlled water heating. We offer a one-time rebate or monthly bill credit for customers that choose to have their electric water heater enrolled in our load management program. Rebates are only available for the purchase of newly installed water heaters that meet capacity, efficiency and warranty requirements (see application for details). Monthly bill credits are available for existing water heaters or new water heaters that do not meet efficiency and warranty requirements. DLPUD only pays a credit or rebate. Water heaters do not get the off-peak rate.

d) DLPUD offers a bill credit for the months of June, July and August electric consumption for customers who sign up for load control of their central cooling unit.
DLPUD will install a load control receiver, at no cost to the customer, near the outdoor cooling unit that will allow for cycling of the compressor during peak demand periods.

2) Metering Requirements - Qualifying customers will be required to have an additional meter to measure off-peak dual heating electric energy used. The firm service meter and the off-peak meter must be mounted on the outside of the building (excluding mobile homes). A dual-meter based, manufactured style is recommended. Metering will consist of line-to-line metering and not subtractive metering. **Subtractive metering is not allowed.**

3) Load Control Receivers (LCR) - LCR’s are to be located on the outside of the building adjacent to the electric meter. The customer is responsible to furnish and install the proper conductors to the interior of the outside meter socket as appropriate for heat, water heater and cooling equipment. DLPUD will then attach the LCR to the meter socket and make necessary connections as may be required. **All new residential installations shall have the field wiring installed at time of construction to facilitate future controllable loads.** See 9A – 9E.

4) Affidavit - All qualifying customers applying for service must file an affidavit with the DLPUD. This affidavit will require inspection by the State Electrical Inspector and must have correct address, be completely filled out and have a signature. Any affidavit to be used for dual fuel, where in new or remodel, needs to be stated on the affidavit.

5) Application for Service - All customers who wish service under this policy must sign an application for service. The application is a contract insuring that the customer conforms to all regulations.

6) Equipment Furnished - The off-peak heating meter and LCR will be furnished by DLPUD. The customer shall furnish all other equipment, including the primary and secondary heating systems and all electrical wiring necessary to permit switching of controlled electric loads and **inspected by DLPUD.**

7) Installation of Equipment - All equipment installed shall be in conformance with the existing DLPUD regulations and state codes and shall be inspected by DLPUD to assure compliance to regulations. **DLPUD will also inspect the operation of controllers on a periodic basis.**

8) Tampering - Any service that has been tampered with so as to defeat the intent of the regulations, shall result in additional customer charges or discontinuation of credits or special rates. DLPUD may also back charge the customer at the customers’ current regular applicable rate back to such time of tampering as may be evidenced or determined by DLPUD. You are reminded that no one is allowed to disconnect DLPUD metering or cut seals without prior approval from a DLPUD representative.

9) DLPUD does not automatically control (shed) on a daily basis, only during peak conditions.

10) REMINDER – In case of a power interruption to the load controller, or most cases, there may be up to a 15-minute delay before controller will restore power to controllable load.

Revised March 2016
SECTION 600

METERS – METER SOCKETS - TESTING - BILLING ERRORS

The purpose of this policy is to assist electrical contractors and installers with the purchase and installation of metering equipment in DLPUD's service area. All new and replacement self-contained meter sockets and current transformer cabinets must meet the standards set forth in this directive. Installations made with unapproved metering equipment will not be connected to DLPUD's service.

601 Wiring

1) Inspection - All wiring and other electrical equipment furnished by the Customer will be installed, operated, and maintained by the Customer in conformity with good electrical practice and the requirements of the constituted regulatory authorities. For the customer's protection, DLPUD must be provided an affidavit or certificate indicating that an inspection has been requested and that the conditions are safe for energization. DLPUD does not assume responsibility for the design, operation or condition of the Customer's installation.

2) Meter Socket - Inspection of the wiring in the meter socket is the responsibility of DLPUD and no installation shall be energized until connections have been checked and approved by an authorized employee. DLPUD will refuse to install meters or complete the service requirements if violation of electrical codes or hazardous conditions exist.

3) Wild Leg Location - In three-phase, 4-wire Delta services, the phase conductor with the highest voltage-to-ground (wild leg) shall be identified by an orange color tape or by tagging. The "wild leg" service entrance conductor shall be identified at the service head, meter socket, and at any point where connection is made, if the neutral is present.

4) In seven-terminal meter sockets, the wild leg or highest voltage-to-ground service drop conductor shall be connected to the right side terminal of the three-phase meter socket.

602 Single Phase Service

Only Three-Wire Service - Services for single-phase loads shall be three-wire, 240-volt installations. 2-wire, 120 volt service will not be permitted unless 3-wire, 240 volt service is unavailable or the service is for communication power supply, traffic signals or similar loads.

603 Residential Service

1) Residential service entrance sizes up to 400 amp, single-phase will be metered by the use of self-contained meters furnished by DLPUD. See Section 200, 203.2 #2.

2) The meter socket shall be furnished and installed by the customer or electrical contractor.

3) DLPUD requires all residential services to have a by-pass lever mechanism to allow safe installation and removal of self-contained meters for testing purposes. See Exhibit 5.

4) Residential services, which require in excess of 400 amp, single-phase should contact DLPUD at 218-846-7139 for more information.
604 Commercial Services

Customer Furnished Socket - Meter sockets for self-contained metering shall be furnished and installed by the customer or electrical contractor. Service entrance sizes up to 400 amp, single-phase, and 200 amp, polyphase will be metered by the use of self-contained meters. Exhibit 5.

All commercial services using self-contained meters must use an approved lever operated bypass socket. See Exhibit 5. Such sockets permit uninterruptible service for meter testing or maintenance.

Customer Furnished Cabinet - Cabinets used outside the building wall for current transformers or for a junction point between DLPUD’s service lateral and customer’s service entrance conductor shall be furnished by the customer or electrical contractor. Refer to 903.2 for designated point of connection.

Metering Transformers - Current Transformers required for metering services in excess of 400 amp single-phase or 200 amp three-phase shall be housed in cabinets placed on outside of building and accessible at all times to DLPUD personnel. All such cabinets shall be furnished and installed by Customer or their contractor as per DLPUD's specifications. See Exhibit 8 for preferred examples. Adequate notice must be given (6-8 weeks) to DLPUD on the size and location of the service for timely ordering of CT’s and meters.

** NOTE ** - Metering configurations will not be mounted on DLPUD owned poles.

605 Socket Requirement

Underwriters Lab - All meter sockets must be UL approved or be so marked.

Profile and Rating - Customer must furnish an approved 200 amp or larger meter socket for underground services. This socket must be a minimum of 11 inches wide on single-phase service and 13 inches wide on polyphase service. This width allows for proper bending, crossover clearance, and additional slack in the incoming service wires within the socket. A conduit of adequate size must be installed from the meter socket to 12 inches below grade level.

Round Meter Sockets - Due to limited space for conductors, round meter sockets will not be permitted.

By-Pass Devices - All self-contained meter sockets used for new or rewired commercial installations must be equipped with a lever-operated positive by-pass mechanism. See Exhibit 5.

This requirement includes both single- and three-phase services at all voltages. This will permit the removal of the meter without interruption to customer’s service.

Socket bypasses must be capable of carrying full-load current of the service it is metering on new or rewired commercial sockets. The house meter for apartment buildings and exit light loops require bypasses. Exceptions would be communication power supplies and billboards. Any other exceptions must be approved by DLPUD.

Flash Guards - Sockets with manual by-pass devices shall have a flash guard or safety shield. We encourage the use of flash guards on all meter sockets to provide protection from accidental shorts or shocks. This guard will also serve as a guide for easy meter installation.

Automatic Circuit Closing Devices - Sockets with an automatic circuit-closing device. The
manual by-pass lever shall operate both the by-pass feature and release tension on the meter terminal blades. Moving the lever up bypasses the current around the meter and releases tension on the meter terminal blades. Moving the lever down (operating position) will allow a secure clamping force to terminal jaws, open the by-pass, and return the meter to service.

**Ringless Sockets** - All meter sockets used on commercial and residential installations, single or multiple positions will be of the ringless type. **Ring type will not be permitted.**

### 606 Location

**Socket Location** - The general location of the meter socket and service shall be designated by DLPUD. No wiring dependent upon service entrance and socket locations shall be started until these locations have been designated by DLPUD. The meter socket shall be located outside the building adjacent to the service entrance equipment and readily accessible to DLPUD service personnel or meter readers. The customer shall be responsible for providing a location and protection from mechanical damage to the meter and socket. Customer must maintain a clear area of at least four feet in front of the meter and socket. No customer metering or metering equipment shall be allowed on DLPUD owned poles or equipment. Service will not be provided if:

1) Reaching the meter requires company employee to use adjacent property.

2) Gaining access to the meter requires climbing fences or other obstructions or may cause damage to the customer's walkway.

3) The meter socket protrudes over a walkway or driveway.

4) The meter socket is located so that it may be damaged by moving vehicles.

5) The meter socket is mounted so that ice buildup from roof run-off will cause damage or prevent readings.

6) Inaccessible meters will be charged a fee when DLPUD personnel are denied access to meters for reading and maintenance. See 610.1.

Meter sockets shall be installed on the line side of the service disconnect. In multiple occupancy buildings, for residential or commercial use, meter sockets may be installed indoors in one common location if at all times fully accessible to all occupants and to DLPUD personnel. Additional meter rooms may be provided where requirements are in excess of six meters per location. See Exhibit 3.

**Socket Height** - Outdoor meter sockets should be mounted so that the face of the meter is approximately five feet above the final grade. In no instances will any meter be installed with the top of the meter more than six feet, nor the bottom of the meter less than four feet above final grade. See Exhibit 1.

**Socket Mounting** - Mounting the meter socket shall be the responsibility of the customer with the following provisions. Meter sockets must be plumb and level and firmly secured to the support with screws of sufficient length and size to hold the socket securely, independent of conduit or cable connections. To prevent condensation, the conduit between a heated area and an outdoor socket or cabinets should be sealed with compound.
607 Current Transformer Cabinet

The customer or electrical contractor will furnish the cabinet to be used as a junction and/or metering point between DLPUD’s service lateral and the customer's service entrance. This cabinet will be used for current transformers and associated conductor termination and shall be under the exclusive control of DLPUD. The cabinet will be mounted outdoors in a location readily accessible to authorized DLPUD employees. All conduit will be provided by the customer.

The contractor shall refer to DLPUD personnel to discuss details prior to ordering a current transformer cabinet.

Minimum specifications will be:

1) UL approved and meet all applicable codes and be outdoor rated.

2) Complete with landing pads for cable terminations and mounting-bar type current transformers.

3) Hinged door, with provisions for locking and sealing

4) MINIMUM DEPTH OF TEN (10) INCHES.

5) Minimum of 4” raceway between transformer and current transformer cabinet.

6) Contact DLPUD for placing of cabinet to allow room for meter socket.

The overall dimensions will vary with the required ampacity rating. Ample room should be provided for conductor bending space and ease of termination. See Exhibit 8.

608 Meter Disconnect and Use of Seals

Removing DLPUD Seals and Meters - No one, other than a DLPUD employee or designated representative is allowed to cut and remove or to install a meter seal on any meter, meter socket or other metering device used for metering of DLPUD supplied electricity. The customer, or those found responsible, may be held liable for costs of inspections and re-sealing of any metering where seals are found to be removed or cut by parties other than those designated by DLPUD.

Only in case of an emergency may service be disconnected and seals cut without prior approval of DLPUD. DLPUD must then be notified within 24 hours, excluding weekends and holidays.

During electrical work on a customer's premises any switchgear, termination cabinets, raceways, etc., connected ahead of and including the meter socket, if left unattended and energized shall be secured with a locking device. After the job is complete, DLPUD must be immediately notified to inspect and approve the installation

609 Meter Testing

Meters shall be tested for accuracy by DLPUD with the use of standard calibration equipment and generally accepted test procedures, upon request of any customer who believes their meter to be inaccurate. If, upon test, it is found that the meter overran to the extent of an average of 2% or more, DLPUD shall pay the cost of such tests and shall make a refund for overcharges collected
since the last known date of accuracy, but for not more than 12 months, on the basis of the extent of
the inaccuracy found to exist at the time of testing. If, upon test, it is found that the meter is
slow to the extent of 2% or more, the customer shall pay for undercharges since the last known
date of accuracy, but not for more than 12 months, on the basis of the extent of the inaccuracy
found to exist at the time of testing. If, when the meter is tested upon request of a customer, it is
found to be accurate, slow or less than 2% fast, the customer shall be billed the reasonable cost
of such testing.

610 Meter Accessibility

An inaccessible or obstructed meter can cause issues beyond limiting access to our meter
readers and other utility personnel. Customers may not realize that quick access to the meter
may be critical in an emergency situation. DLPUD may need to turn off the meter for safety
purposes, repair or replace a malfunctioning meter. Please make every effort to keep your meter
accessible, or to fix any current situation that is preventing DLPUD from accessing the meter.
After a visit to your location when we are unable to access the meter, DLPUD will leave a door
hanger to let you know of the specific reason the meter was inaccessible or obstructed. This may
be followed by additional communication about your meter. If the meter continues to be
inaccessible, this will lead to a charge for inaccessible meter at a rate established annually by the
DLPUD Commission.

611 Limitations on Meter Reading and/or Billing Errors

611.1 Errors warranting remedy. When a customer has been overcharged or undercharged as
a result of incorrect reading of the meter, incorrect application of rate schedule, incorrect
connection of the meter, application of an incorrect multiplier, constant or other similar reasons,
the amount of the overcharge shall be refunded to the customer or the amount of the
undercharge may be billed to the customer as detailed in subparts 2 through 4.

611.2 Remedy for overcharge. When a utility has overcharged a customer, the utility shall
calculate the difference between the amount collected for service rendered and the amount the
utility should have collected for service rendered, plus interest, for the period beginning one (1)
year before the date of discovery. Interest must be calculated as prescribed by Minnesota
Statutes, section 325E.02, paragraph (b). If the recalculated bills indicate that more than $1 is
due an existing customer or $2 is due a person no longer a customer of the utility, the full amount
of the calculated difference between the amount paid and the recalculated amount shall be
refunded to the customer. The refund to an existing customer may be in cash or credit on a bill.
Credits shall be shown separately and identified. If a refund is due a person no longer a customer
of the utility, the utility shall mail to the customer's last known address a notice that the customer
has three months in which to request a refund from the utility.

611.3 Remedy for undercharge. When a utility has undercharged a customer, the utility shall
calculate the difference between the amount collected for service rendered and the amount the
utility should have collected for service rendered, for the period beginning one (1) year before the
date of discovery. If the recalculated bills indicate that the amount due the utility exceeds $10, the
utility may bill the customer for the amount due. The utility must not bill for any undercharge
incurred after the date of a customer inquiry or complaint if the utility failed to begin investigating
the matter within a reasonable time and the inquiry or complaint ultimately resulted in the
discovery of the undercharge. The first billing rendered shall be separated from the regular bill
and the charges explained in detail.
611.4 Exception if error date known. If the date the error occurred can be fixed with reasonable certainty, the remedy shall be calculated on the basis of payments for service rendered after that date, but in no event for a period beginning more than one (1) year before the discovery of an overcharge or one (1) year before the discovery of an undercharge.
SECTION 700

CUSTOMER UTILIZATION EQUIPMENT

The Customer's service entrance and utilization equipment shall be installed in accordance with all local, state and National Electrical Code requirements. It is the intent of this section to provide the Customer with recommendations concerning factors that can affect both DLPUD and the Customer in the selection, installation, maintenance and operation of the Customer's utilization equipment. DLPUD should be contacted if concerns arise that are not covered in the section.

701 Motor Protection Devices

DLPUD's power system is designed to provide high speed reclosing of its protective devices following power interruptions resulting from lightning or other causes. In most instances these power interruptions will be of short duration (less than one second). DLPUD recommends that under-voltage motor protection to be equipped with time delay devices to permit motors to ride through these short duration interruptions. It is recommended that phase monitoring devices be provided in each phase to afford some motor-running protection of three-phase, three-wire motors against "single-phasing". DLPUD is not responsible for damage caused by "single phasing" which results from acts of nature or system operations not directly controlled by DLPUD personnel. (See Section 208)

702 Motor Starting Currents

Generally, all motors require a starting current substantially greater than their normal running current. Where starting currents are excessive, an abnormal drop in supply voltage will result. In order to minimize the unfavorable effects of such voltage drops, it is essential that the Customer's motors do not exceed the allowable starting characteristics.

NOTE: Customers planning to install any motor larger than 5 hp single-phase or 25 hp three-phase, must contact DLPUD. Motor installations that cause power quality problems for other customers shall be corrected at the owner's expense.

703 Power Factor

In order to improve the efficiency of DLPUD's distribution system, the Customer's utilization equipment shall maintain an average power factor as close to unity as possible.

Some of DLPUD's rate schedules include a demand charge and a penalty for an average power factor that is less than 95%. Details of the method of billing for such Customers can be obtained from the Billing & Collection Representative. For new services, it is suggested that the Customer's utilization equipment be designed for operation at high power factor or with capacitors that are switched on and off with the equipment.

704 Wiring Adequacy

The National Electrical Code (NFPA No. 70) specifies the adequacy of wiring with respect to safety but such installations may not be efficient, convenient, or adequate for good service of future expansion of electrical use. In many instances, the installation of wiring capacity greater than minimum code requirements is strongly recommended.
705 Customer-Owned Generating Equipment

Unless authorized by written agreement, electric generating equipment installed by the Customer shall not be interconnected or operated in parallel with DLPUD system. The customer shall own, install, operate, and maintain electrical interlocking equipment, which will prevent parallel operation and such equipment shall be approved by DLPUD prior to installation. Refer to DLPUD Distribution Generation Policy.

706 Energy Conservation

DLPUD encourages the prudent and efficient use of the electric power and energy, which it provides. Customers desiring special information or other assistance regarding the efficient end use of electricity should contact DLPUD’s Energy Services Specialist at 218-846-7133.
SECTION 800

OVERHEAD SECONDARY SERVICE

DLPUD will supply overhead secondary service (600 volts or less) at the voltages and under the conditions specified in other sections of the publication. The service entrance location will be specified by DLPUD. This section includes information on distribution transformer size, overhead service drop and connections to the Customer's premises or equipment. Metering and customer equipment requirements are covered in other sections of this publication. The requirements of the section apply to all residential, commercial and industrial customers.

801 Maximum Transformer Size

801.1 The maximum overhead transformer size installed by DLPUD will normally be either one 75 kVA transformer for single-phase application or three 50 kVA transformers for multi-phase applications. Larger transformer sizes will normally only be provided as a pad-mounted type, unless determined otherwise by DLPUD. See Section 404 on fault-current rating.

801.2 One or more secondary services may be supplied from a transformer; the number of services from a transformer shall be determined by DLPUD depending upon the application.

802 Service Drop Conductors

802.1 The service drop for new services will be a twisted wire triplex (three wires) or quadplex (four wires) configuration from the distribution system to the point of attachment on the Customer's premises.

802.2 Existing services may be either a twisted wire or open wire configuration. If necessary for various reasons, DLPUD may change a service from an open wire to a twisted wire configuration.

803 Clearances

803.1 The service drop must be so located that the minimum clearance as specified in the latest editions of the National Electrical Code (NFPA No. 70) and the National Electric Safety Code (ANSI C2) are maintained. An illustration of the clearances required is shown in Exhibit 4. Any clearances required by MNDOT shall supersede these requirements if MNDOT specifications are more stringent than the NESC.

803.2 Service drop conductors shall not be installed above a swimming pool or surrounding area extending 10 feet horizontally from the pool edge, diving structure, observation stands, towers or platforms.

804 Point of Attachment

A solid point of attachment for supporting the service drop on the building shall be provided by the Customer at a point which will comply with previously stated clearances. Where the required heights and clearances cannot be maintained by a point of attachment on the building, the Customer shall provide a service mast which is of a permanent nature and of sufficient strength to support the service drop at the required minimum clearance. Typical service mast installation is shown in Exhibit 6. In such an installation 2-inch or larger galvanized iron conduit or 3-inch or larger rigid aluminum conduit shall be used. DLPUD reserves the right to decline to connect its service drop to an extension support, which, in its judgment, constitutes a hazard to life or
property. Refer to Exhibit 4 for minimum clearances.

805 Service Entrance

The Customer’s service entrance wiring shall terminate at a point so located that the service drop from the supply lines does not interfere with windows, doors, awnings, drainpipes, or other parts of the building or other obstructions so that only one bracket is required.
SECTION 900

UNDERGROUND SERVICE

901 Undergrounding in New Residential Developments/Newly Developed Lots

901.1 If requested in advance by the property owner, new developments will be considered for underground installation of all distribution facilities except main feeders.

901.2 In all areas considered for underground facilities, the developer must agree to:

1) Furnish the DLPUD with a recorded plat of the area for which service is requested. DLPUD will not install underground systems in segments smaller or larger than considered economically feasible.

2) Establish grades along the underground system route which shall be within 4" of finished grade.

3) Clear the established route of all obstructions such as trees, fences, foundations, dirt piles, etc.

4) Refrain from installation of curb, blacktop, sidewalks, etc., that will increase installation cost until after electric lines are installed.

5) Provide property stakes as required by DLPUD.

6) No planned construction after November 1 or before May 1.

7) Provide an easement for installation of DLPUD facilities on private property if it is agreed to be mutually beneficial.

8) A minimum of 200 Amp conductor, raceway and meter socket are required.

901.3 DLPUD will designate a junction point for the connection of the Customer's secondary underground service lateral. The junction point will be a power pole, service pedestal, pad-mounted transformer or other type of junction enclosure as may be determined by DLPUD. DLPUD will install, own, operate, and maintain all facilities on the source side of the junction point, including the junction enclosure and connections. The customer will install all underground secondary cables, conduit, and other related service equipment on the load side of the junction point. DLPUD will provide maintenance of all residential service cables installed by the customer provided the installation meets all DLPUD policies and regulations as well as all federal and state codes. Also see Section 2, subsection 203.2, Underground Service. The homeowner or electrical contractor shall provide enough conductor and conduit to complete the installation on or to the structure to make the secondary connections to the overhead secondary. If adequate conductor or conduit is not supplied, DLPU will not connect the service until such additional material is provided.
901.4 Underground Service - In addition to the equipment on the Customer side of the meter, all conduit and cable required to extend the secondary service lateral from DLPUD's secondary terminals to the meter are the property of the Customer. After installation by customer, DLPUD will maintain all residential service cable in underground services of 250 amp capacity or less which meet DLPUD policies and specifications to the line side of the meter or C.T. cabinet.

901.5 All service cable, which shall be built over by hard surfaced drives or roadways, porches, decks or any other building or structure shall be placed in conduit as per DLPUD specifications. Conduit must extend a minimum of 24” from edge of hard surfaced area.

902 Residential Undergrounding in Overhead Areas.

Customers residing in residential zones served by overhead lines may install underground electric service. All such services shall be in accordance to subsection 901.3.

903 Underground Service to Commercial and Industrial Customers

903.1 DLPUD encourages underground installation of primary and secondary distribution service laterals to new commercial and industrial structures.

903.2 DLPUD will designate a junction point for the connection of the Customer's secondary underground service lateral. The junction point for services of less than 800 amps will normally be the secondary terminals of a pad-mounted transformer, and for services of 800 amps or more; the junction point will normally be a secondary transition cabinet. Pad-mounted transformers will be placed at a mutually agreed to location, as close as practical to the metering point of the customer or customers. Transition cabinets and conduits or ducts connecting the cabinet to DLPUD's transformer will be installed, owned and maintained by the customer as per specifications and in such locations as designated by DLPUD. The secondary connections will be furnished by the Customer.

903.3 DLPUD will install, own, operate, and maintain the primary underground cable, and the distribution transformer. The primary cable will be installed from DLPUD's main distribution system, on or adjacent to the Customer's property, to the distribution transformer.

903.4 The customer shall furnish and install a transformer pad and/or secondary transition cabinet pad to DLPUD specifications at all locations which are specific to the customers sole use. If the transformer is located in an area where it may be subject to physical damage (e.g. from vehicular traffic), DLPUD may require the Customer to furnish and install an approved means of protection.

903.5 In a network metering application, the Customer shall install, own, and maintain all secondary cables and conduits from the transformer or transition cabinet to the building service entrance; the cables and conduit shall be buried 24 inches minimum below final grade. DLPUD must approve the design of all secondary bus duct and cable bus designs. The installation will be inspected by DLPUD and the secondary connections to the transition cabinet will be made by the Customer. It is the Customer's responsibility to coordinate with and provide the necessary information to DLPUD to assure that adequate connections are made at the secondary terminals of the transformer.

903.7 DLPUD will furnish and install the meter set in accordance with the requirements of Section 600 and per the National Electric Code (NEC).
904 Transformer Clearances

Where pad-mounted transformers and equipment in pad-mounted enclosures are installed, the minimum clearances specified in Exhibit 7 must be maintained. Fences, shrubbery, and trees may be installed by the Customer provided that the specified clearances are maintained, the grade is not altered, and the underground cables are not endangered.

905 Total Undergrounding

DLPUD does not install underground vaults, manholes, or submersible transformers on customer property. Electric service requiring the total undergrounding of facilities will be arranged for on an individual basis.

906 Underground Wire Trenched to Transformer

Homeowner or electrical contractor is responsible for trenching underground cable to within 2 feet of transformer or utility pedestal, leaving an adequate length of wire to terminate in enclosure. The installation shall at a minimum meet the NEC code requirements for such installation and have suitable marking tape installed above the conductor per code.

Revised March 2016
EXHIBITS

1 - Typical Underground Residential Metering Arrangement
2 - Typical Mobile Home Metering Arrangement
3 - Typical Network Metering Arrangement
4 - Secondary Service Drop Clearances
5 - Manual Lever Operated By-Pass Meter Sockets
6 - Typical Residential Service Mast
7 - Location of Pad-Mounted Transformers near Building
8 - Current Transformer Cabinet
9-A(1) - Typical Residential Service (Two Single Meters)
9-A(2) - Typical Residential Service Layout (Double Meter Socket)
9-B - Typical Residential Service Layout, including Water Meter

Remote Wiring
9-C - Typical Panel Layout
9-D - LCR 6600 Indicator Lights/LCR 6200 Indicator Lights
9-E - LCR 6600 Specifications
9-F - Off Peak Heat Schematics
10 - Standard Pole Configuration

Revised March 2016
Topsoil

Conduit should extend out past sidewalk or patio
(2’ minimum)

24” Minimum

4’-6’
EXHIBIT 2

Typical Mobile Home Metering Arrangement

1. Meters are to be permanently labeled.
2. Meters are to face towards street.
3. Service lateral from meter to mobile home is responsibility of customer.
EXHIBIT 3

Typical Network Metering Arrangement

1. METERS ARE TO BE PERMANENTLY LABELED
2. METERS MUST HAVE INDIVIDUAL LOCK-OFF CAPABILITY
3. METERS MUST BE ACCESSIBLE TO DLPUD
4. ALL PHASES MUST BE BALANCED
5. ALL METERS MUST HAVE LEVER BYPASS
EXHIBIT 4

Secondary Service Drop Clearances

A = 12' - 6” MIN
B = 16' - 6” MIN
C = 16' - 6” MIN

TRIPLEX SERVICE DROP

8 FT MIN. CLEARANCE
ABOVE FENCE OR STRUCTURE ON WHICH PERSON CAN WALK

PRIVATE DRIVE
ACCESSIBLE ONLY
TO PEDESTRIANS
SIDEWALK CURB
STREET OR ROADWAY

AREA

TO PEDESTRIANS

Emergencies: 218-847-7609
EXHIBIT 5

Manual Lever Operated By-Pass Meter Sockets

1. All by-pass sockets shall be manually lever operated and capable of carrying full-load current of service being metered. (No automatic circuit closing device sockets are permitted.)

2. Lever designed to operate both the by-pass function and to provide secure clamping force to terminal jaws during meter operation and release of tension for removal of meter.

3. By-pass sockets shall be provided with insulated shield between terminals and to protect from accidental shorts and shocks.

4. If service provided is 120/208 single phase, the 5th jaw (diagram) must be grounded.

5. If service provided is three phase, the 7th jaw (diagram) must be grounded.
EXHIBIT 6

Typical Residential Service Mast

Service conductor shall project at least 3’ from weatherhead for connection by the DLPUD to service drop

Service drop

Wireholder installed by customer

12.5’ minimum above finished grade

18” minimum height and 3’ maximum without guy support
EXHIBIT 7

Location of Pad-Mounted Transformers Near Buildings

I. NON-COMBUSTIBLE WALLS (included in this class would be wood framed brick veneered buildings, metal clad steel framed buildings, asbestos-cement-board walled metal framed buildings, and masonry buildings.)

Pad-mounted oil insulated transformers may be located a minimum distance of 24 in. from non-combustible walls if all the following clearances are maintained from doors, windows, and other building openings. A sump shall be installed for transformers if the immediate terrain is not pitched away from the building. If a combustible first floor overhang exists, a 10 ft. distance from the edge of the transformer to the edge of the overhang (combination of vertical and horizontal distance) shall be required in addition to the other clearance as shown.

A. DOORS

Pad-mounted oil insulated transformers shall not be located within a zone extending 20 ft. outward and 10 ft. to either side of a building door.

B. AIR INTAKE OPENINGS

Pad-mounted oil transformers shall not be located within a zone extending 10 ft. outward and 10 ft. to either side of an air intake opening located at the level of the transformer. If the air intake opening is located above the transformer level, the distance from the transformer to the opening shall be a minimum of 25 ft.

The above term "level of the transformer" is to be interpreted as within 10 ft. of the ground.

C. WINDOWS OR OPENINGS OTHER THAN AIR INTAKE

1. First Story

Pad-mounted oil insulated transformers shall not be located within a zone extending 10 ft. outward and 3 ft. to either side of building window or opening other than an air intake

2. Second Story

Pad-mounted oil insulated transformers shall not be located less than 5 ft. from any part of a second story window or opening other than an air intake.
II **COMBUSTIBLE WALLS** (Included in this class would be wood buildings and metal clad buildings with wood frame construction.)

Pad-mounted oil insulated transformers shall be located at a minimum of 10 ft. from the building wall. In addition to the clearance from building doors, windows and other openings set forth for non-combustible walls. If a combustible first floor overhang exists, a 10 ft. distance from the edge of the transformer to the edge of the overhang (combination of vertical and horizontal distance) shall be required in addition to the other clearances as shown.

III **BARRIERS** (Included in this class are reinforced concrete, brick or concrete block barrier wall.)

If the clearance specified above cannot be obtained, a fire resistant barrier shall be constructed in lieu of the separation. The barrier when required is provided by the customer. The following methods of construction are acceptable:

A. **NON-COMBUSTIBLE WALLS**

The barrier shall extend to a projection line from the corner of the pad-mount to the furthest corner of the window, door or opening in question. The height of the barrier shall be 1 ft. above the top of the pad-mounted transformer.

B. **COMBUSTIBLE WALLS**

The barrier shall extend 3 ft. beyond each side of the pad-mounted transformer. The height of the barrier shall be 3 ft. above the top of the pad-mounted transformer. If a combustible first floor overhang exists, the 24 in. specified shall be measured from the edge of the overhang rather than from the building.

IV **FIRE ESCAPES**

Pad-mounted oil insulated transformers shall be located such that a minimum clearance of 20 ft. is maintained from fire escapes at all times.

Exception: Pad-mounted transformers may be located closer to a fire escape than the 20 ft. minimum when a fire resistant barrier is constructed around the pad-mounted (side walls and roof). The barrier shall extend a minimum of 1 ft. beyond the pad-mount. The pad-mount and barrier shall not in any way obstruct the fire escape exit. 10 ft. clearance required in front of pad-mounted transformer doors. Adequate transformer accessibility and ventilation must be provided.

V **DECORATIVE COMBUSTIBLE ENCLOSURE**

Decorative combustible enclosures (fence) installed by the customer around pad-mounted transformers adjacent to a combustible building wall shall not extend more than 24 in. beyond the transformer towards the combustible wall. 10 ft. clearance required in the front of pad-mounted transformer doors. Adequate transformer accessibility and ventilation must be provided.
EXHIBIT 8

Current Transformer Cabinet

The customer or electrical contractor shall furnish and install the cabinet in an outdoor location readily accessible to authorized DLPUD employees. See DLPUD for prior approval to exceptions.

1. UL approved and to be outdoor rated
2. Complete with landing pads for cable terminations and for mounting of bar type current transformers.
3. Hinged door with provisions for locking and sealing.
4. Minimum depth of 10” with overall dimensions to vary with required ampacity rating.
5. Wall mount CT cabinets shall not be ground mounted
6. Must meet NEC requirements.
7. Any exception to line and load locations as shown below must be approved by DLPUD
EXHIBIT 9-A (1)

Typical Residential Service (Two Single Meter Sockets)
EXHIBIT 9-A (2)

Typical Residential Service Layout (Double Meter Socket)
EXHIBIT 9-B (1)
Typical Residential Service Layout

- Mini Split Switch Loop (wire size must be equal to branch circuit) (Minimum 2’)
- 2- #10’s Water Heater Switch Loop (Minimum 2’)
- 2- #14 or #12’s Heat Switch Loop (Minimum 2’)
- 2-#14 or #12’s 240 Volts Controller Power (Minimum 2’)
- 18/3 Bell Wire A/C Switch Loop (Minimum 2’). Run A/C Switch Loop To Furnace or Outdoor Unit

*NOTE: WATER METER WIRES ELECTRICIAN’S RESPONSIBILITY

Run 18/3 Cables For Water Meters Remotes Back To Water Meters

18/3 Bell Wire Residential Water Meter Remote (where city water is available)

18/3 Bell Wire Residential Water Meter Remote
EXHIBIT 9-B (2)

Typical Residential Service Layout W/Out Off Peak Service

2- #10’s Water Heater Switch Loop (Minimum 2’)

2- #14 or #12’s 240 Volts Controller Power (Minimum 2’)

18/3 Bell Wire A/C Switch Loop (Minimum 2’). Run A/C Switch Loop To Furnace or Outdoor Unit

Mini Split Switch Loop (wire size must be equal to branch circuit) (Minimum 2’)

18/3 Bell Wire Residential Water Meter Remote (where city water is available)

18/3 Bell Wire Residential Water Meter Remote

*NOTE: WATER METER WIRES ELECTRICIAN’S RESPONSIBILITY

Run 18/3 Cables For Water Meters Remotes Back To Water Meters

18/3 Bell Wire A/C Switch Loop (Minimum 2’). Run A/C Switch Loop To Furnace or Outdoor Unit
EXHIBIT 9-C
Typical Panel Layout

- Water Heater Breaker
- Water Heater Switch Loop From Residential Panel to Off Peak Panel
- Off Peak Controller Breaker
- Air Conditioner/Heat Pump
- Circ. Pumps/Misc. Control Power
- Isolation Relays For Off Peak Heat Sources
EXHIBIT 9-D

Typical LCR Indicator Lights

LCR 6600

A/C Off When Lit

Power (On/Normal)

Water Heater Off When Lit

Heat Off When Lit

Heat Pump Cooling Off When Lit

LCR 6200

Power (On/Normal)

Cycling (A/C Off When Lit)
*NOTE: When installing multiple relays, all relays need to have the same voltage coils
EXHIBIT 10

Standard Pole Configuration

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<td>B</td>
<td>24'0&quot;</td>
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<td>C</td>
<td>20'8&quot;</td>
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<td>D</td>
<td>19'4&quot;</td>
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*minimum 22' required over state highways*
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Section 1100

403.00. Water Utility Regulations

403.01 Water Service Connections: Permit Required

Subdivision. 1. Plumbers are required to be licensed by the City of Detroit Lakes and shall secure a permit from the City Administration Office before making any connections to a main, and no plumber or other person shall make any attachment or connection to it to serve other premises.

Subd. 2. Excavators are required to be licensed in the City of Detroit Lakes and shall secure a permit before digging is done on public right-of-way or municipal easement. Fees for license and excavating are set in the Detroit Lakes City Code, Section 210. The regulations for excavating are found in Section 302.

Subd. 3. All public and municipal utilities shall be contacted before any excavation work is done by using Gopher State One Call. All utility locations are the responsibility of the contractor.

Subd. 4. Safety precautions are the responsibility of the contractor, and shall be maintained at all times. Barricades and fencing are available upon request from the Water Department.

403.02 Water Service Connections: Who To Make, Cost Of:

Subdivision 1. Any property located in the City which requires a source of potable water shall be connected to the public water distribution system at the expense of the property owner whenever the public system is located in a public right-of-way or easement which is accessible to said property. In the event, an owner of such property does not connect as so required, the City may, after providing written notice of owner, begin assessment a monthly water availability charge to the owner at an amount as set by City Council. (Any exception shall only be permitted through a written agreement by the administrative authority.) (Amended 01-10-2012 Ord. #359)

A water well which is taken out of service because a person is connecting to a public water supply must either be maintained for use such as irrigation, or sealed and abandoned in accordance with the Minnesota Water Well Construction Code (Minnesota Rules, Chapter 4725).
Subd. 2. Service connections to the water distribution system will be done by the Water Department or other authorized personnel.

Subd. 3. Water connection permit fees will be established by resolution of the City Council. Amended: 5/3/94 Ord. 106

Subd. 4. A water connection fee will be charged anytime a water service line is installed, repaired or replaced. Amended: 5/3/94 Ord. No. 106

Subd. 5. All service taps up to and including 2 inches will be done under pressure. Service taps larger than 2 inches have the option of being done under pressure.

Subd. 6. When a service lateral was installed with a water main project (out to the curb box), the property owner will connect at the curb box. If any additional service is needed, the fore-mentioned described service connection will apply.

Subd. 7. All service lines, connections, piping and appurtenances shall be installed and performed strictly in accordance with the Minnesota Plumbing Code and be approved by the Water Department. Failure to install or maintain the same in accordance therewith, or failure to have, or permit, required inspections shall be grounds for termination of water service to any customer.

403.03 Services: Construction

Subd. 1. All services shall be constructed by licensed plumbers at the owner’s expense.

Subd. 2. Services under four (4) inches in diameter or less shall be type “K” copper or DR-9 (200 PSI) Poly Ethylene (PE) pipe. This material may be used in both the right of way and private property installations. All services four (4) inches in diameter or larger than shall be DR-18 (235 PSI) Poly Vinyl Chloride (PVC) C900 pipe. (Amended 4-8-2014 Ord. #377)

Subd. 3. All taps less than four (4) inches in diameter or smaller shall be made with the use of a corporation stop designed for tapping under pressure and will be tapped using a stainless steel service saddle. Services up to, and including, two (2) inches shall be required to use compression type fittings. (Amended 1-10-2012 Ord. #359)(Amended 4-8-2014 Ord. #377)
Subd. 4. All taps, other than those allowed in the preceding paragraph, shall be made only with the use of an approved tapping sleeve and gate valve. In no case shall the valve be smaller than four (4) inches. On services which are connected to the main with a gate valve and sleeve, the gate valve shall take the place of the curb stop and shall be placed within three (3) feet of the water main.

Subd. 5. All corporation stops must have round ways of the same diameter as the pipe with which they are placed and be of a make and pattern approved by the Water Department. All curb stops three-quarters (3/4) inch and larger shall be of the Mueller or Ford design or approved equal.

Subd. 6. No service pipe shall be less than 3/4 inch in diameter and no service line in excess of 150 feet in length shall be less than one (1) inch in diameter. All services shall have a depth of at least seven (7) feet below finished grade or one (1) foot below the ground water level; and each service two (2) inches in diameter or smaller shall have a curb stop fitted with a stop box set on the property line at the same elevation as finished grade.

Subd. 7. The stop box used shall have a Minneapolis pattern base and be of a design approved by the Water Department. Stop boxes on curb stops one (1) inch diameter or smaller shall have an unobstructed opening of one and one-half (1 1/2) inches diameter. Curb stops larger than one (1) inch diameter shall have an unobstructed opening, a minimum of two (2) inches in diameter. All stop boxes shall be fitted with a substantial cover.

Subd. 8. Every service pipe must have a shut-off valve placed adjacent to and on the street side of the meter which must be kept in working order at all times so that the water may be shut off by the occupant of the premises. There shall also be a shut-off valve placed on the other side of the water meter so that the meter can be taken out or replaced without draining the pipe system in the building.

403.04 Services: Restriction on Laying of Pipe

Subdivision 1. No consumer shall be permitted to extend water pipes across lots or buildings to adjoining premises. All service pipe shall be laid on streets, alleys or public ground to the premises to be served and enter at the front, side or rear of the nearest main.

Subd. 2. Separation of water service pipes and sewer service pipes shall be no less than ten (10) feet apart horizontally or can be placed in a common trench if the bottom of the
water service pipe is kept at a minimum of 12 inches above the top of the sewer pipe at all points and the water pipe is placed on a solid shelf at one side of the common trench. A common trench may also be used without the separation requirements if the sewer pipe is of ductile iron or schedule 40 plastic pipe and the water pipe is of approved copper, ductile iron or plastic pipe.  **Amended: 08/04/92 Ord. 83**

Subd. 3. Water extensions to a sub-division within the corporate limits of Detroit Lakes are to be petitioned by the developer. The City Administrator will have a feasibility study conducted after which the City Council will approve, or disapprove, any utility improvements to the area.

403.05 Services: Separate Service to Each Building

No new service shall be constructed and no existing service shall be changed in such a manner that more than one building shall be on the service.

403.06 Separate Curb Stop Required for Each Building

Owners of premises having water services which do not have separate curb stops and boxes for each individual service or which otherwise do not conform to the requirements in this Chapter shall be required to put in such curb stops or make such other changes as are necessary to conform to these requirements, when so instructed by the Water Department. Additional curb stops, when so required, shall be installed, maintained, repaired, or replaced at the expense of the owner of the premise for which it provides service. The owner of such curb stops shall also, at all times, provide and allow the Water Department access to the curb stops for the purpose to shut off or to turn on the water supply to the premise or service. **(Amended 1-10-2012 Ord. #359)**

403.07 For Water Used During Construction

If a contractor requests water during construction, a temporary meter hook-up can be installed by the contractor. Under no circumstances is a contractor permitted to use water without a meter.

403.08 Curb Stop: To be Shut-Off, When
Plumbers shall leave all new water services shut-off at the curb stop after completing the testing, except that water may be left on only when the owner or their agent has made application for the same and has a receipt from the City Administration Office showing fees paid.

403.09 Maintenance of Service Pipes

The Water Department will maintain water services from the main to, and including the curb stop, or the property line, whichever is the closest to the main, free of charge to the customer. Customers shall be responsible for maintenance of water services on the property owners side of the curb stop. In the case of large services constructed with a gate valve, the gate valve shall be considered the curb stop and shall be placed within three (3) feet of the water main.

Amended: 08/04/92 Ord. 83

403.10 Repair of Services to Conform to Chapter

Repairs made to existing services shall cause each service to conform in every respect with this chapter. If the plumbing is not within the Code requirements, as outlined in Section 403.03, Subd. 2, it is required to be brought up to Code standards by the property owner. The owner may choose to pay for said replacement or they may elect to have the City pay for said repairs and have it assessed to the property.

403.11 Two or More Services on One Shut-Off: Turning on of Water

When there are two or more services on one curb stop, the water will not be turned on unless each service is properly metered and the water billing for all services are paid in full. The Water Department may require that additional curb stops be installed as outlined in Section 403.06. (Amended 1-10-2012 Ord. #359)

403.12 Services - Location of Leaks

When a leak occurs, the City Water Department will determine which side of the curb box the leak is located. It is then the responsibility of the City or the property owner as determined in Section 403.09 to repair a leak within ten working days. If the owner has not repaired the leak within said time, the City will hire a contractor to fix said leak and assess the cost in
accordance with procedures set out in the City Code. Failure by the property owner to maintain their service line may be cause for the City to discontinue water service.

403.13 Service Line- Freeze-Ups

Subdivision 1. When a water service lateral freezes, it is the sole responsibility of the property owner to thaw the service lateral from the house or building to the main. Any cost resulting from the thawing of these frozen water lines will be paid by the owner.

Subd. 2. If a water service lateral freezes, it is the sole responsibility of the customer to let the water “drip or slow run” to prevent freezing of the service line. The City of Detroit Lakes does not allow a credit on water used during the period in which the water “drips or runs”. If a bypass line is deemed necessary, the City will allow owners to install a bypass to prevent freezing, however the installation will be at the owner’s expense and must be installed by a licensed plumber. Bypass line should be located before water meter and discharge water is recommended to flow directly to a floor drain. (Amended 4-8-2014 Ord.377)

403.14 Abandoned Water Service Lines. Amended: 06/01/04, Ord. No. 256

Subdivision 1. When a water service line is abandoned in an improved street and determined to be no longer necessary, the Water Department shall keep a record of such abandonment and shall bill the property owner an abandonment fee. The Abandonment fee shall be a fixed charge established by resolution of the City Council. Such charge shall be determined by computing the average cost of abandonment as established by the City Engineer. All abandonment fees are to be billed to the property owner and if not paid by September 30th of the year in which the service is determined to be abandoned, the charges shall be assessed to the property owner in accordance with City policy for assessing current service charges. All abandonment fees shall be credited to the Water Department. All previously abandoned services shall be excavated and shut off at the main during the next street construction, reconstruction or overlayment project with the cost to be paid by the Water Department.

Subd. 2. When a water service line is replaced in an improved street during a construction, reconstruction or overlayment project and not previously abandoned, the old service shall be shut off at the water main. The cost of the new service and abandonment of the old service shall be paid by the property owner and assessed according to the City’s assessment policy.
Subd. 3. When a leak occurs in an abandoned water service line prior to construction, reconstruction or overlayment, the Water Department shall repair the leak or remove the abandoned service in accordance with Section 403.09.

403.15 Right to Shut-Off Water: Notice, When Required, Claims Against City

The Water Department reserves the right, at any time when necessary without notice, to shut the water off at the main for the purpose of making repairs or extensions or for any other purpose. No claim shall be made against the Water Department for any damage that may result from shutting off water for repairing, laying or relaying mains, hydrants or other connections. The Water Department shall give notice of shutting off water if conditions are such that it is possible to do so.

CONTROL AND REGULATIONS OF WATER METERS

403.16 Water Meters: Required - By Whom Furnished

Any person, firm or corporation taking water from the water mains of the City of Detroit Lakes is required to use a meter. In the case of meters one (1) inch or smaller in size, such meters will be furnished at the expense of the Water Department. An extra meter, one (1) inch or smaller, will be furnished by the Water Department and the total price billed to the property owner, except in the case of an outdoor watering meter, see Section 403.19, Subdivision 3. Meters larger than one (1) inch are to be purchased by the owner of the property requesting water service. Meters will measure water at cubic foot rates and the consumer will pay for the water used. No one shall use water that is not measured by a meter furnished or approved by the Water Department. The City will maintain and does retain ownership of all meters, regardless of who purchased the meter. Amended: 08/04/92 Ord. 83

403.17 Water Meters: To be Attached to All Services, Exceptions

Meters shall be attached to all services except private fire protection services as herein provided.

403.18 Water Meters: Installation of
The owner must have a licensed plumber install the meter and necessary fittings at their expense. The Water Department will inspect the installation and approve it before the water is turned on. Meters shall be placed on the service pipe not to exceed two (2) feet from the wall where such pipe enters the premises and be in a horizontal position. There shall be a valve between the meter and the wall; and a suitable place shall be provided for the meter so as to keep it dry and clean, protected from frost, and it shall be readily accessible at all times to the meter reader and inspectors of the Water Department.

403.19 Water Meters: Outdoor Metering

When a customer requests metering for outdoor watering only, with no corresponding wastewater charges, the following procedure will be followed:

Subdivision 1. A separate water meter with remote meter reading capability and piping is to be installed in such a manner that the outdoor water system cannot be interconnected to a domestic system.

Subd. 2. The outdoor metering and piping shall be inspected and approved by Public Utility personnel before use of the system is authorized.

Subd. 3. Half of the meter cost and all of the installation costs are to be paid for by the customer.

Subd. 4. Any use of the outdoor watering system which results in water entering the wastewater system of the Public Utility will be charged to the customer, based upon wastewater rates in effect at the time of use.

Subd. 5. All charges for water used in the system and service charges in effect will be billed at rates which are in effect at the time of use.

403.20 Remote Meter Register

Remote meter registers are required on all new construction and or remodeling projects. Remote meter register wire shall be furnished by the owner (owner’s electrician or plumber) for new construction or remodels and installed by owner’s electrician or plumber. If a remote register is requested by the owner for an existing meter, the Water Department will furnish and
install the remote meter register and wire at no charge to the owner. All remote registers are to be located next to the electric meter, unless the electric meter is not located on the external wall surface of a residence. (Amended: 08/04/92 Ord. 83) (Amended 4-8-14 Ord. 377)

403.21 Water Meters: To be Kept Sealed

Meters shall at all times be sealed, such seals shall not be broken. Meters shall be removed only by authorized employees of the Water Department.

403.22 Water Meters: Valves on One and One-Half Inch and Larger

Meters one and one-half (1 1/2) inches in size and larger shall be by-passed, and shall have a suitable valve on either side of the water meter and a valve on the by-pass, which will be sealed by the Water Department. An owner may opt to install (two) 2 meters, instead of one (1) meter and a by-pass.

403.23 Water Meters: To Be Protected

Meters that are liable to become damaged by heating or cooling systems shall be protected by the installation of an approved back flow preventer located in the potable water line before the point where any chemicals may be introduced.

403.24 Water Meters: Damage to, Who Liable

The owner or occupant of premises where a meter is installed shall be held responsible for its care and protection from freezing or hot water, and from other injury or interference or in case of its stoppage or imperfect working, they shall give immediate notice to the office of the Water Department. All meters that are broken or damaged by negligence of owners or occupants of premises, or by freezing, hot water or other damage, except ordinary wear and tear, shall be repaired by the Water Department and the cost of repairs shall be paid by the owner or occupant.

403.25 Water Meter: Owner of Premises to Give Notice When Meter Not Needed

Whenever a water meter is installed on a water service in a premises that is to be remodeled, removed or destroyed, or where the service is discontinued so that the water meter is no longer needed, the owner of such premises shall give notice to the Water Department to
remove such meter, and free access to such meter must be provided so that the meter may be removed. The owner of the premises shall be held responsible for the meter and, if the meter is lost, they shall be required to pay for the same at the actual value.

403.26 Water Meters: Interference with Registration and the Breaking of Seal is Prohibited

No one shall in any way interfere with the proper registration of a water meter; and no one, except an authorized employee of the Water Department shall break a seal of a meter; provided, however, that the Water Department may grant specific permission to licensed plumbers to break such seal for draining pipes or stopping water leaks.

403.27 Water Meters: Tampering With, Water Bill to be Estimated

If any meter is found to have been tampered with, the water bill shall be estimated for that billing period and the meter repaired and tested. Upon repetition of the offense, it will be the option of the Water Department to discontinue the water service or collect the amount estimated due.

403.28 Water Meters: Testing and Expense for

In case there is doubt as to the accuracy of a water meter on the part of the consumer, they may have the meter, up to one (1) inch, tested by the Water Department; at which time they may be present, or have a representative present if they so desire; and if the meter is found to register within two (2) percent of being correct, a charge will be made for making the test. If the meter is found to measure two (2) percent incorrectly, no charge shall be made for making the test. If the meter should be found to over-register more than two (2) percent, there shall be a proportional deduction made from the previous water bill. A water meter shall be considered to register satisfactorily when it registers within two (2) percent of accuracy.  
Amended: 08/04/92 Ord. 83

403.29 Water Meters: Right of Access

The customer shall grant all necessary permission to allow the Water Department access to, and the right to operate any and all service line valves, including but not limited to the curb box valve. The Water Department employees or agents shall have the right to enter the customer's premises at all reasonable times for the purpose of operating service valves or for the reading, inspection, repairing or removal of the water meter.
WATER SERVICE RATES, BILLS AND ACCOUNTS

403.30 Water Rates and Rules, How Established, Changed

It is hereby expressly provided that the City Council of the City of Detroit Lakes reserves the right to change the rate for the use of water from time to time, by resolution; and at all times make such water restrictions, rules and regulations as, in the judgement of the City Council, may be necessary.

403.31 Water Rates: How Applies in Building Service Rentals

When billing for rentals, the rates shall be applied separately for the consumption of water through each meter. When two or more apartments are connected with one meter it will be the responsibility of the landlord to pay the water bill.

403.32 Water Service Bills, When Due and Delinquent: Turning Off of Water, When Turned On

All bills are due and payable on or before the 15th day in which bills are sent out. Five days after a bill has become delinquent the water may be shut off from the premises; and, when so shut off, shall not be turned on again until all water bills and all other charges due for services to the consumer, together with a reconnect charge for turning water on, has been paid. Water will be turned on during regular working hours for the reconnect charge. After regular working hours, an additional call-out charge will be added for turning water on. **Amended: 08/04/92 Ord. 83**

403.33 Water Service Bills, Where to Be Paid

All bills for water and other services are payable only at the City Administration Office during regular working hours.

403.34 Water Service, Discontinuing of, Seasonal Customers, Freeze-Ups
Subdivision 1. Any consumer desiring to discontinue the use of water must either notify the Water Department or call a licensed plumber. If the water is turned off at the stop box by a licensed plumber, they must inform the Water Department the same day the water service is discontinued.

Subd. 2. There are no seasonal customers for water and sanitary sewer services. Monthly charges are based upon the consumption of water. If there is no consumption for that month, a fee is charged according to the current rate schedule or the customer may have the water shut-off or turned on at the curb box at the current fee.

Subd. 3. Any water breaks due to freezing lines, in which a residence is not in use, is the responsibility of the owner. The owner will be charged for all water consumption as well as any sewer rates. However, an owner may appeal their sewer billing to the Public Utility Commission.

403.35 Permission Necessary to Turn On, When

No firm, company or corporation or individual from whose premises the water shall have been shut off for any of the reasons provided, shall turn the water on without permission from the Water Department.

403.36 Fire Services: Construction of

The construction of fire services shall be under the personal supervision of an authorized employee of the Building Inspector's Department, and the cost of this supervision shall be charged to the owner.

403.37 Fire Services: When Meters Not Required

Private fire protection services may be constructed without meters provided that all outlet valves are sealed, and that the system is approved by the Water Department, Fire Department and conforms with all building codes. All fire service lines shall be installed with a check valve or backflow prevention device. Approved back-flow prevention devices shall be used when required by the Minnesota Plumbing Code. Owners of those backflow prevention devices which require testing will be responsible to have these devices tested annually by an accredited tester and to annually submit a copy of all such test results to the City. Each backflow prevention device shall also have an attached tag showing recorded test dates and signature of tester. Amended: 08/04/92 Ord. 83
403.38 Fire Services: When to be Opened

Fire protection systems shall be opened in case of fire or for inspection; and shall not supply water for domestic use, other than fire purposes.

403.39 Fire Services: Seals Broken On, Duty to Notify

When seals on a fire protection system are broken, it shall be the duty of the owner or occupant to notify the Water Department within 24 hours thereafter.

403.40 Fire Services: Installation of More Than One Service to a Premise

If more than one service is installed on the same premise, the piping of one shall not be connected with the other, except with permission of the Public Utility Commission.

403.41 Fire Services: Limited Size Of

The Water Department shall reserve the right to limit the size of fire protection services where the street mains are not adequately sized in order to protect public interest.

403.42 Fire Service: Use of For Other Purposes, Penalty

In any case when the owner or occupant of any premises are found to be using water from a fire service for purposes other than fire protection, the Water Department reserves the right, at any time, to require the owner of the premises to furnish and install, at his expense and under the direction of the Water Department, an approved water meter and to keep the same in accurate operating condition.

403.43 Fire Hydrants: Permit Required to Use

Hydrants are available throughout the City, but the use of a fire hydrant, unless authorized by the Water Department, is strictly forbidden. Temporary service from fire hydrants is available for contractors. A hydrant rental fee, along with a metered charge, is required for contractor
usage, tank fillings or other approved usages of fire hydrants. If a meter is required, it will be furnished and installed by the Water Department. The charges for water used will be billed at the current water rates. **Amended: 08/04/92 Ord. 83**

403.44 Fire Hydrants: How To Be Opened

Hydrants shall be opened only with an operating hydrant wrench and spanner which shall be obtained either from the Fire Department or Water Department.

403.45 Fire Hydrants: Use of in Flushing Streets and Sewers

Hydrants used for construction purposes and/or flushing sewers and streets shall have a reducing coupling attached to the nozzle of the hydrant with an independent throttling valve for regulating the supply. **Amended: 08/04/92 Ord. 83**

403.46 Water Supply From Two Sources, Piping System to be Separate

On premises where water is supplied from two sources, the city water being one of the systems, the piping system for city water must be entirely separated from that of the other source. If such cross-connections are found to exist, the owner or their plumber must give notice to the Water Department and make an immediate correction of the problem. Failure to correct the problem will result in the discontinuation of the City's water supply by the Water Department.

403.47 Safety Devices Required

Consumers are required to equip their City supplies water systems with approved safety devices and/or backflow prevention devices whenever the system is connected to water using fixtures or equipment which could cause a hazard to the City's water supply during such instances when back pressure/back siphonage may occur. Those consumers required to test such backflow prevention devices shall also adhere to the device testing requirements as stipulated in Section 403.37. **Amended: 08/04/92 Ord. 83**

403.48 Water Department Does Not Guarantee Accuracy of Information Given
Information obtained from the records, maps, employees, etc., of the Water Department relative to the location of water mains and service pipes will be furnished to licensed plumbers and interested parties, but the Water Department does not guarantee the accuracy of the same.

403.49 Unnecessary Waste, Right to Cut Off Supply

Consumers shall prevent unnecessary waste of water and keep all water outlets closed when not in actual use. If unnecessary waste of water takes place the Water Department reserves the right to cut off the supply. The Water Department reserves the right to prohibit the use of water for yard sprinklers, elevators, air conditioners, coolers and large consumers of water when in the judgment of the Water Department, it shall be necessary to do so.

403.50 Water Department Does Not Guarantee Pressure, or Supply

The Water Department does not guarantee the consumer any fixed pressure or a continuous supply. In emergencies, water may be shut off without notice.

403.51 Non-Liability of Water Department for Water Service Breakage Failure in Supply

The Water Department shall not be held responsible for any reason, such as, but not limited to the breaking of any service pipe or apparatus, water coil, shut-off or failure in the supply of water.

403.52 Borrowing of Plumbing Supplies

When a contractor is in need of a certain part, the city may "borrow" that part to the contractor with the agreement that the contractor will replace said part or be charged the current replacement price.

APPLICATION RULES, PENALTY

403.53 Foregoing Rules and Regulations Considered Part of Every Contract
The foregoing rules and regulations shall be considered a part of the contract with every person who takes water supplied by the Water Department through the City Water Works, and every such person who takes water shall be considered as having expressed his agreement to be bound thereby.  **Added: Ord. No. 53 11/13/90**