

**ORDINANCE 48-2006**

**ORDINANCE OF THE BOROUGH OF MADISON AMENDING CHAPTER 94 OF THE BOROUGH CODE ENTITLED "ELECTRIC UTILITY" TO AMEND THE RULES AND REGULATIONS OF THE ELECTRIC UTILITY DEPARTMENT AND SET FORTH REQUIREMENTS, FEES AND RATES FOR CUSTOMERS WHO FEED ELECTRICITY INTO MADISON'S ELECTRICAL SYSTEM**

**WHEREAS**, the Electric Utility Superintendent has recommended amending the Electric Utility Rules and Regulations in order to update them and to include a new section of rules for customers with self-generation equipment; and

**WHEREAS**, the Borough Electric Utility Attorney, Kirk Betts, Esq., has assisted in the preparation of the proposed Rules and Regulations.

**WHEREAS**, the Madison Borough Attorney, Joseph Mezzacca, Jr., has recommended that the amended Rules and Regulations be adopted by ordinance and incorporated into Chapter 94 as Appendix C.

**NOW THEREFORE, BE IT ORDAINED**, by the Council of the Borough of Madison, in the County of Morris and State of New Jersey as follows:

**SECTION 1**: Section 94-1 of the Borough Code entitled "Schedule of rates" shall have the following paragraph added:

The schedule of rates for customers who generate and feed electricity into Madison's electrical system, which is applicable to all service classifications, is set forth in Appendix A.

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**SECTION 2**: The following schedule shall be made a part of and added to the end of Appendix A to Chapter 94.

**BOROUGH OF MADISON**

**SCHEDULE OF RATES FOR CUSTOMERS WHO GENERATE AND FEED  
ELECTRICITY INTO MADISON'S ELECTRICAL SYSTEM**

Applicable to All Service Classifications:

An electric customer who obtains a permit from the Borough for installation of a system to generate and feed electricity to Madison's electrical system pursuant to §94-3 above, and in accordance with the Rules and Regulations of the electric utility department of the Borough of Madison shall pay for energy delivered at the same rate as others and the same customer class.

The Madison Borough Electric Department will:

1. Credit the self-generation customer for energy the Borough receives at the same kWh rate Madison pays for purchased power. This credit will be applied against the next monthly bill. If the credit amount is greater than the bill the remaining credit will be carried forward.

2. Pay the customer for credit held at the end of the twelve-payment cycle (January through December) at the current purchase power rate, leaving no outstanding balance. The Borough shall make this payment no later than January 31<sup>st</sup>.

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**SECTION 3:** Section 94-2 of the Borough Code entitled "Applicability of utility rules and regulations" is hereby amended as follows:

A. The procedures and practices of the Madison Electric utility and customer requirements shall be carried out in accordance with the terms and conditions of the rules and regulations of the electric utility of the Borough of Madison currently in effect and as amended from time to time by ordinance or resolution of the Madison Council.

B. The rules and regulations of the electric utility shall be as set forth in Appendix C annexed hereto and entitled "Borough of Madison - Rules and Regulations of the Electric Utility."

**SECTION 4:** Section 94-3 of the Borough Code shall read as follows:

§94-3. Requirements and fees for customers who install a system to generate and feed electricity into Madison's electrical system.

An electric utility customer who plans to install a generator to produce electricity on the customer side of the meter must comply with Section 6 Rules and Regulations of the Electric Utility Department of the Borough of Madison ([see Appendix C](#)) and:

Apply for service under the self-generation rules, pay the plan review fee of \$500 at the time of application and obtain the proper construction permits.

Acknowledge and accept the terms of this Schedule and the Rules and Regulations regarding the interconnection and operation of a Self-Generation system.

Pay for the purchase and installation of a special meter that measures both the amount of energy provided by the Borough and the amount of energy provided by the customer.

Enter into an agreement with the Borough of Madison as provided in section 6 of the Rules and Regulations of the Electric Utility Department of the Borough of Madison (see Appendix C).

**SECTION 5:** Section 94-4 of the Borough Code shall read as follows:

§ 94-4. Repealer.

All ordinances and amendments to ordinances establishing rates for the electric utility contrary to the provisions of this Article are hereby repealed and/or amended as required

**SECTION 6:** Section 94-5 of the Borough Code shall read as follows:

§94-5. Severability.

Each section of this article and every part of each section is an independent section or part of a section, and the holding of any section or a part thereof to be unconstitutional, void or ineffective for any cause shall not be deemed to affect the validity or constitutionality of any other section or part thereof.

**SECTION 7.** This ordinance shall take effect as provided by law.

ADOPTED AND APPROVED

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ELLWOOD R. KERKESLAGER, Mayor

Attest:

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MARILYN SCHAEFER, Borough Clerk

Introduced and passed: September 25, 2006  
Published, Madison Eagle: September 28, 2006  
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Published upon final adoption, Madison Eagle: October 19, 2006

**APPENDIX C**

**BOROUGH OF MADISON**

**ELECTRIC UTILITY DEPARTMENT**

**RULES AND REGULATIONS**

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MADISON BOROUGH ORDINANCE NO. 487 28-29

adopted June 9, 1947 and subsequent amendments and supplements thereto

## INTRODUCTION

The Electric Department of the Borough of Madison operates the municipal electrical distribution system to serve and benefit the residents and taxpayers of the community.

The Borough of Madison, a municipal corporation representing the people of Madison, is the sole owner of this municipal utility, the annual surplus from the net earnings of which is used entirely for municipal purposes, including the reduction of taxes.

In order to provide the best and safest electric service possible, it is essential that all interested persons be informed of the rules and regulations of the Electric Department, which must be strictly followed in the interest of safety and uniformity of good service.

This booklet, has, therefore, been prepared as a guide for those who desire to:

- A. Install new electric wiring, fixtures, or equipment.
- B. Add to, or alter existing wiring.
- C. Consume electric energy distributed by the Borough of Madison.

To facilitate use, and to be of maximum value, the material is presented in seven sections, viz;

1. Matters of general application.
2. Matters primarily of interest to consumers.
3. Matters primarily of interest to developers, builders, contractors, and electricians installing wiring, fixtures and appliances in homes and buildings.
4. Matters Primarily of Interest to Owners and Builders of Apartment Houses.
5. Matters Primarily of Interest to Owners and Operators of Commercial Establishments.

Rules for Customers with Self-Generation Equipment.

Madison Borough Ordinance No. 487, adopted June 9, 1947, and subsequent amendments and supplements thereto.

The rules, regulations, instructions and general information herein set forth are supplemental to the provisions of Ordinance No. 487, as amended and supplemented, and are intended to implement the same.

The Council of the Borough of Madison reserves the right to add to, amend or make deletions from these rules and regulations whenever necessary and the Electric Department should be consulted before planning or starting any electrical work.

In addition to the rules, regulations and information herein set forth, the Borough has, during the many years of the successful operation of its electrical utility, established certain service classifications and rate schedules, which are periodically reviewed and revised, in order that service and costs may compare favorably with those enjoyed by surrounding communities supplied by private utility companies.

All questions regarding these Rules and Regulations, as well as requests for information concerning service classifications and rate schedules, should be directed to the Electric Department at the Hartley Dodge Memorial, Kings Road, Madison, New Jersey.

The Electric Department will also furnish information to and cooperate in every way possible with consumers, builders, developers, contractors, electricians, and others desiring, or interested in, electrical service.



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DEFINITIONS OF SOME OF THE PRINCIPAL TERMS USED IN THE RULES AND REGULATIONS

1. APPROVED - with reference to an electrical installation, shall mean meeting the requirements of and acceptable to, an authorized inspector of the National Board of Fire Underwriters. With reference to equipment or material: as having the approval of a recognized laboratory, such as the Underwriters Laboratory, after test, or of a recognized acceptable authority after inspection, trial or general use.

2. UNDERWRITERS AUTHORIZED INSPECTION AGENCY - the Middle Department Association of Fire Underwriters.

3. BOROUGH - when used in these rules and regulations shall mean THE BOROUGH OF MADISON.

4. CUSTOMER - a present or prospective user of the Department's electric service.

5. DEPARTMENT - as used throughout this booklet refers to the Electric Department of the Borough of Madison.

6. DEPARTMENT PROPERTY - refers to transformers, network protectors, meters, meter cabinets, instrument transformers, and associated wiring and equipment furnished by the Department and placed in or on the customer's premises and which remain the property of the Department and will be removed from there when no longer required.

7. METER-READER - the employee of the Department authorized to enter customer's premises to

read meters.

8. METER-TESTER - the employee of the Department authorized to enter customer's premises for the testing and/or servicing of meters.

9. PORTABLE APPLIANCES - are considered to be the "PLUG-IN" type; of single phase; and not to consume more than 2000 watts; nor have operating characteristics causing an excess starting or initial load on the line.

10. REPRESENTATIVE - an employee of the Department authorized to handle transactions with

customers.

11. SERVICE - the supplying of electric energy by the Borough to the customer.

12. SERVICE CREW - is the designation of the Linemen of the Department authorized to enter customer's premises for testing voltage, meters, or for such other duties as are authorized and proper.

13. SERVICE DROP - the Department's wires connecting the customer's wiring to the Department's

pole and lines.

14. SERVICE ENTRANCE - the customer's wires, conduit and fittings between the service drop and the main entrance switch (usually inside the structure).

15. UNDERGROUND AREA - the area being served by Electric Underground conduits and conductors. (This area is gradually being expanded.)

16. CONSULTING ENGINEER TO ELECTRIC UTILITY- Consulting Engineer appointed by the Mayor and Council each year to provide Electric Utility Consulting.

#### 1. MATTERS OF GENERAL APPLICATION

1.01 No attachments of any kind may be made to the poles, structures, equipment or other property under the direction of the Electric Department.

1.02 Only duly authorized persons are permitted to climb poles or structures of the Electric Department.

1.03 Admission to the operations buildings, structures, and property under the control of the Electric Department is authorized only by written permission from the office.

1.04 The Borough cannot, and will not, be responsible in any way for failures, defects, deficiencies or inadequacies in consumer's wiring, fixtures or electrical equipment nor for any power loss, or damage which may result from such defects, deficiencies or inadequacies.

1.05 The Borough will not furnish electricity to, or for use upon, any premises located outside of the Borough limits.

1.06 The Borough does not guarantee uninterrupted service but will use reasonable care to provide an uninterrupted supply of electricity to customers premises. The Borough will not be liable in damages, direct or consequential for interruption to, or curtailment of customers' service supply by reason of acts of God, accidents, strikes, legal process, governmental interference or other causes beyond Borough control. The Borough will not be liable for damages, direct or consequential for interruption to, or curtailment of customers' service supply by reason of tree or wildlife contact or vehicle accidents involving utility poles. The Borough will not be liable for

damages, direct or consequential to customer's service caused by voltage fluctuations such as surges, sags, swells, dips, spikes, or other causes beyond Borough control.

1.07 Single Point of Delivery: The rates specified in this tariff for each class of service are predicated upon the delivery of service to a single metering point for the total requirements of each separate premises of the Consumer. Service at different points and at different premises shall be separately metered and billed.

1.08 Residential Purposes: Service rendered to Consumers for domestic and household use within a single dwelling unit is classified as residential service. Residential service does not include service to hotels and boarding or rooming houses where the number of guest bedrooms available for public rental exceeds four (4) in number.

1.09 Unusual Conditions: Company may refuse to supply service to loads of unusual characteristics which might affect the supply of service to the detriment of other Consumers of Company. Service to such unusual loads may be supplied where Consumer has installed necessary regulating and protective equipment in accordance with the requirements and specifications of Company. The Borough of Madison maintains the right to disconnect any service that is a hazard or is deemed unsafe.

## 2. MATTERS PRIMARILY OF INTEREST TO CONSUMERS

### APPLICATIONS FOR SERVICE

2.01 Before electric service will be furnished to a property, the OWNER must obtain from the Office, sign and file an "Owners Application Form" (W-E #1). **(No construction permit is required at this point unless service changes or equipment/devices change)**

2.02 If the OWNER is also the Consumer (the occupant of the premises to be served) it is not necessary for him to fill in and sign the reverse of the "Owners Application Form", except to show his previous address.

2.03 The consumer (if not the owner must fill in and sign the reverse of the "Owners Application Form" before electricity can be furnished. This situation generally occurs on rented property, and the owner or landlord, and the tenant or renter, are both required to sign the application.

2.04 The owner is liable for all electric bills and service charges properly due from and unpaid by, the lessee. Such unpaid bills and charges become a lien against the property, in accordance with the provisions of the Revised Statutes of the State of New Jersey.

2.05 The owner of property which is rented to, or otherwise used by, another person or persons, business or corporation, may apply to the Electric Division to have such service placed on a "Restricted Service" basis, by signing the application form provided. This action is intended to limit the time during which bills are permitted to remain unpaid (See section "Billing and Rates- Regular Service") and thus minimize the amount of and the owner's potential liability for such unpaid bills.

2.06 The application for service covers a specific property owner and consumer. It is not transferable. If a consumer (and or owner) moves from one location to another within the Borough, a new application is required to cover the new address.

2.07 If there are any unpaid electric charges against the property, where service is requested, such charges must be paid before further service can be furnished.

2.08 Liquidation of Prior Debts: Service will not be supplied by Borough to former Consumers until such time as any and all indebtedness to Borough for previous service has been paid or otherwise discharged.

2.09 Borough may reject any application for a class of electric service not available under a standard Service Classification. Borough may refuse service to an applicant who is then a member of the household of a former Consumer then indebted to Borough for service previously rendered, except that such indebtedness be paid.

2.10 Unauthorized Use: Unauthorized connection to Borough's service supply facilities, or the use of service without authorization of Borough may be terminated by the Borough after proper notification. The use of electric service, without notice to Borough to enable it to read its meter on the user's premises may render the user liable for any amount due for electric service supplied to the premises since the last reading of the meter immediately preceding the said user's occupancy, as shown by Borough's books.

### SERVICE PROVIDED

2.11 The Borough of Madison Electric Department will install, maintain and if necessary enlarge the electric distribution lines on all accepted streets, county, or state highways in Madison. The Borough maintains the right to trim or remove any tree or shrub that may interfere with the safety and reliability of its distribution system. The Borough has the right to install anchor guys to re-enforce any pole.

2.12 In the case of streets that have been dedicated but not accepted, the Borough will install, maintain and if necessary enlarge the electric lines on these streets. Such acceptance and maintenance of electrical lines and installations shall not be construed to constitute an acceptance of any street.

2.13 In the case of Commercial or Industrial customers with a connected load of **250KW** or more that requires a primary line extension on private property, the Borough will furnish and install the overhead line to a 100 foot distance onto the customer's property at the Borough's expense.

Underground primary lines will be installed, owned and maintained at the expense of the customer. Transformer installations on poles with ratings up to 300 KVA (three phase only), will be installed at the Borough's expense. All commercial and industrial transformers on pads, in vaults, or inside buildings will be installed, owned and maintained at the owner's expense. Transformers up to 300 KVA, that are located outside of buildings, will be supplied by the owner and become the property of the Borough of Madison upon acceptance, transformers larger than 300 KVA will be supplied by owner and remain the property of the customer. Transformer installations underground or inside of buildings, if of the submersible type, would be installed at the expense of the customer, within the ratings above stipulated.

2.14 All underground service ducts and conductors will be installed, owned, and maintained at the owner's expense. All existing underground ducts and cable that run from the borough's manholes or vaults to the customer's premises will be upgraded, replaced or repaired at the owner's expense. No one shall enter any manhole, hand hole, or vault without being accompanied by an electric department employee.

2.15 In new residential developments, on new streets being installed in the development, the owner will install all street lights, lampposts, transformers, ducts, and cables, underground, upon completion the system that will be dedicated to the Borough. Installation will meet or exceed the Borough's Construction Specifications. If in any new development a Lot has a side yard or fronts on an accepted street and the service drop can be made from that accepted street, the Borough will install the service drop at its expense. The owner will give to the Borough executed rights of way, easements, tree and shrub trimming rights and rights to install anchor guys on private property where such are needed before any service, including construction service, is supplied. All residential or multi-family buildings supplied from transformers on pads, in vaults, or inside buildings will be installed at the owner's expense, all transformers up to 300 KVA will be supplied by the contractor and will become the property of the Borough of Madison upon acceptance of the development. Contractor must provide the Borough of Madison with a spare transformer (single phase-up to 100 KVA, 3 phase transformers up to 300 KVA) fuses, lamppost, fixture, and accurate as built drawings upon completion of project. All underground secondary ducts and cables that run from the Borough's facilities to the residence are the property and responsibility of the owners. All transformers shall be according to Borough of Madison's specifications.

2.16 For new apartment houses, condominiums, townhouses, and association housing, on accepted streets, county and state highways, the Borough will install the overhead service drop to the building provided this can be done from a Borough line without setting a pole on private property.

2.17 For new apartment houses, condominiums, townhouses, and association housing complexes, requiring pole lines on private property or on non-accepted streets, the owner will install all street lights, lampposts, transformers, ducts, and cable underground and, upon completion, the system will be dedicated to the Borough to become part of its distribution system to be maintained, enlarged or extended. All transformers will be supplied by the contractor. Transformers up to 300 KVA will become the property of the Borough of Madison upon acceptance of the development, transformers larger than 300 KVA will be owned and maintained by the association. All condominium, townhouses, and association housing will install, own and maintain all underground secondary ducts and cable originating at the transformer and connecting at the meter pan. All primary underground ducts and cable will become the property and responsibility of the Borough of Madison. All underground street lighting and associated duct and cable will be installed owned and maintained by the association. Contractor must provide the Borough of Madison with a spare transformer, fuses, lamppost, fixture, and accurate as built drawings upon completion of project. All transformers shall be according to Borough of Madison specifications.

2.18 The layout of electric service and materials shall be approved or specified by the Superintendent of the Borough's Electric Department, or the borough's consulting engineering firm, for all electric utility lines on private property and non-accepted streets. All rights of way, easements, including maintenance and tree trimming, shall be executed and presented to the Borough before any service is supplied. All installations shall conform to the Borough of Madison's specifications.

2.19 In the event that the Borough is required to supply electricity through lines and equipment which are not the property of the Borough, (or dedicated to public use), such lines and equipment shall be placed or installed along the rear or side property lines and not in any street area. In such instances the Borough reserves the right:

(a) to place a meter at the end of the public supply line;

(b) to discontinue service when the charges indicated by said meter to be due to

the Borough are not promptly paid;

(c) upon notice to the affected customers, to discontinue the service of electricity to and through lines and equipment located on private property which the Borough considers to be inadequate, substandard, in a state of disrepair or dangerous to persons and property.

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#### NORMAL SERVICE

2.20 For normal lighting and residential use, the Department maintains nominally 120 volts, 60 cycle, alternating current, at the consumer's meter.

2.21 For power, or special use, a higher voltage will be supplied. The Division will specify the voltage and type of service available at any point in the Borough.

2.22 Direct current is not supplied by the Electric Department of the Borough of Madison.

### TYPES OF SERVICE SUPPLIED

#### Temporary Service

2.23 Temporary service will be supplied for "approved" carnivals, fairs, demonstrations, or other affairs of a temporary nature. Application should be made 3 weeks prior to event, to the Office, so that the service may be ready when desired, provided the type of service requested is available at the specified location. Temporary services will require the issuance of a NJUCC Electrical Permit available at the Construction Department of the Borough of Madison.

2.24 An Underwriters Electrical Inspection application must be completed and filed in the Office not later than 4 days prior to the time the service is desired in order to afford ample time for the inspection to be made.

2.25 A suitable meter location, satisfactory to the Division, must be provided by the applicant.

2.26 As each application for this type of service will differ from others, and present its unique problems, the Office will advise, in each such case, what type of service is available, what work must be done at the owner's expense, and any other special requirements prerequisite to furnishing the service.

2.27 A minimum charge of \$20.00 must be paid in advance for temporary service. If the current consumed exceeds \$5.00 the additional current will be billed at the commercial rate. Any additional charge or cost as agreed upon by the Department and the applicant (such as installation of additional transformers, running wire, etc.) must also be paid in advance. UCC Permits for Temporary Electrical Services are \$37.00 plus the State charges a training fee based on the cost of the work involved.

#### Three-Wire, Single-Phase, 120/240 Volts

2.28 For all residential lighting use, and combinations of lighting and power, provided individual motors do not exceed seven and a half horse-power each. (The Division should be advised if any motors in excess of one horse-power are to be used.)

2.29 The voltage supplied is 120 volts from phase to neutral; or 240 volts phase to phase.

2.30 A fused service entrance switch or circuit breaker is required. Size of switch or breaker shall be determined by consultant or contractor, submitted to Borough for approval.

#### Four-Wire, Three-Phase, 120/208 Volts

2.31 Four-wire, three-phase 120/208 volt service will be supplied only for large installations requiring a heavy electrical energy consumption for lighting and power load or as otherwise determined by the Division. Borough of Madison will provide current transformers, CT rated meter pans, and pole stand-offs.

2.32 The normal voltage is 120 to neutral, and 208 across the phase wires.

2.33 The Division must approve the size and type of connection provided. Contractor shall provide the Borough of Madison and the Borough's consulting engineering firm with a load calculation letter and a single line drawing prior to construction. Borough of Madison Specifications may be obtained from Electric Department Field Operations at Water & Light Plant, John Avenue & Station Road.

2.34 The type of service to be furnished shall be the prerogative of the Borough and shall be determined by it. If voltage higher than that normally supplied is desired, special arrangements must be made through the Office for such service.

2.35 Should Primary voltage (12.5KV) be desired, the customer, his electrical contractor, or other qualified representative shall file in advance with the Office a single line diagram, load calculation letter, load characteristics, a location plan and layout of the primary installation including a list and description of the principal electrical equipment to be used therein and estimated peak demands. System protective equipment such as circuit breakers, fuses, relays, etc. must be included on the single line diagram with voltage, interrupting and continuous current ratings listed. Appropriate relay ranges and proposed trip settings shall be furnished for Division approval. The Division may require special protective devices, relays, etc. to protect its system. Such devices shall be furnished by the Customer at his expense. Such diagram, location plan, transformers, equipment, and layout must be approved in advance by the Electric Department. All primary services that feed transformers larger than 300 KVA shall have an approved primary (15KV) metering cabinet installed on the line side of the transformer. Borough of Madison will supply current and potential transformers and meter pan.

2.36 On secondary installations where, in the judgment of the Electric Department, the customer's installation and power demand is sufficiently large to warrant it, the Department will require the customer to furnish, at his expense and on his premises, either a transformer vault or the equivalent outdoor structure to house and support transformers.

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#### SERVICE INSTALLATIONS

##### Service Drops

2.37 The normal service drop will be overhead, from a Borough line at a Borough pole, directly to a residence or place of business. The Borough will supply and install at its expense such overhead service drop for a distance of 100 feet from its mains without the installation of a pole on the property of the residence or business. If the installation of a pole is required, the Borough will install the drop to the pole, but the cost of the pole, and of the installation thereof, will be at the order and expense of the property owner, or other person requesting the installation. Any additional poles or further extensions of lines to the residence or business beyond 100 feet from the Borough mains will also be at the expense of the property owner or other person requesting the installation. Such extensions beyond the normal service drop will be dedicated to the Borough and the necessary easement, license or other form of permission given to the Borough for the purposes of maintaining such lines, and further extending the same, if required.

#### Relocation of Lines Underground

2.38 Where the Borough supply lines are overhead, the installation, maintenance and replacement of underground supply lines from such Borough lines to the consumer's service entrance shall be at the expense of the owner of the property, to which the service is to be supplied or other person requesting the service.

Where the Borough supply mains are to be placed underground the relocation of service lines underground to replace existing overhead lines and drops will be made by the Borough. Where the distance from the curb line to the consumer's service entrance is 30 feet or less, measured at right angles to the curb line, the installation of the necessary ducts and conductors from the Borough's underground main and the owner's service entrance will be at the Borough's expense. All future service upgrades, including conduit, handholes and conductors shall be at the owners expense.

When the required service connection exceeds the said 30 feet measured as above, the customer shall install all conduits, hand-holes, and conductors from the customer's premises to the nearest available splice box or manhole provided in and as part of the Borough's normal underground distribution system. All connections between Borough's facilities and customer shall be made by the Borough.

#### WIRING CHANGES OR ADDITIONS

2.39 If an owner or consumer desires to extend, alter or modify the wiring of any premises, he must follow the provisions of applicable laws, Borough ordinances, and codes as well as the requirements of the Fire Underwriters' Electrical Inspectors. Approval by the Underwriters Authorized Inspection Agency is required by the Division prior to energizing a new or modified electric service. In addition, an electrical permit must be obtained from the Construction Department of the Borough of Madison and all required inspections must be completed prior to energizing the electrical service.

Owner and/or consumer should also carefully study the rules and regulations of the Electrical Department of the Borough of Madison.

2.40 In the interest of safety, the property owner and/or consumer should insist that an Underwriters Inspection Certificate be furnished by the electrician following the installation of electrical appliances such as: Cooking Ranges; Washing Machines; Dryers; Room or Water Heaters; Garbage Disposal Units; Air Conditioning Units; or other items which are permanently installed (as contrasted with portable "Plug-In" items of 2000 watts consumption or less.)

2.41 The Electric Department should be advised immediately of any substantial increase in any connected loads, so that necessary action may be taken to insure adequate system capacity and voltage at all times.

2.42 Consumers are warned of the grave danger resulting from overloading residence circuits by over-fusing such circuits in order that they will carry loads in excess of that for which they are designed. Circuits can be dangerously overloaded by an excess of "Plug-In" appliances consuming a high wattage of electric energy. (Included in this category are air conditioners, ceramic kilns, and table cooking units.)

2.43 When a customer moves and service is to be shut off or transferred, a final reading must be scheduled with the billing department.

2.44 In multiple occupancy buildings separate meters are required for each use. Separate meters are required for residential and for commercial services in each building. One meter may be used to measure the electricity consumed by all residential or all commercial users in a building, but this is not considered good practice except in special cases, due to the possibility of abuses by one or more of several users. If an owner desires to change the metering devices on his premises from one meter to individual meters or vice versa, all costs except the cost of the meters will be the expense of the owner. As provided by Law of the State of New Jersey, resale of electricity by a metered consumer to any other consumer, through an additional meter, is prohibited. Meters shall be located as provided by that Section which sets forth the proper location of meters. When single meters are installed to serve more than one consumer and for any commercial user, whenever the consumption may exceed 2000 K.W.H. per month, a demand meter will be installed and the owner or user billed for a demand charge at the established Borough rate.

2.45 The Division installs, reads, tests, repairs, removes and replaces all electric energy meters.

2.46 All meters installed are the property of the Borough of Madison, and only employees of the Electric Department are permitted to install, service, adjust, test, repair or remove them. No person, other than authorized Borough personnel, shall remove any electric meter from any location where the same has been installed, nor shall any unauthorized person attach wires to or around a meter; or interfere with its normal operation.

2.47 When any consumer believes a meter to be registering improperly, he may request the Office to have it tested.

2.48 It is the responsibility of both owner and tenant to keep the meters free of obstructions and readily available to Electric Department employees during normal business hours.

2.49 A consistently wet cellar is a hazard to employees when reading or servicing a meter. Either a dry floor, or duck boards, must be provided; otherwise the Electric Department may require that the meter be moved, at the expense of the owner, to a safe, accessible location.

2.50 Owners of premises where outdoor meters are installed must not permit shrubbery, brush, trees or other obstructions to hinder access to such meters. No planting shall be permitted nor shrubbery allowed to encroach within 24" of the sides or face of any meter.

2.51 When a meter is found to be obstructed, or in an unsafe, or unusually difficult location to reach, the Department will notify the owner of the premises thereof and such meter shall be relocated to a site satisfactory to the Division within 10 days after notification, at the owner's expense.

2.52 At the end of the ten day period, the premises will be inspected, and if the unsatisfactory conditions have not been corrected, the service may be discontinued until satisfactory remedial measures have been completed.

### METER READING

2.53 As a rule, all electric meters are read once each month by an authorized employee of the Electric Department. The time of the month for the reading varies with the location, as meters are read on a cyclic basis.

2.54 If it is not possible for the Meter-Reader to enter premises and read the meter, a printed card is left requesting the consumer to read the meter, and note on the card the figures shown on the face of the meter.

2.55 The card should then be returned to the Department within twenty-four hours, as all billing is done on the cyclic basis, and immediately after the meters are read.

2.56 If the card showing the consumer's reading is not received by the Department before the billing is done, an average (or minimum) bill will be rendered.

2.57 When the records of the Department show that the billing for the previous month was done without the meter actually having been read, the Meter-Reader will make a second call at the premises to read the meter.

2.58 If the Meter-Reader is again unable to read the meter, the Department will notify the consumer that unless definite arrangements are made to make the meter location accessible to the Meter-Reader within ten days thereafter, the service will be discontinued until the meter is placed in an accessible location.

### BILLING AND RATES

2.59 Electric bills are prepared and mailed to consumers every month - and at about the same time each month - a few days after the meter has been read.

2.60 There are two basic rate schedules now in effect: Residential and Commercial.

2.61 The schedule of rates now in effect in each classification may be obtained from the Office.

2.62 A special rate-schedule will be applied to individual consumers using large amounts of electric energy for short periods of time where a demand factor is to be a part of the calculation.

2.63 Electricity supplied through separate meters at the same location or at different locations, will not be combined for billing. A separate bill will be rendered for each meter.

### PAYMENT OF BILLS

2.64 All bills and charges in connection with electric services are due when rendered, and must be paid within thirty days after the latest reading date as shown on the electric bill.

2.65 Accounts not on the "RESTRICTED" basis are allowed an additional grace period for payment, before the bill is considered as delinquent. If a monthly bill is unpaid when the bill for the following month is rendered, the total amount for the two months must be paid within thirty days of the latest reading date, as shown on the bill for the second month. Failure to do so will make an account delinquent and subject to an interest charge.

2.66 Accounts on the "RESTRICTED" basis are considered as delinquent if not paid within thirty days after the latest reading date as shown on the electric bill.

2.67 When an account becomes "delinquent" a notice is sent to the consumer as well as the owner advising that if the bill is not paid within five days after the date shown on the delinquency notice, the service will be discontinued.

2.68 If a service is discontinued for non-payment of an electric bill or charges, there will be a charge of \$25.00 for restoring service.

2.69 The Department has no authority to defer the shutoff date for service-account unpaid bills, nor does a partial payment prevent the service from being shut off.

### DISCONTINUANCE OF SERVICE

2.70 Consumers planning to move, or who for other reasons desire the service discontinued on a specific date, should so advise the Department three working days in advance of that day.

2.71 The meter will be read, and final bill presented on the day the service is to be discontinued. Final bills are payable on presentation.

## TEMPORARY SUSPENSION OF SERVICE

2.72 Consumers who plan to be absent from their premises for a period in excess of one month should so advise the Office.

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## TRANSFER OF SERVICE - WITHIN BOROUGH LIMITS

2.73 Consumers transferring their place of residence or business from one location to another within the Borough limits, should so advise the Office at least a week in advance of the moving date.

2.74 This action will provide ample time for preparing the service at the new location, and also for reading the meter and rendering the final bill at the old address.

2.75 Electric service cannot be furnished at the new address until the final bill for the previous address has been paid in full.

2.76 If electric service is desired at the new address prior to the date of occupancy, it may be provided, if it is understood and agreed by the consumer that the final bill for the old address must be paid as soon as presented. If such bill is not promptly paid, the new service will be discontinued pending satisfactory settlement of the bill.

2.77 When property is sold, notice must be given promptly to the Office of the sale of the same, in order to facilitate the prompt transfer of the account to the new owner, who must sign the application for (a continuance of) the service.

## CAUSES FOR DISCONTINUANCE OF SERVICE

2.78 Defective Equipment: Department may discontinue the supply of electric service after reasonable warning if, in the judgment of Department, Consumer's installation has become dangerous or defective, or if Department has received notice from the proper authorities that Consumer's equipment is dangerous or defective, or if Consumer's equipment, or use thereof, injuriously affects the quality of Department's service to other Consumers.

2.79 Misrepresentation With Intent to Defraud: Department may discontinue the supply of electric service and remove its equipment from Consumer's premises without notice in the event Consumer has made misrepresentations to Department with respect to the use of electric service, or has in any other manner fraudulently entered into a contract for the supply of electric service by Department.

2.80 Resale: Department may discontinue the supply of electric service and remove its equipment from Consumer's premises upon reasonable notice in the event Consumer resells the said electric service.

2.81 Tampering: Company may discontinue the supply of electric service and remove its equipment from Consumer's premises without notice in the event evidence is found that Department's service wires, meters, seals, switch boxes or other property or appurtenances on Consumer's premises have been tampered with, with intent to illegally divert current.

2.82 Repairs and Loss of Department Equipment: Department may discontinue the supply of electric service and remove its equipment from Consumer's premises upon reasonable notice in the event Consumer neglects or refuses to reimburse Department for repairs to, or loss of Department property on Consumer's premises when such repairs are necessitated, or loss occasioned, by negligence on the part of Consumer.

2.83 Contravention of Ordinances: Department may discontinue the supply of electric service and remove its equipment from Consumer's premises upon reasonable notice in the event that the supply of such service conflicts with orders, ordinances or laws of the Federal government, or of the State of New Jersey, or any political subdivision thereof.

2.84 Writs and Letters: Department may discontinue the supply of electric service and remove its equipment from Consumer's premises upon reasonable notice in the event a writ of execution is issued against Consumer or in case the premises in which service is supplied is levied upon, or in case of assignment or act of bankruptcy on the part of Consumer.

2.85 Discontinuance for Cause: Department may discontinue the supply of electric service and remove its equipment from Consumer's premises upon reasonable notice in the event access to its meter or other service facilities is refused, or in the event access thereto is obstructed or hazardous, or for other violation of these Rules and Regulations.

#### CONSUMER'S RESPONSIBILITIES

2.86 In the event of a power failure, or interruption of service, the consumer should first look to see if his neighbors' lights are on. If they are, the fault is on the consumer's premises - probably a blown fuse or tripped circuit breaker, or possibly a broken service drop.

If the neighboring premises also appear to be without electricity, telephone 973-966-7330 during regular working hours and 973-593-3000 (Police Dept.) after regular working hours, and report the matter without further delay. The Line Crew will immediately be called out to correct the fault.

Should the consumer believe that the voltage drops below 120 volts nominally, except during power emergencies, the matter should be reported to the Electric Department. A recording reading of the voltage at the consumer's meter will be taken, and the results of the test communicated to the consumer.

All citizens are requested to report to the Department immediately any broken or sparking wires seen.

2.87 The owner is responsible for the wiring from the service entrance to meter, and from the meter throughout his wiring system. The Department is responsible for the "service drop" from the terminal pole to the service entrance of the structure. (See under "SERVICE INSTALLATIONS").

3. MATTERS PRIMARILY OF INTEREST TO DEVELOPERS, BUILDERS,  
CONTRACTORS AND ELECTRICIANS INSTALLING WIRING, FIXTURES  
AND APPLIANCES IN HOMES AND BUILDINGS.

NEW DEVELOPMENTS

3.01 Borough planning regulations require that in all new subdivisions and developments, the owner furnish and install, at his expense, all electric utility poles (or underground conduit, if he so desires) conductors, pole hardware, street lights, transformers and secondary wires, within the limits of the proposed development. The department will install the service drops.

3.02 On new streets being constructed in any residential development, the owner of the development will install all street lights, lampposts, conduits, transformers and underground cables, in accordance with Borough specifications and requirements, and upon completion, the system will be dedicated to the Borough of Madison to become a part of its distribution system, and to be maintained by said Borough. However, if in any new development a lot fronts on or has a side yard which abuts an accepted street and the service drop can be made from that accepted street, the service drop and line extension will be made as provided in subsection 2.30 of these regulations.

3.03 The Electric Department of the Borough will advise the owner of its requirements in this particular and submit to him the specifications for the work to be done. The owner will have the work done at his expense, and upon completion it will be inspected by the Division. If in conformity with the specifications and satisfactory to the Division, it will be accepted. The layout and material are to be as specified or approved by said Division, which shall also have the right to prescribe the type of service to be supplied.

3.04 Primary and Secondary lines will be inspected, and if satisfactory, will be approved by the Division. All wiring from service entrances to the meters and from meters throughout the premises as subdivided must be in conformity with the National Electric Code; inspected and approved by the Authorized Inspection Agency.

3.05 The owner of every new development shall give to the Borough of Madison, executed rights-of-way, easements, tree and shrub trimming rights and rights to install anchor guys on

private property (where such are necessary to guy poles as required to serve the development), before any service, including construction service, is supplied.

### REQUIREMENTS RELATING TO INSTALLATION, INSPECTION AND SERVICE

3.06 The customer's wiring and equipment must be installed to conform to Borough codes, ordinances and regulations; the National Electric Code, and such State Laws or fire prevention and probation requirements as may be in force at the time the installation is made.

3.07 The Electric Department requires that all wiring installation, initial or subsequent, be inspected and approved by an electrical inspector of the Underwriters Authorized Inspection Agency before the installation will be connected to the distribution system, and/or current supplied. Homeowner or contractor shall secure electrical permits.

3.08 Alterations or additions to old installations also will require inspection and a certificate of approval from the Underwriters' Inspection Agency.

3.09 Any person or firm planning to do any wiring must obtain an application for inspection of the work at the Office. The form must be completed, signed, and presented to the Office in advance of the time the work is to be inspected. Inspection of the work done will not be carried out unless the extent of the work is large enough to require a change of meter.

3.10 Separate inspections are required of temporary construction; electric service; rough wiring, heating equipment; air conditioning equipment fixtures, and other permanently connected appliances or equipment.

3.11 Should one contractor or electrician do all of the work, he may ask for all inspections on the one application form. If different parts of the work are being done by different contractors or electricians, each must apply independently for inspection of his particular work.

3.12 The application for inspection should be made in advance or at the time of completion of the work to be inspected, even though the Department may not be asked to supply electric service until some later date. In any event electricity cannot be supplied until the Underwriters Inspection Agency's approval has been received by the Department.

3.13 If temporary electric service is desired for construction purposes only, the applicant should file a request for inspection of the temporary service several days before the wiring is ready for such inspection. This action should enable the Department to schedule the installation of the service drop and meter immediately after the inspection, and before the day on which the electricity is desired. Service should be at least fifteen feet above ground, on a 6" x 6" post or equivalent.

3.14 As each application for this type of service will differ from others, and present its unique problems, the Office will advise, in each such case, what type of service is available; what work must be done at the owner's expense; and any other special conditions prerequisite to furnishing the service.

3.15 A minimum charge of \$37.00 plus the "State Training Fee of \$1.35 per \$1,000 worth of work to install the temp service, must be paid in advance for temporary service. If the current consumed exceeds \$5.00 the additional current will be billed at the commercial rate. Any additional charge or cost as agreed upon by the Department and the applicant (such as installation of additional transformers, running wires, etc.) must be paid in advance.

3.16 Electric energy for temporary service for construction purposes shall not be obtained from adjacent permanent services.

## SERVICE CONNECTIONS

### A. OVERHEAD SECONDARY SERVICE FROM OVERHEAD LINES

3.17 The service drop is considered to be the span of wire extending from the terminal pole to the point of attachment on the building or structure where it meets the customer's entrance cable. (See DEFINITIONS "Service Drop").

3.18 The Division will provide and run the service drop from its lines to the structure, and will also make connection to service entrance. The standard service drop installed by the Division is three-wire, number two AWG aluminum cable.

3.19 In general, only one service drop will be installed to serve a building. The service entrance must be so located that service can be supplied by means of a single set of wire attachments on the building. The service conduit or approved entrance cable must extend to a point at least 15 feet above the ground level. On low buildings an additional support satisfactory to the Division must be provided to carry the service connection at the proper level.

3.20 Where the customer's property can be reached by one span of wire of not more than one hundred (100 feet) in length, the service drop will be installed by the Department at its expense. If the distance to the customer's structure requires a span of wire exceeding one hundred (100) feet in length, the customer or owner must provide, at his own cost, a suitable intermediate pole for the wires, which must be approved by the Electric Division. The cost of additional service drop beyond 100 feet shall be paid by the customer or owner. The owner will dedicate the additional wire, pole or poles, and anchor guys, with rights to trim trees and maintain lines, to the Borough.

3.21 Service drops will not be carried over housetops or other buildings to reach customer's connections. Should it become necessary to carry service drop through trees or shrubbery the owner must have such trees or shrubbery trimmed so as to prevent contact, and in a manner satisfactory to the Division. The Division will furnish and install tree guards on its wires to minimize trimming and to afford as much protection as possible both to lines and to trees. Any obstruction within three feet of the sides and ten feet of the front of any transformer is prohibited. Any obstruction that interferes with the safety and reliability of the Borough's equipment may be cut or removed by the Borough.

### B. UNDERGROUND SECONDARY SERVICE FROM OVERHEAD LINES

3.22 Where the lines are overhead, and the customer desires an underground service, the service connection is made at the terminal pole designated. Schedule 40 PVC conduit underground and Schedule 80 PVC at the riser pole, not less than 2 inches in diameter must be installed by the contractor, from the customer's premises meter cabinet (except as otherwise directed by the Division) at the proper location, and thence to the terminal pole, on the street quarter, and up the pole approximately ten feet. Service must be three or four wire depending upon service voltage, not less than No. 4 AWG copper or No. 2 aluminum, type THW or TW. Sufficient cable is to be left at the top of the ten foot section to reach the Borough's secondary lines without splices. Contractors will provide a temporary weather-proof covering over the end of the pipe. All underground ducts and cable shall be owned, maintained, repaired and upgraded at the owner's expense. No one shall enter any manhole, hand hole, or vault without being accompanied by an electric department employee. Borough of Madison will provide pole stand-offs that must be used on all underground pole risers.

3.23 No direct burial cable is permissible; all cable shall be installed in conduit. Any cables carrying voltages above 600 volts must be encased in concrete.

3.24 All underground services must be placed at least 24" below the surface of the ground. All road crossings shall be concrete encased.

3.25 The Electric Division must always be consulted in advance as to the feasibility of an underground service, and will specify the terminal pole to which the service connection is to be made.

3.26 Where the customer desires an underground service, the complete service connection consisting of conduit and cable, except that portion of conduit on the terminal pole above a point fifteen feet above the ground, will be furnished and installed by the customer at his expense. The Division will furnish and install at its expense, the conduit from this point to its lines including all necessary fittings.

#### C. UNDERGROUND SECONDARY SERVICE FROM UNDERGROUND LINES IN

##### COMMERCIAL AREA

3.27 All underground ducts and cable from the pole, transformer, vault, manhole, or handhole, shall be the owners responsibility.

All cable terminations between Borough facilities and customer shall be by the Borough.

#### D. PRIMARY – HIGH - VOLTAGE SERVICE

3.28 Maximum primary voltage is 12,470 volts.

3.29 Overhead primary service connection is made to Overhead Main Lines at a terminal pole, and under conditions designated by the Division.

3.30 Underground primary service connections from overhead main lines shall be by shielded service cable rated 15,000 Volts, of No. 2 AWG copper or larger, placed in Schedule 80 PVC, concrete encased as acceptable to the Division at least four inches in diameter. Each such conduit shall contain only a single service of not more than four conductors. A spare conduit must be installed in all cases. If the vault is more than 100 feet from the terminal pole, a standard pull box shall be installed at or near the terminal pole, as designated by the Department. All primary conduits shall be concrete encased as per Borough of Madison's specifications.

#### E. OVERHEAD PRIMARY SERVICE FROM OVERHEAD LINES

3.31 The service connection to an outdoor structure, is made by an overhead connection consisting of a single span of not more than 100 feet in length will be made at the Division's expense.

#### F. UNDERGROUND PRIMARY SERVICE FROM OVERHEAD LINES

3.32 When this type of service is desired, either to an outdoor structure, pad-mounted transformer or to a vault within a building, the cost thereof will be allocated in the same manner as specified in Subsection 3.22 through 3.26. If the customer would like to have the existing primary overhead cables installed underground, all excavation, conduit, and cable will be at the owners expense. All underground conduit and cable from the riser pole, to any vault, manhole, handhole, or transformer shall be owned and maintained by the owner. If there is an existing pad-mounted transformer currently supplied from overhead lines, the transformer shall become the property and responsibility of the owner.

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#### SERVICE ENTRANCE

3.33 Except in commercial areas, the Electric Division requires outdoor meters for all single-phase installations up to 300 amperes capacity. (See Section "Meters and Connections" for rules regarding placing of meters.)

3.34 The Contractor will furnish and install meter cabinets. The contractor will also install the service conduit and all conductors from the point of attachment of the service drop wires through the meter cabinet and into the structure. The Borough will furnish C.T. rated meter pans only, without cost. On all primary services, the Borough will furnish all Current Transformers and Potential Transformers. Owner will supply all C.T. and P.T. cabinets at the owner's expense.

3.35 The service entrance must be located so that the service wires will not interfere with the operation of windows or awnings, or be in proximity to fire-escapes or other building projections.

3.36 Approved service cable may be used under National Electric Code Rules for service entrances to the Customer's service equipment. All entrance cable or wires shall be of a size not less than No. Four, AWG copper or No. Two AWG aluminum type THW or TW minimum insulation.

3.37 If the point of attachment cannot be located as specified above, or is not satisfactory to the said Division, said Division should be consulted in order to find a mutually satisfactory point for connection. Any additional cost involved must be paid for by the owner.

#### SERVICE ENTRANCE DISCONNECTING MEANS

3.38 If the customer's meter is located outside the building, a main line entrance disconnecting means such as a switch or circuit breaker will be required within the building in accordance with the National Electric Code. (No meter service switch or meter board will be necessary.) The entrance switch or circuit breaker shall be readily accessible to the customer.

3.39 When the meter is located inside the building, a meter service switch is required for each such meter and must be readily accessible to the customer.

3.40 All main and/or meter service switches shall be of a minimum of 100 amperes capacity, and of a type approved by the Department.

3.41 If seven or more meters are connected to one service, a main line entrance switch or circuit breaker is required in addition to the individual meter service switches.

3.42 Lighting or power installations of over 240 volts, or of greater capacity than allowed on a 200 ampere meter service switch, must be provided with transformer cabinets and meter devices, as specified by the Electric Division.

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#### MINIMUM STANDARDS - WIRING INSTALLATIONS

3.43 All individual single-phase lighting installations shall be wired for three-wire, 120/240 volt, single phase service; or for three or four wire poly-phase service as specified below.

3.44 Buildings having one or more lighting meters must be wired for 120/240 volt, three-wire single phase service; or 208Y/120 volt, four-wire polyphase service, regardless of the load of the individual customers.

3.45 Buildings housing a group of residential and/or commercial customers will be supplied 3 wire up to 200 Ampere capacity.

Over 200 Ampere capacity, the Building will be supplied 4 wire (208Y /120 volts) with individual customers supplied 3 wire from the 4 wire system.

Individual customers requiring larger than 200 Ampere service will be supplied 3 phase, 4 wire, 208Y/120 Volt Service.

### GROUNDING

3.46 The contractor shall install and connect at the customer's expense secondary grounds on the following installations, as provided by the National Electric Code:

120/240 volt, 3-wire, single phase

208Y/120 Volt, 4-wire, three-phase

3.47 All conduits, cabinets and metallic covering for wiring shall be securely bonded and suitably grounded in accordance with the National Electric Code.

### METERS AND CONNECTIONS

#### A. GENERAL

3.48 All meters will be furnished and set by the Division; and remain the property of the Borough of Madison.

3.49 Only authorized personnel of the Public Utilities Department may set, adjust, test or remove a meter.

3.50 No person may connect any appliance or device on the Department's side of the customer's service disconnecting means.

#### B. SEALING OF METERS AND DEVICES

3.51 It is the practice of the Electric Division to seal all meters, service entrance equipment or indoor meters, instrument transformer cabinets, and test switches.

3.52 When service is provided prior to completion of the wiring; or, if service is temporarily discontinued, the Division reserves the right to seal or padlock all service cabinets with the main switch or circuit breaker locked in the "OFF" position (instead of removing the meter). Only authorized personnel of the Division are permitted to interfere with or remove such a seal or padlock.

#### C. LOCATION OF METERS

3.53 An outdoor meter installation is required for all single-phase service (to facilitate meter reading and spare the customer the monthly annoyance of admitting the meter-reader to the residence.)

3.54 On single-phase installations up to 300 amperes three-wire, the Owner will furnish a meter cabinet, to be installed in the service entrance conduit on the exterior wall of the building or structure. In this case only a mainline entrance switch or circuit breaker will be needed within the building. No meter service switch or meter board will be necessary.

3.55 Outdoor meters must not be installed over six feet, or less than three feet above the ground level. They must be placed in an accessible location, but not where they are liable to damage by the opening of doors or windows, or by passing traffic. When more than one outdoor meter is installed in one location, no pipe nipple should be shorter than six inches. Not more than 6 outside meters shall be installed in one group.

3.56 In apartment houses, multiple family dwellings, and office buildings, the meters must be grouped in one conveniently accessible place.

3.57 Meters to be placed in commercial areas must be installed inside the building in a conveniently accessible location, available at all times to the customer as approved by the Division.

3.58 For industrial or commercial installations, the Division must be consulted, and its approval obtained, as to meter location, before the wiring to and from the meter board has been completed.

3.59 Where alterations or additions are to be made to old installations, necessitating considerable change in the present system of wiring, or where additional meters shall be required, all meters must be placed in outside meter cabinets. The Division will furnish meter cabinets without cost, to be installed by the contractor.

#### MOTORS, MOTOR DEVICES, AND LIGHTS ON POWER CIRCUITS:

##### A. TYPE OF MOTORS

3.60 All motors connected to the Electric Division's lines shall be of good commercial efficiency, and such as will impose no disturbing elements on the Borough electrical system. Motors of over one horsepower are subject to the approval of the Department.

##### B. VOLTAGE AND PHASE

3.61 Motors of three quarter horsepower or less may be connected for 120 volts, single phase service. If conditions warrant the use of larger motors at this voltage, the prior consent of the Division must be obtained in writing.

3.62 Motors of over three quarter horsepower, and up to and including 7 ½ horsepower, shall be connected for 240 volt single-phase, except where three-phase service is available and the Department has approved the use of three-phase motors. The Division reserves the right to require starting devices on all motors when their operation causes interference with the services of other customers supplied from the same lines.

3.63 Motors above 7 ½ horsepower must be of such phase and voltage as are specified by the Division.

### C. STARTING DEVICES

3.64 In order to insure uniform, good-quality service, it is necessary for the Division to establish limits for the starting current of motors in excess of one-half horsepower. The Division must always be consulted in advance to approve the omission of starting compensators.

### D. PROTECTIVE EQUIPMENT

3.65 An automatic release which will open the motor circuit upon failure of the power supply is required on all installations of one single phase motor over three horsepower or any poly-phase motor over seven and one-half horsepower. Where installation consists of a number of motors aggregating more than three horsepower single-phase, or seven and one-half horsepower poly-phase, the individual releases may be omitted if a main release is installed which will disconnect all motors. Power installations, requiring continuous service to essential motors should be provided with time delay under-voltage relays. All customer's motors shall be protected from single phase conditions. The Borough of Madison will not be held liable for any single phase conditions that cause damage to a customer's equipment.

3.66 Reverse phase relays and circuit breaker must be provided on elevator, crane and hoist installations.

### ADDITIONS AND ALTERATIONS

3.67 Changes in apparatus or electrical equipment connected to the Borough's lines, either by addition or replacement, which alter the characteristics of, or increase the demand upon the service, must not be made without the prior approval of the Electric Division.

3.68 Where alterations or rewiring of a building make the relocation of a meter necessary, the Division must be notified in advance of the proposed change. The new wiring must be completed and approved before the Division will change the meter to the new location.

3.69 If the alterations or additions necessitate a considerable change in the present wiring system, or if additional meter cabinets will be required, all meters - present and new - must be placed outside of the building in outside meter cabinets, which will be supplied by the Division, but installed by the contractor.

3.70 All persons except authorized employees of the Electric Department, are forbidden to interfere with the meter and its connections, or with any service connection.

3.71 Such installation shall be made subject to the requirements of the Code, and the usual inspection.

#### 4. MATTERS PRIMARILY OF INTEREST TO OWNERS AND BUILDERS OF APARTMENT HOUSES

##### APPLICATION OF RULES GENERALLY

4.01 Except as otherwise specified in this section, owners and builders of apartment houses shall be subject to and bound by the rules and regulations herein set forth, to the same extent as other owners of property and consumers of electricity who are served by the Borough of Madison.

##### SERVICE INSTALLATIONS

4.02 In the case of new apartment houses situated on premises abutting accepted streets and county and state highways, the Borough will, at its expense, install overhead service drops to the building, provided this can be done from a Borough line without the setting of a pole on private property.

4.03 For new apartment houses requiring pole lines on private property or on non-accepted streets, the owner will install all poles, street lights and lines, whether overhead or underground and upon completion the system will be dedicated to the Borough to become part of its distribution system to be maintained, enlarged or extended. Transformers will be supplied and installed by the Borough at its expense as described hereinbefore.

4.04 The layout of electric service and materials shall be approved or specified by the Superintendent of the Borough's Electric Department, for all electric utility lines on private property and non-accepted streets. All the rights of way, easements, including maintenance and tree trimming shall be executed and presented to the Borough before any service is supplied.

##### WIRING STANDARDS, INSPECTION AND APPROVAL

4.05 The electrical layout and materials used in any new apartment house shall be as specified or approved by the Electrical Division. Said Division shall also have the right to prescribe the type of service to be supplied.

4.06 All wiring in buildings shall conform to and shall be installed in accordance with the National Electrical Code, and the same shall be inspected and approved by the Underwriters Authorized Inspection Agency.

#### DEDICATION OF RIGHTS OF WAY

4.07 All of the rights of way, easements, rights of entry, and tree trimming rights shall be executed and presented to the Division before any service, including the construction service, is supplied.

### 5. MATTERS PRIMARILY OF INTEREST TO OWNERS AND OPERATORS OF COMMERCIAL ESTABLISHMENTS

5.01 Commercial electrical installations on premises abutting accepted streets, county or state highways, shall be subject to the same regulations as are set forth herein with respect to residences and other premises situated on accepted streets; provided, however, that the Borough of Madison will set minimum amounts for monthly billings, such billings to be determined in accordance with regular billing procedures.

### 6. RULES FOR CUSTOMERS WITH SELF-GENERATION EQUIPMENT

#### CONSULTATION WITH BOROUGH

6.01 It is essential to assure safety of Borough personnel, that the Customer consults with the Borough utility before purchasing, constructing, operating, or interconnecting any self-generation equipment. Under no circumstance shall the Customer be allowed to install self-generating equipment before the Borough Utility has given consultation, review and approval.

#### GENERAL REQUIREMENT

6.02 No self-generating equipment or facility may be connected to the Borough system without express authorization from the Superintendent of the Electric utility. To obtain this approval all requirements listed below must be met.

6.03 The self-generator shall have a rated capacity of no more than the lesser of 100kW or the current peak electric demand of the customer's residence or facility.

6.04 Customer must provide complete plans and specifications for the proposed equipment, including a single-line diagram and details of the proposed protective schemes. A Professional Engineer licensed in the State of New Jersey must certify plans. Upon receipt of the certified plans and the appropriate fee paid, as specified in the Borough's Schedule of Rates, the Borough Utility shall review the plans. It should be noted that Borough review does not constitute approval of the correctness of Customer's plans.

6.05 Institute of Electrical and Electronics Engineers, specifically IEEE Standard 929-2000 if less than 10 kW, accredited testing institutions, such as Underwriters Laboratories, and all applicable municipal, county, and federal codes or regulations must be met.

6.06 Prior to connection to the Borough system, the equipment and interconnection shall be inspected and approved by the Borough's inspector. Inspections undertaken by the Borough shall be undertaken solely for the purpose of determining compliance with the proposed plans and for the safety and integrity of the Borough System. Nothing done by the Borough's Utility inspector shall constitute endorsement or approval of the generating system purchased by the customer.

6.07 Prior to interconnection with the Borough System, Customer shall enter into a written agreement with the Borough. In addition to the operating provisions contained with these Rules, this agreement shall permit unlimited right of entry to the customer's property for safety reasons or to disconnect whenever the Borough believes that continued operation of the self-generation equipment could result in harm to the Borough System or to a Customer of the Borough. Borough System employees shall have the right to inspect and test the interconnection facilities during reasonable hours. This agreement also shall require the safe operation of the equipment and such other provisions as are appropriate for the protection of other customers and safe operation of the Borough System.

6.08 The Customer shall be responsible for the safe operation of the self-generation equipment and shall be responsible for all costs of repairs, corrections, or updating of the interconnection facilities.

6.09 The customer shall be financially responsible for all costs of interconnection including the Borough plan review fee, voltage regulation, wiring, labor, special metering, and inspections.

The Customer shall also be responsible for the cost of periodic testing of the interconnection facilities.

6.10 Customer shall not change any aspect of the operation, the wiring, the controls, or the interconnection of the self-generation equipment without first providing prior written notice to the Borough and the plans showing proposed changes to the system. All changes or proposed changes shall be certified by a Professional Engineer licensed in the State of New Jersey, in the same manner as provided in Section 2 above. Customer shall pay all reasonable engineering fees (up to a maximum **established in the Schedule of Rates**) incurred by the Borough to review and inspect the proposed installation.

6.11 The Borough of Madison shall credit excess energy generated by a self-generation system to the customer in accordance with the Schedule of Rates established by ordinance.

#### ELECTRICAL REQUIREMENTS

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6.12 Customer shall install all equipment, switches, and devices necessary to allow the generating equipment to be isolated from the Borough supply when the Borough feels it necessary to assure safety.

6.13 Generators and similar equipment not intended to operate as part of an interconnected generating facility are not covered by these regulations. However, a permit under the State Uniform Construction Code and approval from the Madison Electric Utility is required for such generators if they are directly connected to the customer's electrical system. All such generators must be designed so that they are incapable of feeding electrical energy into the Borough's system.

#### METERING REQUIREMENTS

6.14 All metering costs associated with the interconnection or the interconnected operation of the equipment shall be the responsibility of the Customer.

## 7. MADISON BOROUGH ORDINANCE NO. 487

AN ORDINANCE TO REGULATE AND CONTROL THE INSTALLATION AND USE OF ELECTRIC WIRING AND ELECTRICAL EQUIPMENT FIXTURES AND APPLIANCES IN THE BOROUGH OF MADISON.

BE IT ORDAINED by the Council of the Borough of Madison as follows:

That on and after the date when this ordinance shall take effect no electric wiring for the supplying of electric current shall be installed in any building or structure, or any wiring be used for the operation of any outdoor electrical displays or signs, nor shall any extension or alteration be made of any existing electrical wiring system in the Borough of Madison, without a permit first having been obtained for the same, and an application, made for the inspection thereof, as hereinafter provided.

No person, firm or corporation shall install, renew, extend or alter any electrical wiring, electrical appliances (excluding portable appliances) or any electrical fixtures or accessory equipment in or upon any premises in the Borough of Madison, or permit, suffer or allow the same to be done in or upon any building, structure or other property owned by such person, firm or corporation, or over which it shall have the jurisdiction and control, without first obtaining a permit for the same from the Water and Light Department of the Borough of Madison.

Such permit shall be issued without charge, provided, however that the applicant for such permit shall first file with said Water and Light Department an application in writing, properly executed by said applicant, requesting and consenting to an inspection of the electric wiring, electrical appliances, fixtures and accessory equipment, or any alteration or extension of any electric wiring system, including the work to be done in connection therewith, for which such permit is requested; such inspection to be made by the Electrical Inspector for the Middle Department Association of Fire Underwriters.

All electric wiring, electrical appliances, fixtures or other equipment installed or used in the Borough of Madison, for the operation and use of which the Borough of Madison is requested to supply electric current, shall be in accordance with the National Electric Code. Any and all work done in connection with the installation of any electric wiring system, shall also be in conformity with the provisions of said National Electric Code, and be subject to the inspection by the Electrical Inspector for the Middle Department Association of Fire Underwriters, as provided in Section 3 hereof.

When, upon inspection, it shall be found that any existing electric wiring, appliance, fixture or other electrical equipment or accessory in use in the Borough of Madison is defective or unsafe, or that a fire hazard exists by reason of the same, or that the same is hazardous to life or could result in personal injuries, the Water and Light Department of the Borough of Madison shall notify the person or persons to whom electric current is being furnished in or on the premises where such condition exists, of the existence thereof; and in case such person or persons shall not be the owner or owners of said premises, then such owner or owners or the duly appointed agent thereof, shall also be notified of such conditions. Notices given pursuant hereto shall be in writing, and may be served either personally or by mail. When given by mail, proof of depositing the same in the United States Post Office shall be considered sufficient for the purposes of this ordinance. Any such notice shall contain, in addition to the mention of the defective, unsafe or hazardous condition complained of, a request that the same be corrected and made safe within five days after the date of service or mailing of such notice, or the Borough of Madison may discontinue the supply of electric current to the premises where such condition is alleged to exist. If the same is deemed sufficiently hazardous in the opinion of said Borough, the supply of electricity may be discontinued immediately. In the event that the supply of electric current has been discontinued by reason of any defective, unsafe or hazardous condition of wiring, appliances, fixtures or equipment, as herein specified the same shall not be restored until such defect or hazard has been eliminated, and upon inspection the same shall be found to conform with all requirements of the National Electric Code, as certified by the Electrical Inspector for the Middle Department Association of Fire Underwriters.

When, upon inspection as herein provided for, it shall be found that any new electric wiring, or any addition to, extension of or alteration of any existing electric wiring, or any new electrical appliance fixture or other electrical equipment or accessory thereto, or any work being done in connection with the installation thereof does not conform to the standards established in and by the National Electric Code, the Borough of Madison, through the Water and Light Department thereof, shall notify the owner or owners of the premises where such condition exists, or the person or persons having the jurisdiction thereof or control over the same of such condition and shall also notify the person or persons performing said electrical work or making such installation of appliance, wiring, fixture or equipment of the non-conformance thereof with said Code. Thereafter the Borough of Madison may refuse to supply electric current to the premises where such condition exists until the wiring, appliance, fixture or equipment, or the installation thereof shall, upon inspection thereof as herein provided for, be certified to be in accordance with the provisions of said Code.

Any person, firm or corporation who shall install, extend or make any alteration in any electric wiring, appliance (other than a portable type of appliance), electrical fixture or equipment, or any

appurtenance thereto, without having first obtained the necessary permit from the Borough of Madison, as required in and by the provisions of section 2 of this ordinance, shall, upon conviction thereof, be liable to a fine of not more than \$25.00 or imprisonment for not more than 10 days in the County Jail; such fine or imprisonment to be in the discretion of the magistrate before whom the proceedings for the alleged violation hereof shall be brought.

This ordinance shall take effect immediately upon publication and final passage hereof in accordance with law.

Approved: June 9, 1947.

(Signed) Norman J. Griffiths,

Mayor

Attest:

(Signed) Samuel A. Gruver,

Borough Clerk

Dated: June 10, 1947