# City of Bardstown Electric Department General Rules and Regulation (Terms and conditions)

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**AVAILABILITY** 

A copy of the City's Rates and Rules and Regulations (Terms and Conditions) are available for public inspection at the office of the City Clerk.

#### **EXISTING ORDINANCES**

These RULES AND REGULATIONS are a companion document to existing City ordinances governing the supply of electric service in the City of Bardstown and as such are secondary to the rates, charges and policies set therein.

## APPLICATION FOR SERVICE

All form applications for service will be made on the City's standard ORDER FOR SERVICE form and/or Contract form and will be signed by the Customer, or his duly authorized agent, and accepted by the City before service is supplied by the City. Contract forms will be signed whenever there is a rider or special agreement with the Customer.

Residential Customers in good standing may provide a signed ORDER FOR SERVICE after service is provided, however, failure to provide an acceptable Order by the agreed date may result in discontinuance of service.

A separate ORDER FOR SERVICE and/or Contract will be made for each class of service at each separate location.

These TERMS AND CONDITIONS apply to all Customers receiving service from the City.

## **RATES**

The classifications of service and their rate schedules are contained in the City's ordinance regarding electric rates and charges.

#### **OPTIONAL RATES**

The conditions under which rates are applicable to the requirements of particular customers are plainly set forth in the City's published rate schedules. However, the choice of rates within the E2 and E3 Classes lies with the Customer.

The City will, at any time, upon written request, advise any existing or potential E2 or E3 Customer as to the rate best adapted to service requirements as defined by the Customer, but the City does not assume responsibility for the selection of such rate or for the continuance of the lowest annual cost under the rate selected.

From time to time, the E2 or E3 Customer should investigate his operating conditions with a view to determining desirable changes from either commercial available rate to the other. The City, lacking knowledge of changes that may occur at any time in the these Customer's operating conditions, does not assume responsibility that E2 or E3 Customers will be served under the most favorable rate, nor will the City make refunds covering the difference between the charges under the rate in effect and those under the other rate applicable to the same service.

An E2 or E3 Customer, having selected the rate adapted to his service, may not change to the other rate within a 12-month period unless there should be a substantial change in the character or conditions of his service. A new E2 or E3 Customer or existing E2 or E3 Customer having substantial change in the use of electricity will be given reasonable opportunity to determine his service requirements before definitely selecting the most favorable rate therefore.

#### **CUSTOMER'S INSTALLATION**

All wiring and other electrical equipment on the premises, furnished by the Customer, will be maintained by the Customer at all times in conformity with the requirements of the constituted authorities and with the TERMS AND CONDITIONS of the City.

## OWNER'S CONSENT TO OCCUPY

The City expects the Customer to provide easements necessary for the provision of service that are mutually acceptable to both the City and the Customer. In the case the Customer is not the owner of the premises or of the intervening property between the premises and the City's lines, the Customer will obtain from the property owner or owners the necessary consent to install and maintain in or over said premises all such wires and electrical equipment as are necessary or convenient for supplying electric service to the Customer.

#### **ACCESS TO PREMISES**

The City will have the right of access to the Customer's premises at all reasonable times for the purpose of installing, reading, inspecting, or repairing any meters, devices, and other equipment used in connection with its supply of electric service, or for the purpose of removing its property and for all other proper purposes.

## **METERING**

The electricity used will be measured by a meter or meters to be furnished and installed by the City at its expense and all bills will be calculated upon the registration of said meters. When service is supplied by City at more than one delivery point on the same premises each delivery point will be

metered and billed separately on the rate applicable. Meters include all measuring instruments. Meters will be located as near as possible to the service entrance and at eye level on the ground floor of the building, in a clean, dry, safe and easily accessible place, free from vibration, agreed to by the City.

#### PROTECTION OF CITY'S ELECTRICAL PROPERTY

Customers will be held responsible for tampering, interfering with, breaking of seals of meters, or other electrical equipment of the City installed on the Customer's premises, and will be held liable for same according to law. The Customer hereby agrees that no one except the employees of the City shall be allowed to make any internal or external adjustments of any meter or any other piece of apparatus which shall be the property of the City.

#### **EXCLUSIVE SERVICE ON INSTALLATION CONNECTED**

Except in cases where the Customer has a contract with the City for reserve or auxiliary service, no other electric light or power service will be used by the Customer on the same installation in conjunction with the City's service, either by means of a throw-over switch or any other connection.

The Customer will not sell the electricity purchased from the City to any other Customer, Company, or person, and Customer will not deliver electricity purchased from the City to any connection wherein said electricity is to be used off of Customer's premises or by persons over whom Customer has no control.

#### **EXTENSION OF SERVICE**

The main distribution lines of the City will be extended to such points as provide sufficient load to justify such extensions or in lieu of sufficient load, the City may require such definite and written guarantees from a Customer, or group of Customers, in addition to any minimum payments required as may be necessary. This requirement may also be made covering the repayment, within a reasonable time, of the cost of tapping such existing lines for light or power service or both.

#### LIABILITY

The Customer assumes all responsibility for the electric service upon the Customer's premises at and from the point of delivery of electricity and for the wires and equipment used in connection therewith, and will protect and save the City harmless from all claims for injury or damage to persons or property occurring on the Customer's premises or at and from the point of delivery of electricity, occasioned by such electricity or said wires and equipment, except where said injury or damage will be shown to have been occasioned by such electricity or said wires and equipment, except where said injury or damage will be shown to have been occasioned solely by the negligence of the City.

#### CONTINUOUS SERVICE

The City will not be responsible in damages for failure to supply electric service or for interruptions or reversal of the supply if such failure is without willful fault on its part.

#### PROTECTION OF SERVICE

The City cannot render service to any Customer for the operation of any device that has a detrimental effect upon the service rendered to other Customers.

The City, however, will endeavor to cooperate with its Customers when consulted concerning the intended use of any electric device.

Where the Customer's use of service is intermittent or subject to violent fluctuations, the City reserves the right to require the Customer to furnish, at his own expense, suitable equipment to reasonably limit such intermittence or fluctuation.

## **METER TESTING**

Any Customer that believes his or her meter is registering incorrectly can request the City to pull the meter and have it tested at the customer's expense. Should the meter test more than two percent (2%) fast, the Customer shall be reimbursed by the City for testing expenses as outlined herein.

For meters registering over two percent (2%) fast, the City will make an adjustment for the Customer's previous twelve (12) months of usage.

#### **BILLING FOR SERVICE**

- (a) All bills will be based upon consecutive meter readings made in accordance with the City's meter reading schedule, and shall be taken as nearly as may be practicable either every 30 days for monthly billing or as otherwise specified. Bills will be processed and mailed at the first of the month.
- (b) Failure to receive a bill in no way exempts Customer from the provisions of these TERMS AND CONDITIONS.
- (c) When the City is unable to read a meter after reasonable effort, the Customer will be billed at the average of the three immediately preceding monthly bills and the billing adjusted when the meter is read.
- (d) Fuel clause adjustments (+/-) are in addition to the minimum.
- (e) Customer's bill will be due by the 15th of the month for the prior month's consumption as determined in (a), as described in the City's ordinance regarding electric rates and charges.

#### POWER FACTOR

- (a) The reference in this section to "power factor" or "pf" is in accordance with the accepted technical meaning of this term.
- (b) The City expects the customer's electrical system to be at or near unity power factor. However, the City will permit the customer's system during normal operation, to have a power factor not lower than 90% either lagging or leading. Where the customer's power factor is less than 90%, the City reserves the right to require the customer to furnish, at his own expense, suitable corrective equipment to maintain a power factor of 90% or higher. At the City's option, in lieu of the customer providing the above corrective equipment, the City may add an adjustment to the maximum

measured KW load for billing purposes each month when the power factor is less than 90%, in accordance with the following formula: (BASED ON POWER FACTOR MEASURED AT TIME OF MONTHLY MAXIMUM KW LOAD)

## (Maximum Measured KW Load x 90%)

Power Factor (in percent) - (Maximum Measured KW Load) = pf Correction KW

(c) The City reserves the right to install a KVA meter or metering equipment of a type whereby power factor can be determined for use in the above formula.

#### DEPOSIT

The City shall require the Customer to make and maintain a reasonable deposit to secure the prompt payment of bills. A deposit will normally be required prior to service being rendered. The terms of the required deposit are outlined in the City's ordinance regarding electric rates and charges.

MOTOR INSTALLATIONS See Page No. \_\_\_.

#### ASSIGNMENT

No order for service, agreement or contract for service may be assigned or transferred without the written order for service and consent of the City.

#### AGENTS CANNOT MODIFY AGREEMENT

No agent has power to amend, modify, alter, or waive any of these TERMS AND CONDITIONS, or to bind the City by making any promises or representations not contained herein.

## SUPERSEDE PREVIOUS TERMS AND CONDITIONS

These TERMS AND CONDITIONS supersede all TERMS AND CONDITIONS, under which the City has previously supplied electric service.

#### DISCONTINUANCE OF SERVICE

The City reserves the right to refuse or discontinue service to any Applicant or customer for (a) noncompliance with these Rules and Regulations, (b) for refusing or neglecting to provide reasonable access to the premises, (c) when the Applicant is indebted to the City for service, (d) for noncompliance with any applicable state, municipal, or other code, rule or regulation, (e) for nonpayment of bills, or (f) for fraudulent or illegal use of service. The City shall discontinue service when a dangerous condition is found to exist on the customer's premises.

When service has been discontinued for any of the reasons stated above, service shall not be restored until the City has been paid in full for the cost of service rendered (which may be estimated by the City if actual usage cannot be determined) and reimbursed for the estimated cost to the City incurred by reason of the discontinuance, and if service is restored, for reconnection. For any customer whose service has been discontinued for nonpayment of bills, \$10.00 shall be charged for reconnecting service during regular scheduled working hours and \$20.00 for reconnecting service during other than regular scheduled working hours or as specifically set out in applicable Ordinance or subsequent modifications.

When service has been discontinued as a result of fire or other structural damage, the Customer's electrical equipment shall be inspected and passed by a licensed Electrical Inspector prior to restoration of service.

The City reserves the right to discontinue a customer's service when that service causes serious fluctuations or interruptions to services of other customers.

When service has been discontinued for any of the above reasons, the City shall not be responsible for any damages that may result therefrom.

Discontinuance or refusal of service shall be in addition to, and not in lieu of, any other rights or remedies available to the City.

#### SPECIAL RULES FOR ELECTRIC SERVICE

## (1) EXTENSION OF SERVICE TO NEW SUBDIVISIONS

When electric lines are proposed to be built into a subdivision, which subdivision is subject to the jurisdiction of a public commission, board, committee or other agency which may zone or otherwise regulate the use of the land in the area and requires a plat (or plan) of the subdivision, the subdivider or those responsible for development of the project shall furnish the Department with plats (or plan) of the subdivision showing street and lot locations with utility easements as required.

Said plats (or plan) shall have been approved by above named group or agencies. Said plats (or plan) shall also have been duly recorded in the office of the Nelson County Clerk by the owner dedicating all easements and right-of-ways to public use.

## (2) UNDERGROUND INSTALLATIONS

Underground installations shall be in accord with City rules governing such installations.

## (3) ELECTRIC SERVICE ENTRANCE REQUIREMENTS

(a) The location of all electrical service entrances and metering equipment must be approved by the City and no wiring affected by the service entrance or meter locations shall be installed until these locations have been approved. All service entrances must be so located as to facilitate proper connections and to provide adequate clearances according to the National Electric Safety Code, latest revision, or according to the table below.

MINIMUM VERTICAL CLEARANCES FOR SERVICE CONDUCTORS

Voltage Between Conductors	At Point OF Attachment To	Above Streets, Roads Alley Or Other	Above Residential Driveways	Above Buildings
0-250	House (1) 12 Ft. (3)	Public Ways 18 Ft.	15 Ft.	8 Ft. (2)
250-500	12 Ft.	18 Ft.	15 Ft.	8 Ft.

- (1) These clearances must be maintained over any generally accessible areas such as porches, stoops, steps, etc., which may be above ground level.
- (2) If the roof of the building cannot be readily walked upon, this clearance may be reduced to three feet.
- (3) The point of attachment of a service drop should not be more than 30 feet above ground level, unless a greater height is necessary to insure proper clearance of the service line.
- (b) All new single phase electric wiring installations and all existing single phase wiring installations at the time of any alteration must be wired for a minimum of 120/240 volts, 3 wire, 100 ampere service; except an electric installation supplying a structure with useable floored area not in excess of 500 square feet, requiring not more than two branch circuits of 15 amperes capacity each, may be wired for 120 volts, 2 wire, 30 ampere service.
- (c) Service entrances wired for three phase, 120/240 volt service shall have the high voltage-to-ground phase, i.e., "wild leg", installed on the rightmost terminal of the meter base, as viewed facing the installation.
- (d) New and other applicable service entrances must pass an inspection by a licensed Electrical Inspector before service will be provided. A copy of the inspection certificate must be submitted to the City's Utility Department as notice that the service has passed inspection.
- (e) Single phase services, supplied by a three phase, four-wire network distribution of 120/208 volts, will be metered by the City with a 2-stator, network meter. An appropriate 5-terminal meter base shall be installed for such single phase services.

Should such a location, existing or new, be found to have an inappropriate 4-terminal 120/240 volt meter base, the City reserves the right to deny or discontinue service until a network meter base is installed.

(f) Unless otherwise provided, all single phase meter bases shall be supplied by the Customer as a part of his or her service entrance equipment.

All three phase services less than or equal to 400 amps shall be metered by the City with socket or bolt-in self-contained metering. The Customer shall provide the appropriate meter base according to City specifications.

On all self-contained, overhead services, the point of connection to the City's service equipment shall be the weatherhead. The Customer is responsible for providing necessary attachment points on their structure for the City's service wire. The City will install, own and maintain the meter.

- (g) On secondary metered locations where instrument transformers are used, the Customer shall be responsible for all secondary facilities past the point of metering, unless otherwise provided. The City shall provide the meter, meter cabinet, and instrument transformers. If metering point is at the Customer's building, the Customer is responsible for meter cabinet installation to City specifications. If the point of metering is at the transformer service pole, the City shall install said equipment, however, the Customer is then responsible for providing and installing the secondary facilities to the building.
- (h) The City reserves the right to limit an individual single-phase service entrance's connected capacity to 1000 amps. Individual locations requiring greater than 1000 amps, single phase, are strongly encouraged to re-evaluate load requirements or install three phase equipment and facilities.
- (i) The City reserves the right to require the balancing of the load on 3 wire and 3 phase systems.
- (4) TEMPORARY OR CONSTRUCTION POWER REQUIREMENTS

- (a) Customer will furnish and install support (stub) for installation of the Department's meter base and service attachment and all other necessary equipment other than meter base, service attachment and service cable.
- (b) The Department will furnish the meter base, meter, service attachment and service cable.
- (c) Extraordinary temporary construction power requirements will be evaluated on a case-by-case basis.

## (5) CONDITIONS OF RENDERING SERVICE

The City shall have the right to refuse connection and at any time to discontinue service being rendered to any facilities if such facilities are not in accordance with the City's Rules and Regulations. The City, in rendering electrical service to the facilities of the Customer shall be relieved from responsibility for any damage that may result from rendering such service. Disconnection shall not be considered as a cancellation of the agreement and shall not relieve the Customer of any minimum or other guarantees.

## (6) INCREASE OF LOAD AND CHANGES

The Department shall be notified prior to:

- a) The increase of service panel capacity at an existing Customer's location.
- b) Addition of major electrical equipment that causes the Customer's load to exceed seventy-five percent (75%) of existing rated service panel capacity.
- c) Any other substantial increases in load or changes that affect the City's service equipment.

## (7) SPECIAL CHARGES

The following charges will be applied uniformly throughout the City's service area. Each charge reflects only that revenue required to meet associated expenses.

#### RETURNED CHECK CHARGE

In those instances where a Customer renders payment to the City by check which is not honored upon deposit by the City, the Customer will be charged \$10.00 to cover the additional processing costs.

#### METER TEST CHARGES

Where the test of a meter is requested (during normal working) hours by a Customer, the Customer will be charged as specified below to cover the test and transportation costs:

- (a) Single-Phase Meter \$ 5.00
- (b) Poly-Phase Meter \$30.00

#### RECONNECTION CHARGE

To reconnect a service that has been disconnected for nonpayment of bills or for violation of the City's Rules and Regulations, the Customer will be charged \$10.00 for reconnection during regular scheduled working hours or \$20.00 for reconnection at any other time or as set out in applicable Ordinance or subsequent modifications.

(REFERENCE: See Page <u>6</u> "Discontinuance of Service")

## (8) RULES PERTAINING TO PRIMARY METERED LOCATIONS

## A) Industrial or Large Commercial/Institutional

These locations have enough KVA capacity, multi-service primary facilities or unwieldy secondary structures that makes primary metering more practical and economical. Unless specifically requested by the Customer, such locations shall be primary metered and shall be eligible for the

City's E4 primary rate. The E4 rate, in general, shall apply to these such locations except as outlined below. The City, except as otherwise provided, shall own and maintain the primary facilities and transformers in these installations. Other primary metered locations when requested by the Customer, shall be only by special contract agreed to by Customer and Department and approved by City Council

## B) Multiple Service -- Single Primary Locations

At these locations, the Customer has a need for three phase power services of different secondary voltages or needs a separate single phase lighting circuit not available from the three phase service. While such installations are eligible for the E4 primary delivery rate, unless the Customer's usage regularly exceeds the \$1,000.00 E4 minimum, the E3 or E2 commercial secondary rate shall be applied, except as otherwise provided. The City shall own and maintain the primary facilities and transformers at such locations.

## C) Multiple Service -- Multiple Primary Locations

These locations have primary distribution facilities supplying multiple points of service beyond the primary delivery point. While such installations are eligible for the E4 primary delivery rate, unless the Customer's usage regularly exceeds the \$1,000.00 E4 minimum, the E3 or E2 commercial secondary rate shall be applied except as otherwise provided. The Customer shall own and maintain all primary facilities past the point of primary metering, however, the Customer can contract the City to perform repairs and maintenance as needed.

## (9) RULES RELATING TO APPLICATION OF RESIDENTIAL RATE SCHEDULES

1. Residential rates are based on service to single family units and are not applicable to multi-family dwellings served through a single meter. Where two or more families occupy a residential building the City will require, as a condition precedent to the application of the residential rate, that the wiring in the building be so arranged as to permit each family to be served through a separate meter. Otherwise, electric service rendered to a multi-family residential building through a single meter will be classified as commercial and billed on the basis of service to one Customer under an applicable commercial rate.

- 2. A residential building used by a family as a home, which is also used to accommodate roomers or boarders for compensation, shall be billed as commercial rate.
- 3. If a residential Customer's garage, workshop or other outbuildings are located at such distance from his residence as to make it impracticable to supply service thereto through his residential meter, the separate meter required to measure service to such remotely located buildings will be considered a separate service contract and billed as a separate Customer.
- 4. Single phase power service used for domestic purposes will be permitted under the residential rate when measured through the residential meter to the extent and subject to the conditions set forth in Motor Rules and Regulations which are deemed imperative to avoid violent voltage fluctuation which would result in impairment of lighting service.
- 5. No three phase service will be rendered to residential Customers except under applicable rates, facilities permitting.

#### MOTOR RULES AND REGULATIONS

#### **GENERAL**

To assure all Customers of uniform, well regulated service, it is necessary that the following motor regulations and general information be adhered to for installations on City lines. The use of incorrect motors and starting equipment causes flickering of lights when used on circuits supplying both lighting and power, and may result in interruptions to service, interference with proper operation of other equipment or abnormal power costs due to excessive starting current. To assist Customers in obtaining equipment best suited for a particular operation at minimum investment and operating costs, these regulations and general information are prepared for the guidance of customers, dealers, jobbers, manufacturers and City representatives.

All special applications of motors not covered by these regulations should be discussed with the Engineering Department of the City and approval obtained before equipment is purchased or installed.

In the case of hoists, elevator motors or other similar installations whose load characteristics cause intermittent or violent fluctuations in electrical load, the City reserves the right to require the Customer to install, at his own expense, such wiring and equipment as is necessary to reasonably limit the intermittence and fluctuation and to prevent undue interference with the City's service. For loads of this nature, the difference between the maximum and minimum effective value of the pulsating current of any motor shall not exceed 50% of the rated full load current of the motor.

The City reserves the right to inspect and test all motors and other devices and apparatus which are owned by the Customer and which are, or shall be, connected to the City's lines. Tests are for purpose of determining starting current, power factor, efficiency and other characteristics which may affect the service of other Customers or cause undue disturbance to the City's system.

The Customer shall make formal application for type of service and voltage desired.

#### ALTERNATING CURRENT MOTORS

- (A) Manual start motors of on HP or less, and automatically controlled motors of 3/4 HP or less, may be operated at either 120 or 240 volts, single phase, on lighting services and meters.
- (B) Except as provided in (A), motors larger than 3/4 HP and not larger than 5 HP shall be connected to 240 volt single phase service except in the following cases:
- (1) Three phase service may be furnished where the Customer has justifiable reason for needing three phase service and guarantees sufficient revenue to justify the investment for such service. (It is recommended that no installations be made where the revenue so guaranteed will be much in excess of average service bills.)
- (2) Where the Customer is served by a three phase, four- wire network distribution of 120/208 volts and where this service is available, the motor shall be designed for operation at 208 volts. The Customer may use single phase 208 volt motors of 5 HP or less and three phase motors that conform with allowable starting currents.

- (C) Motors larger than 5 HP shall be connected to a standard three phase voltage of 208 volts or higher, and shall be provided with starting equipment to comply with the permissible starting currents as given under "Starting Currents."
- (D) The City reserves the right to require the Customer to furnish, at his own expense, suitable corrective equipment to maintain a power factor not less than 90% lagging.
- (E) The Department must be contacted when the installation of a 50 HP motor or larger is anticipated.

#### STARTING EQUIPMENT

- (A) All motors shall be protected with overload and under-voltage protective devices. These devices may be cut out of the circuit during the starting of manual start motors only.
- (B) All motors larger than 2 HP shall have no-voltage-release starting equipment.
- (C) All motors shall comply with the permissible starting currents as given under "Starting Currents." Current limiting starters shall be used when necessary to comply with the allowable starting currents.
- (D) In group motor installations supplied from three phase service, the current limiting starters ordinarily required for the small motors may be omitted when such omission will not result in a starting current, either by individual motor or groups of motors, in excess of the permissible maximum for the largest motor of the group.

#### STARTING CURRENT

The following tables set forth the maximum permissible values of blocked rotor current as measured on the line side of motor starting equipment. The free rotor starting current as measured by a well damped ammeter shall not exceed three-fourths of the maximum allowable blocked rotor amperes stated in the tables.

The free rotor starting current for three phase motors connected to the City's three phase four wire 120/208 volt distribution system shall not exceed the values listed below under three phase 120/208 systems.

When the starting time, frequency of starts and distribution system to the motor location allow an increase in the following blocked-rotor amperes, this increase may be determined and authorized by the Department upon evaluation of the area in which motor will be located.

# STARTING CURRENTS THREE PHASE 120/208 VOLT SYSTEMS

Three phase motors of all types connected to the City's alternating current three phase, four wire 120/208 volt distribution system shall be subject to the following requirements governing starters:

- (1) The starting device must not open the circuit during the starting period.
- (2) For motor installations where the total motor and load will create an estimated 15 minute demand not greater than 50 KW, the momentary starting current shall not exceed 175 amperes. (Equivalent to 10 HP across-the line start.)
- (3) For motor installations where the total motor and other load will create an estimated 15 minute demand greater than 50 KW, but not exceeding 200 KW, the momentary starting current of any motor installed shall not exceed 175 amperes plus 1 ampere for each KW demand above 50 KW.
- (4) For motor installations where the total motor and other load will create an estimated 15 minute maximum demand greater than 200 KW, the momentary starting current of any motor installed shall not exceed 350 amperes (Equivalent to 25 HP across-the-line start).

If the momentary starting current of any such motor exceeds the maximum permitted for it under the foregoing regulations, the City will require the motor to be equipped with a starting device that will limit the starting current to increments, each of which is within the permissible maximum designated and at intervals of not less than one second. TABULATED ALLOWED STARTING CURRENTS

## SINGLE PHASE, 120 VOLT, AC MOTORS

Full Load Amps Per Terminal	· ·	Maximum Allowable Blocked Rotor I Amps For The Following Size Of Service Entrance	
		100 Amps and over	Less Than 100 Amps
6	1 /3	31	31
8	1 /2	45	45
10	3 /4	61	
13 (manual start only with Department confirmation)	1	70	

## SINGLE PHASE, 240 VOLT, AC MOTORS

Full Load Amps Per Terminal	Approximate HP	Maximum allowable Blocked Rotor Amps
3.5	1/2	23
5.0	3/4	31
7.0	1	35
10.0	11/2	40
12.0	2	50
16.0	3	70

(Department confirmation required for following:)

		Automatic Control	Manual Control
25.0	5	70 amps	105 amps

THREE PHASE, 240 VOLT, AC MOTORS Maximum Allowable Blocked Rotor Amps (See 1)

Full Load Amps Per	Approximate HP	*Frequently Started	**Infrequently Started
Terminal		Motors	Motors
6.5	2	50(L.S.)	50(L.S.)
9.5	3	60(L.S.)	60(L.S.)
16.5	5	90(L.s.)	90(L.S.)
23.0	7.5	120(L.S.)	120(L.S.)
30.0	10	150(L.S.)	150(L.S.)
43	15	175	220(L.S.)
55	20	190	290(L.S.)
68	25	240	365(L.S.)

## (Department confirmation required for following:)

Full Load Amps Per	Approximate HP	*Frequently Started	**Infrequently Started
Terminal		Motors	Motors
80	30	290	435(L.S.)
105	40	350	580(L.S.)

The following values are allowed reduced starting currents and are allowable only where existing facilities permit. The Department shall be contacted to determine the permissible starting currents at each location.

Full Load Amps Per	Approximate HP	*Frequently Started	**Infrequently Started
Terminal		Motors	Motors
130	50	435	600
155	60	520	650
190	75	590	720
250	100	660	960
310	125	760	1100
370	150	880	1300
425	175	1000	1320
490	200	1000	1350

(1) NOTE: (L.S.) indicates across the line starting currents. Other values are starting currents with reduced voltage starters.

\*Frequently started includes motors which start more than six times each day but not more often than once each minute. This includes such apparatus as elevator motors, automatic pumps, air compressors, air conditioning, ice machines, etc.

\*\*Infrequently started motors include motors which start less than seven times in a 24-hour period and not more than once between 11 A.M. and 2 P.M. and midnight. This includes such apparatus as motor generators, fans, pumps, etc.

NOTE: The Department shall be consulted for the starting current values on all motors over 200 HP.

For three phase motors the permissible maximum blocked-rotor amperes will decrease in direct proportion to the increase in the motor voltage.

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Temporary Or

Construction Power Requirements

**Conditions of Rendering Service** 

Increase of Load and charges

**AVAILABILITY** 

A copy of the City's Rates and Rules and Regulations (Terms and Conditions) are available for public inspection at the office of the City Clerk.

#### **EXISTING ORDINANCES**

These RULES AND REGULATIONS are a companion document to existing City ordinances governing the supply of electric service in the City of Bardstown and as such are secondary to the rates, charges and policies set therein.

## APPLICATION FOR SERVICE

All form applications for service will be made on the City's standard ORDER FOR SERVICE form and/or Contract form and will be signed by the Customer, or his duly authorized agent, and accepted by the City before service is supplied by the City. Contract forms will be signed whenever there is a rider or special agreement with the Customer.

Residential Customers in good standing may provide a signed ORDER FOR SERVICE after service is provided, however, failure to provide an acceptable Order by the agreed date may result in discontinuance of service.

A separate ORDER FOR SERVICE and/or Contract will be made for each class of service at each separate location.

These TERMS AND CONDITIONS apply to all Customers receiving service from the City.

#### RATES

The classifications of service and their rate schedules are contained in the City's ordinance regarding electric rates and charges.

#### **OPTIONAL RATES**

The conditions under which rates are applicable to the requirements of particular customers are plainly set forth in the City's published rate schedules. However, the choice of rates within the E2 and E3 Classes lies with the Customer.

The City will, at any time, upon written request, advise any existing or potential E2 or E3 Customer as to the rate best adapted to service requirements as defined by the Customer, but the City does not assume responsibility for the selection of such rate or for the continuance of the lowest annual cost under the rate selected.

From time to time, the E2 or E3 Customer should investigate his operating conditions with a view to determining desirable changes from either commercial available rate to the other. The City, lacking knowledge of changes that may occur at any time in the these Customer's operating conditions, does not assume responsibility that E2 or E3 Customers will be served under the most favorable rate, nor will the City make refunds covering the difference between the charges under the rate in effect and those under the other rate applicable to the same service.

An E2 or E3 Customer, having selected the rate adapted to his service, may not change to the other rate within a 12-month period unless there should be a substantial change in the character or conditions of his service. A new E2 or E3 Customer or existing E2 or E3 Customer having substantial change in the use of electricity will be given reasonable opportunity to determine his service requirements before definitely selecting the most favorable rate therefore.

#### CUSTOMER'S INSTALLATION

All wiring and other electrical equipment on the premises, furnished by the Customer, will be maintained by the Customer at all times in conformity with the requirements of the constituted authorities and with the TERMS AND CONDITIONS of the City.

#### OWNER'S CONSENT TO OCCUPY

The City expects the Customer to provide easements necessary for the provision of service that are mutually acceptable to both the City and the Customer. In the case the Customer is not the owner of the premises or of the intervening property between the premises and the City's lines, the Customer will obtain from the property owner or owners the necessary consent to install and maintain in or over said premises all such wires and electrical equipment as are necessary or convenient for supplying electric service to the Customer.

## **ACCESS TO PREMISES**

The City will have the right of access to the Customer's premises at all reasonable times for the purpose of installing, reading, inspecting, or repairing any meters, devices, and other equipment used in connection with its supply of electric service, or for the purpose of removing its property and for all other proper purposes.

#### **METERING**

The electricity used will be measured by a meter or meters to be furnished and installed by the City at its expense and all bills will be calculated upon the registration of said meters. When service is supplied by City at more than one delivery point on the same premises each delivery point will be metered and billed separately on the rate applicable. Meters include all measuring instruments. Meters will be located as near as possible to the service entrance and at eye level on the ground floor of the building, in a clean, dry, safe and easily accessible place, free from vibration, agreed to by the City.

#### PROTECTION OF CITY'S ELECTRICAL PROPERTY

Customers will be held responsible for tampering, interfering with, breaking of seals of meters, or other electrical equipment of the City installed on the Customer's premises, and will be held liable for same according to law. The Customer hereby agrees that no one except the employees of the City shall be allowed to make any internal or external adjustments of any meter or any other piece of apparatus which shall be the property of the City.

#### **EXCLUSIVE SERVICE ON INSTALLATION CONNECTED**

Except in cases where the Customer has a contract with the City for reserve or auxiliary service, no other electric light or power service will be used by the Customer on the same installation in conjunction with the City's service, either by means of a throw-over switch or any other connection.

The Customer will not sell the electricity purchased from the City to any other Customer, Company, or person, and Customer will not deliver electricity purchased from the City to any connection wherein said electricity is to be used off of Customer's premises or by persons over whom Customer has no control.

#### **EXTENSION OF SERVICE**

The main distribution lines of the City will be extended to such points as provide sufficient load to justify such extensions or in lieu of sufficient load, the City may require such definite and written guarantees from a Customer, or group of Customers, in addition to any minimum payments required as may be necessary. This requirement may also be made covering the repayment, within a reasonable time, of the cost of tapping such existing lines for light or power service or both.

#### LIABILITY

The Customer assumes all responsibility for the electric service upon the Customer's premises at and from the point of delivery of electricity and for the wires and equipment used in connection therewith, and will protect and save the City harmless from all claims for injury or damage to persons or property occurring on the Customer's premises or at and from the point of delivery of electricity,

occasioned by such electricity or said wires and equipment, except where said injury or damage will be shown to have been occasioned by such electricity or said wires and equipment, except where said injury or damage will be shown to have been occasioned solely by the negligence of the City.

## **CONTINUOUS SERVICE**

The City will not be responsible in damages for failure to supply electric service or for interruptions or reversal of the supply if such failure is without willful fault on its part.

#### PROTECTION OF SERVICE

The City cannot render service to any Customer for the operation of any device that has a detrimental effect upon the service rendered to other Customers.

The City, however, will endeavor to cooperate with its Customers when consulted concerning the intended use of any electric device.

Where the Customer's use of service is intermittent or subject to violent fluctuations, the City reserves the right to require the Customer to furnish, at his own expense, suitable equipment to reasonably limit such intermittence or fluctuation.

#### METER TESTING

Any Customer that believes his or her meter is registering incorrectly can request the City to pull the meter and have it tested at the customer's expense. Should the meter test more than two percent (2%) fast, the Customer shall be reimbursed by the City for testing expenses as outlined herein.

For meters registering over two percent (2%) fast, the City will make an adjustment for the Customer's previous twelve (12) months of usage.

## BILLING FOR SERVICE

- (a) All bills will be based upon consecutive meter readings made in accordance with the City's meter reading schedule, and shall be taken as nearly as may be practicable either every 30 days for monthly billing or as otherwise specified. Bills will be processed and mailed at the first of the month.
- (b) Failure to receive a bill in no way exempts Customer from the provisions of these TERMS AND CONDITIONS.
- (c) When the City is unable to read a meter after reasonable effort, the Customer will be billed at the average of the three immediately preceding monthly bills and the billing adjusted when the meter is read.
- (d) Fuel clause adjustments (+/-) are in addition to the minimum.
- (e) Customer's bill will be due by the 15th of the month for the prior month's consumption as determined in (a), as described in the City's ordinance regarding electric rates and charges.

#### POWER FACTOR

- (a) The reference in this section to "power factor" or "pf" is in accordance with the accepted technical meaning of this term.
- (b) The City expects the customer's electrical system to be at or near unity power factor. However, the City will permit the customer's system during normal operation, to have a power factor not lower than 90% either lagging or leading. Where the customer's power factor is less than 90%, the City reserves the right to require the customer to furnish, at his own expense, suitable corrective equipment to maintain a power factor of 90% or higher. At the City's option, in lieu of the customer providing the above corrective equipment, the City may add an adjustment to the maximum measured KW load for billing purposes each month when the power factor is less than 90%, in accordance with the following formula: (BASED ON POWER FACTOR MEASURED AT TIME OF MONTHLY MAXIMUM KW LOAD)

(Maximum Measured KW Load x 90%)

- (Maximum Measured KW Load) = pf Correction KW

Power Factor (in percent)

(c) The City reserves the right to install a KVA meter or metering equipment of a type whereby power factor can be determined for use in the above formula.

#### **DEPOSIT**

The City shall require the Customer to make and maintain a reasonable deposit to secure the prompt payment of bills. A deposit will normally be required prior to service being rendered. The terms of the required deposit are outlined in the City's ordinance regarding electric rates and charges.

MOTOR INSTALLATIONS See Page No. .

#### ASSIGNMENT

No order for service, agreement or contract for service may be assigned or transferred without the written order for service and consent of the City.

## AGENTS CANNOT MODIFY AGREEMENT

No agent has power to amend, modify, alter, or waive any of these TERMS AND CONDITIONS, or to bind the City by making any promises or representations not contained herein.

## SUPERSEDE PREVIOUS TERMS AND CONDITIONS

These TERMS AND CONDITIONS supersede all TERMS AND CONDITIONS, under which the City has previously supplied electric service.

## DISCONTINUANCE OF SERVICE

The City reserves the right to refuse or discontinue service to any Applicant or customer for (a) noncompliance with these Rules and Regulations, (b) for refusing or neglecting to provide reasonable access to the premises, (c) when the Applicant is indebted to the City for service, (d) for noncompliance with any applicable state, municipal, or other code, rule or regulation, (e) for nonpayment of bills, or (f) for fraudulent or illegal use of service. The City shall discontinue service when a dangerous condition is found to exist on the customer's premises.

When service has been discontinued for any of the reasons stated above, service shall not be restored until the City has been paid in full for the cost of service rendered (which may be estimated by the City if actual usage cannot be determined) and reimbursed for the estimated cost to the City incurred by reason of the discontinuance, and if service is restored, for reconnection. For any customer whose service has been discontinued for nonpayment of bills, \$10.00 shall be charged for reconnecting service during regular scheduled working hours and \$20.00 for reconnecting service during other than regular scheduled working hours or as specifically set out in applicable Ordinance or subsequent modifications.

When service has been discontinued as a result of fire or other structural damage, the Customer's electrical equipment shall be inspected and passed by a licensed Electrical Inspector prior to restoration of service.

The City reserves the right to discontinue a customer's service when that service causes serious fluctuations or interruptions to services of other customers.

When service has been discontinued for any of the above reasons, the City shall not be responsible for any damages that may result therefrom.

Discontinuance or refusal of service shall be in addition to, and not in lieu of, any other rights or remedies available to the City.

#### SPECIAL RULES FOR ELECTRIC SERVICE

(1) EXTENSION OF SERVICE TO NEW SUBDIVISIONS

When electric lines are proposed to be built into a subdivision, which subdivision is subject to the jurisdiction of a public commission, board, committee or other agency which may zone or otherwise regulate the use of the land in the area and requires a plat (or plan) of the subdivision, the subdivider or those responsible for development of the project shall furnish the Department with plats (or plan) of the subdivision showing street and lot locations with utility easements as required.

Said plats (or plan) shall have been approved by above named group or agencies. Said plats (or plan) shall also have been duly recorded in the office of the Nelson County Clerk by the owner dedicating all easements and right-of-ways to public use.

## (2) UNDERGROUND INSTALLATIONS

Underground installations shall be in accord with City rules governing such installations.

## (3) ELECTRIC SERVICE ENTRANCE REQUIREMENTS

(a) The location of all electrical service entrances and metering equipment must be approved by the City and no wiring affected by the service entrance or meter locations shall be installed until these locations have been approved. All service entrances must be so located as to facilitate proper connections and to provide adequate clearances according to the National Electric Safety Code, latest revision, or according to the table below.

#### MINIMUM VERTICAL CLEARANCES FOR SERVICE CONDUCTORS

Voltage Between	Above Ground And	Above Streets,	Above	Above Buildings
Conductors	At Point OF	Roads Alley	Residential	
	Attachment To	Or Other	Driveways	
	House (1)	Public Ways		
0-250	12 Ft. (3)	18 Ft.	15 Ft.	8 Ft. (2)
250-500	12 Ft.	18 Ft.	15 Ft.	8 Ft.

- (1) These clearances must be maintained over any generally accessible areas such as porches, stoops, steps, etc., which may be above ground level.
- (2) If the roof of the building cannot be readily walked upon, this clearance may be reduced to three feet.
- (3) The point of attachment of a service drop should not be more than 30 feet above ground level, unless a greater height is necessary to insure proper clearance of the service line.
- (b) All new single phase electric wiring installations and all existing single phase wiring installations at the time of any alteration must be wired for a minimum of 120/240 volts, 3 wire, 100 ampere service; except an electric installation supplying a structure with useable floored area not in excess of 500 square feet, requiring not more than two branch circuits of 15 amperes capacity each, may be wired for 120 volts, 2 wire, 30 ampere service.
- (c) Service entrances wired for three phase, 120/240 volt service shall have the high voltage-to-ground phase, i.e., "wild leg", installed on the rightmost terminal of the meter base, as viewed facing the installation.
- (d) New and other applicable service entrances must pass an inspection by a licensed Electrical Inspector before service will be provided. A copy of the inspection certificate must be submitted to the City's Utility Department as notice that the service has passed inspection.
- (e) Single phase services, supplied by a three phase, four-wire network distribution of 120/208 volts, will be metered by the City with a 2-stator, network meter. An appropriate 5-terminal meter base shall be installed for such single phase services.

Should such a location, existing or new, be found to have an inappropriate 4-terminal 120/240 volt meter base, the City reserves the right to deny or discontinue service until a network meter base is installed.

(f) Unless otherwise provided, all single phase meter bases shall be supplied by the Customer as a part of his or her service entrance equipment.

All three phase services less than or equal to 400 amps shall be metered by the City with socket or bolt-in self-contained metering. The Customer shall provide the appropriate meter base according to City specifications.

On all self-contained, overhead services, the point of connection to the City's service equipment shall be the weatherhead. The Customer is responsible for providing necessary attachment points on their structure for the City's service wire. The City will install, own and maintain the meter.

- (g) On secondary metered locations where instrument transformers are used, the Customer shall be responsible for all secondary facilities past the point of metering, unless otherwise provided. The City shall provide the meter, meter cabinet, and instrument transformers. If metering point is at the Customer's building, the Customer is responsible for meter cabinet installation to City specifications. If the point of metering is at the transformer service pole, the City shall install said equipment, however, the Customer is then responsible for providing and installing the secondary facilities to the building.
- (h) The City reserves the right to limit an individual single-phase service entrance's connected capacity to 1000 amps. Individual locations requiring greater than 1000 amps, single phase, are strongly encouraged to re-evaluate load requirements or install three phase equipment and facilities.
- (i) The City reserves the right to require the balancing of the load on 3 wire and 3 phase systems.
- (4) TEMPORARY OR CONSTRUCTION POWER REQUIREMENTS
- (a) Customer will furnish and install support (stub) for installation of the Department's meter base and service attachment and all other necessary equipment other than meter base, service attachment and service cable.
- (b) The Department will furnish the meter base, meter, service attachment and service cable.

(c) Extraordinary temporary construction power requirements will be evaluated on a case-by-case basis.

## (5) CONDITIONS OF RENDERING SERVICE

The City shall have the right to refuse connection and at any time to discontinue service being rendered to any facilities if such facilities are not in accordance with the City's Rules and Regulations. The City, in rendering electrical service to the facilities of the Customer shall be relieved from responsibility for any damage that may result from rendering such service. Disconnection shall not be considered as a cancellation of the agreement and shall not relieve the Customer of any minimum or other guarantees.

## (6) INCREASE OF LOAD AND CHANGES

The Department shall be notified prior to:

- a) The increase of service panel capacity at an existing Customer's location.
- b) Addition of major electrical equipment that causes the Customer's load to exceed seventy-five percent (75%) of existing rated service panel capacity.
- c) Any other substantial increases in load or changes that affect the City's service equipment.

## (7) SPECIAL CHARGES

The following charges will be applied uniformly throughout the City's service area. Each charge reflects only that revenue required to meet associated expenses.

#### RETURNED CHECK CHARGE

In those instances where a Customer renders payment to the City by check which is not honored upon deposit by the City, the Customer will be charged \$10.00 to cover the additional processing costs.

#### METER TEST CHARGES

Where the test of a meter is requested (during normal working) hours by a Customer, the Customer will be charged as specified below to cover the test and transportation costs:

- (a) Single-Phase Meter \$ 5.00
- (b) Poly-Phase Meter \$30.00

#### RECONNECTION CHARGE

To reconnect a service that has been disconnected for nonpayment of bills or for violation of the City's Rules and Regulations, the Customer will be charged \$10.00 for reconnection during regular scheduled working hours or \$20.00 for reconnection at any other time or as set out in applicable Ordinance or subsequent modifications.

(REFERENCE: See Page 6 "Discontinuance of Service")

## (8) RULES PERTAINING TO PRIMARY METERED LOCATIONS

## A) Industrial or Large Commercial/Institutional

These locations have enough KVA capacity, multi-service primary facilities or unwieldy secondary structures that makes primary metering more practical and economical. Unless specifically requested by the Customer, such locations shall be primary metered and shall be eligible for the City's E4 primary rate. The E4 rate, in general, shall apply to these such locations except as outlined below. The City, except as otherwise provided, shall own and maintain the primary facilities and transformers in these installations. Other primary metered locations when requested by the

Customer, shall be only by special contract agreed to by Customer and Department and approved by City Council

## B) Multiple Service -- Single Primary Locations

At these locations, the Customer has a need for three phase power services of different secondary voltages or needs a separate single phase lighting circuit not available from the three phase service. While such installations are eligible for the E4 primary delivery rate, unless the Customer's usage regularly exceeds the \$1,000.00 E4 minimum, the E3 or E2 commercial secondary rate shall be applied, except as otherwise provided. The City shall own and maintain the primary facilities and transformers at such locations.

## C) Multiple Service -- Multiple Primary Locations

These locations have primary distribution facilities supplying multiple points of service beyond the primary delivery point. While such installations are eligible for the E4 primary delivery rate, unless the Customer's usage regularly exceeds the \$1,000.00 E4 minimum, the E3 or E2 commercial secondary rate shall be applied except as otherwise provided. The Customer shall own and maintain all primary facilities past the point of primary metering, however, the Customer can contract the City to perform repairs and maintenance as needed.

## (9) RULES RELATING TO APPLICATION OF RESIDENTIAL RATE SCHEDULES

- 1. Residential rates are based on service to single family units and are not applicable to multi-family dwellings served through a single meter. Where two or more families occupy a residential building the City will require, as a condition precedent to the application of the residential rate, that the wiring in the building be so arranged as to permit each family to be served through a separate meter. Otherwise, electric service rendered to a multi-family residential building through a single meter will be classified as commercial and billed on the basis of service to one Customer under an applicable commercial rate.
- 2. A residential building used by a family as a home, which is also used to accommodate roomers or boarders for compensation, shall be billed as commercial rate.

- 3. If a residential Customer's garage, workshop or other outbuildings are located at such distance from his residence as to make it impracticable to supply service thereto through his residential meter, the separate meter required to measure service to such remotely located buildings will be considered a separate service contract and billed as a separate Customer.
- 4. Single phase power service used for domestic purposes will be permitted under the residential rate when measured through the residential meter to the extent and subject to the conditions set forth in Motor Rules and Regulations which are deemed imperative to avoid violent voltage fluctuation which would result in impairment of lighting service.
- 5. No three phase service will be rendered to residential Customers except under applicable rates, facilities permitting.

#### MOTOR RULES AND REGULATIONS

#### **GENERAL**

To assure all Customers of uniform, well regulated service, it is necessary that the following motor regulations and general information be adhered to for installations on City lines. The use of incorrect motors and starting equipment causes flickering of lights when used on circuits supplying both lighting and power, and may result in interruptions to service, interference with proper operation of other equipment or abnormal power costs due to excessive starting current. To assist Customers in obtaining equipment best suited for a particular operation at minimum investment and operating costs, these regulations and general information are prepared for the guidance of customers, dealers, jobbers, manufacturers and City representatives.

All special applications of motors not covered by these regulations should be discussed with the Engineering Department of the City and approval obtained before equipment is purchased or installed.

In the case of hoists, elevator motors or other similar installations whose load characteristics cause intermittent or violent fluctuations in electrical load, the City reserves the right to require the Customer

to install, at his own expense, such wiring and equipment as is necessary to reasonably limit the intermittence and fluctuation and to prevent undue interference with the City's service. For loads of this nature, the difference between the maximum and minimum effective value of the pulsating current of any motor shall not exceed 50% of the rated full load current of the motor.

The City reserves the right to inspect and test all motors and other devices and apparatus which are owned by the Customer and which are, or shall be, connected to the City's lines. Tests are for purpose of determining starting current, power factor, efficiency and other characteristics which may affect the service of other Customers or cause undue disturbance to the City's system.

The Customer shall make formal application for type of service and voltage desired.

#### ALTERNATING CURRENT MOTORS

- (A) Manual start motors of on HP or less, and automatically controlled motors of 3/4 HP or less, may be operated at either 120 or 240 volts, single phase, on lighting services and meters.
- (B) Except as provided in (A), motors larger than 3/4 HP and not larger than 5 HP shall be connected to 240 volt single phase service except in the following cases:
- (1) Three phase service may be furnished where the Customer has justifiable reason for needing three phase service and guarantees sufficient revenue to justify the investment for such service. (It is recommended that no installations be made where the revenue so guaranteed will be much in excess of average service bills.)
- (2) Where the Customer is served by a three phase, four- wire network distribution of 120/208 volts and where this service is available, the motor shall be designed for operation at 208 volts. The Customer may use single phase 208 volt motors of 5 HP or less and three phase motors that conform with allowable starting currents.
- (C) Motors larger than 5 HP shall be connected to a standard three phase voltage of 208 volts or higher, and shall be provided with starting equipment to comply with the permissible starting currents as given under "Starting Currents."

- (D) The City reserves the right to require the Customer to furnish, at his own expense, suitable corrective equipment to maintain a power factor not less than 90% lagging.
- (E) The Department must be contacted when the installation of a 50 HP motor or larger is anticipated.

#### STARTING EQUIPMENT

- (A) All motors shall be protected with overload and under-voltage protective devices. These devices may be cut out of the circuit during the starting of manual start motors only.
- (B) All motors larger than 2 HP shall have no-voltage-release starting equipment.
- (C) All motors shall comply with the permissible starting currents as given under "Starting Currents." Current limiting starters shall be used when necessary to comply with the allowable starting currents.
- (D) In group motor installations supplied from three phase service, the current limiting starters ordinarily required for the small motors may be omitted when such omission will not result in a starting current, either by individual motor or groups of motors, in excess of the permissible maximum for the largest motor of the group.

#### STARTING CURRENT

The following tables set forth the maximum permissible values of blocked rotor current as measured on the line side of motor starting equipment. The free rotor starting current as measured by a well damped ammeter shall not exceed three-fourths of the maximum allowable blocked rotor amperes stated in the tables.

The free rotor starting current for three phase motors connected to the City's three phase four wire 120/208 volt distribution system shall not exceed the values listed below under three phase 120/208 systems.

When the starting time, frequency of starts and distribution system to the motor location allow an increase in the following blocked-rotor amperes, this increase may be determined and authorized by the Department upon evaluation of the area in which motor will be located.

# STARTING CURRENTS THREE PHASE 120/208 VOLT SYSTEMS

Three phase motors of all types connected to the City's alternating current three phase, four wire 120/208 volt distribution system shall be subject to the following requirements governing starters:

- (1) The starting device must not open the circuit during the starting period.
- (2) For motor installations where the total motor and load will create an estimated 15 minute demand not greater than 50 KW, the momentary starting current shall not exceed 175 amperes. (Equivalent to 10 HP across-the line start.)
- (3) For motor installations where the total motor and other load will create an estimated 15 minute demand greater than 50 KW, but not exceeding 200 KW, the momentary starting current of any motor installed shall not exceed 175 amperes plus 1 ampere for each KW demand above 50 KW.
- (4) For motor installations where the total motor and other load will create an estimated 15 minute maximum demand greater than 200 KW, the momentary starting current of any motor installed shall not exceed 350 amperes (Equivalent to 25 HP across-the-line start).

If the momentary starting current of any such motor exceeds the maximum permitted for it under the foregoing regulations, the City will require the motor to be equipped with a starting device that will limit the starting current to increments, each of which is within the permissible maximum designated and at intervals of not less than one second. TABULATED ALLOWED STARTING CURRENTS

## SINGLE PHASE, 120 VOLT, AC MOTORS

Full Load Amps Per Terminal	1.1	Maximum Allowable Blocked Roto All Amps For The Following Size Of Service Entrance	
		' ·	Less Than 100 Amps
6	1 /3	31	31
8	1 /2	45	45
10	3 /4	61	
13 (manual start only with Department confirmation)	1	70	

## SINGLE PHASE, 240 VOLT, AC MOTORS

Full Load Amps Per Terminal	Approximate HP	Maximum allowable Blocked Rotor Amps
3.5	1/2	23
5.0	3/4	31
7.0	1	35
10.0	11/2	40
12.0	2	50
16.0	3	70

## (Department confirmation required for following:)

		Automatic Control	Manual Control
25.0	5	70 amps	105 amps

## THREE PHASE, 240 VOLT, AC MOTORS Maximum Allowable Blocked Rotor Amps (See 1)

Full Load Amps Per	Approximate HP	*Frequently Started	**Infrequently Started
Terminal		Motors	Motors
6.5	2	50(L.S.)	50(L.S.)
9.5	3	60(L.S.)	60(L.S.)
16.5	5	90(L.s.)	90(L.S.)
23.0	7.5	120(L.S.)	120(L.S.)
30.0	10	150(L.S.)	150(L.S.)
43	15	175	220(L.S.)
55	20	190	290(L.S.)
68	25	240	365(L.S.)

## (Department confirmation required for following:)

Full Load Amps Per	Approximate HP	*Frequently Started	**Infrequently Started
Terminal		Motors	Motors
80	30	290	435(L.S.)
105	40	350	580(L.S.)

The following values are allowed reduced starting currents and are allowable only where existing facilities permit. The Department shall be contacted to determine the permissible starting currents at each location.

Full Load Amps Per	Approximate HP	*Frequently Started	**Infrequently Started
Terminal		Motors	Motors
130	50	435	600

155	60	520	650
190	75	590	720
250	100	660	960
310	125	760	1100
370	150	880	1300
425	175	1000	1320
490	200	1000	1350

(1) NOTE: (L.S.) indicates across the line starting currents. Other values are starting currents with reduced voltage starters.

\*Frequently started includes motors which start more than six times each day but not more often than once each minute. This includes such apparatus as elevator motors, automatic pumps, air compressors, air conditioning, ice machines, etc.

\*\*Infrequently started motors include motors which start less than seven times in a 24-hour period and not more than once between 11 A.M. and 2 P.M. and midnight. This includes such apparatus as motor generators, fans, pumps, etc.

NOTE: The Department shall be consulted for the starting current values on all motors over 200 HP.

For three phase motors the permissible maximum blocked-rotor amperes will decrease in direct proportion to the increase in the motor voltage.