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Gas Companies Operating Within the State of Connecticut

Part I

Definitions

Sec. 16-11-1. Gas company

The term “gas company,” when used in these regulations, includes every corporation, company, association, joint stock association, partnership or person, or lessee thereof, owning, leasing, maintaining, operating, managing or controlling mains, pipes or other fixtures, in public highways or streets, for the transmission or distribution of gas not in excess of an internal gas pressure of two hundred pounds per square inch gauge for sale for light, heat or power within this state, or engaged in the manufacture of gas to be so transmitted or distributed for such purpose.

(Effective March 31, 1964)

Sec. 16-11-2. Customer

The term “customer” means any person, firm, partnership, company, corporation, municipality, cooperative, organization, governmental agency, or similar organization supplied with gas service by any gas company.

Sec. 16-11-3. Commission

The term “the commission” means the public utilities commission of the state of Connecticut.

Sec. 16-11-4. Gas main

The term “main” means a gas pipe, owned, operated or maintained by a gas company, but does not include “gas service.”

Sec. 16-11-5. Gas service

The term “gas service” means the piping and appurtenances which connect a gas main with the inlet connections of a gas meter on a customer’s premises.

Sec. 16-11-6. Cubic foot

The term “cubic foot” of gas has the following meanings:

(1) In cases where gas is supplied and metered to customers at standard delivery pressure, a cubic foot of gas shall be defined to be the volume of gas which, at the temperature and pressure existing in the meter, occupies one cubic foot, except that a temperature and pressure correction to standard conditions shall be permissible at the gas company’s option when large volumes of gas are being metered.

(2) In cases where gas is supplied to customers through orifice or positive displacement meters at other than standard delivery pressure, a cubic foot of gas shall be defined to be that volume of gas which, at 60°F. and at absolute pressure of 14.73 pounds per square inch, (thirty inches of mercury) occupies one cubic foot; except that, in cases where different bases that are considered by the commission to be fair and reasonable are provided for in gas sales contracts or in rules or practices of a gas company, such different bases shall be effective.

(3) The standard cubic foot of gas for testing the gas itself for heating available shall be that volume of gas which, when saturated with water vapor and at a temperature of 60°F., and under a pressure equivalent to that of thirty inches of mercury (mercury at 32°F., and under standard gravity), occupies one cubic foot.

Sec. 16-11-7. British thermal unit

The term “British thermal unit” means the quantity of heat required to raise the temperature of one pound of water 1°F at the maximum density of water.

Sec. 16-11-8. Therm

The term “therm” means a unit of heating available equivalent to one hundred thousand British thermal units.

Sec. 16-11-9. Statutory references

Reference to sections of the general statutes refers to the Connecticut general statutes, revision of 1908, except where otherwise noted.

Part II

CONTINUITY OF SERVICE

Sec. 16-11-10. Record of interruptions

(a) Every gas company shall keep a record of each interruption of service to its entire system or major division thereof, including a statement of the time, cause, extent and duration of the interruption.

(b) Every gas company shall keep a record of the time of starting and shutting down its generating units, governors and compressors and of the indication of station instruments at sufficiently frequent intervals to show the characteristics of the service, and the details of any changes in operating practice when they occur.

(c) Planned interruptions shall always be preceded by adequate notice to all affected customers.

Sec. 16-11-11. Accidents

(a) Every gas company shall at all times use every effort to properly warn and protect the public from danger and shall exercise all possible care to reduce the hazard to which employees, customers and others may be subjected by reason of its equipment and facilities.

(b) Every gas company shall assist the commission in promptly examining into the causes of and the circumstances connected with all fatal accidents and other accidents of a serious nature.

[For statutory provisions relating to the reporting of accidents, see appendix following section 16-11-48.]

Sec. 16-11-12. Gas leaks

(a) A systematic inspection program shall be maintained for the purpose of detecting leaks and observing conditions which might cause or be connected with possible leaks. Leakage inspection may be accomplished by any single or combination of the following methods: Vegetation surveys, line patrolling, and the testing of bar-holes and utility manholes with a combustible gas indicator.

(b) Every gas company shall make prompt investigation of each report of a gas leak to discover and correct the cause. A record shall be kept of the condition found and the corrective measures taken.

(c) Each gas company shall report to the commission such leaks as are caused by broken mains, services, and defective joints which are of such a nature as might have resulted in serious consequences.

(d) Every gas company shall provide itself with one or more reliable devices for detecting the presence of combustible gas in the atmosphere.

Part III

QUALITY CONTROL

Equipment, Standards, Records and Reports

Sec. 16-11-13. Testing equipment and facilities

(a) Every gas company shall, unless specifically excused by the commission, provide for and have available such shop facilities, instruments and other equipment and accessories as may be necessary to carry out the tests required by these regulations. All testing equipment shall be properly maintained, and shall be available at all reasonable times for inspection, approval and use by the commission or its qualified representatives. Gas companies may arrange for the joint use of such facilities.

(b) Testing equipment shall be so located and used that the samples of gas tested shall be typical of the gas being distributed in the system.

Sec. 16-11-14. Heating value

(a) Each gas company shall file by statement, with the commission, as a part of its schedule of rates or rules and regulations, the heating value of the gas being distributed. The heating value of the gas shall be maintained with as little deviation as practicable; and to this end the average heating value on any one day should not vary by more than five per cent from the monthly average except when a substitute gas is used in accordance with the provisions of subsection (c).

(b) In maintaining the established heating value, the chemical composition and specific gravity shall be such as to attain satisfactory combustion in the customer's appliances at all times without repeated readjustment of the burners.

(c) When supplemental or substitute gas is distributed by a gas company, the gas quality shall be such that the utilization performance, when used as a fuel, will be satisfactory regardless of the heating value of the gas.

Sec. 16-11-15. Heating value tests—records and reports

(a) Every gas company shall regularly determine the heating value of the gas as supplied to the customers, using standard calorimeter equipment in accordance with accepted methods. At least one such determination shall be made each day except on Sundays and holidays.

(b) Each determination of heating value shall be recorded originally upon a form adopted for that purpose.

(c) When two or more communities are served entirely from a common gas supply, the commission may permit the heating value to be determined at a single suitable location.

(d) The gas company supplying natural gas shall make sufficient tests, or have access to such tests made by its suppliers, as to ascertain the heating value.

(e) These tests shall be made at a location, or locations, which will insure a representative sampling of the gas being sent out to the distribution systems.

(f) Every gas company shall report to the commission, not later than the tenth day of each month, the monthly average, together with the number of tests included in the average, and the maximum and minimum day averages of the heating value of the gas supplied during the calendar month preceding.

(g) The average for any day shall be determined from the record of a recording calorimeter where such record is available, or it shall be taken as the average of

the results of all tests of heating value made on that day. The average of all such day averages shall be taken as the monthly average.

Sec. 16-11-16. Calorimeter equipment

The gas company shall maintain or have access to a standard type calorimeter in an adequate testing station located as specified in section 16-11-13. The gas company may use a standard recording calorimeter which shall be maintained in proper working order and shall be checked periodically with a standard calorimeter or against a standard gas. Both calorimeter and method of testing shall be subject to inspection and approval by the commission.

Sec. 16-11-17. Gas odor

All gas supplied to customers shall possess a distinctive odor to act as an indicator to its presence. Any gas which does not naturally possess such an odor shall have added to it an odorant to meet this requirement. Upon request of the commission, the company shall report the kind and method of odorization.

Sec. 16-11-18. Purity of gas

(a) Every gas company supplying manufactured gas shall daily, except Sundays and holidays, test the gas for the presence of hydrogen sulphide in the manner specified in the following subsection.

(b) The hydrogen sulphide in the gas shall be considered negligible if a strip of white filter paper moistened with a solution containing five per cent by weight of lead acetate is not distinctly darker than a second paper freshly moistened with the same solution, after the first paper has been exposed for one minute in an apparatus through which a stream of the gas is flowing at the rate of approximately five cubic feet per hour, the gas not impinging directly from the jet upon the test paper.

(c) All gas sold for heating or lighting shall contain not more than thirty grains total of sulphur per one hundred cubic feet nor more than five grains of ammonia per one hundred cubic feet.

(d) No gas shall contain impurities which may cause excessive corrosion of mains or piping or form corrosive or harmful fumes when burned in a properly designed and adjusted burner.

(e) Every gas company producing more than one hundred million cubic feet of manufactured gas per year, containing sulphur or ammonia, shall provide and maintain such apparatus and facilities as are necessary for the determination of total sulphur and ammonia in the gas; and each such gas company shall at least once each month determine the amount of total sulphur and ammonia in the manufactured gas distributed by it.

(f) When two or more communities are served entirely from a common supply of gas, the commission may permit tests for impurities to be made at a single suitable location.

Sec. 16-11-19. Maintenance of utilization pressure

The pressure of the gas, measured at the outlet of the service meter of any customer, shall be maintained at a pressure that will provide safe, efficient utilization of the gas as a fuel in any customer's properly adjusted appliance.

Sec. 16-11-20. Pressure testing and maintenance of standards

(a) Every gas company shall make such determination and keep such records of pressure as will enable it to have at all times a substantially accurate knowledge of the pressure existing in every part of its distributing system.

(b) The pressure records shall be properly identified, dated and filed.

(c) All recording pressure gauges shall be tested periodically and maintained in an accurate condition.

Meters: Use, Location, Accuracy Tests

Sec. 16-11-21. Use of meters

All gas sold by a gas company and all gas consumed by the gas company shall be metered, except in case of emergency, or when otherwise authorized by the commission. Each meter shall bear an identifying number and shall be plainly marked to indicate the units of the meter index. When gas is sold at higher pressure or in large volumes, the contract or rate schedule shall specify the method to be used to correct the gas volume. Prepayment meters shall not be installed except where there is no other satisfactory method of collecting payment for the service rendered.

Sec. 16-11-22. Meter location

(a) Meters may be located inside or outside of a building depending upon local conditions and all meters shall be accessible for reading.

(b) When located inside a building, the meter shall be installed as near as practicable to the point of entrance of the service, be in a clean, dry, safe place and be supported in such a manner as to be as free as possible from damage that will render it unsafe or inaccurate.

(c) When located outside a building, the meter shall be installed as near as practicable to the building and be supported in such a manner as to be as free as possible from damage that will render it unsafe or inaccurate. The gas company shall install an accessible shut-off cock ahead of the meter.

Sec. 16-11-23. Meter accuracy

(a) Every gas service meter, before being installed for the use of any customer, shall be in good order and shall be adjusted by the gas company or its agents to register correctly within the tolerances herein specified. Tests at a rate of flow of one-fifth or less of rated capacity and at a rate of flow equal to or greater than the rated capacity of the meter are required for this determination. The tests at the two rates of flow shall agree within one per cent and the accuracy of the meter at the lower rate of flow shall be within a tolerance of plus or minus one per cent.

(b) Every gas meter removed from service, if practicable, shall be tested for accuracy, at a rate of flow of approximately one-fifth of the rated capacity of the meter, and a record kept of such "as found" tests until the meter is permanently retired from service.

(c) At the time the meter is placed in service either the meter index shall be set at zero or the meter index reading shall be recorded.

Sec. 16-11-24. Meter—periodic tests

No gas meter shall be allowed to remain in service more than sixty months without being retested and if necessary being adjusted to register within the tolerance prescribed in subsection (a) of section 16-11-23. The commission may permit a gas company to vary this maximum period for certain classes of meters where it can be shown that the revised schedule is justified.

Sec. 16-11-25. Meter tests by request

Every gas company shall, upon written request of a customer, and, if he so desires, in his presence or that of his authorized representative, make a test of the accuracy

of the meter in use at his premises; provided the meter has not been verified by the gas company within the period of one year previous to such request and provided the customer will agree to abide by the results of such tests as the basis for the adjustment of disputed charges. Upon such request by a customer, or upon an order for a meter test made by the department, the company shall notify the customer, in writing and within one week of the request for the meter test, that he, or his authorized representative, has the right to be present at the meter test. If said customer, or his authorized representative, desires to be present at the meter test, the customer or his authorized representative shall contact the company within 10 (ten) days of the written notification to arrange to be present at the test. Upon such notification, the company shall schedule a meter test, at a time during the normal operating hours of the company's meter testing facility, which is convenient to both the customer, or his authorized representative, and the company, as soon as possible. A written report of the results of the test shall be furnished the customer by the gas company.

(Effective May 22, 1992)

Sec. 16-11-26. Meter test—referee

A gas company, after notification by the commission that a test is to be made pursuant to the provisions of section 16-259 of the general statutes, shall not adjust, disturb or remove the meter in question, except as directed by the authorized representative of the commission.

Sec. 16-11-27. Meter test—methods

(a) All meter tests shall be made by thoroughly trained personnel.

(b) All tests in determining accuracy of any gas service meter shall be made with a meter prover, unless, because of the unusual capacity or construction of the meter, such method of test is considered impracticable, and another method of test has received the approval of the commission.

Sec. 16-11-28. Meter testing equipment

(a) Every gas company furnishing metered gas service shall have access to at least one suitable meter prover maintained in good condition and correct adjustment so that it shall be capable of determining the accuracy of any service meter to within one-half of one percent.

(b) Every meter prover shall be supplied with all accessories needed for accurate meter testing and shall be located in a room suitable for the work to be done, protected from draughts and excessive changes of temperature.

(c) Every prover shall be accompanied by a certificate signed by a proper authority, giving the date when such prover was last tested and adjusted, or a tag referring to such certificate may be attached when more practicable. These certificates when superseded shall be kept on file in the office of the gas company. Every gas company shall keep the commission informed as to the prover equipment in use, reporting the accuracy at the time of each certification, and notify the commission in writing of any alteration, accident or repair which might affect the accuracy of any prover.

Sec. 16-11-29. Records of meters and meter tests

(a) *Meter* records shall be kept *and* systematically arranged, indicating the date of the purchase of each meter, its size or capacity rating, the date and place of * * * *the latest installation or removal* * * *. These records shall be preserved * * * *for the life* of the meter * * *.

(b) *** *A record shall be prepared of every meter test, indicating the information necessary for identifying the meter, the reading of the meter just prior to the test, the computed accuracy of registration both as found and as left, together with the data taken at the time of the test, to permit the convenient checking of the methods employed and of the computations leading to the result. These records shall be preserved until a new meter test record has been obtained. Test records of meters destroyed or permanently removed from service shall be preserved for at least two years.*

(c) Every gas company shall report annually or more often, if requested by the commission, a summary of the "as found" tests in such form as may be designated by the commission.

(Effective March 31, 1964)

Customer Relations

Sec. 16-11-30. Information to customers

(a) Every gas company shall, upon request, give its customers such information as is reasonable in order that the customers may secure safe, adequate and proper service, and inform customers as to how meters may be read; and it shall render its customers reasonable assistance in securing appliances properly adapted and readjusted to the service furnished.

(b) Every gas company shall, upon request, render a statement of the past readings of a customer's meter for any period not necessarily in excess of fifteen months.

Sec. 16-11-31. Utilization by customers

(a) All maintenance and repairs, including replacement where necessary, of the service pipe, between the main and the customer's house up to and including the meter, shall be performed by the gas company at its own expense.

(b) The gas company shall be required to test the customer's piping for gas leaks, at time of turn on by the gas company, by observing that no gas passes through the meter when all appliances are turned off. The gas company shall refuse to serve until all gas leaks so disclosed have been properly repaired by the customer.

Sec. 16-11-32. Customer bills and deposits

Repealed, effective July 9, 1968.

Sec. 16-11-32a. Customer deposits

(a) Each gas company may require from any customer other than residential customers as defined in section 16-3-200 (a) (3) or prospective customer other than a prospective residential customer as defined in section 16-3-200 (a) (4) a deposit to guarantee payment of bills. Such deposit shall not exceed an amount equivalent to the estimated maximum bill for ninety days.

(b) Each utility having on hand deposits from customers, or hereafter receiving deposits from customers, shall keep records to show: (i) the name of the customer making the deposit; (ii) the account number or other identification of the premises occupied by the customer when the deposit was made; (iii) the amount and date of making the deposit; (iv) a record of each transaction concerning the deposit.

(c) Each utility shall issue a receipt to every customer from whom a deposit is received and shall provide means whereby the depositor may receive his deposit or balance if such receipt is lost.

(d) Interest on any security deposit received from a customer for each calendar year shall be paid at the rate prescribed in Section 16-262j of the general statutes. Interest shall accrue daily and shall be paid or credited to the customer's account annually. Accrued interest shall be paid upon return of the deposit if such return is made at other than the annual payment date for interest.

(e) The deposit shall cease to draw interest on the date it is returned, on the date service is terminated or on the date notice is sent to the customer's last-known address that the deposit is no longer required.

(f) A record of each unclaimed deposit and the interest thereon shall be maintained until the funds are paid over to the state treasurer under the escheat provisions of the general statutes. During this time the utility shall make a reasonable effort to return the deposit and accrued interest.

(g) Deposits by customers other than residential customers as defined in section 16-3-200 (a) (3) may be retained by the utility as long as required to insure payment of bills.

(h) Upon final discontinuance of service the utility may apply such deposit, including accrued interest, to any amount due from the customer for service. Any balance due to the customer shall be promptly refunded.

(i) Deposits by customers other than residential customers, as defined in section 16-3-200 (a) (3) shall be returned, together with accrued interest, where satisfactory credit has been established.

(Effective August 19, 1992; amended August 5, 1997)

Sec. 16-11-33. Customer service requests

Every gas company shall make prompt and full investigation of each complaint and other service requests made to it, either at its office or in writing by any customer; and it shall keep a record of all substantial complaints, which shall show the name and address of the complainant, the date and nature of the complaint and the adjustment or disposal thereof. Records of such complaints shall be kept for a period not less than three years.

Sec. 16-11-34. Meter reading and bill form

(a) Meters shall be read each month at regular scheduled intervals, unless special permission is granted. Bills shall be rendered promptly after a reasonable period for preparing the bills. When there is good reason for doing so, estimated bills may be submitted. Estimated bills of residential customers shall be rendered in accordance with the provisions of section 16-3-102 of the regulations of Connecticut state agencies.

(b) Every gas company shall show, on all periodically rendered bills, the present and previous reading dates, the quantity of gas consumed, the rate code, the fuel charge, if any, the amount of the bill, and such other information as will, in conjunction with its published rates, make possible a convenient recomputation of the charges assessed.

(Effective June 7, 1978)

Sec. 16-11-35. Adjustment of bills for meter error

(a) Whenever the test of a meter reveals it to be fast by more than four per cent, the gas company shall refund to the customer such percentage of the amount of bills covering the consumption indicated by the meter for the previous six months as the meter was found to be in error at the time of test, unless it can be shown from the records of either party that the error found has existed for a greater or lesser period, in which case the refund shall cover such actual period.

(b) In the case of a nonregister meter, the customer may be billed on an estimate based on previous bills for similar usage.

(c) If unmetered gas is used without permission, the customer may be billed on a reasonable estimate of the gas consumed.

Sec. 16-11-36. Rate schedules

(a) Every gas company shall keep on file, in its local office, open to public inspection, copies of all schedules of rates for each class and type of service, forms of agreement, and all rules and regulations respecting the relations of the customer and gas company.

(b) Every gas company shall, upon request, furnish a customer with the schedule of rates applicable to such customer.

(c) Every gas company shall render service to a customer only at rates provided for in the rate schedules on file with the commission, or as prescribed by order of the commission, except as provided in subsection (f).

(d) Every new schedule of rates and any change in rates to be established by any gas company pursuant to statute shall be filed with the commission not less than ten days in advance of the date upon which it is to become effective.

(e) Every gas company shall file with the commission any change made in the filed rules and regulations respecting the relations of the customer and the gas company not less than ten days in advance of the date upon which such change is to become effective.

(f) Every gas company shall file with the commission all special contracts or agreements for billing of gas service to any customer or other utility where the rate to be billed is other than that on file with the commission.

Sec. 16-11-37. Change in gas characteristics

(a) Any change in the heating value, utilization pressures, or other characteristics of the gas which might impair the safe, efficient utilization of the gas as a fuel in the customer's appliances shall not be made unless the gas company makes the necessary adjustments to the customer's appliances.

(b) In the event of such change, the gas company shall give adequate notice to the customers of the pending changes and shall conduct the adjustment program without charge and with a minimum of inconvenience to the customers, provided any change in heating value shall have the approval of the commission as set forth in section 16-11-14.

Sec. 16-11-38.

Repealed, August 19, 1992.

Sec. 16-11-39. Reference to commission

In the event of any dispute involving the interpretation of these regulations, any aggrieved party may refer the dispute to the commission for settlement.

Construction and Operation of Plant

Sec. 16-11-40. Regulator stations

(a) Regulators

(1) All distribution main systems, other than low-pressure systems, that are being supplied through a pressure reducing valve or regulator, shall be protected by suitable safety devices to insure that the failure of a regulator shall not impose pressure on

any part of a system beyond those for which it is designed to operate. (2) In all low-pressure systems, the down stream of the regulator station shall be protected to insure that the pressure of gas shall at no time exceed a maximum of two pounds per square inch gauge at the inlet of any gas service lateral. (3) Regulators supplying distribution systems shall be checked once a month to determine that there is no gas leakage in the station and that the equipment is in operable condition. Once a year this equipment shall be inspected internally, and overhauled if required.

(b) **Ventilation.** (1) All district regulator enclosures shall be ventilated in a way to remove accumulations of gas or shall be closed to prevent intentional or accidental introduction of sources of ignition into the enclosures. (2) Ventilation shall also include provision for the venting of diaphragms of regulators and pressure relief devices to the outside atmosphere. The vent shall be of a size no smaller than the connection provided by the manufacturer and so installed as to relieve the entire capacity of the relieving device. All vents shall terminate outside buildings, pits, and confined spaces in rain proof fittings and shall be installed with due regard to hazards to life and property by the venting of gas into the atmosphere.

(c) **Drainage.** Underground regulator stations shall not be connected by drain lines to a public sewer. Provision shall be made to minimize the entrance of water or for its removal, or the equipment shall be designed to operate properly if submerged.

(d) **Shutoff valves.** A shutoff valve shall be provided in the inlet line of each regulator station supplying a low pressure distribution system. This valve shall be in an accessible location not closer than twenty-five feet from the nearest wall of the station nor preferably more than one thousand feet distant. These valves shall be checked at least once each year by closing and operating insofar as operating conditions permit.

(e) **Auxiliary equipment.** (1) Where electrical equipment is required in regulator stations, it shall be designed and installed in accordance with Article 500 of the latest edition of the National Electrical Code and shall meet the requirements thereof for Class I locations. (2) Where regulators require supports, they shall be of fire-proof material.

Sec. 16-11-41. Services

(a) **Regulators.** (A device for reducing and controlling pressures between the service and house piping) (1) Any customer's service being supplied through a customer service pressure regulator shall be protected by a suitable safety device to prevent the development of pressures in excess of two pounds per square inch gauge. (2) Provision shall be made for the venting of the diaphragms of service pressure regulators and pressure relief devices to the outside atmosphere. The vent shall be of a size no smaller than the connection provided by the manufacturer and so installed as to relieve the entire capacity of the relieving device. Such vent or vents shall terminate outside buildings, pits and confined spaces in rain-proof fittings and shall be installed with due regard to hazards to life and property by the venting of gas into the atmosphere. (3) All service pressure regulators installed on the customer's premises shall be maintained in proper working order and shall be periodically inspected in place, preferably at the time of removal of the meter for periodic testing. The inspection shall consist of external examination of the regulator, its piping, seal, vent line and operating condition.

(b) **Shutoffs.** (1) All services entering a building shall be provided with a shutoff inside of the building and ahead of the meter. Where a service pressure regulator is part of the metering installation, the shutoff shall be located upstream of the other

gas service fittings within the building. (2) A shutoff shall be installed at the curb or property line on all gas services supplying gas to a theater, church, school, factory or other building where large numbers of persons assemble and on all gas services where the inlet pressure to the service is in excess of two pounds per square inch gauge. In the case of an outside meter or regulator installation, subsection (c) of section 16-11-22 shall apply. (3) Shutoffs may be either a cock or a valve and shall be accessible and maintained in proper working order.

(c) **Installation of services.** (1) The gas company may furnish and install, but shall maintain free of charge, a gas service from the gas main adjacent to the customer's premises to the customer's property line or curb when in its judgment the cost of installation is reasonable and the use of gas is sufficient to warrant it. (2) While the service connections from the property line to the customer's metering equipment shall ordinarily be installed at the expense of the customer and shall be maintained by the company, the company may furnish such service connections in whole or in part when, in its judgment, the cost of installation is reasonable and the use of gas is sufficient to warrant it.

Sec. 16-11-42. Gas system construction and maintenance

(a) The gas company shall maintain its entire plant, and all facilities owned or operated by it and used in furnishing gas, in such condition as to render adequate and continuous service. Every gas company shall at all times use every effort to properly protect the public from danger and shall exercise due care to reduce the hazards to which employees, customers and others may be subjected by reason of its equipment and facilities.

(b) Unless some other material is approved by the commission, cast iron, wrought iron, steel or copper shall be used for mains and services in low pressure and intermediate pressure systems, and wrought iron or steel in pressure systems operated in excess of one hundred pounds per square inch gauge.

(c) Mechanical or flexible couplings shall be used on cast iron mains and services, but cement or lead joints may be used when soil conditions assure satisfactory foundations.

(d) Flexible couplings or welded joints shall be used on wrought iron or steel mains and services but screwed couplings may be used for pipe four inches in diameter or less.

(e) Provisions for expansion, by expansion joints or otherwise, shall be made where necessary on runs of exposed pipe.

(f) As far as practicable, all pipe shall be laid below average frost line but for cast iron pipe the top of the bell shall be a minimum of thirty inches below the ground surface.

(g) Whenever normal excavation discloses unsatisfactory foundation, one or more of the following corrective measures shall be adopted: (1) Excavate to good bearing soil and backfill to pipe grade with suitable material well tamped to provide adequate support; (2) support with a concrete slab; (3) support with piling; (4) use steel or wrought iron pipe with flexible couplings and, in unusually wet or corrosive soil, treat the steel pipe with a protective coating.

(h) Pipe on a highway bridge shall be so located and protected as to reduce hazard to a minimum.

(i) All gas mains shall be laid clear of all other underground structures and shall not be laid in the same trench with other underground utilities in order to minimize the possibility of gas leakage by reason of any movement of such structures or of

the mains. Gas services may be laid in the same trench with other underground utilities, with the exception of sewer pipes, provided such service pipes are laid at least twelve inches in a horizontal plane from other underground facilities. At crossings of mains and services with other underground structures clearances shall be not less than twelve inches. To secure compliance with the requirements of these regulations by others doing underground construction work, the gas companies should arrange with the other agencies having highway subsurface rights for adequate notification and inspection procedure.

(j) Pipe laid shall be tested and made tight before being placed in service.

(k) The ditch underneath, around and over the pipe shall be backfilled with good material thoroughly tamped to secure a firm support. To disclose any settlement of the backfill which may need correcting, newly filled ditches shall be reinspected at intervals for sufficient period of time subsequent to completion of backfilling operations.

(l) Service connections may be tapped into cast iron mains if the diameter of the hole does not exceed one-quarter of the diameter of the main, otherwise, and in mains other than cast iron, a saddle, sleeve or welded connection may be used or a tee cut into the line.

(m) The service connection at the main or the run of service pipe shall allow for a reasonable amount of flexibility to prevent fracture or leaks at the connection with the main.

(n) At entrances to foundation walls or to regulator or valve pit walls, the pipe shall be protected against corrosion.

(o) Regulator pits and valve pits shall be constructed to safely sustain any reasonable load imposed thereon, and with sufficient foundation depth and stability to minimize the possibility of breaks in the pipe lines at the wall entrances.

Gas Company System Records

Sec. 16-11-43. Maps and records

(a) The gas company shall keep maps or records to show the size, location, character, and date of installation, of major items of its plant.

(b) Upon request, the gas company shall file with the commission an adequate description or maps, to define the territory served. All records which the commission may require the gas company to file except maps which shall be the gas company's standards shall be in a form satisfactory to the commission.

Sec. 16-11-44. Operating records

The gas company shall keep appropriate operating records for use in statistical and analytical studies for regulatory purposes. Such records shall include at least the following data: Gas manufactured, produced or purchased; real amount of gas sent out; the amount of coal, oil, electric energy and gas used; and labor charged against the above.

Sec. 16-11-45. Availability of records

All records and reports as required under these regulations shall be kept at the office or offices of the gas company, within the state unless permission is granted otherwise. Such records shall be preserved in complete form for at least three years, unless a longer period is specified, and shall be open for inspection by the commission or its authorized representatives at any and all reasonable times.

Sec. 16-11-46. Property identification

Each group of buildings or structures used in the production, refining or distribution of gas shall be provided with such signs as will definitely designate the name of the gas company owning or having the custody or maintenance of the same.

Sec. 16-11-47. Reports to commission

The gas company shall furnish to the commission, at such times and in such form as the commission may require, the results of any required tests and summaries of any required records. The gas company shall also furnish the commission with any information concerning the gas company's facilities or operations which the commission may request and need for determining rates or judging the practices of the gas company.

Sec. 16-11-48. Reconstruction not required

These regulations shall not be construed to require general reconstruction or re-equipping on the part of the gas company to conform with regulations for equipment or construction contained herein, not in force when such equipment was installed or construction made. The commission reserves the right to deal with specific cases as the particular conditions require.

Appendix**Report of accidents—Sec. 16-16, General Statutes.**

Repealed, July 7, 2010.

Inspection of meters—Sec. 16-259, General Statutes.

Upon petition of any person and the payment of a fee of one dollar for each meter, the commission shall cause to be inspected any meter used in measuring electricity, gas or water supplied to such petitioner. The commission may prescribe such limits of variation from accurate registration by such meters as it determines to be reasonable. The company supplying electricity, gas or water through any such meter shall reimburse the petitioner for such inspection fee if such meter is found out to register accurately within the limit of variation so prescribed, and shall not again use such meter until it is corrected and approved by the commission.

Service Supplied by Water Companies**Sec. 16-11-50. Definitions**

As used in sections 16-11-50 to 16-11-97, inclusive: (1) "Commission" means the public utilities commission of the state of Connecticut;

(2) "Company" or "utility" includes every person, partnership, corporation, company, association, joint stock association, or lessee thereof, owning, maintaining, operating, managing or controlling any pond, lake, reservoir or distributing plant employed for the purpose of supplying water for general domestic use in any town, city or borough, or portion thereof, within this state;

(3) "Class 1 utilities" means water companies having annual revenues of twenty thousand dollars or more;

(4) "Class 2 utilities" means water companies having annual revenues of less than twenty thousand dollars;

(5) "Customer" means any person, firm, corporation, company, association, governmental unit, lessee who by the terms of a written lease is responsible for the water bill, or owner of property furnished water service by a water company.

(6) "Meter" means any device for measuring the quantity of water used as a basis for determining charges for water service to a customer;

(7) "Premises" shall include but is not restricted to the following:

(A) A building or combination of buildings owned or leased by one customer, in one common enclosure, occupied by one family as a residence or one corporation or firm as a place of business, or

(B) each unit of a multiple house or building separated by a solid vertical partition wall occupied by one family as a residence or one firm as a place of business, or

(C) a building owned or leased by one customer and having a number of apartments, offices or lofts which are rented to tenants using in common one hall and one or more means of entrance, or

(D) a building two or more stories high under one roof owned or leased by one customer and having an individual entrance for the ground floor occupants and one for the occupants of the upper floors, or

(E) a combination of buildings owned by one customer, in one common enclosure, none of the individual buildings of which is adapted to separate ownership, or

(F) a public building, or

(G) a single plot, used as a park or recreational area;

(8) "Property" means all facilities owned and operated by a water company;

(9) "Main" means a water pipe, owned, operated and maintained by a company, which is used for the purpose of transmission or distribution of water but is not a water service pipe;

(10) "Service pipe" means the pipe that runs between the main and the customer's place of consumption.

(Effective April 12, 1978)

Sec. 16-11-51. Records

All records required by these regulations or necessary for the administration thereof shall be kept within this state, unless otherwise authorized by the commission. Said records shall be available for examination by the commission or its authorized representatives during all reasonable business hours.

(Effective October 18, 1966)

Sec. 16-11-52. Preservation of records

Unless otherwise specified by the commission, all such records shall be preserved for the period of time specified in the latest edition of the national association of railroad and utilities commissioner's publication, "Regulations to govern the preservation of records of electric, gas and water utilities."

(Effective October 18, 1966)

Sec. 16-11-53. Documents filed with commission

The utility shall file with the commission the following documents and information, and shall maintain such documents and information in a current status:

(1) A copy of the company's tariff, which shall include but not be limited to: (A) A copy of each schedule of rates for service, together with the applicable riders; (B) A copy of the company's rules, or terms and conditions, describing the company's policies and practices in rendering service. These rules shall include: (I) A list of items which the company normally furnishes, owns and maintains on the customer's premises; (II) The utility's extension plan or plans as required in section 16-11-61;

(2) A copy of each special contract for service which differs from the filed rates;

(3) A copy of each type of customer bill;

(4) The name, title, address and telephone number of the person who should be contacted in connection with: (A) General management duties; (B) customer relations and complaints; (C) engineering operations; (D) meter tests and repairs; (E) emergencies during non-office hours.

(Effective August 19, 1992)

Sec. 16-11-54. Protection against hazards. Assistance to commission

(1) Every company shall use every effort to warn and protect the public from danger and shall exercise all possible care to reduce the hazard to which customers, employees and others may be subjected by reason of its equipment and facilities.

(2) Every company shall make available to the commission all records, data, reports and statements of employees and shall assist the commission in promptly examining into the causes of and the circumstances connected with each accident which is the subject of commission investigation.

(Effective October 18, 1966)

Sec. 16-11-55. Sale on meter measurement basis

(1) All water sold by a utility shall be on the basis of meter measurements or as otherwise provided for in its rate schedules.

(2) Wherever practicable, consumption of water within the utility itself, or by administrative units associated with it, shall be metered.

(3) Separate premises shall be separately metered and billed. Combined billing will not be permitted except on the same premises. Any other arrangement shall require prior approval of the commission.

(4) Submetering shall be permitted only with the approval of the commission.

(Effective October 18, 1966)

Sec. 16-11-56. Meter reading sheets or cards

The meter reading sheets or cards shall show:

(1) The customer's name, address and service classification;

(2) the identifying number or description of the meter;

(3) meter readings and dates;

(4) identification of an estimated bill.

(Effective October 18, 1966)

Sec. 16-11-57. Reading of meters

Meters shall be scheduled to be read at least quarterly except for seasonal customers. Utilities shall avoid, insofar as practicable, sending a customer two successive estimated bills. Estimated bills of residential customers shall be rendered in accordance with the provisions of section 16-3-102 of the regulations of Connecticut state agencies.

(Effective June 7, 1978)

Sec. 16-11-58. Meter test records

Each utility shall maintain records of each test made of a meter for not less than two years. Test records shall include the following: (1) The date and reason for the test; (2) the type and capacity of the meter; (3) the reading of the meter before making the test; (4) the accuracy “as found” at each rate of flow; (5) the accuracy “as left” at each rate of flow; (6) if the test of the meter is made by using a standard meter, the utility shall retain all data taken at the time of the test in sufficient form to permit the convenient checking of the test methods and the calculations.

(Effective October 18, 1966)

Sec. 16-11-59. Records relating to meters

Each utility shall maintain records of the following data, where applicable, for each meter and associated metering device until retirement: (1) The complete identification, including manufacturer, number, type, capacity and units; (2) the dates of installation and removal from service, together with the location.

(Effective October 18, 1966)

Sec. 16-11-60. Cost for temporary or intermittent service

When the utility renders temporary or intermittent service to a customer, it may require that the customer bear all the cost of installing and removing the service in excess of any salvage realized.

(Effective October 18, 1966)

Sec. 16-11-61. Plans for financing main extensions

Each utility shall file a plan acceptable to the commission providing for financing of extensions of mains. Such plan shall be based upon the following principles:

(1) Mains having a diameter of less than six inches shall not be installed without prior approval of the commission;

(2) when it is determined, in accordance with a predetermined formula on file with the commission, that the anticipated revenues are insufficient to cover all operating expenses and to support the investment, advance payments, contributions or guarantee rates in excess of the regular established rates shall be required.

(3) Costs to be borne by patrons or developers under extension contracts shall be calculated on mains of the size required to serve the customer but shall not be calculated on mains larger than eight inches in diameter unless unusual customer requirements warrant a larger size main. Extension contracts shall include the cost of all service connections, as defined in section 16-11-62 (3), constructed in connection with the installation of new mains by either class 1 or class 2 utilities.

(4) Estimated costs shall be adjusted to actual costs upon completion of the work, except that the use of average costs, excluding paving, may be used under the advance or contributory forms of agreement.

(5) All main extension applications shall be made in writing and a contract executed before start of construction.

(6) When the utility determines, in accordance with a predetermined formula on file with the commission, that the anticipated revenues are insufficient to cover all operating expenses and to support the investment, the following conditions shall apply:

(A) Individual patrons shall be offered a choice of the three following plans: “Guarantee,” “Contributory” or “Refundable advance payment”;

(B) developers having lots for building construction or the sale of homes shall be offered either the contributory or refundable advance payments plans;

(C) all contributions or advances required shall be paid before material is ordered. Material shall be ordered within a reasonable time after receipt of deposit;

(D) no interest shall be paid on advance deposits;

(E) the "Guarantee" plan shall state the amount of the annual guarantee and shall be apportioned equitably among patrons on the extension, and the time of payment shall be specifically set forth;

(F) the "Refundable advance payment" plan shall provide for and state the amount to be refunded for each additional patron taking service from the extension and shall have a termination date. The time of payment shall be specifically set forth;

(G) the "Contributory plan" shall provide for the payment by the developer of the entire cost of the extension less the then present value of the anticipated payments, as determined by the utility, which, under a refundable advance payment plan, would become refundable to the developer;

(H) if a party other than the original patron seeks service from an extension which was constructed under a refundable advance payment contract, such party shall be required to advance an amount to the company representing his equitable share of the cost of the extension, and appropriate refund shall be made to the original patrons;

(I) if an additional party obtains service along an extension serving patrons under guarantee rates, appropriate adjustment shall be made in such guarantee rates.

(7) If an extension contract requires additional facilities, such as standpipes and booster pumps, and such facilities are not necessary to benefit the system as a whole, the cost of such facilities may, with the approval of the commission, be included in the water main extension contract. If facilities larger than required are installed to serve an extension, the company shall pay the excess cost.

(8) If a utility determines, with the Department's approval, that constructing and operating a water system not connected to the utility's existing system is more feasible than extending the utility's existing mains, the utility shall build such a non-connected water system in accordance with (7) above, and account for such construction in accordance with the Uniform System of Accounts. Any such non-connected water system shall be designed to accommodate adjacent growth of at least 10% over the non-connected supply's normal design demand. Any such non-connected water supply shall be constructed in conformance with section 16-11-79 of these regulations. Installing a non-connected water system in lieu of extending a utility's existing mains shall be considered feasible if conditions including, but not limited to, the following prevail: in a development with at least fifteen dwelling units or twenty-five persons, the investment for an extension exceeds \$5000 per dwelling unit or person; viable groundwater sources are present; and adequate fire protection may be provided.

(Effective May 27, 1986)

Sec. 16-11-62. Service connection costs: Class 1 utilities

In the case of class 1 utilities (1) the utility shall furnish, install, own and maintain at its expense all new service connections, provided the costs of excavation, backfill, and removal and replacement of paving, walks, curbs, etc., necessarily incurred in respect to new services, shall be borne by the customer or other applicant for service;

(2) the utility shall furnish, install, own and maintain at its expense all replacements of service connections, including the cost of excavation, backfill and removal

and replacement of paving, walks, curbs, etc., necessarily incurred in respect to each replacement;

(3) as used herein, service connection means the service pipe from the main to the curb stop, at or adjacent to the street line or the customer's property line and such other valves, fittings, etc., as the utility may require at or between the main and the curb stop, but does not include the curb box. All service connections shall include a curb stop;

(4) the customer at his own expense shall furnish, install, own and maintain the necessary curb box and the service pipe from the curb stop to the place of consumption and shall keep them in good repair and in accordance with reasonable requirements of the utility. A curb box shall be installed at each curb stop;

(5) the utility shall, with the cooperation of the customer, make an adequate inspection of the customer's service pipe in order to determine that it complies with company requirements, and

(6) all replacements and repairs of service connections owned by the utility shall be at its own expense.

(Effective October 18, 1966)

Sec. 16-11-63. Service connection costs: Class 2 utilities

In the case of class 2 utilities: (1) The customer at his own expense shall furnish, install and maintain all new service pipes from the connection at the main to the curb or property line and shall furnish, install, own and maintain all new service pipes from the curb or property line to the place of consumption, including excavation, backfill, removal, replacement of paving, walks, curbs, etc., and shall keep them in good repair in accordance with reasonable requirements of the utility. A curb stop and box shall be required on each service;

(2) the utility shall, with the cooperation of the customer, make an adequate inspection of the customer's service pipe in order to determine that it complies with company requirements;

(3) the customer at his own expense shall replace and maintain the service pipe from the main in the street to the premises served, including excavation, backfilling and replacement of paving.

(4) the utility shall be responsible for tapping of the main and furnishing the corporation cock for which a reasonable charge may be made.

(Effective July 9, 1968)

Sec. 16-11-64. Location of service pipe

(a) The service pipe shall extend through that point on the customer's property line or the street line easiest of access to the utility from its existing distribution system and, where practicable, from a point at right angles to the existing distribution line in front of the premises to be served. Service pipes shall not cross intervening properties or operate in place of a proper water main extension running in the street and fronting the property except as noted in subsection (b). The approval of the utility shall be secured as to the proper location for the service pipe.

(b) The utility or property owner, upon written request to the Department of Public Utility Control, and with proper easements in place, may be granted an exception to allow a service pipe to cross intervening properties. The utility or property owner may request such exception only under very exceptional hardship circumstances and then only on a case by case basis. Documentation shall be furnished to demonstrate that the proposed service line will ultimately serve no more than one premises, otherwise the water utility shall install a company-owned

main extension in accordance with Section 16-11-61. The following shall generally not constitute sufficient cause for granting an exception:

(1) When the intent is to avoid the time and expense of a proper main extension, and proper service pipe installation, or other reasonable engineering solution in conformance with good engineering standards of practice, or

(2) When the intent is to perpetuate an existing non-conforming condition through an extension or replacement of an existing non-conforming service pipe, or

(3) When an easement is proposed without sufficient evidence to show that alternative ownership of a suitable strip of land to establish frontage on a road is not feasible.

(Effective October 25, 1988)

Sec. 16-11-65. Meter installation

(1) Meter installed out of doors shall be so located as to be accessible to the utility's distribution line for proper service connection and so far as practicable the location should be mutually acceptable to the customer and the utility. The meter shall be installed so as to be unaffected by climatic conditions and reasonably secure from injury. Meter pits shall be owned and maintained by the property owner.

(2) Meters installed inside the customer's building shall be located as near as possible to the point where the service pipe enters the building and so as to be reasonably secure from injury and readily accessible for reading and testing. In case of multiple dwellings, such as two-family flats or apartment buildings, the meter shall be located within the premises served or in a location accessible to the customer and the utility.

(Effective October 18, 1966)

Sec. 16-11-66. Maintenance charges

All maintenance charges, including thawing of frozen services, shall be paid for by the party owning the service. Where the service from the main to inside the cellar wall is in part owned by the company and in part owned by the customer, the water company shall thaw out the frozen service, and one-half the cost thereof shall be paid by the customer.

(Effective October 18, 1966)

Sec. 16-11-67. Information to customers

Each utility shall:

(1) Furnish rate schedules and such additional information as the customer may reasonably request;

(2) upon request, inform its customers as to how meters are read and the method of computing the charges billed;

(3) notify customers affected by a change in rates or rate classification;

(4) maintain up-to-date maps, plans or records of its entire transmission and distribution systems, with such other information as may be necessary to enable the utility to advise prospective customers, and others entitled to the information, as to the facilities available for service in any locality.

(Effective October 18, 1966)

Sec. 16-11-68. Customer deposits

(a) Each utility may require from any customer or prospective customer a deposit to guarantee payment of bills. Such deposits shall not exceed an amount equivalent to the estimated maximum bill for ninety days.

(b) A company may not refuse to provide utility service where a residential customer lacks the financial ability to pay a security deposit, which is defined as:

(1) A person receiving local, state, or federal public assistance including but not limited to:

- (A) aid to the blind;
- (B) aid to families with dependent children;
- (C) old age assistance;
- (D) aid to the disabled;
- (E) medicaid;
- (F) supplemental security income; or
- (G) general assistance;

(2) A person whose sole source of financial support is derived from social security, veterans' administration or unemployment compensation benefits;

(3) A person whose income falls below one hundred twenty five per cent of the poverty level as determined by the federal government in accordance with the income poverty guidelines from the regional office of family assistance, department of health, education, and welfare or its successor agency; or

(4) A person whose circumstances threaten a deprivation of the necessities of life for himself/herself or dependent children of his/her household if payment of a security deposit is required.

(c) If a company has determined that a security deposit should be required from a residential customer, it shall inform that customer that service will not be denied if the customer lacks the financial ability to pay, and shall provide him or her with a copy of these regulations.

(d) Each utility having on hand deposits from customers, or hereafter receiving deposits from customers, shall keep records to show:

(1) The name of the customer making the deposit; (B) the account number or other identification of the premises occupied by the customer when the deposit was made;

(2) the amount and date of making the deposit; and

(3) a record of each transaction concerning the deposit.

(e) Each utility shall issue a receipt to every customer from whom a deposit is received and shall provide means whereby the depositor may receive his deposit or balance if such receipt is lost.

(f)(1) Interest on any security deposit received from a customer for each calendar year shall be paid at the rate prescribed in section 16-262j of the general statutes. Interest shall accrue daily and shall be paid or credited to the customer's account annually. Accrued interest shall be paid upon return of the deposit if such return is made at other than the annual payment date for interest.

(2) The deposit shall cease to draw interest on the date it is returned, on the date service is terminated, or on the date notice is sent to the customer's last-known address that the deposit is no longer required.

(g) A record of each unclaimed deposit and the interest thereon shall be maintained until the funds are paid over to the state treasurer under the escheat provisions of the general statutes. During this time the utility shall make a reasonable effort to return the deposit and accrued interest.

(h) Deposits may be retained by the utility as long as required to insure payment of bills.

(i) Upon final discontinuance of service the utility may apply such deposit, including accrued interest, to any amount due from the customer for service. Any balance due to the customer shall be promptly refunded.

(i) Deposits shall be returned, together with accrued interest, where satisfactory credit has been established.

(Effective August 19, 1992; amended August 5, 1997)

Sec. 16-11-69. Bill form

The bill form used shall show:

- (1) The name of the utility furnishing the service;
- (2) the reading of the meter at the end of the period for which the bill is rendered;
- (3) the present and previous meter reading dates;
- (4) the number and kind of units metered;
- (5) the applicable rate schedule, or identification of the applicable rate schedule;
- (6) the gross or net amount of the bill;
- (7) the date by which the customer must pay the bill in order to benefit from any discount and to avoid any penalty;
- (8) a distinct marking to identify an estimated bill;
- (9) any conversions from meter reading units to billing units or, in lieu of such information, a statement advising that such information can be obtained by contacting the utility's principal office;
- (10) the address or post office box where payment may be made;
- (11) telephone number of officers where information may be obtained.

(Effective October 18, 1966)

Sec. 16-11-70. Customer billing records

The utility shall retain customer billing records for the length of time necessary to permit the utility to comply with section 16-11-52 of these regulations.

(Effective October 18, 1966)

Sec. 16-11-71. Adjustment of bills

Bills which are incorrect due to meter or billing errors shall be adjusted as follows:

(1) Whenever a meter in service is tested and found to have over-registered more than two per cent, the utility shall adjust the customer's bill for the excess amount paid as determined below.

(A) If the time at which the error first developed or occurred can be definitely determined, the amount of overcharge shall be based thereon.

(B) If the time at which the error first developed or occurred cannot be definitely determined, it shall be assumed that the over-registration existed for a period equal to one-half of the time since the meter was last tested. If more than one customer received service through the fast meter during the period for which the refund is due, a refund shall be paid to the present customer only for the time during which he received service through the meter. (2) Whenever a meter in service is found not to register, the utility may render an estimated bill. The utility shall estimate the charge for the water used by averaging the amount registered over a similar period preceding or subsequent to the period of nonregistration or for a corresponding period in previous years, adjusting for any changes in the customer's usage. When it is found that the error in a meter is due to some cause, the date of which can be fixed, the overcharge or the undercharge shall be computed back to but not beyond such date. (3) Billing adjustments due to fast meters shall be calculated on the basis that the meter should be one hundred per cent accurate. For the purpose of billing adjustment, the meter error shall be one-half of the algebraic sum of the error at maximum test flow plus the error at intermediate test flow. (4) When a customer has been overcharged as a result of incorrect reading of the meter, incorrect calculation of

the bill, incorrect connection of the meter or other similar reasons, the amount of the overcharge shall be adjusted, refunded or credited to the customer. (5) When a customer has been undercharged as a result of incorrect reading of the meter, incorrect calculation of the bill, incorrect connection of the meter or other similar reasons, the amount of the undercharge may be billed to the customer.

(Effective October 18, 1966)

Secs. 16-11-72—16-11-73.

Repealed, August 19, 1992.

Sec. 16-11-74. Restoration of discontinued service

In all cases of discontinuance of service as herein defined, where the cause for discontinuance has been corrected and all rules of the utility on file with the commission have been complied with, the utility shall promptly restore service to the customer.

(Effective October 18, 1966)

Sec. 16-11-75. Reconnection charge

Where service has been discontinued in accordance with subsection (b) of Section 16-3-100 of the Regulations of Connecticut State Agencies, the utility may make a reasonable charge for reconnection of service. Such charge shall be applied uniformly and shall be incorporated in the rules of the utility.

(Effective August 19, 1992)

Sec. 16-11-76.

Repealed, August 19, 1992.

Sec. 16-11-77. Complaints

For the purpose of this section, “complaint” means objection to the charge, facilities or quality of service of a utility. When a complaint, oral or written, is made to the utility by a customer, the utility shall make a prompt and complete investigation and advise the complainant thereof. It shall keep a record of each such complaint which shall show the name and address of the complainant, the date and nature of the complaint and the adjustment or disposition thereof. A record of the original complaint shall be kept for a period of three years subsequent to the final settlement of the complaint.

(Effective October 18, 1966)

Sec. 16-11-78. Identification of employees

Any employee of a utility whose duties require him to enter the customer’s premises shall wear a distinguishing uniform identifying him as an employee of the utility, or carry on his person a badge or other identification prominently displayed which will identify him as an employee of the utility.

(Effective October 18, 1966)

Sec. 16-11-79. Design and construction of plant

The design and construction of the utility’s water plant shall conform to good standard engineering practice, including the minimum standards of the American Water Works Association. It shall be designed to make reasonable provision for the company’s water supply requirements for a period of at least fifteen years and operated so as to provide reasonably adequate and safe service to its customers and

shall conform to the requirements of the state department of health with reference to sanitation and potability of water.

(Effective October 18, 1966)

Sec. 16-11-80. Mains. Service pipes

(1) Mains. (A) Water mains shall be placed at such a depth below ground level, or otherwise protected, as will prevent freezing during the coldest weather experienced in the community in which laid, and will prevent damage to traffic. (B) Insofar as practicable, the utility shall design its distribution system so as to avoid dead ends in its mains. Where dead ends are necessary, the utility shall provide hydrants or valves for the purpose of flushing the mains. Mains with dead ends shall be flushed as often as necessary to maintain the quality of the water. (C) Valves or stop cocks shall be provided at reasonable intervals in the mains so that repairs may be effected by the utility with interruptions of service to a minimum number of customers. (D) All new mains shall be disinfected before being connected to the system. The method of disinfecting shall be in compliance with state department of health practices. (E) Wherever feasible, the distribution system shall be laid out in a grid so that, in case of breaks or repairs, the interruptions of service to the customers shall be at a minimum.

(2) Service pipes. (A) The size, design, material and installation of the service pipe shall conform to such reasonable requirements of the utility as may be incorporated in its rules, provided the minimum size of the pipe shall not be less than three-quarters inch nominal size except under unusual circumstances which shall be clearly defined. (B) All service pipes shall be laid at such a depth in accordance with the rules of the utility as will prevent freezing, except where services are not intended for use during freezing weather and are actually drained during such periods. (C) The utility shall inspect the service pipe to assure that it has been installed at proper depth and is free from any tee, branch connection, irregularity or defect.

(3) Whenever normal excavation discloses an unsatisfactory soil condition, one or more of the following corrective measures shall be employed: (A) Excavate to good bearing soil and backfill to pipe grade with suitable material well tamped to provide adequate support; (B) support with a concrete slab; (C) support with piling.

(4) Pipe on a highway bridge shall be located so as to reduce hazard to a minimum and shall be protected from freezing.

(5) In the case of pipes laid in trench as with other facilities: (A) Water mains shall be laid clear of all other underground facilities; (B) water mains may be laid in the same trench with other underground utility facilities except gas, oil or sewer pipes, provided at least eighteen inches separation, in a horizontal plane, shall be maintained and provided such arrangements shall be mutually acceptable to the parties concerned; and (C) water services may be laid in the same trench with other underground utility facilities except oil or sewer pipes, provided twelve inches separation, in a horizontal plane, shall be maintained and provided such arrangements shall be mutually acceptable to the parties concerned; (D) at crossings of mains and services with other underground facilities, clearances wherever possible shall be not less than twelve inches; (E) to secure compliance with the requirements of these regulations by others doing underground construction work, the utility shall arrange with the other agencies having highway subsurface rights for adequate notification and inspection procedure.

(6) Pipe laid shall be tested and made tight before being placed in service.

(7) The ditch underneath, around and over the pipe shall be backfilled with good material thoroughly tamped to secure a firm support. To disclose any settlement of

the backfill which may need correcting, newly filled ditches shall be reinspected at intervals.

(8) The service connection at the main or the run of service pipe shall allow for a reasonable amount of flexibility to prevent fracture or leaks at the connection with the main.

(Effective October 18, 1966.)

Sec. 16-11-81. Meter testing equipment

(1) Each utility furnishing metered water service shall provide the necessary standard facilities instruments and other equipment for testing its meters in compliance with these regulations. Any utility may be exempted from this requirement by the commission if satisfactory arrangements are made for tests of its meters by another utility or approved agency equipped to test meters in compliance with these regulations. (2) The utility's meter test shop shall, insofar as practicable, simulate the actual service conditions of temperature, inlet pressure and outlet pressure. It shall be provided with the necessary fittings, including a quick acting valve for controlling the starting and stopping of the test and a device for regulating the flow of water through the meter under test within the requirements of these regulations. (3) The over-all accuracy of the test equipment and test procedures shall be sufficient to enable tests of service meters within the requirements of these regulations. (4) Where a standard test meter is used for field testing of service meters, such device shall be checked in an approved meter shop for accuracy at least once a year, adjustments made when necessary and a record kept of such tests and adjustments.

(Effective October 18, 1966.)

Sec. 16-11-82. Pre-installation testing. Storage

Every water meter shall be tested as required by these regulations prior to its installation either by the manufacturer, the utility or any commission approved laboratory equipped for meter testing. Meters with oil-enclosed gear trains should be stored in an inverted position and, if not so stored, shall be tested immediately before installation.

(Effective October 18, 1966.)

Sec. 16-11-83. Test flows

(1) All meters used for measuring the quantity of water delivered to a customer shall be in good mechanical condition and shall be adequate in size and design for the type of service which they measure and shall be accurate to the following standards. (2) For determination of minimum test flow over normal test flow limits, the commission will use as a guide the appropriate standard specifications of the American Water Works Association for the various types of meters. These test flows for positive displacement type cold water meters are as follows:

FLOW IN G.P.M.

<u>Nominal Meter Size</u>	<u>Minimum</u>	<u>Intermediate</u>	<u>Maximum</u>
5/8"	0.25	2	15
3/4"	0.50	3	25
1"	0.75	4	40
1 1/2"	1.50	8	80
2"	2.00	15	120
3"	4.00	20	250
4"	7.00	40	350
6"	12.00	60	700

(3) Displacement meters shall be tested at each of the rates of flow stated above for the various size meters. A meter shall not be placed in service if it registers less than ninety-five per cent of the water passed through it at the minimum test flow or over registers or under registers more than one and one-half per cent at the intermediate or maximum limit. A repaired meter shall not over register or under register more than one and one-half per cent of the intermediate and maximum flows.
(Effective October 18, 1966.)

Sec. 16-11-84. Periodic and complaint tests

All meters tested in accordance with these regulations for periodic or complaint tests shall be tested in the condition in which found in the customer's service prior to any alteration or adjustment in order to determine the average meter error. Tests shall be made at the intermediate and maximum rates of flow and the average meter error shall be one-half the algebraic sum of the errors of the two tests.
(Effective October 18, 1966)

Sec. 16-11-85. Seal

Upon completion of adjustment and test of any water meter under the provisions of these regulations, the utility shall affix thereto a suitable seal in such a manner that adjustment or registration of the meter cannot be changed without breaking the seal.
(Effective October 18, 1966)

Sec. 16-11-86. Reports of tests

Each utility shall furnish to the commission, at intervals not exceeding one year, a report of the summary of all meter tests made. This report shall be in such detail as may be prescribed by the commission from time to time.
(Effective October 18, 1966)

Sec. 16-11-87. Restoration of meters removed from service

All water meters removed from service for repair or testing in accordance with these regulations shall be restored to the prescribed limits of accuracy as required by these regulations before again being placed in service.
(Effective October 18, 1966)

Sec. 16-11-88. Periodic and routine tests

Each utility shall adopt the following periodic and routine test and repair schedule of its meters:

<i>Size of Meter Inches</i>	<i>Interval between Test Years</i>
5/8	8
3/4	8
1	8
1 1/2	4
2	4
3	3
4	2
6 & larger	1

(1) If a utility's meters are maintained in compliance with the provisions for meter testing herein and in accordance with the above schedule, (or as the test interval

has been extended in part as described below), and if the utility has consistently demonstrated satisfactory compliance in its annual meter test report submissions to the Authority over the most current consecutive three-year period including the condition that the utility has not exceeded an amount of overdue meters equal to ten percent (10%) of the total due tests in any year over that three-year period, and if at least ninety percent (90%) of the meters so tested register an accuracy of not less than ninety-six percent (96%) nor more than one hundred two percent (102%) during the given three-year period, such utility, upon request, may be granted an extension in the time interval between test years. Such extension shall be in an increment of two years and shall apply only to those meters in sizes of five-eighths inch, three-quarters inch and one inch. Requests for subsequent two-year increment extensions shall require the same satisfactory annual test reporting and minimum three-year accuracy history and maximum allowed ten percent overdue meters, as described above, for the then current test interval meters. The maximum allowed meter test interval period shall be sixteen years.

(2) If a utility's water meter testing program does not comply in whole or in part with the standards and requirements prescribed in subsection (1) above during a consecutive three-year period, the time interval between test years for those meters in sizes of five-eighths through one inch may be reduced by the Authority to a period not less than six years.

(Effective December 7, 1978)

Sec. 16-11-89. Tests on request of customers

Each utility shall, upon written request of a customer and, if he so desires, in his presence, or that of his authorized representative, make without charge a test of the accuracy of the meter in use at his premises, if the meter has not been tested by the company within the period of one year previous to such request and provided the customer shall agree to abide by the results of such test as the basis for any adjustment of disputed charges. Upon such request by a customer, or upon an order for a meter test made by the department, the company shall notify the customer, in writing and within one week of the request for the meter test, that he, or his authorized representative, has the right to be present at the meter test. If said customer, or his authorized representative, desires to be present at the meter test, the customer or his authorized representative shall contact the company within 10 (ten) days of the written notification to arrange to be present at the test. Upon such notification, the company shall schedule a meter test, at a time during the normal operating hours of the company's meter testing facility, which is convenient to both the customer, or his authorized representative, and the company, as soon as possible. A written report of the results of the test shall be furnished the customer.

(Effective May 22, 1992)

Sec. 16-11-90. Test by commission

(1) In accordance with section 16-259 of the general statutes, the commission, upon request, shall cause to be tested for accuracy the water meter at a customer's premises.

(2) A water company, after notification by the commission that a test is to be made pursuant to the provisions of said section 16-259, shall not adjust, disturb or remove the meter in question, except as directed by an authorized representative of the commission.

(Effective October 18, 1966)

Sec. 16-11-91. Standard installation method

Each water utility shall adopt a standard method of meter installation. Such method shall be set out with a written description or drawings to the extent necessary for a clear understanding of the requirements. Copies of approved standard methods shall be made available upon request to prospective customers, contractors or others engaged in the business of placing pipe for water utilization. All meters shall be set in place by the utility or its agent.

(Effective October 18, 1966.)

Sec. 16-11-92. Registration devices

All meters used for metered sales shall have registration devices indicating the volume of water in either cubic feet or United States gallons. Where a constant or multiplier is necessary to convert the meter reading to cubic feet or gallons, the constant shall be indicated upon the face of the meter and on the meter reading sheet or card.

(Effective October 18, 1966.)

Sec. 16-11-93. Charges to customers for devices

No utility shall charge for the installation of any devices for metering service to a customer, except for temporary service where the utility may charge the actual cost of installation and removal of metering devices. The customer shall pay for any special device requested.

(Effective October 18, 1966.)

Sec. 16-11-94. Sanitation standards

(1) Any utility furnishing water service for human consumption or domestic use shall conform to all requirements of the state department of health for construction and operation of its water system as pertains to sanitation and potability of the water.

(2) Each utility shall have representative samples of the water supplied by it tested and analyzed by the state or local departments of health or by a competent chemist and bacteriologist, at intervals sufficient to insure a safe water supply.

(3) If the above-prescribed tests show that the water furnished by the utility is contaminated or otherwise unsafe for human consumption, the utility shall forward a report of such test to the commission or other state agency having correctional jurisdiction without delay, and shall take immediate steps to correct the condition. Reports of corrective action shall then be forwarded to the commission.

(Effective October 18, 1966.)

Sec. 16-11-95. Standard pressure

(1) Each utility shall, subject to the approval of the commission, adopt and maintain a standard pressure in its distribution system at locations to be designated as the point or points of "standard pressure." At one such point a recording pressure gauge shall be maintained in continuous service.

(2) Under normal conditions of use of water the pressure at a customer's service connection shall be not less than 25 p.s.i.g. and not more than 125 p.s.i.g.

(3) Pressure outside the limits specified will not be considered a violation when the variations arise from:

- (A) The action of the elements;
- (B) infrequent fluctuations not exceeding five minutes duration;
- (C) service interruptions;
- (D) causes beyond the control of the utility;

(E) service elevations.

(4) At regular intervals, each utility shall make a survey of sufficient magnitude of pressures in its distribution system to indicate the quality of service being rendered at representative points on its system. Such surveys shall be made during periods of high usage at or near the maximum usage during the year. The pressure charts for these surveys shall show the date and time of beginning and end of the test and the location at which the test was made. Records of these pressure surveys shall be maintained for a period of six years at the utility's principal office in the state and shall be made available to the commission upon request.

(Effective October 18, 1966.)

Sec. 16-11-96. Interruptions in service

(1) Each utility shall give prompt notice to the commission by telephone during regular business hours of all interruptions, except those occurring in the course of routine operations, to, or major impairment of, service for periods of duration of four hours or more occurring on production works, storage works, transmission mains or distribution mains or of accident or damage to portions of the plant which might lead to such interruptions of service. Such notice shall be confirmed in writing within five days.

(2) Each utility shall make all reasonable efforts to prevent interruptions of service and, when such interruptions occur shall endeavor to reestablish service with the shortest possible delay consistent with the safety of its customers and the general public. Where an emergency interruption affects fire protection service, the utility shall immediately notify the fire chief or other responsible local official.

(3) Whenever any utility finds it necessary to schedule an interruption to its service, it shall make all reasonable effort to notify all customers to be affected by the interruption, stating the time and anticipated duration of the interruption. Whenever possible, scheduled interruptions shall be at such hours as will provide least inconvenience to the customer.

(4) Every utility shall maintain records of interruptions for a period of at least two years.

(Effective October 18, 1966.)

Sec. 16-11-97. Restrictions on water use

(1) The utility shall exercise reasonable diligence to furnish a continuous and adequate supply of water to its customers and to avoid any shortage or interruptions of delivery thereof.

(2) If a utility finds that it is necessary to restrict the use of water, it shall notify its customers, and give the commission written notice, before such restriction becomes effective. Such notifications shall specify:

(A) The reason for the restriction;

(B) the nature and extent of the restriction, i.e., on outdoor use of water, use by certain classes of customers, etc.;

(C) the date such restriction is to go into effect;

(D) the probable date of termination of such restriction.

(3) During times of threatened or actual water shortage, the utility shall equitably apportion its available water supply among its customers with due regard to public health and safety.

(Effective October 18, 1966.)

Sec. 16-11-98. Reconstruction not required

Sections 16-11-50 to 16-11-97, inclusive, shall not be constituted to require general reconstruction or re-equipping to conform with the provisions contained therein.
(Effective October 18, 1966)

Standby Power Regulations for Water Companies**Sec. 16-11-99. Definitions**

For purposes of Sections 16-11-99 through 16-11-99d of the regulations:

- (a) "Department" shall mean the Department of Public Utility Control.
 - (b) "Company" shall mean a water company as defined in Section 16-1 of the General Statutes of Connecticut, relying on groundwater as its source of supply.
 - (c) "Average Daily Demand" shall mean the normal water usage of the system as determined for the most representative twenty-four (24) hour period of record not affected by unusual demand conditions such as drought or a significant temporary increase in demand.
 - (d) "Standby Power" shall mean an alternative source of providing power in the event of an electrical outage.
 - (e) "Standby Power Equipment" shall include permanent and portable generators, engine-driven pumps, or other mechanical drive equipment.
 - (f) "Sufficient Standby Power Capacity" shall mean the ability of a company to supply 100% of the average daily demand of its system, or of each division if the company's system is comprised of multiple divisions, and satisfy the requirements of the Connecticut Department of Health Services concerning purity and adequacy of water.
 - (g) "Facility Location" shall include pumping stations, treatment plants, storage tanks, and such other plant where electric power is required to satisfy the design criteria for sufficient standby power capacity, provided in Section 16-11-99 (f) of these regulations.
- (Effective June 22, 1990)

Sec. 16-11-99a. Permanent and portable generators

(a) Each company shall provide permanently installed gasoline, propane-fueled, natural gas or oil-fired standby power equipment at such facility locations as are necessary to provide sufficient standby power capacity. The prior approval of the Connecticut Department of Health Services shall be required for the installation of standby power equipment at a facility location.

(1) Portable generators with sufficient standby power capacity may be considered acceptable as an alternative to an on-site generator. Such portable generators may be used only if there are suitable controls, connections and manual or automatic switches in the pumphouse that are operational as of the effective date of Sections 16-11-99 through 16-11-99d.

(2) Portable generators shall be owned or leased at all times by the company, by a subsidiary of the company, by the parent of the company, or by a corporation with the same parent as the company.

(3) Portable generators must be ready to provide power within four hours of an electrical outage, unless the company has sufficient atmospheric storage to provide safe and adequate service, in conformance with the requirements of the Connecticut Department of Health Services concerning purity and adequacy of water, for up to

twenty-four hours without electric power, but in no event shall standby power not be provided more than twenty-four hours after the occurrence of an electrical outage.

(4) Each company providing standby power through the use of a portable generator or portable generators shall report to the Department the type and capacity of the generator or generators, the location where the generator or generators are regularly stored, and the site or sites where the generator or generators will be employed, no later than the implementation date provided in Section 16-11-99c.

(b) Fuel storage may be above ground or below grade, and shall comply with all pertinent statutes, regulations, and codes, except that a direct buried tank shall not be permitted. A containment area capable of holding the full volume of the fuel tank shall be provided, except for propane and natural gas. The fuel tank shall be properly located to protect the water source from accidental spills. Review by, and the approval of the Connecticut Department of Health Services, shall be required prior to the installation of a fuel storage tank.

(c) Sufficient fuel storage capacity shall be provided for the generation of standby power by permanently installed standby power equipment for at least twenty-four (24) hours, and by portable generators for at least eight (8) hours.

(d) Each company shall test standby power equipment, at the site where the standby power equipment will be employed, at least once in every consecutive thirty (30) day period, under load, for a minimum duration of thirty (30) minutes, and shall maintain a record of the results of such test. Each company shall perform maintenance of its standby power equipment in accordance with the manufacturer's specifications, at least once in every consecutive twelve (12) month period, and shall maintain a record of equipment maintenance. Each company shall submit a report on its standby power equipment testing results and on its equipment maintenance program to the Department, and to the Connecticut Department of Health Services, annually on or before the last day of January following the close of each calendar year.

(e) Each company shall notify the local electric utility of the provisions for standby power made by the company, including but not limited to the operating capacity and characteristics of the generating units. Installation of any standby power equipment shall not be made with the electric utility system without the express written approval of the electric utility.

(Effective June 22, 1990)

Sec. 16-11-99b. Exemptions

(a) The provisions of sections 16-11-99 through 16-11-99d shall not apply to a company, as defined in section 16-11-99 (b) of these regulations, to the extent that the company is able to supply 100% of the average daily demand of its system, or of a division of its system if the company's system is comprised of multiple divisions, and satisfy the requirements of the Connecticut Department of Health Services concerning purity and adequacy of water, by (1) gravity alone, for a consecutive period of twenty-four (24) hours without electric power, or (2) by an interconnection with a system that is able to supply 100% of the average daily demand of both the interconnected and interconnecting systems by gravity alone.

(b) Each company seeking an exemption from these regulations pursuant to subsection (a) of this section shall make a written application for the approval of the Department of such an exemption. Such application shall contain a statement of the facts and supporting documentation sufficient to indicate that the condition or conditions for exemption provided by subsection (a) of this section are met by the company.

(c) The department shall make a determination to approve or to deny the application for an exemption within sixty (60) days of receipt of the application, except that the sixty (60) day requirement may be waived in writing by the company.

(Effective June 22, 1990)

Sec. 16-11-99c. Implementation

(a) Each company shall comply with the requirements of Sections 16-11-99 through 16-11-99d as soon as practical, but no later than three years from the effective date of these regulations. Each company shall provide written notice of compliance to the Department, and to the Connecticut Department of Health Services, including evidence of an interconnection if an exemption from these regulations is requested pursuant to Section 16-11-99b of these regulations.

(b) In the event that a company, which was determined by the Department to be exempt from these regulations pursuant to Section 16-11-99b, ceases to meet the conditions for exemption provided by Section 16-11-99b, such company shall provide written notice of its non-compliance to the Department, and to the Connecticut Department of Health Services, within thirty (30) days of the commencement of non-compliance, and shall provide written notice of compliance with these regulations to the Department, and to the Connecticut Department of Health Services, within one year from the date non-compliance commenced.

(Effective June 22, 1990)

Sec. 16-11-99d. Penalties

Each company that fails to comply with the requirements of Sections 16-11-99 through 16-11-99d shall be subject to the civil penalty provided for in Section 16-41 of the General Statutes.

(Effective June 22, 1990)

Code of Electrical Standards and Specifications

(Effective July 30, 1968)

Part I

General Practices and Operation of Electrical Systems

Sec. 16-11-100. Definitions

As used in sections 16-11-100 to 16-11-152, inclusive, and sections 16-11-236 to 16-11-238, inclusive:

(a) "Utility" means a railroad, electric, telephone or telegraph company, owning, leasing, maintaining, operating, managing or controlling plants or parts of plants or equipment within this state, but shall not include towns, cities, boroughs or any municipal corporation or department thereof, whether separately incorporated or not;

(b) "Municipality" means a town, city, borough or any municipality or department thereof, owning, leasing, maintaining, operating, managing or controlling electric plants or parts of electric plants within this state;

(c) "Electric company" shall not include a municipality, but means every corporation, company, association, joint stock association, partnership, or person, or lessee thereof, owning, leasing, maintaining, operating, managing or controlling poles, wires, conduits or other fixtures along public highways or streets, for the transmission or distribution of electric current for light, heat or power within this state, or engaged in generating electricity to be so transmitted or distributed for such purpose;

(d) "Commission" means the public utilities commission of the state of Connecticut;

(e) "Customer" means any person, partnership, firm, company, corporation, municipality, cooperative, organization, governmental agency or similar organization furnished electric, telephone or telegraph service by a utility;

(f) "Submetering Customer" means any recreational campground, or other facility as approved by the Department, whose electric service is furnished by an electric company and who is authorized to submeter the service to other parties within such facility;

(g) "Submetered Party" means any person, partnership, firm, company, corporation or organization whose electric service is furnished by a submetering customer of an electric company; and

(h) "Average Cost" means—total bill including all adjustments
total kWh hour usage of the submetering customer
for billing period.

(Effective August 21, 1991)

Continuity of Service

Sec. 16-11-101. Record of interruptions

(a) Every electric company shall notify the commission of all electric outages whenever the total customer-outage hours is equal to, or greater than two hundred, provided, outages of less than thirty minutes duration need not be reported unless the loss of the electric supply produces a substantial adverse effect or hardship on the public.

(b) Every electric company shall keep a record for a period of two years of the time of starting and shutting down its generating units, and of the indication of station instruments at sufficiently frequent intervals to show the characteristics of the service, and the details of any significant changes in operating practices.

(c) Every utility shall make all reasonable efforts to prevent interruptions of service, and when such interruptions occur shall endeavor to reestablish service with the shortest possible delay. Whenever the service is necessarily interrupted or curtailed for any significant length of time for the purpose of working on equipment, such work should be done at a time which will cause the least inconvenience to customers, and those customers who will be affected shall be notified in advance to the extent practicable except in cases of emergency.

(d) Notification of electric outages shall be submitted by telephone as soon as may be reasonably practicable on the first working day after the occurrence of each interruption of service.

(e) On or before the fifth working day following the interruption the company shall file with the commission a report in writing of each such electric outage which shall include the date, time, outage area, cause, duration, number of customers affected, the number of customer-outage hours and the steps to be taken to prevent the recurrence of such interruption.

Sec. 16-11-102. Accidents

(a) Every utility shall use every effort to properly warn and protect the public from danger and shall exercise all possible care to reduce the hazard to which employees, customers and others may be subjected by reason of its equipment and facilities.

(b) Every utility shall make available to the commission all records, data, reports and statements of employees and shall assist the commission in promptly examining into the causes of and the circumstances connected with each accident which is the subject of commission investigation.

Customer Relations

Sec. 16-11-103. Rate schedules

(a) Every electric company shall keep on file, in its local office, open to public inspection, copies of all schedules of rates for each class and type of service, forms of agreement and all rules and regulations respecting the relations of the customer and electric company.

(b) Every electric company shall, upon request, furnish a customer the schedule of rates applicable to such customer.

(c) Every electric company shall render service to a customer only at rates provided for in the rate schedules on file with the commission, or as prescribed by order of the commission.

(d) Every new schedule of rates and any change in rates proposed by any electric company pursuant to statute shall be filed with the commission not less than ten days in advance of the date upon which it is to become effective.

(e) Every electric company shall file with the commission any change made in the filed rules and regulations respecting the relations of the customer and the electric company not less than ten days in advance of the date upon which such change is to become effective.

(f) Every electric company shall file with the commission a copy of each contract or agreement for billing of electric service to any customer or other utility, which contract or agreement provides for billing of electric service on a basis other than the company's field rates.

Sec. 16-11-104. Information to customers

(a) Every electric company shall, upon request, give its customers such information as is reasonable, in order that customers may secure safe, adequate and proper service.

(b) Every electric company shall, upon request, render a statement of the past readings of a customer's meter for any period not in excess of fifteen months.

Sec. 16-11-105. Customer bills and deposits

(a) Each utility may require from any customer other than a residential customer as defined in section 16-3-200 (a) (3) or prospective customer other than a prospective residential customer as defined in section 16-3-200 (a) (4) a deposit to guarantee payment of bills. Such deposits shall not exceed an amount equivalent to the estimated maximum bill for ninety days.

(b) Each utility having on hand deposits from customers, or hereafter receiving deposits from customers, shall keep records to show: (i) the name of the customer making the deposit; (ii) the account number or other identification of the premises occupied by the customer when the deposit was made; (iii) the amount and date of making the deposit; (iv) a record of each transaction concerning the deposit.

(c) Each utility shall issue a receipt to every customer from whom a deposit is received and shall provide means whereby the depositor may receive his deposit or balance if such receipt is lost.

(d) Interest on any security deposit received from a customer for each calendar year shall be paid at the rate prescribed in section 16-262j of the general statutes. Interest shall accrue daily and shall be paid or credited to the customer's account annually. Accrued interest shall be paid upon return of the deposit if such return is made at other than the annual payment date for interest.

(e) The deposit shall cease to draw interest on the date it is returned, on the date service is terminated, or on the date notice is sent to the customer's last-known address that the deposit is no longer required.

(f) A record of each unclaimed deposit and the interest thereon shall be maintained until the funds are paid over to the state treasurer under the escheat provisions of the general statutes. During this time the utility shall make a reasonable effort to return the deposit and accrued interest.

(g) Except in the case of residential customers as defined in section 16-3-200 (a) (3) deposits may be retained by the utility as long as required to insure payment of bills.

(h) Upon final discontinuance of service the utility may apply such deposit, including accrued interest, to any amount due from the customer for service. Any balance due to the customer shall be promptly refunded.

(i) Except in the case of residential customers as defined in section 16-3-200 (a) (3) deposits shall be returned, together with accrued interest, where satisfactory credit has been established.

(Effective August 19, 1992; amended August 5, 1997)

Sec. 16-11-106. Customer complaints and service requests

Every electric company shall make prompt and reasonable investigation of each complaint and other service requests made to it, either at its office or in writing by any customer; and it shall keep a record of all substantial complaints which shall show the name and address of the complainant, the date and nature of the complaint and the disposal thereof. Records of such complaints shall be kept for a period of not less than three years.

Sec. 16-11-107. Meter reading and bill form

(a) Meters shall be read each month at regular scheduled intervals, unless special permission is granted by the authority. Bills shall be rendered promptly. Estimated bills may be submitted to non-residential customers when it is impracticable to read meters at regular periods. Efforts shall be made to avoid rendering two consecutive estimated bills. Estimated bills of residential customers shall be rendered in accordance with the provisions of section 16-3-102 of the regulations of Connecticut state agencies.

(b) The meter reading date may be advanced or postponed not more than five days without adjustment of the billing for the period.

(c) Every electric company shall show on all periodically rendered bills, the present and previous meter reading dates, the present meter reading, the kilowatt hours consumed, the rate designation, the fuel charge rate, if any, the amount of the bill, and such other information as will, in conjunction with its published rates, make possible a recomputation of the charges assessed.

(Effective June 7, 1978)

Sec. 16-11-108. Refusal or discontinuance of service

(a) An electric company is not required to furnish service which could operate in parallel with generating equipment connected to the customer's system if such operation is hazardous or may interfere with its own operation or service to other

customers. The electric company may specify conformance with its requirements as to connection and operation as a condition of rendering service under such circumstances.

(b) All wiring and equipment to be connected to the system of an electric company should be installed in accordance with the National Electrical Code currently in effect and an electric company may refuse to connect with any customer's wiring not so installed, or when the certificate of the underwriters or of the local inspection bureau has not been issued or when the wiring is not in accordance with the rules of such company.

(Effective August 19, 1992)

Sec. 16-11-109.

Repealed, August 19, 1992.

Sec. 16-11-110. Adjustment of bills

(a) Whenever the test of a meter reveals it to be fast by more than four per cent, the electric company shall refund to the customer such percentage of the total amount of bills covering the consumption indicated by the meter for the previous six months as the meter was found to be in error (see sec. 16-11-120 (d)) at the time of the test, unless it can be shown from the records of either party that the error has existed for a greater or lesser period, in which case the refund shall cover such actual period.

(b) No refund shall be allowed in any case if the seal on the customer's meter is found to be broken or if there is any other evidence that the meter has been tampered with.

(c) In the event of a nonregistering meter, the customer may be billed on an estimate based on previous usage.

(d) If unmetered electricity is used without permission, the customer may be billed on an estimate of the energy consumed.

Utilization and Control Equipment

Sec. 16-11-111. Company-owned equipment

Electric companies shall service and maintain any company-owned equipment on customers' premises and shall adjust thermostats, clocks, relays or time switches if necessary to provide service in accordance with the rate provisions.

Sec. 16-11-112. Time switches

(a) Time switches owned by the electric company for controlling equipment such as water heaters shall be of such quality as to be accurate under normal operating conditions.

(b) Time switches owned by the electric company for controlling service to customers' facilities shall be inspected or operation observed periodically and adjusted if necessary, and shall also be adjusted upon complaint when found to be in error.

Sec. 16-11-113. Frequency

Alternating current service under normal conditions shall be supplied at sixty cycles per second and under normal conditions the deviation shall not exceed one per cent.

Sec. 16-11-114. Standard voltage

Every electric company shall adopt a standard nominal voltage or standard nominal voltage conforming to modern usage, as may be required by the design if its distribution system for its entire service area or for each of the several areas into which the distribution system or systems may be divided. The voltage maintained at the electric company's service terminals, as installed for each customer, shall be reasonably constant within the limits set forth in section 16-11-115.

Sec. 16-11-115. Voltage variations

(a) For service rendered principally for residential or commercial purposes, the voltage variation shall not exceed an upper limit as low as practically possible, not to exceed a maximum of three per cent above or five percent below standard voltage. Voltage excursions above the upper limit shall not exceed one minute. Providing voltage below the lower limit shall be limited in extent, frequency and duration. Corrective action shall be promptly taken whenever deviations result from other than temporary conditions. Temporary conditions, such as automatic switching to supply interrupted feeders, should not exceed 24 hours where practical. American National Standards Institute (ANSI) Standard c84-1 shall be used to determine the lowest temporary voltage excursions permissible.

(b) For service rendered under contracts principally for power purposes the normal variation in voltage shall not exceed ten per cent above or ten per cent below the standard for any period longer than one minute.

(c) Any electric company may furnish service under conditions of greater voltage variations than that prescribed in the foregoing if specifically provided for by contract filed with the authority.

(d) Where the electric company's distribution facilities supplying customers are reasonably adequate to carry the loads normally imposed, the utility may require that the operating characteristics of utilization equipment shall not cause objectionable voltage fluctuations or other adverse effects.

(e) When an electric company is unable to conform a portion of its distribution system to comply with subsection (a) above, said company may petition the authority for an exemption to said subsection, setting forth the reasons why it is unable to comply. For good cause shown, the authority may grant such exemption under such terms and conditions as it deems reasonable.

(f) Electric companies shall commence implementation of section 16-11-115 (a) upon the effective date of these regulations, and shall have completed said implementation throughout their respective systems or requested appropriate exemptions authorized by section 15-11-115 (e) prior to October 1, 1979.

(Effective March 22, 1990)

Points of Delivery**Sec. 16-11-116. Establishment of delivery point**

(a) Every electric company shall establish each point of delivery as an independent customer and shall calculate the amount of the bill accordingly. Any other arrangement shall require prior approval of the commission.

(b) Service to a room or group of rooms which regularly separate cooking facilities shall be considered as service to a separate apartment for metering and billing purposes.

Sec. 16-11-117. Meter location

Each electric company may prescribe rules for the location of meters. All meters shall be in an accessible location. When located inside a building, the meter shall be installed as near as practicable to the point of entrance of the service, be in a clean, dry, safe place and be supported in such a manner as to be reasonably free from damage. When located outside a building, meters shall be installed in a practicable location and supported in such a manner as to be reasonably free from damage.

Metering**Sec. 16-11-118. Measurement**

(a) All electricity sold to customers shall be measured by commercially acceptable measuring devices owned and maintained by the electric company, except where it is impracticable to measure certain loads.

(b) Every reasonable effort shall be made to measure at one point all the electrical quantities necessary for billing a customer under a given rate.

(c) Metering facilities located where energy may flow in either direction and where the quantities measured are used for billing purposes shall consist of meters equipped with ratchets or other devices to prevent reverse registration and be so connected as to record energy flow in each direction.

Sec. 16-11-119. Multipliers and test constants

(a) Meters operating in conjunction with instrument transformers shall have the multiplier plainly marked on the meters or otherwise suitably marked.

(b) The watt-hour constant for the meter itself shall be on all watt-hour meters.

Sec. 16-11-120. Accuracy of watt-hour meters

(a) A watt-hour meter that has an incorrect register constant, test constant, gear ratio to dial train, or which creeps (that is, registers on no load), shall not be placed in service or allowed to remain in service without adjustment and correction after knowledge of the defect.

(b) The average meter error for a watt-hour meter shall not be in excess of one per cent at unity power factor and, in the case of polyphase meters, the elements shall be in balance within two per cent at one hundred per cent load and unity power factor. When tested in the shop, the error of polyphase meters shall not be in excess of two per cent at one hundred per cent load and fifty per cent lagging power factor.

(c) Whenever a test of a watt-hour meter shows the average error to be in excess of one per cent, or, in the case of polyphase meter, the elements are not balanced within two per cent at one hundred per cent load and unity power factor, the meter shall be removed from service or adjusted.

(d) For the purpose of pre-installation, installation, complaint, periodic or evaluation tests, the average error shall be determined as follows: (1) The error at light load, at approximately ten per cent of the rated current (test amperes) specified for the meter; (2) the error at heavy load, at approximately one hundred per cent of the rated current (test amperes) specified for the meter; (3) the average error of the meter shall then be computed by taking one-fifth of the algebraic sum of the error at light load and four times the error at heavy load.

Sec. 16-11-121. Accuracy of demand meters

All demand meters shall be accurate to within plus or minus two per cent of full scale. The timing element shall be accurate to within plus or minus two percent.

Sec. 16-11-122. Instrument transformers

(a) Meters used in conjunction with instrument transformers shall be adjusted so that the overall accuracies will come within the limits specified in subsections (a), (b) and (c) of section 16-11-120 and section 16-11-121.

(b) Meters installed with instrument transformers may be tested independently of such transformers, provided the electric company applies the corrections indicated by a test certificate exhibiting the characteristics of the type of transformers used and guaranteeing the limits of deviation of individual transformers from the average characteristics of the type; otherwise the meters and transformers shall be verified as a measuring unit.

Meter Testing—Facilities**Sec. 16-11-123. Laboratories**

Each electric company shall maintain adequate laboratories, meter testing shops, secondary standards, instruments and facilities to determine the accuracy of meters and measuring devices generally used by the electric company in rendering service. An electric company may, however, have all or part of the required tests made or its portable testing equipment checked by another electric company or agency approved by the commission as having adequate testing equipment.

Sec. 16-11-124. Equipment required

Each electric company shall maintain (1) one or more portable rotating standards of capacity and voltage range adequate to test all watthour meters used by the electric company; (2) portable indicating instruments of such various types as are required to determine the accuracy of instruments used by the electric company and these instruments shall be checked periodically; (3) one or more master standards to check rotating standards used for testing watthour meters. Each master standard shall be kept permanently at one location and not used for field work.

Sec. 16-11-125. Test standards

(a) Each electric company, upon notification, shall submit to the commission's standards laboratory for checking for accuracy, one of its master rotating standards at least once in each year.

(b) Master watthour meter standards shall not be used to check or calibrate working standards unless the master standard has been checked, and adjusted if necessary, within the preceding twelve months. Each master standard watthour meter shall have a calibration record available and a history card.

(c) Portable indicating instruments shall be checked, in a laboratory approved by the commission, and adjusted if necessary, at least once a year. A historical record shall be kept of such checks and adjustments.

(d) All working rotating standards when regularly used shall be compared with a master standard at frequent intervals. Standards infrequently used shall be compared with a master standard before they are used.

(e) Working rotating standards shall be adjusted, when necessary, and a record shall be kept for each instrument.

Meter Tests—Special

Sec. 16-11-126. Customer request

Every electric company shall, upon written request of a customer and, if he so desires, in his presence or that of his authorized representative, make a test of the accuracy of the meter in use at his premises; provided the meter has not been verified by the electric company within the period of one year previous to such request, and provided the customer shall agree to abide by the results of such test as the basis for any adjustment of disputed charges. Upon request by a customer, or upon an order for a meter test made by the department, the company shall notify the customer, in writing and within one week of the request for the meter test, that he, or his authorized representative, has the right to be present at the meter test. If said customer, or his authorized representative, desires to be present at the meter test, the customer or his authorized representative shall contact the company within 10 (ten) days of the written notification to arrange to be present at the test. Upon such notification, the company shall schedule a meter test, at a time during the normal operating hours of the company, which is convenient to both the customer, or his authorized representative, and the company, as soon as possible. A written report of the results of the test shall be furnished the customer by the electric company.

(Effective May 22, 1992)

Sec. 16-11-127. Commission directive

(a) In accordance with section 16-259 of the general statutes the commission, upon request, will cause to be tested for accuracy the electric meter on a customer's premises.

(b) An electric company, after notification by the commission that a test is to be made pursuant to the provisions of said section 16-259, shall not adjust, disturb or remove the meter in question, except as directed by the authorized representative of the commission.

Meter Tests—Regular

Sec. 16-11-128. Location of tests

Each electric company shall conduct all required tests of meters at the permanent location of the meter on the customer's premises except that the commission may authorize that such tests be performed in the company's shop or in a mobile unit, following an inspection of such facilities by the commission's engineering staff to insure their adequacy to perform such tests.

Sec. 16-11-129. Installation test

Each electric company shall have each watt-hour meter checked for accuracy within sixty days of its installation, except that this installation test shall not be required for meters of verified accuracy.

Sec. 16-11-130. Periodic tests

All wathour meters installed on customers' premises shall be tested periodically in conformity with the most recent ANSI Code. Meter test data shall be summarized and furnished annually to the Department upon Department prescribed forms. The Department may permit an electric company which maintains a high degree of meter accuracy, as indicated by its periodic test records, to extend the period between

tests or to adopt a practice of selective testing or of testing a statistically adequate sample of all meters on lines.

(Effective August 28, 1990)

Sec. 16-11-131. Meter records

Meter records shall be kept and systematically arranged, indicating the date of purchase of each meter, its size or capacity rating and the date and place of the latest installation or removal. These records shall be preserved for the life of the meter.

Sec. 16-11-132. Meter test records

Meter test records shall be preserved of every meter test, indicating the information necessary for identifying the meter, the reading of the meter just prior to the test, the computed accuracy of registration both as found and as left, together with the data taken at the time of the test to permit the convenient checking of the methods employed and of the computations leading to the result. These records shall be preserved for two years or until a new periodic test record has been obtained.

Sec. 16-11-133. Types of meters

Every electric company shall report to the commission each year the quantity of each make and type of meter in service. This report may be included with the commission prescribed forms pertaining to periodic tests as required by section 16-11-130. Whenever any new make or type of meter is placed in service, a prompt report and description shall be furnished to the commission.

Standard Practices

Sec. 16-11-134. Acceptable codes

The commission recognizes the provisions of the National Electrical Safety Code and the National Electrical Code in effect from time to time as minimum requirements and recommends the same as a guide to good practice for the installation, maintenance and operation of electrical facilities in all cases not governed by specific commission orders and the provisions of this code as contained herein.

Sec. 16-11-135. Safety manuals

Every utility within the purview of this order shall adopt comprehensive instructions for the safety of employees, file a copy thereof with the commission, and supply a copy thereof to each employee assigned to electrical work in generating stations, substations and overhead lines or underground lines, obtaining a receipt therefor; and before requiring such employee to perform electrical work, the utility shall be satisfied that he has been properly informed of safe practices and is cognizant of the hazards involved in the work to be performed.

Transmission Lines

Sec. 16-11-136. Coordination by utilities

Construction involving electric lines, where nominal phase to ground voltages are less than twenty thousand volts, may proceed without notification to the commission, provided reasonable advance notice is given to the utilities or municipalities involved, advance planning and interchange of information is coordinated, and agreement regarding proposed construction and operating characteristics is obtained from other utilities or municipalities involved. This section is not intended to preclude the

participating companies from developing broad areas of approval, where coordination can be safely developed for specific types of facilities either in the power or telephone plant. Nothing in this section is intended to alter the requirements of the general statutes. For the purposes of this section construction shall mean the erection and installation of the physical facilities excluding the planning and other work preliminary thereto.

Sec. 16-11-137. Petition for commission approval—electric lines

No electric line, the nominal voltage of which is to exceed twenty thousand volts to ground, shall be constructed without prior commission approval of the manner and method of construction. A petition for such approval shall be submitted to the commission at least thirty days before it is planned to construct such line, and said petition shall state the following: (1) The purpose for which the line is to be built; (2) the local names of the points between which the line is to be built, and the towns through which it will pass; (3) the length of the line; (4) the electrical description of the line, indicating voltage, number of phases, frequency and number of conductors; (5) the general type of construction to be employed; such as, wood pole, steel tower, wood crossarms, grounded metal crossarms, pin or suspension insulators, underground ducts, direct burial, etc, (6) the character of materials to be employed; namely, pole size and class, insulator rating, conductor, material and size (solid or stranded), cable (insulation and sheathing); (7) a description of lightning protection and grounding of neutral, if any; (8) the special feature employed at points of crossing over or under circuits and facilities of other utilities and municipalities; (9) the titles of specifications and standards with which it is intended that the construction shall conform, (10) the names of all utilities and municipalities whose exposed circuits, tracks or other facilities are crossed over or under, paralleled by or in conflict with the overhead line in question. The names of all utilities and municipalities whose underground circuits, hacks or other facilities are crossed over or under, or are paralleled by and adjacent to the underground line in question; (11) the dates upon which it is planned to start construction and to energize the line; (12) the petition shall be accompanied by a drawing showing the typical arrangement and spacing of conductors on poles or towers and the amount of sag of conductors and clearances from the ground in a typical span; (13) the petition for underground construction shall be accompanied by a drawing showing the approximate location, depth and clearances of all known underground circuits, tracks and other underground facilities of municipalities and other utilities crossed over or under by or adjacent to the underground line in question; (14) commission approval is also to be obtained prior to energizing line construction contemplated by this section.

Sec. 16-11-138. Petition for commission approval—communication lines

Where communication and electric lines are both aerial or both underground, no communication line shall be extended so as to cross, conflict or establish joint use with an electric line over twenty thousand nominal volts to ground without prior commission approval. A petition for such approval shall be submitted to the commission and said petition shall state the following: (1) The purpose for which the line is to be built, (2) the towns in which it is located; (3) sufficient information to identify the electric line involved, (4) special features employed at points of crossing; (5) the names of all other utilities and municipalities whose circuits are involved in the proposed crossing, conflict or joint use.

Sec. 16-11-139. Supporting data

A petition required by section 16-11-137 or 16-11-138 shall be accompanied by the following: (1) A map indicating the route of the line and the location of the circuits. The map shall show the points at which such electric lines will cross over or under public highways, and the circuits, tracks and other facilities of municipalities and other utilities; (2) copies of letters from each railroad, municipality or other utility affected, stating that it has been notified of the details of the proposed line and that it offers no objection to the method or manner of construction.

Sec. 16-11-140. Exemptions from commission approval

Construction of a communication line under existing electric lines does not require commission approval outlined in section 16-11-138 when the conductors of such communication line consist of not more than one insulated twisted pair of parallel lay conductors, or where two or more such insulated conductors are involved consisting of service drops not grouped together in a single run.

PROPERTY IDENTIFICATION

Sec. 16-11-141. Signs

Each group of buildings or structures used in the generation, transformation or distribution of electrical energy shall be provided with such signs as will definitely designate the name of the utility owning or having the custody and maintenance of the same.

Sec. 16-11-142. Markers

Each pole, tower, or other structure used for supporting electrical conductors, shall be marked with a symbol indicating the utility or municipality so owning or having the custody and maintenance thereof, and a number or letter or both; provided such marking shall not be required for ornamental standards or for more than every fifth pole upon a line of poles in a rural district; and provided the mark of no utility other than the one owning or having custody shall be required on jointly used poles.

Sec. 16-11-143. Methods of application

Such markings of poles may be made with paint, brand or with plates or individual characters of soft metal or other suitable material so as to be easily read from the ground.

SEPARATION OF POLE LINES

Sec. 16-11-144. Sufficiency

The separation of two parallel pole lines one of which carries supply conductors and the other signal conductors shall, where practicable, be sufficient so that neither conflicts with the other and, if within conflicting distance, they shall be separated as far as practicable.

Sec. 16-11-145. Considerations determining method

If separation beyond conflicting distance is impracticable, the choice as affecting the relative safety attainable at reasonable cost between a joint pole line and separate conflicting lines depends on the voltage of the supply circuits, the total number and weight of conductors, the tree conditions, the number and location of branches and service drops and the availability of right of way.

INDUCTION AND CORROSION

Sec. 16-11-146. Use of coordinated methods

All supply and signal circuits with their associated apparatus shall be constructed, operated and maintained in conformity with generally coordinated methods with due regard to prevention of interference with the rendering of either service by adequately limiting in the most convenient and economical manner those characteristics of supply circuits which determine the character and intensity of the inductive field, or those characteristics of signal circuits which determine the extent to which the service they are designed to render is affected by a given inductive field or both.

Sec. 16-11-147. Special measures

Where such generally coordinated methods are insufficient in any specific case, special adequate coordinated measures determined by cooperative consideration shall be applied to the circuits of either or both kinds, to most conveniently and economically prevent the interference.

Sec. 16-11-148. Coordination by parties affected

To facilitate coordination, each party, in advance of any construction or change in the construction or operating conditions of its facilities, shall consult with other parties between whose facilities and its own coordinated measures may now or later be necessary.

Sec. 16-11-149. Coordination on corrosion

All utilities and municipalities shall cooperate with each other and use all reasonable means to work out general coordinated methods applicable to corrosion problems or the protection of other utilities and municipalities.

Live Line Maintenance

Sec. 16-11-150.

Repealed, March 17, 1993.

Ownership Rights and Compensation

Sec. 16-11-151. Attachments—consent thereto

Every utility or municipality shall have a clearly defined right of occupancy and use of poles. Attachments shall not be made to poles of another utility or municipality until consent has first been secured from such utility or municipality or an order issued by the commission under section 16-18 of the general statutes.

Sec. 16-11-152. Compensation for attachments

The right of a utility or municipality to occupy poles of another utility or municipality without proper compensation is not contemplated by these rules.

Joint Pole Construction

Sec. 16-11-153.

Repealed, April 22, 1986.

Reconstruction

Sec. 16-11-154.

Repealed, April 22, 1986.

Part II

Construction of Jointly Used Wood Pole Lines

Secs. 16-11-155—16-11-156.

Repealed, April 22, 1986.

Related Levels

Secs. 16-11-157—16-11-158.

Repealed, April 22, 1986.

Vertical Clearance Above Ground

Secs. 16-11-159—16-11-161.

Repealed, April 22, 1986.

Vertical Separations

Secs. 16-11-162—16-11-168.

Repealed, April 22, 1986.

Horizontal Separations

Sec. 16-11-169.

Repealed, April 22, 1986.

Vertical Runs—General

Secs. 16-11-170—16-11-171.

Repealed, April 22, 1986.

Vertical Runs on Pole Surface

Secs. 16-11-172—16-11-177.

Repealed, April 22, 1986.

Vertical Runs Not on Pole Surface

Secs. 16-11-178—16-11-179.

Repealed, April 22, 1986.

Climbing Space

Sec. 16-11-180.

Repealed, April 22, 1986.

Street Lamps

Secs. 16-11-181—16-11-182.

Repealed, April 22, 1986.

Guy Clearances

Secs. 16-11-183—16-11-186.

Repealed, April 22, 1986.

Guy Insulators

Secs. 16-11-187—16-11-194.

Repealed, April 22, 1986.

Line Insulators

Secs. 16-11-195—16-11-197.

Repealed, April 22, 1986.

Strength Requirements—General

Secs. 16-11-198—16-11-206.

Repealed, April 22, 1986.

Strength of Poles

Secs. 16-11-207—16-11-213.

Repealed, April 22, 1986.

Strength of Crossarms

Secs. 16-11-214—16-11-218.

Repealed, April 22, 1986.

Pins and Conductor Fastenings

Secs. 16-11-219—16-11-221.

Repealed, April 22, 1986.

Conductors

Secs. 16-11-222—16-11-225.

Repealed, April 22, 1986.

Messengers

Sec. 16-11-226.

Repealed, April 22, 1986.

Cables

Secs. 16-11-227—16-11-228.

Repealed, April 22, 1986.

Miscellaneous

Secs. 16-11-229—16-11-235.

Repealed, April 22, 1986.

Submetering of Electrical Service

Sec. 16-11-236. Calculating submetered party's cost

(a) Every submetering customer shall calculate, average cost, per kilowatthour, for each bill received from the electric company, and in turn, shall charge each submetered party the same average cost for each kilowatthour used by the submetered party. When the meter reading dates of the submetering customer differ from those of the submetered party, the average cost of each of the submetering customer's billing periods will be applied to the submetered party, in proportion to the number of days that the submetered party used energy in those periods.

(b) Every submetering customer shall indicate, on written bills to a submetered party, the present and immediately preceding submeter reading dates, the present and immediately preceding submeter readings, the kilowatthours consumed by the submetered party, the submetering customer's average cost for all relevant billing periods, the charge to the submetered party, and any other information that will permit the submetered party to verify the charges assessed.

(c) Submetering customers shall take appropriate steps to insure that the service delivered to a submetered party is delivered at a voltage that is in conformity with the most recent standard for service voltage issued by the American National Standards Institute ("ANSI"), or within one percent of that received by the submetering customer.

(d) Every submetering customer shall, upon request of a submetered party, render a statement of past electric company meter readings, total electric company charges applicable to the submetering customer, submeter readings and charges applicable to the submetered party, for a period of at least twelve months.

(e) Every submetering customer shall read the submeters each month, at regularly scheduled intervals. The meter reading date should not be advanced or postponed more than five days from the normal reading date and to the extent practical, shall coincide with the meter reading of the electric company.

(f) In addition to the monthly readings, a submetering customer shall read the submeter for a submetered party, at the time of initiation of service and termination of service to the submetered party. Where a final bill is to be rendered to a submetered party upon the termination of service the submetering customer shall utilize the last current average kWh cost available for that portion of the bill for which there is no current bill available to the submetering customer.

(Effective August 21, 1991)

Sec. 16-11-237. Installation and maintenance of submeters

(a) Submeters and any submetering equipment shall be installed by the submetering customer in accordance with the provisions of all applicable codes and standards, including the National Electrical Safety Code, the National Electrical Code, and state and local electric codes.

(b) Submeters shall be clearly and permanently labeled with the owner's identity, in order that submeters are clearly distinguishable from the electric company's meters. In addition, each submeter shall be permanently marked to indicate the portion of the premises and all facilities it serves. Submeters shall be securely

mounted in a manner as to be reasonably free from damage. All submeters shall be visually accessible to submetered parties or access shall be provided upon request. Submeters located indoors shall be mounted in a clean, dry and safe location. If located outdoors, all equipment associated with the submeter shall be suitable for outdoor installation or otherwise weatherproofed and the meters shall be mounted at a height of not less than 24" above ground level.

(c) All electricity sold to submetered parties shall be measured by commercially acceptable meters, owned and maintained by the submetering customer.

(Effective August 21, 1991)

Sec. 16-11-238. Meter test and record retention

(a) All watt-hour meters installed and owned by a submetering customer shall be tested periodically in conformity with the most recent ANSI Code for Electricity Metering. Meter test data shall be furnished to the Department upon request.

(b) Meter records shall be kept by the submetering customer and shall include the identification of each meter, the date and place of its latest installation or removal and the date and results of the most current meter test. These records shall be maintained for the previous two years.

(c) Every submetering customer shall provide to the Department, upon request data or records as may be deemed necessary by the Department related to the submetering and furnishing of electric service to submetered parties.

(Effective August 21, 1991)