

A VALUATION PROBLEM

**A THESIS SUBMITTED TO THE FACULTY OF
THE GRADUATE SCHOOL OF
THE UNIVERSITY OF KANSAS**

FOR

**THE DEGREE OF
ELECTRICAL ENGINEER**

**B Y
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PREFACE

The following work presents an analysis of a somewhat new problem in valuation work. The Corporation Commission of the State of Oklahoma promulgated, in the spring of 1914, its now rather famous Order No. 774, outlining a standard system of accounts for Gas and Electric Utilities in Oklahoma and calling for a report of Original Cost. The writer, in regular practice, was engaged on this work by some of the companies operating electric properties in the state to prepare the reports of property accounts to date, outlining the original costs to conform with this order. Three of these properties were under one ownership and presented similar problems, and the writer has chosen these three as the basis of the analysis of this new problem.

It was deemed advisable to outline the basis of the work and what stood back of the order. Accordingly, sections of the constitution of the state are quoted, which sections are pertinent to the powers of the Corporation Commission over public service corporations. The status of the Commission is established or defined. A law, passed to extend the powers of the Commission over public utilities in instances in which the Supreme Court of the state held the Commission was without power, is quoted, as it is really with this law as a basis that the Commission promulgated the order in question. The order is quoted in full to provide a background for study of the work which follows.

In the following discussion, the writer has tried to

show these things: the general viewpoint of the Commission in writing this order; the special viewpoint in connection with the reports of property accounts which really form a valuation in a certain sense; the interpretation of the Commission of the items which enter into actual cost; the writer's method of handling the reports to make them conform to the ideas of the Commission; the difficulties which the writer encountered in arriving at equitable figures in connection with plants constructed under the conditions existing in Oklahoma at the time of their construction; a criticism of the viewpoint of the Commission; and a short discussion of the relation of Original Cost to Present Value.

There is appended to this discussion of the writer's copies of the reports which were made. Those parts of the report which could be bound with the discussion appear immediately following it; the other parts of the reports, consisting of maps and drawings, are bound separately. From time to time, direct reference is made to these reports and they provide a means of analysis of the success of the writer's judgment, as criticised by a reader.

The work, as a whole, is presented to the Faculty of the Graduate School of the University of Kansas as evidence of worthiness of the degree of Electrical Engineer. Appreciation is here expressed for the advice and counsel of Professor George C. Shaad in connection with the work.

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It is provided in the Constitution of the State of Oklahoma that there shall be a Corporation Commission. The powers and duties of the Commission are set forth in Article IX of the Constitution. The particular sections of this Article to which attention is called here are as follows:

Sec. 6. Railroads heretofore constructed, or which may hereafter be constructed in this State, are hereby declared public highways. Every railroad or other public service corporation organized or doing business in this State, under the laws or authority thereof, shall have and maintain a public office or place in this State, for the transaction of its business, where transfers of stock shall be made, and where shall be kept, for inspection by the stockholders of such corporation, books, in which shall be recorded the amount of capital stock subscribed, the names of the owners of stock, the amounts owned by them, respectively; the amount of stock paid, and by whom; the transfer of said stock, with the date of transfer; the amount of its assets and liabilities, and the names and places of residence of its officers, and such other matters required by law or by order of the Corporation Commission. The directors of every railroad company, or other public service corporation, shall hold at least one meeting annually in this State, public notice of which shall

NOTE: All indented matter is in direct quotation.

be given thirty days previously, and the president or superintendent of every railroad company and other public service corporation organized or doing business in this State, under the laws of this State, or the authority thereof, shall report annually under oath, and make such other reports as may be required by law or order of the Corporation Commission, to said Commission, their acts and doings, which report shall include such matters relating to railroads and other public service corporations as may be prescribed by law. The Legislature shall pass all necessary laws enforcing, by suitable penalties, all the provisions of this section.

* * * * *

Sec. 8. No public service corporation, of the lessees, purchasers, or managers thereof, shall consolidate the stock, property, or franchises, of such corporation with, or lease or purchase the works or franchises of, or in any way control, any other public service corporation owning or having under its control, a parallel or competing line; except by enactment of the Legislature upon the recommendation of the Corporation Commission; Provided, however, That the Legislature shall never enact any law permitting any public service, the lessees, purchasers, or managers thereof when such public service corporation is organized under the laws of any other State, or of the United States, to consolidate the stock, property, or franchises, of such corporation, with, or lease, or purchase, the works of, franchises, of, or

in any way control, any other public service corporation, organized under the laws of any other State, or of the United States, owning or having under its control in this State a parallel or competing line; nor shall any officer of such corporation act as an officer of any other corporation owning or controlling a parallel or competing line.

* * * * *

Sec. 18. The Commission shall have the power and authority and be charged with the duty of supervising, regulating and controlling all transportation and transmission companies doing business in this State, in all matters relating to the performance of their public duties and their charges therefor, and of correcting abuses and preventing unjust discrimination and extortion by such companies; and to that end the Commission shall, from time to time, prescribe and enforce against such companies. in the manner hereinafter authorized, such rates, charges, classifications of traffic, and rules and regulations, and shall require them to establish and maintain all such public service, facilities, and conveniences as may be reasonable and just, which said rates, charges, classifications, rules regulations, and requirements, the Commission may, from time to time, alter or amend. All rates, charges, classifications, rules and regulations adopted, or acted upon, by any such company, inconsistent with those prescribed by the commission, within the scope of its authority, shall be unlawful and void. The commission shall also have the right, at all times, to inspect the books and papers of all transportation and transmission companies

doing business in this State, and to require from such companies, from time to time, special reports and statements, under oath, concerning their business; it shall keep itself fully informed of the physical condition of all the railroads of the State, as to the manner in which they are operated, with reference to the security and accommodation of the public, and shall, from time to time, make and enforce such requirements, rules, and regulations as may be necessary to prevent unjust or unreasonable discrimination and extortion by any transportation or transmission company in favor of, or against any person, locality, community, connecting line, or kind of traffic; in the matter of car service, train or boat schedule, efficiency of transportation, transmission, or otherwise, in connection with the public duties of such company. Before the Commission shall prescribe or fix any rate, charge or classification of traffic, and before it shall make any order, rule, regulation, or requirement directed against any one or more companies by name, the company or companies to be affected by such rate, charge, classification, order, rule, regulation, or requirement, shall first be given, by the Commission, at least ten days' notice of the time and place, when and where the contemplated action in the premises will be considered and disposed of, and shall be afforded a reasonable opportunity to introduce evidence and to be heard thereon, to the end that justice may be done, and shall have process to enforce the attendance of witnesses; and before said Commission shall make or prescribe any general order, rule, regulation, or requirement, nor directed against any specific company or companies by name, the contemplated general order, rule, regulation,

or requirement shall first be published in substance, not less than once a week, for four consecutive weeks, in one or more of the newspapers of general circulation published in the county in which the Capitol of this State may be located, together with the notice of the time and place, when and where the Commission will hear any objections which may be urged by any person interested, against the proposed, order, rule, regulation, or requirement; and every such general order, rule, regulation, or requirement, made by the Commission, shall be published at length, for the time and in the manner above specified, before it shall go into effect, and shall also, so long as it remains in force, be published in each subsequent annual report of the commission. The authority of the Commission (subject to review on appeal as hereinafter provided) to prescribe rates, charges, and classifications of traffic, for transportation and transmission companies, shall, subject to regulation by law, be paramount; but its authority to prescribe any other rules, regulations or requirements for corporations or other persons shall be subject to the superior authority of the Legislature to legislate thereon by general laws; Provided, However, That nothing in this section shall impair the rights which have heretofore been, or may hereafter be, conferred by law upon the authorities of any city, town or county to prescribe rules, regulations, or rates of charges to be observed by any public service corporation in connection with any services performed by it under a municipal or county franchise granted by such city, town, or county, so far as such services may be wholly within the limits of the city, town or county granting the franchise. Upon

the request of the parties interested, it shall be the duty of the Commission, as far as possible, to effect, by mediation, the adjustment of claims, and the settlement of controversies, between transportation or transmission companies and their patrons or employees.

* * * * *

Sec. 19. In all matters pertaining to the public visitation, regulation, or control of corporations, and within the jurisdiction of the Commission, it shall have the powers and authority of a court of record, to administer oaths, to compel the attendance of witnesses, and the production of papers, to punish for contempt any person guilty of disrespectful or disorderly conduct in the presence of the Commission while in session, and to enforce compliance with any of its lawful orders or requirements by adjudging, and by enforcing its own appropriate process, against the delinquent or offending party or company (after it shall have been first duly cited, proceeded against by due process of law before the Commission sitting as a court, and afforded opportunity to introduce evidence and to be heard, as well against the validity, justness, or reasonableness of the order or requirement alleged to have been violated, as against the liability of the company for the alleged violation), such fines or other penalties as may be prescribed or authorized by this Constitution or by law. The Commission may be vested with such additional powers, and charged with such other duties (not inconsistent with this Constitution) as may be prescribed by law, in connection with the visitation, regulation, or control of corpor-

ations, or with the prescribing and enforcing of rates and charges to be observed in the conduct of any business where the State has the right to prescribe the rates and charges in connection therewith, or with the assessment of the property of corporations, or the appraisement of their franchises, for taxation, or with the investigation of the subject of taxation generally. Any corporation failing or refusing to obey any valid order or requirement of the Commission, within reasonable time, not less than ten days, as shall be fixed in the order, may be fined by the Commission (proceeding by due process of law as aforesaid) such sum not exceeding five hundred dollars, as the Commission may deem proper, or such sum, in excess of five hundred dollars, as may be prescribed or authorized by law; and each day's continuance of such failure or refusal, after due service upon such corporation of the order or requirement of the Commission, shall be a separate offense: Provided, That should the operation of such order or requirement be suspended, pending any appeal therefrom, the period of such suspension shall not be computed against the company in the matter of its liability to fines or penalties.

* * * * *

Sec. 28. The commissioners, or either of them, or such persons as they may employ therefor, shall have the right, at such times as they may deem necessary, to inspect the books and papers of any railroad company or other public service corporation, and to examine, under oath, any officer, agent, or employee of such corporations in relation to the business and affairs of the same.

If any railroad company or other public service corporation shall refuse to permit the Commissioners, or either of them, or any person authorized thereto, to examine its books and papers, such railroad company or other public service corporation shall, until otherwise provided by law, for each offense, pay to the State of Oklahoma not less than one hundred and twenty-five dollars, nor more than five hundred dollars, for each day it shall so fail or refuse, and the officer or other person so refusing shall be punished as the law shall prescribe.

* * * * *

Sec. 29. The Commission shall ascertain, and enter of record, the same to be a public record, as early as practicable, the amount of money expended in construction and equipment per mile of every railroad and other public service corporation in Oklahoma, the amount of money expended to procure the right of way, and the amount of money it would require to reconstruct the roadbed, track, depots, and transportation facilities, and to replace all the physical properties belonging to the railroad or other public service corporation. It shall also ascertain the outstanding bonds, debentures, and indebtedness, and the amount, respectively, thereof, when issued, and rate of interest, when due, for what purposes issued, how used, to whom issued, to whom sold, and the price in cash, property or labor, if any, received therefor, what became of the proceeds, by whom the indebtedness is held, the amount purporting to be due thereon, the floating indebtedness of the company, to whom due, and his address, the credits due on it, the property on hand belonging to the railroad

company or other public service corporation, and the judicial or other sales of said road, its property or franchises, and the amounts purporting to have been paid, and in what manner paid therefor. The Commission shall also ascertain the amounts paid for salaries to the officers of the railroad, or other public service corporation, and the wages paid its employees. For the purpose in this section named, the Commission may employ experts to assist them when needed, and from time to time, as the information required by this section is obtained, it shall communicate the same to the Attorney General by report, and file a duplicate thereof with the State Examiner and inspector for public use, and said information shall be printed, from time to time, in the annual report of the Commission.

* * * * *

Sec. 34. As used in this article, the term "transportation company" shall include any company, corporation, trustee, receiver, or any other person owning, leasing, or operating for hire, a railroad, street railway, canal, steam boat line, and also any freight car company, car association, express company, sleeping car company, car corporation, or company, trustee or person in any way engaged in such business as a common carrier over a route acquired in whole or in part under the right of eminent domain, or under any grant from the government of the United States; the term "rate" shall be construed to mean rate of charge for any service rendered, or to be rendered; the terms "rate," "charge," and "regulation," shall include joint rates, joint charges, and joint regulations, respectively; the term "transmission company" shall

include any company, receiver or other person, owning, leasing, or operating for hire any telegraph or telephone line; the term "freight" shall be construed to mean any property transported or received for transportation, by any transportation company. The term "public service corporation" shall include all transportation and transmission companies, all gas, electric light, heat, and power companies, and all persons authorized to exercise the right of eminent domain, or to use or occupy any right of way, street, alley, or public highway, whether along, over, or under the same, in a manner not permitted to the general public; the term "person" as used in this article, shall include individuals, partnerships, and corporations, in the singular as well as plural number; the term "bond" shall mean all certificates or written evidences of indebtedness issued by any corporation and secured by mortgage or trust deed. The term "frank" shall mean any writing or token issued by or under authority of a transmission company, entitling the holder to any service from such company free of charge.

The provisions of this article shall always be so restricted in their application as not to conflict with any of the provisions of the Constitution of the United States, and as if the necessary limitations upon their interpretation had been herein expressed in each case.

Sec. 35. After the second Monday in January, nineteen hundred and nine, the Legislature may, by law, from time to time, alter, amend, revise, or repeal sections from eighteen to thirty-four,

inclusive, of this article, or any of them, or any amendments thereof: Provided. That no amendment made under authority of this section shall contravene the provisions of any part of this Constitution other than the said sections last above referred to or any such amendments thereof.

The State of Oklahoma was admitted to the Union in November, 1907 and the Corporation Commission became active in 1908. In pursuance with the duties imposed upon the Commission in Section 29 of Article IX of the Constitution, the Commission early started upon the work of making a physical valuation of the railroads of the state. This work was of such magnitude and was of such great expense to a new commission that it occupied the major part of the attention of the Commission for two or three years, during which time no attempt was made at a valuation of other transportation and transmission companies nor of any of the public service corporations, as defined in Section 34.

However, under the supposition that the Commission had supervision over the rates of public service corporations as well as of transportation and transmission companies, complaint was lodged with the Commission in regard to the rates charged for gas in the City of Shawnee, the public service corporation affected being the Shawnee Gas and Electric Company. This company appealed from the decision of the Corporation Commission which decision was in the form of an order prescribing certain rates. Appeal from the decisions of the Corporation Commission, it is provided in Sections 20 to 24, inclusive, of Article IX, may be made directly to the Supreme Court of the State. The appeal in this case was taken upon the ground that Section 18, which gives the Corporation

Commission power to prescribe rates, does so for transportation and transmission companies only. The Supreme Court upheld this view of the matter and reversed the decision of the Commission, setting forth the fact that the Commission did not have control over the rates of public service corporations.

In the words of Commissioner Watson, "The result was inevitable," and this lack of power was soon remedied. The Commission, it is provided, consists of three men who are elected by the state at large at general elections, one Commissioner every second year, the term of office being six years. The Commission is, therefore, much more responsive to the suggestions of the electorate than an appointive commission would be. The popularity of the Oklahoma Commission shows how close the Commission is, in general, to the electorate. It was without much difficulty, then, that the Commission was able to have passed, at the next -- the 1913 -- session of the legislature, a law giving it the required power over rates of public service corporations. It was argued that it was mere error or neglect which had left the words "and public service corporations" out of Section 18. The power of Section 35, giving the legislature power to "alter, amend, revise, or repeal sections from eighteen to thirty-four, inclusive" was then invoked and the necessary provisions enacted into law. This law appears as Chapter 93 of the Session Laws of 1913 and is as follows:

An act to extend the jurisdiction of the Corporation Commission over the rates, charges, services and practices of water, heat, light and power companies, and to give said Commission general supervision over such utilities, and declaring an emergency.

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:

Section 1. The term "public utility," as used in this Act, shall be taken to mean and include every corporation, association, company, individuals, their trustees, lessees, or receivers, successors or assigns, except cities, towns or other bodies politic, that now or hereafter may own, operate, or manage any plant or equipment, or any part thereof, directly or indirectly, for public use, (or may supply any commodity to be furnished to the public);

2 (a) For the conveyance of gas by pipe line.

(b) For the production, transmission, delivery, or furnishing of heat or light with gas.

(c) For the production, transmission, delivery or furnishing electric current for light, heat or power.

(d) For the transportation, delivery or furnishing of water for domestic purposes or for power.

The term "Commission" shall be taken to mean Corporation Commission of Oklahoma.

Section 2. The Commission shall have general supervision over all public utilities, with power to fix and establish rates and to prescribe rules, requirements and regulations, affecting their services, operation, and the management and conduct of their business; shall inquire into the management of the business thereof, and the method in which same is conducted. It shall have full visitorial and inquisitorial power to examine such public utilities, and keep informed as to their general conditions, their capitalization, rates, plants, equipments, apparatus, and other property

owned, leased, controlled or operated, the value of the same, the management, conduct, operation, practices and services; not only with respect to the adequacy, security and accommodation afforded by their service, but also with respect to their compliance with the provisions of this act, and with the constitution and laws of this State, and with the orders of the Commission.

Section 3. In addition to the powers enumerated, specified, mentioned or indicated in this Act, the Commission shall have all additional implied and incidental powers which may be proper and necessary to carry out, perform and execute all powers herein enumerated, specified, mentioned, or indicated, and to punish as for contempt such corporation, association, company or individual, their trustees, lessees, receivers, successors and assigns, for the disobedience of its orders in the manner provided for punishment of Transportation and Transmission Companies, by the Constitution and laws of this State.

Section 4. In case the owner or operator of any public utility is engaged in carrying on any other business in connection with the operation of such public utility, the Commission may require the cost of the operation and gross revenues of such joint business to be kept in such form and manner as may be prescribed by the Commission so that the cost of the operation and gross revenues of the public utility may be ascertained.

Section 5. The Commission may, from time to time, adopt or promulgate such orders, rules, regulations or requirements, relative to investigations, inspections, tests, audits, and valuations of the

plants and properties relative to inspection and tests of meters as in its judgement may be necessary and proper; Provided, that under the provisions of this Act, any public utility, corporation, association, company, individual, their trustees, lessees or receivers, successors, or assigns, may appeal from any order or finding or judgment of the Corporation Commission as provided by law in cases tried and heard before said Commission of transportation and transmission companies.

Section 6. For the preservation of the public health, peace, and safety, an emergency is hereby declared to exist, by reason whereof this Act shall take effect and be in force from and after its passage and approval.

This law gave the Commission the desired power which would bridge the several gaps which might exist in the original constitution. In the words of Commissioner Watson, in an address to the Gas, Electric and Street Railway Association of Oklahoma in May, 1914,

"* * * * it is generally conceded that the scope of the law is sufficiently broad to cover all probable eventualities for the future."

To quote Commissioner Watson further,

"Whether this observation is correct or not, the adoption of this law imposed upon the Corporation Commission the duty of its administration, and the first step toward compliance with such duty was necessarily the establishing of a uniform system of reports to be used as a basis for determining important factors in the valuation of the properties thus brought within

the definite scope of the Commission's jurisdiction."

From conversations with the Commissioners and with employees in the Commission's office, which employees are influential in the decisions of the Commission, and from investigation of the sections of the constitution quoted above, the writer is of the opinion that the reports called for by the Commission as mentioned above are useful for other purposes than for rate-making. In the matter of consolidation, if the Commission is to make recommendation to the legislature regarding a particular case, it is most advisable that the Commission have sufficient data at hand to make a decision which will be founded upon fact and supported by data showing the characteristics of the consolidating properties. The provisions of Section 29 make a valuation a necessity and even set forth upon what basis this valuation shall be made. The Section, however, appears to be loosely worded. It seems, from the first part, to call for the actual money expended, then in the next phrase to call for the "amount of money it would require to reconstruct" and then again later to call for the money "to replace" the "physical properties." This misstatement is not surprising when one considers that the men who wrote the constitution had practically never heard of valuations and were certainly not well versed in the different elements which enter into such work. The Commission, then, had in mind the provisions here mentioned as well as those of the law above quoted.

The result of the considerations of the Commission was Order No. 774 which reads as follows in so far as it relates to electric properties.

CORPORATION COMMISSION OF OKLAHOMA

ORDER NO. 774

PROPOSED ORDER NO. 131

CAUSE NO. 1815

TO ALL PERSONS, FIRMS, AND CORPORATIONS OPERATING UTILITIES FOR THE MANUFACTURE, SALE AND DISTRIBUTION OF GAS. (EITHER NATURAL OR ARTIFICIAL) OR ELECTRIC CURRENT TO CONSUMERS WITHIN THE STATE OF OKLAHOMA FOR HEAT, LIGHT OR POWER, AND TO ALL WHOM IT MAY CONCERN:

Pursuant to publication of Proposed Order No. 131 relating to classification of property balance sheet, Income, and Corporate surplus & deficit accounts of gas and electric utilities, in the Daily Oklahoman, a newspaper of general circulation, published in the city of Oklahoma, State of Oklahoma, said contemplated order having appeared therein once a week for four consecutive weeks, as required by law, pursuant to specific service thereof and a hearing held in the City of Oklahoma City, on the 9th day of September, 1913, notice is hereby given that the following orders shall be in full force and effect on and after July, 1, 1914.

1. All gas and electric utility companies now operating or doing business in the State of Oklahoma, shall file with the Corporation Commission, separately for each of such utilities, on or before the 31st day of July, 1914, copies of corrected original and up to date drawings in blue or white print, or photograph of such original drawings certified by the chief engineer or managing officer, showing the location of all right of way, real estate, gas

distributing lines, electric transmission lines and all other facilities or structures as of June 30, 1914, devoted to the purpose of or used in connection with the manufacture or distribution of gas, (either natural or artificial) or electric current to the public or to municipalities or others for distribution to the public.

2. Such utility companies shall report to the Corporation Commission, under oath, separately for each such utility, in the manner prescribed, the original cost of construction of the actual facilities or property in use as of June 30, 1914, and the amounts expended from time to time for permanent additions and betterments to their properties. The location of such permanent additions and betterments shall be plainly indicated upon blue or white prints or photographs of such original drawings filed at the time such report or reports are filed with said Commission.

3. All property, real or personal, and all plant facilities abandoned shall be reported in detail, on quarterly reports.

4. When any portion of the original cost cannot be identified with any primary account named in the classification of expenditures for property accounts prescribed by said Commission, estimates in detail for such portion shall be made, and such estimated costs shall be the estimated original costs at the time the utility or portion thereof was placed in operation.

5. On or before the last day of the month following each calendar quarter, detailed reports of the cost and location of all completed new construction or additions and betterments for the preceding calendar quarter shall be made, the first of which reports

shall be filed on or before the 31st day of October, 1914, for the calendar quarter ending September 30, 1914. Same shall be certified by the chief engineer or managing officer of the company making such report, covering additions and betterments from the first to the last day of such calendar quarter, both inclusive. Blue or white print copies of original drawings or photographs showing thereon the cost of any and all completed new construction and additions and betterments shall be filed with said Commission as a part of such quarterly report.

6. Any gas or electric utility company contracting for the construction of new plants, or for additions and betterments, shall require reports of such construction in such detail as may be necessary to enable such gas or electric utility company to report to said Commission the original cost and inventory in the manner and form prescribed by the said Commission.

7. No director, officer, agent, member or employee of the operator of any gas or electric utility under jurisdiction of the Commission shall destroy, deface or falsify any contract, record, books, maps or plats, or any paper or document relating to the cost or operation of such utility or utilities.

8. The Commission will exempt any company from complying with any of the requirements named herein upon satisfactory showing.

* * * * *

ELECTRIC UTILITIES

CLASSIFICATION OF PROPERTY

ACCOUNTS AND INSTRUCTIONS

(Property accounts are those which represent only actual money

expended.)

The following classification of expenditures for property accounts shall be, and same is hereby prescribed, promulgated and adopted, for the use of all utilities engaged in the generation, sale, transmission and distribution of electric current to consumers in the State of Oklahoma for light, heat or power, subject to the jurisdiction of the Corporation Commission in the keeping and recording of Property Accounts; that each and every such company and that each and every receiver or operating trustee of any such company be required to keep accounts in conformity therewith, in so far as the same is pertinent with the facts and circumstances with any such utility.

The rules and regulations herein contained are, and by virtue of this order do become, the lawful rules according to which said property accounts are defined. Each and every person directly in charge of the accounts of any such utility, or any receiver or operating trustee of any such utility is hereby required to follow and apply the said rules in keeping and recording of the property accounts of any such utilities, and it shall be unlawful for any such company or for any such receiver or operating trustee of any such company or for any person directly in charge of the accounts of any such company to keep any account or record or memoranda of any accounting of property accounts, except in the manner and form set forth and hereby prescribed, and except as hereinafter authorized.

For each item in accounts covering stations and structures and all other facilities, the date such material was placed in use or in a position ready to serve shall be noted.

Whenever second-hand material is installed, the symbol "SH" shall immediately follow each item or entry.

INSTRUCTIONS PERTAINING TO PROPERTY ACCOUNTS

(Applies also to classification of electric utility accounts following.)

ADDITIONS are structures, facilities, equipment, and other properties added to those in service at the beginning of operations, and not taking the place of any property of like purpose previously held by the company.

BETTERMENTS are mechanical changes in structures, facilities, or equipment which have as their primary aim and result the making of the properties affected more useful or of a greater capacity than they were at the time of their installation or acquisition. The cost of such portion only of the changes incident to betterments as will, when added to their original cost of the property bettered, give the cost of replacement or reconstruction in present condition of the property as bettered should be charged to the appropriate subaccounts. The remainder of the cost of the change should be classed as a **REPAIR** and be charged to the appropriate operating expense accounts.

REPLACEMENTS are those installations of plant and equipment which have for their purpose the substitution of one building, structure, piece of equipment, or machine for another which it has become necessary to retire, the substitute having substantially no greater capacity than the plant and equipment replaced. The cost of the plant and equipment retired should be credited to the

accounts in which it is carried, and the cost of the plant and equipment installed in place of that so retired should be charged to the appropriate accounts.

A-COSTS TO BE ACTUAL MONEY COSTS: All charges made to plant and equipment or other property accounts with respect to any property acquired on or after July, 1, 1914, should be the actual money costs of the property. When the consideration actually given for anything with respect to which a charge is made to any plant and equipment or other property account is anything other than money, the actual consideration should be described in the entry with sufficient fullness and particularity to identify it, and the amount charged should be the actual money value of such consideration at the time of the transaction.

B-COSTS OF LABOR, MATERIAL AND SUPPLIES: The term "Cost" as used in the property accounts means the actual cost in money of labor and materials used in construction, or the actual cost in money of property acquired after construction.

Cost of material and supplies consumed in construction is the cost at the places where they enter into construction, including cost of transportation and inspection when specifically assignable. If such materials and supplies are passed through storehouses, their cost entered in the account may include a suitable proportion of actual store expense.

C-PLANT AND EQUIPMENT AND OTHER PROPERTY PURCHASED: When any property in the form of a going or completed plant is purchased, an appraisal of the property so acquired should be made,

and the different constituent elements of the plant and equipment, if any, or other property acquired should be appraised at their then present physical cost; that is to say, at the estimated cost of replacement or reproduction less deterioration to the then existing conditions through wear and tear, obsolescence and inadequacy.

Where certified copies of vouchers are hereinafter called for, companies will be exempted from furnishing such certified copies if such companies will designate the original voucher number, and declare same as on hand and in files within the state of Oklahoma, designating location of such files by city and street number, subject to call at any time by the Commission or its authorized agents.

In case of doubt concerning the correct application of any rule herein named, the interpretation prescribed by this Commission relating thereto shall be taken as final.

The classification of expenditures for Property Accounts of Electric Utilities shall be as follows:

EU.1. ORGANIZATION.

This account includes the fees paid to governments for the privilege of incorporation, and all office and other expenditures incident to organizing the corporation or other enterprise and putting it in readiness to do business. It includes all legitimate organization expense; provided, that no charge or entry shall be made to this account unless a duly certified copy of the voucher covering the expense is filed with the report.

EU.2. FRANCHISES:

This account shall include only actual moneys paid to municipalities or to persons from whom franchises were acquired. Note:- Annual or more frequent payments in respect to franchises must not be charged to this account, but to the appropriate tax account.

EU.3. LAND DEVOTED TO ELECTRIC OPERATIONS:

This account includes the cost of all land devoted to electric operations. It includes land occupied by generating stations and their appurtenances, right of way and easements for transmission and distributing systems, rights of way for pipe lines, water rights, and rights of pondage and submersion, (when such rights have a life of over one year). Such cost when assumed or paid by the respondent in its own behalf includes the cost of registration of title, cost of examination, notary's fees, taxes accrued to date of transfer of title, and cost of obtaining consents and payments for abutting damages.

EU.4. BUILDINGS AND STRUCTURES:

This account includes the cost of all buildings and other structures of a permanent character devoted to the general purposes of electric current manufacture and distribution, such as general office buildings, shops, storehouses, stables, except power plants and substations.

EU.5. POWER PLANT BUILDINGS:

This account includes the cost of material used and labor expended in erecting buildings to be used for housing power or generating plants. This account includes the cost of

foundations, gas, water, and heating pipes when attached to the building permanently, and cost of plans.

EU.6. SUB*STATION BUILDINGS:

This account includes the cost of material and labor expended in erecting buildings to be used for sub-station purposes, including excavations, permanent foundations, etc., and all pipes and fixtures permanently attached to such buildings.

EU.7. FURNACES, BOILERS AND ACCESSORIES:

This account includes the cost of all furnaces, boilers, and boiler apparatus and accessories devoted to the production of steam for generating electric current. It includes boilers and valves, furnaces, grates, burners, flues, leading to smoke stacks and chimneys, smoke stacks, mechanical stokers, feed and hot water pipes, injectors, filters, steam traps, exhaust pipes, pipes for conducting steam from the boiler to the engine.

EU.8. STEAM ENGINES:

This account includes the cost of all steam engines devoted to the production of electric energy, and includes the specially provided foundations and settings of such engines. The account should be considered as including the complete engine and setting.

EU.9. GAS ENGINES:

This account includes the cost of all gas or gasoline engines devoted to the production of electric energy, including specially provided for foundations including the exhaust pipe.

EU.10. ELECTRIC GENERATORS:

This account includes the cost of all electric generating

apparatus driven by engines operated by steam, gas or gasoline or water. The specially provided for foundations for such generators, shall be included.

EU.11. ACCESSORY ELECTRIC POWER EQUIPMENT:

This account includes the cost of all electric equipment of generating stations not includible in the foregoing accounts, and includes regulators, station switchboards, circuit breakers, switches, ammeters, volt meters, watt meters and the like, ventilator apparatus and air compressors.

EU.12. MISCELLANEOUS POWER PLANT EQUIPMENT:

This account includes the cost of all miscellaneous equipment at power plants not includible in any of the foregoing accounts. It includes the cost of cranes, hoists, machine tools, belts, pulleys, hangers and counter shafts.

EU.13. SUBSTATION EQUIPMENT:

This account includes the cost of all equipment at substations. Such equipment includes not only the electric machinery and apparatus, including storage batteries, but all other equipment of any kind devoted to the purposes of substation work.

EU.14. POLES AND FIXTURES:

This account includes the cost of towers, structures, poles, cross-arms, and insulator pins, braces, brackets and other pole fixtures except transformers, guys and other supports for holding the towers, structures, etc., and all labor expended in connection with the construction of pole lines or structures for carrying the transmission and distributing lines.

EU.15. CONDUIT SYSTEMS:

This account includes the cost of conduits in place required for underground wires, and cables, including manholes, pipes, sewer traps, sewer drains, and all material necessary for the completion of the Conduit system.

EU.16. MUNICIPAL LIGHTING:

Includes the cost in place of all property of the utility in poles, cross-arms, pins^{and} braces, insulators, arc lamps, outfits, and suspensions specially provided for street or park lighting. Such cost includes the cost of material, transportation, setting poles, and restoring the surface to the condition required. This account does not include any part of the property chargeable to the distribution system.

EU.17. TRANSMISSION AND DISTRIBUTION SYSTEM:

EU. 17-A This account includes the cost of the transmission system, including cables and wires.

EU. 17-B This account includes the cost of all distribution main conductors and feeders, including the cost in place of all cables and wires. The charges to the account shall be divided as follows:

- I. Overhead distribution (or Transmission) system.
- II. Underground distribution (or Transmission) system.

EU.18. ELECTRIC SERVICE WIRES:

This account includes the cost of all conductors, together with the cost of all insulation and supports, connecting the main

distribution wires with the house service wire of the consumers.

Note: Cost of renewing or modifying services should not be charged to this account.

EU.19. ELECTRIC METER INSTALLATIONS:

Includes the actual cost of labor and materials for the first setting of meters, for determining the amount of electric energy delivered to consumers.

EU.20. LINE TRANSFORMERS AND APPURTENANCES:

This account includes the cost of all transformers, both overhead and underground, lightning arresters, cutout boxes, in place in the transmission or distribution system.

EU.21. ELECTRIC METERS:

Charge to this account the actual cost of meters used in determining the amount of electric energy delivered to consumers, plus freight and drayage, and the cost of labeling same, but not the cost of setting.

EU.22. COMMERCIAL ARC LAMPS:

This account includes the cost of all property of the respondent in commercial arc lamps and fixtures supplied to the commercial consumers.

EU.23. ELECTRIC TOOLS AND IMPLEMENTS:

Includes the cost of all tools and implements having a life of more than one year, not classed as hand tools, liable to be lost and which are not covered by any of the preceding accounts.

EU.24. ELECTRIC LABORATORY APPARATUS:

Includes the cost of all testing apparatus and laboratory

equipment used for testing purposes.

EU.25. DAMS, CANALS AND PIPE LINES:

This account includes the cost of all dams, and appurtenances, and pipe lines devoted to the utilization of water power, and the delivery of water to the turbine or water wheel, Charges should include the cost of all dam equipment, walls, fences and other supporting structures.

EU.26. TURBINES AND WATER WHEELS:

This account includes the cost of all turbines and water wheels, devoted to the conversion of water power into mechanical power for the production of electric energy. It includes the cost of the foundations or settings of the wheels or turbines.

EU.27. ELECTRIC MOTORS:

Includes the cost of all property of the respondent inelectric motors leased to consumers, and all appurtenances thereof.

EU.28. OTHER TANGIBLE ELECTRIC PROPERTY:

Includes the cost of all other tangible electric property not provided for elsewhere.

EU.29. OTHER TANGIBLE PROPERTY OF THE RESPONDENT:

Includes all tangible property devoted to other purposes than the electric energy.

EU.30. GENERAL EQUIPMENT:

This includes the cost of all equipment of general structures, as provided for under the following heads:

EU.30-A General Office Equipment.

Desks, chairs, tables, movable safes, engineer-

ing equipment, etc.

EU.30-B General Shop Equipment.

Furnaces, boilers, engines, etc., used for the purpose of operating machine shops, but not for the purpose of operating generators.

EU.30-C General Store Equipment.

Movable counters, movable shelving, carts, barrows, and other apparatus used in moving material and stores.

EU.30-D General Stable Equipment.

Horses, harness, drays, wagons, equipment of shops for the repairs of wagons, trucks, etc.

EU,31. ENGINEERING AND SUPERINTENDENCE:

This account shall include all expenditures for services of engineers, assistants, draftsmen, superintendents, clerks and employees on preliminary and construction work, and all expenses incident to their work; provided, that no charge shall be made to this account unless the officer or employee is specifically assigned to the particular work, and during the period of construction is engaged in no other work for the respondent.

EU.32. INJURIES DURING CONSTRUCTION:

This account includes all expenditures incident to injuries to persons when caused directly in connection with the construction of electric plant and equipment, also witness fees and amount of final judgements and all premiums paid on casualty bonds during construction.

Note: No legal expenses are chargeable to this account unless such expenses are caused by employees specifically for an injury case.

EU.33. LAW EXPENDITURES DURING CONSTRUCTION:

This account includes general expenditures of the following nature, incurred in connection with the construction of an electric plant or distributing system, namely, pay of and expenses of all counsels, solicitors and attorneys, and of their clerks and attendants and the expenses of their offices, cost of printing stationery and briefs, etc., and all other legal and court expenses during construction.

EU.34. INTEREST DURING CONSTRUCTION:

This account includes the interest accrued upon all moneys and credits available upon demand, acquired for use in connection with the construction and equipment of the property from time of acquisition until the construction is ready for use.

To this account should also be credited discounts realized through prompt payment of bills for materials and supplies used in construction work, unless such discounts are credited to the particular bills.

EU.35. MISCELLANEOUS CONSTRUCTION EXPENDITURES:

This account includes the salaries and expenses of executive and general officers of an electric plant under construction, clerks in general offices, engaged in strictly construction accounts or work, and rent of general offices when occupied solely by construction officers and employees.

EU.36. TAXES:

This account shall include only taxes accrued on any portion of the plant during the construction thereof, before the same is open to operation; such taxes having been actually paid or an established charge against the utility. Where taxes are assessed for paving, sewerage system, or curbing, the actual money paid may be considered a proper charge to construction.

METHOD OF REPORTING ORIGINAL COST.

All reports of original cost and additions and betterments or abandoned property shall be made on bond or flat paper, the dimensions of which shall be $8\frac{1}{2}$ x 14 inches.

When any electric utility has no additions, betterments, construction or abandoned property to report for a given calendar quarter, such utility may advise the Corporation Commission of such fact by letter on or before the 15th day of the month following the last month of the calendar quarter for which the report is to be made.

For all accounts the labor, material and freight charge cost for each unit must be shown separately, and the total labor, material and freight charge cost must be itemized and classified as such for the total of the account. Each completed will appear as a complete bill of material.

Any entry not enumerated for the accounts must be shown by original units with cost per unit, quantities and total cost.

When unit costs are composed of labor, material and freight charges, such unit costs must be shown for each element composing

the unit cost and the total cost for the unit.

When more than one sheet is used for an account, the total for each sheet must be carried forward. The grand total for each account will appear at the bottom of the last sheet.

No report will be accepted as complete unless the details of each account as required by these instructions are shown.

Previous to the reporting of the cost of all properties used by the respondent utility for more than one service, such respondent shall submit a formula for the Commission's approval, showing in detail the proposed method upon which the cost of property is intended to be divided, but no assignment of property used for more than one service shall be made until the approval of the Commission is received by the respondent. This contemplates the division of property costs where a gas utility or electric utility operates jointly or where a gas or electric utility operates ice plants, water plants, laundries, cotton gins, or other utilities.

EU.1. ORGANIZATION:

Complete analysis of the charges to this account supported by copies of vouchers actually paid, must be attached to the report for the account.

EU.2. FRANCHISES:

Copies of all franchises, contracts or bills of sale which in themselves must show the cost of franchise, supported by copies of paid vouchers, must be attached.

EU.3. LAND DEVOTED TO ELECTRIC OPERATION:

Municipal plats showing the general location of all property

owned or used by the respondent must be filed and must show an identifying number on each 160 acre tract of land (or fraction thereof) into which said plat is divided, for the purpose of showing all facilities in detail as required by the following paragraph.

Maps showing the 160 acre tracts of land (or fraction thereof) drawn to a scale of 200 feet to the inch, and showing on each subdivision, the exact location of all buildings, poles, wires, transformers, street lights, conduits and manholes used in connection with the manufacture, distribution or transmission of electric current shall be filed. All of the above items except location of buildings shall be indicated by symbols, and the legend describing such symbols shall be noted on each map.

Ground or floor plans shall be furnished (and drawn to a scale of 1/4 inch to the foot) showing the location of all buildings and structures and facilities therein.

On all location maps shall be placed an arrow-head 3 inches long pointing due north with the letter "N" at the point.

EU.4. BUILDINGS AND STRUCTURES:

Give complete description, cost, freight charges, unit cost and total cost.

EU.5. POWER PLANT BUILDING:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU.6. SUBSTATION BUILDINGS:

Complete description of each unit, unit cost, total cost of

each unit and total cost of account.

EU.7. FURNACES, BOILERS AND ACCESSORIES:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU. 8. STEAM ENGINES:

Complete description of each unit, unit cost, total cost of each unit, and total cost of account.

EU.9. GAS ENGINES:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU.10. ELECTRIC GENERATORS:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU.11. ACCESSORY ELECTRIC POWER EQUIPMENT:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU.12. MISCELLANEOUS POWER PLANT EQUIPMENT:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU.13. SUBSTATION EQUIPMENT:

Complete description of each unit, unit cost, total cost of each unit, and total cost of account.

EU.14. POLES AND FIXTURES:

Where separate poles and fixtures are used for distribution and transmission systems, the details for this account should be so reported. For each of the items enumerated, the following in-

formation is required:

Poles: Number, kind, length, size at the top, unit cost and total cost.

Towers: Number, kind, length, size at the top, unit cost and total cost.

Guys and Stubs: Number, size, kind, unit cost and total cost.

Cross-Arms and Cross-Arm Braces: Kind, length, unit cost and total cost.

Insulating Pins: Number, kind, size, unit cost and total cost.

Insulators: Numbers, kind, size, unit cost and total cost.

Other poles and Fixtures: Number, kind, size, unit cost and total cost.

EU.15. CONDUIT SYSTEM:

Conduits: Kind, size, length in lineal feet, unit cost per foot and total cost.

Manholes: Number, kind, size, unit cost and total cost.

Other Conduit Material: Number, kind, size, length, unit cost and total cost.

EU. 16. MUNICIPAL LIGHTING:

Complete description, number kind of service, unit cost and total cost.

EU.17. TRANSMISSION AND DISTRIBUTION SYSTEM:

Wires: Gauge, kind of insulation, feet per pound, unit cost per pound, total number of lineal feet, total number of pounds and total cost of each kind and size. In reporting property, cost should be divided between overhead and underground distribution and

transmission systems.

EU.18. ELECTRIC SERVICES:

Number, kind, capacity, name of manufacturer, unit cost and total cost.

EU. 19. ELECTRIC METER INSTALLATION:

Number of meters set, cost per meter and total cost.

EU.20. LINE TRANSFORMERS AND APPURTENANCES:

Number, kind, capacity, name of manufacturer, unit cost and total cost.

Other Appurtenances: Number, kind, capacity, name of manufacturer, unit cost and total cost.

EU.21. ELECTRIC METERS:

Number, kind, capacity, unit cost and total cost.

EU.22. COMMERCIAL ARM LAMPS:

Number, kind, name of manufacturer, unit cost and total cost.

EU.23. ELECTRIC TOOLS AND IMPLEMENTS:

Complete description of each unit, unit cost, total cost.

EU.24. ELECTRIC LABORATORY APPARATUS:

Complete description of each unit, unit cost and total cost.

EU.25. DAMS, CANALS AND PIPE LINES:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU.26. TURBINES AND WATER WHEELS:

Complete description of each unit, unit cost, total cost of each unit and total cost of account.

EU.27. ELECTRIC MOTORS:

Number, kind, name of manufacturer, unit cost and total cost.

EU.28. OTHER TANGIBLE ELECTRIC PROPERTY:

Complete description of each unit, unit cost and total cost.

EU.29. OTHER TANGIBLE PROPERTY OF THE RESPONDENT:

Complete description of each unit, unit cost and total cost.

EU.30. GENERAL EQUIPMENT:

Give complete description of each unit, unit cost and total cost.

EU. 31. ENGINEERING AND SUPERINTENDENCE:

All charges should be itemized and copy of each voucher supporting such charge must be attached to the report.

EU.32. INJURIES DURING CONSTRUCTION:

Analysis of vouchers actually paid by separate claims should be shown and copy of each voucher supporting claims must be attached.

EU.33. LAW EXPENDITURES DURING CONSTRUCTION:

All charges should be itemized and copies of each voucher supporting such charge must be attached to the report.

EU. 34. INTEREST DURING CONSTRUCTION:

Complete analysis of the interest due and the credits and discounts should be shown for each charge or credit to this account.

EU.35. MISCELLANEOUS CONSTRUCTION EXPENDITURES:

Complete analysis of all charges to this account should be shown on the report and copies of supporting vouchers must be attached.

EU.36. TAXES:

Full and complete copies of vouchers for payment of taxes chargeable to construction shall be attached and an explanation of such charges furnished.

METHOD OF REPORTING ADDITIONS AND BETTERMENTS OR ABANDONMENTS.

Under the provision of Section 5 of this order, quarterly reports showing all new construction, additions and betterments or abandonments shall be made, and shall be compiled in the same manner and according to the same rules as for the original construction cost and inventory.

The source of receipt and detailed information relative to acquisition of all moneys expended for each account shall be shown.

On last page of the quarterly report, and immediately preceding the oath, the following data shall be shown:

Total amount charged to property accounts as reported June 30th, 1914 - - - - - \$

Total net charges to property accounts for the period July 1st, 1914, to last day of the calendar quarter, both inclusive preceding the quarter for which this report is rendered, per quarterly reports filed with the Commission - - \$

Total net charges to property accounts for the quarter of - - - - -, 19- - -, per this report - - - \$

TOTAL CHARGES TO PROPERTY ACCOUNTS ON LAST DAY OF CALENDAR QUARTER FOR WHICH THIS REPORT IS MADE \$

OATH

All reports made to the Commission in accordance with the requirements of this Order, shall bear the following oath, except when a series of reports are made at one time and permanently attached together, then the last sheet of such report may carry

the oath for the attached reports.

STATE OF _____ :
 : ss.
 COUNTY OF _____ :

This is to certify that this report was prepared under the requirements of Order No. __, and instructions as promulgated by the Corporation Commission of Oklahoma, under my personal supervision. I further certify that it is in accordance with the books and records of this company, and that the above report is correct.

 Chief Engineer

 Managing Officer.

Subscribed and sworn to before me this the ___ day of _____, A.D., 19__.

CLEARING ACCOUNTS:

Accounts EU-31, EU-32, EU-33, EU-34, EU-35, and EU-36, as herein named (with text pertaining thereto) are provided for certain expenditures which usually affect all classes of construction but need to be brought together in one account in order that the total of each such class of expenditures may be known. Each account named in this paragraph can, if so desired, be cleared by apportioning the total expenditures in each account to other appropriate property accounts on the basis of service rendered, as determined by the actual time devoted to particular jobs, or if actual time cannot be allocated then upon an equitable basis fixed by the officers of the company, but the total for each account must be shown separately.

BALANCE SHEET ACCOUNTS

Definitions and Instructions.

Balance Sheet Accounts defined. By Balance Sheet Accounts are meant those titles under which the ledger accounts are combined and summarized to show the assets, liabilities, and profit or loss of the business at a given time. Where the title and definition of a Balance Sheet Account indicate that it is a summary of other accounts, it is not required that a special ledger account shall be raised under such a title to include the balance from the accounts usually carried on the ledger.

ASSETS: The term Assets is an accepted designation of the wealth or money's worth, either actual or nominal, in the possession or control, or at the disposal of individuals, firms, corporations, or governments, when the wealth or money's worth is considered as resources for satisfying the obligation of debtors to creditors, and those of trustees to their principals.

Corporate deficit is the excess of the expense and deductions over revenue or income, and represents the amount due to the corporation by its proprietors, or propriety interests for the replacement of lost invested capital.

LIABILITIES: Liabilities are primarily amounts of money or quantities of other specified forms of wealth which persons, firms, corporations, or governments are under obligation to pay or deliver, or for whose custody, use, payment, or expenditure they are responsible, or amounts representing losses or depreciation of assets incurred but not realized..

Corporate surplus is the excess of revenue or income over expenses and deductions, or portions of the property rights or equity of the proprietors.

ASSET ACCOUNT

1. FIXED PROPERTY INSTALLED PRIOR TO JULY 1, 1914.

In this account (on the balance sheet statement), shall be shown the total of the balance in the ledger accounts representing the corporation's fixed property which was installed prior to July 1, 1914, and which is still in service at date of the balance sheet.

2. FIXED PROPERTY INSTALLED SINCE JUNE 30, 1914.

This account is a summary of the accounts representing the corporation's fixed property installed since June 30, 1914, and should show the cost of the fixed property which has been installed since that date and is still in service at the date of the balance sheet.

3. CASH AND DEPOSITS.

(A) CASH. Charge to this account the amount of current funds available for use on demand in the hands of financial officers and agents, or deposited in banks or with trust companies, and cash in transit for which agents receive current credit.

(B) SPECIAL DEPOSITS. Charge to this account special deposits to pay declared dividends or matured interest, cash realized from the sale of securities held for disbursement when the purposes for which the securities are sold are accomplished; special deposits other than in sinking funds for the payment of debts and interest,

not matured; also money and securities deposited to secure the performance of contracts, and other deposits of a special nature not provided for elsewhere.

4. NOTES RECEIVABLE:

Charge to this account the cost of all collectible obligations in the form of notes receivable or other similar evidences of money receivable on demand or within a time not exceeding one year. This does not include interest coupons. Time loans that mature more than one year after date of issue shall be considered as investments and shall not be included in this account.

5. ACCOUNTS RECEIVABLE.

Include in this account all amounts owing to the corporation upon accounts with solvent concerns other than banks, also the cost of all accounts and claims (except notes or negotiable bills) upon which responsibility is acknowledged by solvent concerns or which are sufficiently secured to be considered good, and of all judgments against solvent concerns where the judgment is not appealable or suspended through appeal.

The following sub-accounts are provided:

A. Accounts with System Corporations. Charge to this account amounts due from proprietary, affiliated, controlled and controlling corporations on open accounts other than those provided for in Account No. 8-B, "Advances to System Corporations for Construction, Equipment and Betterments."

B. Due from Consumers and Agents. Charge to this account amounts due from consumers and agents for services rendered or

or billed.

Note: Accounts with consumers and agents shall be kept in such manner as will enable corporations to show amounts due from consumers and agents for current accounts, for delinquent accounts, and amounts due from consumers whose service has been suspended.

C. Miscellaneous Accounts Receivable. Charge to this account amounts due from employees for working funds advanced and amounts due from miscellaneous debtors upon open accounts considered collectible.

6. INTEREST AND DIVIDENDS RECEIVABLE:

Charge to this account all interest considered collectible, accrued but not as yet collected upon bonds, notes or other commercial paper held by or for the benefit of the corporation; all dividends declared or guaranteed by solvent concerns but not yet collected the right to which is in the corporation.

7. OTHER CURRENT ASSETS:

Charge to this account the cost of all current assets which are not includible under any of the foregoing accounts. By Current Assets are meant only those things that are readily convertible into money and which are held not as investments, but with the intent of being presently converted into money.

8. INVESTMENTS:

This account includes the cost of all properties acquired or held not for use in present operations, but as a means of obtaining and exercising control over other corporations, or for income to be derived therefrom, or for a raise in value, or for

devotion to future operations, and for securing other business advantages that may seem possible through their acquisition and possession.

It is sub-divided as follows:

A. SECURITIES OF OTHER CORPORATIONS.

Charge to this account the cost of stocks and bonds and other evidences of indebtedness issued by other companies. This account does not include any stocks, bonds, or other evidences of indebtedness issued or assumed by the accounting corporation.

Note: In the annual reports to the Corporation Commission, investments will be required to be classified so as to show those held subject to a lien of some character and those held free of all lien or pledge.

B. Advances to System Corporations for Construction, Equipment and Betterments. Charge to this account advances to proprietary, affiliated, controlled and controlling corporations to enable such corporations to pay for construction, equipment, additions, and betterments, when such advances are of a permanent nature (i.e., where there is not an understanding that the advances are to repaid within one year) or when it is understood and intended that reimbursement shall be made by the issue of the securities of the debtor corporation.

Note: Temporary advances on open accounts to system corporations and such advances for purposes other than construction, equipment, additions and betterments shall be included in accounts receivable.

C. Miscellaneous Investments. Charge to this account all other investments of a permanent nature in intangible and in physical property not held for the operation of the Company's plant.

Note: In the annual reports to the Corporation Commission, investments will be required to be classified so as to show those held subject to a lien of some character and those held free of all lien or pledge.

9. MATERIALS AND SUPPLIES:

Charge to this account the cost (including transportation) of all materials and supplies acquired, and the value of discarded equipment, and of equipment materials, and supplies returned to store, regardless of whether the same are intended to be consumed in construction or in operation, or later to be sold.

Inventories, of materials and supplies shall be taken at least annually, and any shortages or overages disclosed by such inventories shall be credited or debited to this account.

10. SINKING FUNDS:

Charge to this account the amount of cash and the cost of live securities in the hands of trustees of sinking and other funds for the purposes of redeeming outstanding obligations, also amounts deposited with such trustees on account of mortgaged property sold. A separate account shall be raised for each sinking fund. When any security of the same issue as that for which a sinking fund is created is acquired through the operation of the sinking fund, the par value of the security shall be charged to the liability account to which it stands credited and not to the sinking fund

account.

11. OTHER SPECIAL FUNDS:

Charge to this account the amount of cash and the cost of securities held in trust by or for the corporation in insurance funds, pension funds, hospital funds, and other similar special funds not provided for in the preceding accounts. A separate account shall be raised for each fund.

Note: Securities issued or assumed by the corporation may be included among the assets of special funds only when they represent the actual investment of funds held in trust and when the fund so held would share in the distribution of assets covered by the securities in case of foreclosure or dissolution.

12. TREASURY SECURITIES:

Charge to this account the par value of all stocks and bonds which have been authorized and issued by the corporation or assumed by it and held by the Treasurer or other fiscal agent of the corporation for its benefit. When such securities are sold their par value shall be credited to this account.

13. PREPAID EXPENSES:

A. Prepaid Rents. Charge to this account the amount of rents paid in advance of the enjoyment of the term. As the term is consumed, credit this account at monthly intervals and debit the appropriate rent account with the amount applicable to the month.

B. Prepaid Taxes. Charge to this account the excess of taxes paid over the amount properly chargeable to income or other accounts as shown by the debit balance in the Tax Liability account.

C. Prepaid Insurance. When premiums on insurance policies are paid in advance of their accrual, the amount prepaid shall be charged to this account. As such premiums accrue, they shall be credited at monthly intervals to this account and charged to the appropriate expense account.

D. Other Prepayments. When other prepayments are made for anything other than as provided for in the three preceding accounts, the amount of such prepayments shall be included in this account.

14. UNAMORTIZED DISCOUNT ON SECURITIES AND EXPENSE:

When capital stock, funded debt securities and other evidences of indebtedness are disposed of for a consideration whose cash value is less than the sum of the par value of the securities or other evidences of indebtedness and the interest thereon accrued at the time the transfer takes place, the excess of such sum of the par value and accrued interest over the cashvalue of the consideration received shall be charged to this account. To this account shall also be charged all expense connected with the issue and sale of evidences of debt, such as fees for drafting mortgages and trust deeds, fees and taxes for recording mortgages and trust deeds; cost of engraving and printing bonds, certificates of indebtedness, and other commercial paper having a life of more than one year; fees paid trustees, provided for in mortgages and trust deeds; fees and commissions paid underwriters and brokers for marketing such evidences of debt, and other like expenses not elsewhere provided for.

15. OTHER SUSPENSE:

This account includes all debits not elsewhere provided for and the proper final disposition of which is uncertain. It will include all such matters as expense of preliminary surveys, plans, investigations, etc., made for determining the feasibility of projects under contemplation. Should any such project later be carried to completion, such amounts shall be credited to this account and charged to the proper property accounts. Should a project be abandoned such amount shall be charged to profit and loss.

16. CONSTRUCTION WORK IN PROGRESS:

In this account may be included amounts expended upon plant that is in process of construction under estimates or work orders but is not ready for service at the date of the balance sheet. It includes, also, such proportion of plant supervision expenses, engineering expenses, tool expenses, supply expenses, and general expenses as may be properly chargeable to the construction work included under this account.

When the work is completed on any job, the cost of which has been included in this account, the sub-account, covering that job shall be credited with the amount at which it stands charged, and the appropriate property or other accounts shall be concurrently charged; but in no case shall any expenditure be carried in this account beyond the close of the fiscal year next succeeding that in which the expenditure is made.

17. OTHER INTANGIBLE PROPERTY:

Charge to this account the cost of all other intangible property devoted to operations. Entries of charges to this account shall describe the acquired property with sufficient particularity

clearly to identify it, and shall also show specifically the principal from whom acquired and all agents representing such principal in the transaction; also the term of life of such property, estimated is not known, and if estimated, the facts upon which the estimate is based.

18. CORPORATE DEFICIT:

Under this head should be shown the debit balance, if any, in the "Corporate Surplus or Deficit Account."

LIABILITY ACCOUNTS

19. CAPITAL STOCK:

To this account should be credited the par value of the capital stock issued and outstanding, including any that may be in the corporation's treasury, or held in trust for it, or in sinking or other funds.

20. INSTALLMENTS ON STOCK SUBSCRIPTIONS:

To this account should be credited the amounts received for capital stock to be paid for in installments, until such stock is issued.

21. FUNDED DEBT:

The funded obligation of the corporation shall be divided into classes, each class agreeing in all of the following four characteristics:

1. Mortgage or other lien, or security therefor.
2. Rate of Interest.
3. Interest Date.
4. Date of Maturity.

A separate sub-account shall be opened for each mortgage, note, or other lien or security, and no accounts or debts not agreeing in the characteristics as above shall be included in the same sub-account.

To the proper sub-account shall be credited when issued the total receipts for the sale of evidence of indebtedness secured by the mortgage, etc. The entry in any account shall show also the purpose for which funded debt is issued and shall make intelligible reference to the book, page, and account wherein are shown any discount or premium realized on the amount issued or assumed.

If the consideration received for the indebtedness is other than money, the entry shall show to whom issued and shall describe with sufficient particularity to identify the actual consideration received.

If the issue in any case is to an agent of an undisclosed principal, the name and address of agent and the fact of his agency must be shown in the entry; also short time securities or notes and mortgages payable which are due at a date over one year in the future.

22. RECEIVER'S CERTIFICATES:

When any receiver acting under the orders of a court of competent jurisdiction is in possession of the property of the corporation, and under the orders of such court issues certificates of indebtedness chargeable upon such property, the par value of such certificates shall be credited to this account.

Interest accruing upon such certificates shall also be cred-

ited monthly to this account.

23. ADVANCES FROM SYSTEM CORPORATIONS FOR CONSTRUCTION,
EQUIPMENT AND BETTERMENTS.

Credit to this account advances from proprietary, affiliated, controlled and controlling corporations to enable the accounting corporation to pay for construction, equipment, additions and betterments when such advances are of a permanent nature (i.e., where there is not an understanding that the advances are to be repaid within one year) or when it is understood and intended that a reimbursement shall be made by issue of the securities of the debtor corporation.

Note: Temporary advances on open accounts from system corporation and such advances for purposes other than construction, equipment, additions and betterments shall be included in accounts payable.

24. NOTES PAYABLE:

When any note or draft which matures not later than one year after date of issue or of demand is issued or the primary liability thereon assumed by the corporation, the par value thereof shall be credited to this account and when it is paid it shall be charged to this account and credited to "Cash" or other suitable account except secured notes proper to be included in Account No. 20, "Funded Debt".

25. ACCOUNTS PAYABLE:

Include in this account the credit balances, showing all liabilities of the corporation upon open accounts, as provided in

the following sub-accounts:

A. Accounts with System Corporations, Credit to this account the amounts owing to proprietary, affiliated, and controlled or controlling corporations on open accounts other than those provided for in Account No. 22, "Advances from System Corporations for Construction, Equipment and Betterments."

B. Audited Vouchers and Wages Unpaid. Credit to this account the amount of audited vouchers or accounts and audited payrolls unpaid on the date of the balance sheet. Include also the amount of unclaimed wages and outstanding pay and time checks issued in payment of wages.

C. Consumers' Deposits. Credit to this account as such deposits are made all cash deposited with the corporation by consumers for service as security for the payment of bills. Deposits refunded should be charged to this account and credited to cash. Deposits applicable to uncollectible bills should be credited to the account of the consumer and debited to this account.

D. Miscellaneous Accounts Payable. Credit to this account all amounts owing to miscellaneous creditors on open accounts and not provided for elsewhere.

26. INTEREST ACCRUED:

Credit to this account at the close of each month the interest accrued during the month upon the interest-bearing indebtedness issued or assumed by the corporation except interest on judgements and receivers' certificates. When such interest is paid it should be charged to this account and credited to "Cash" or other suitable

account. The interest accruing on any judgement against the corporation or upon any receivers' certificates shall be credited to the account to which such judgement or receivers' certificates stand credited.

27. TAXES ACCRUED:

To this account should be credited taxes that have accrued but are not yet due. The full amount of taxes for the year should be estimated and charged equally (one twelfth) to the tax account of each month with corresponding credit to this account, as soon as the amount of the taxes for the period is known, the accounts should be adjusted to conform. When taxes become due and are vouchered, they should be charged to this account.

28. DIVIDENDS DECLARED:

When any dividend is declared, the amount of the dividend shall be credited to this account and here remain until it is paid, when the amount of the payment shall be charged to this account and credited to "Cash" or other suitable account.

29. SERVICE BILLED IN ADVANCE:

When bills are made for service to be rendered in future months, and the amount of the bills is included in "Accounts Receivable" but not in the revenue accounts, the proportion of the bills applicable to future months shall be credited to this account. As the term for which the bills are made expires, the appropriate revenue account should be credited and this account debited with the amount applicable to the current month.

30. RESERVE OR ACCRUED DEPRECIATION:

Credit to this account or to appropriate sub-accounts such amounts as are concurrently charged to Depreciation. Charge to this account or to appropriate sub-accounts (except as prescribed in the notes hereunder) the realized depreciation in the several classes of tangible property; that is, the difference between the original cost (estimated if not known) of property relinquished, retired, or destroyed, and the value of any salvage recovered. Charge also to this account such part of the expenditures for repairs concurrently credited to appropriate account as may have been provided for in estimating the rate of depreciation.

31. CASUALTY AND INSURANCE RESERVES:

When any admitted liability arises because of loss or damage to property of others, or of injuries to employes or other persons, the amount of the liability may (if not previously provided for by insurance or self-insurance) be charged to the appropriate operating expense or other accounts and credited to this account, against which (in such case) the actual cost of satisfaction of the liability shall be charged when the matter is determined. If the extent of the liability cannot be ascertained promptly after the liability arises, it may be estimated as accurately as practicable for the purpose of determining the immediate charge to the expense or other appropriate account, in which case the matter shall be adjusted when the extent of the liability is definitely ascertained. If the loss is of such character that it is in whole or in part indemnifiable under any contract of insurance carried by the corporation, the indemnifiable portion of the loss shall be charged to

the insurer and credited to "Casualty and Insurance Reserves."

Also credit to this account the amounts charged to operating expense "Insurance," to cover self-carried risks.

32. RESERVES INVESTED IN SINKING FUNDS:

Credit to this account appropriations from surplus specifically invested or set aside in the hands of trustees for sinking and redemption funds, including accretions to such funds.

33. CORPORATE SURPLUS UNAPPROPRIATED:

Under this head should be shown the credit balance, if any, in the "Corporate Surplus or Deficit Account."

INCOME ACCOUNT.

Income account defined.

The income account brings together those accounts that show the total amount of money that the corporation has received or becomes entitled to receive for services rendered during a given period, the return accruing during the period upon investments, and the disbursements and obligations incurred that effect the disposition of the amounts so received or accrued. The following accounts make up the income account statement and should be closed into the Income Account at the close of the year or other fiscal period.

101. OPERATING REVENUES:

Include in this account the total operating revenues of the corporation for the period covered by the income statement.

102. OPERATING EXPENSES:

Include in this account ~~the~~ total expenses of the corporation

for the period covered by the income statement.

103. NON-OPERATING REVENUES:

A. Rent accrued from lease of plant.

Credit to this account monthly as they accrue, all revenues from the corporations interests in plant or equipment held by others under some form of lease whereby it surrenders possession of such property. This account is intended to cover only rents receivable for the use of plants or operating units held as a whole under some form of lease.

B. Miscellaneous rent revenues.

Credit to this account monthly the revenues accruing to the corporation as a return upon rented property other than plant and equipment held by others under lease as provided for in preceding account.

C. Interest and Dividend Revenues.

Credit to this account monthly all revenues accruing to the corporation, not retained in specific sinking or other revenue funds, from interest upon all its bank balances, special deposits and other assets, when such interest is a liability of solvent concerns or individuals and, from dividends declared or guaranteed by solvent concerns upon stocks held by the corporation. No interest or dividends upon securities issued or assumed by the accounting corporation shall be credited to this account nor to any other revenue account.

D. Sinking and other reserve fund accretions.

Credit to this account and charge the appropriate fund or

its trustee monthly the revenues accruing from securities and other assets in the hands of trustees or specifically set aside for sinking or other special funds, when the revenues are retained as a part of the funds. Such revenues may include appropriations equal to interest upon securities issued or assumed by the accounting corporation where such securities are acquired through the operation of a sinking or other reserve fund.

E. Profits from operations of others.

Whenever in accordance with the terms of any contract the corporation is entitled to participate in the profits from operations of others, all revenues accruing to the corporation from such source shall be credited to this account.

F. Miscellaneous non-operating revenues.

Credit to this account all non-operating revenues not provided for in the foregoing accounts.

104. NON-OPERATING REVENUE DEDUCTIONS:

A. Rent expense.

Charge to this account all expenses arising in connection with the procuring of revenues from rented property such as the cost of negotiating contracts, advertising for tenants, fees paid conveyancers, collector's commissions, cost of enforcing payment of rent, cost of ousting tenants, etc. This includes the expenses accruing while the property is idle and awaiting an occupant; also the cost of maintenance of the property when such cost is borne by the corporation. Such maintenance includes depreciation as well as repairable wear and tear. It does not include taxes.

B. Interest expense.

Charge to this account all expense arising in connection with procuring interest upon investments, such as expense of collection, expense of investigating delay in payment, expense of enforcing payment and the like. It does not include taxes on such investments.

C. Dividend expense.

Charge to this account all expense arising in connection with the collection of dividends on stocks of other corporation, including expenses incurred in the investigation of the affairs of the corporations whose stocks are held, whether for the purpose of detecting mismanagement or for the purpose of inducing the declaration of dividends and all expenses connected with enforcing payment of dividends when declared. It does not include taxes on such investments.

D. Others operations expense.

Charge to this account the cost of negotiating contracts whereunder the corporation is to participate in the profit resulting from operations of others; also all expense of collecting the corporation's proportion of such profits, and all expense connected with procuring the modification of the dissolution of any such contract.

E. Miscellaneous non-operating expense.

Charge to this account all non-operating expense not provided for in the foregoing sub-accounts.

F. Non-operating taxes.

Charge to this account all taxes payable by the corporation accrued upon non-operating property and all taxes assignable to non-operating revenues.

G. Uncollectible non-operating revenues.

When any non-operating revenues are judged by the corporation to be uncollectible, the amount thereof shall be credited to the account in which heretofore charged and charged to this account.

105. INTEREST ACCRUED ON FUNDED DEBT.

Charge to this account monthly all interest accrued on outstanding funded debt issued or assumed by the corporation. This account does not include interest on securities held by the corporation in its treasury, in sinking or other reserve funds or pledged as collateral.

106. OTHER INTEREST DEDUCTIONS

Charge to this account monthly all interest accrued on receivers certificates and on interest bearing unfunded obligations of the corporation.

107. RENT DEDUCTIONS.

Include in this account monthly all amounts accrued against the corporation for rents, other than minor rents provided for elsewhere as chargeable to operating expenses. It includes the matters provided for in the following sub-accounts:

A. Rent for lease of plant.

Charge to this account monthly all amounts accrued against the corporation for the rent of plant and equipment which it holds under some form of lease from another, and which it has the ex-

clusive possession of. This account is intended to cover only rents payable for the use of plant or operating units held as a whole under some form of lease.

B. Rent for conduits, poles and the like.

Charge to this account rents payable accruing for the use of ducts, conduits or subways owned by others and rents for the use of poles, fences or buildings owned by others and rents for the use of poles, fences or buildings used as supports for the electric lines of the accounting corporation.

C. Rents for instruments and equipment. .

Charge to this account the rents payable accruing for electric or gas instruments and equipment owned by others. This does not include amounts paid lessor electric or gas corporations under an agreement to pay a certain percentage of revenues for use of instruments, privilege of connection, etc.

109. MISCELLANEOUS DEDUCTIONS FROM INCOME.

Include in this account the matters provided for in the following sub-accounts:

A. Loss on operations of others.

Whenever, in accordance with the terms of any contract, the corporation is bound to contribute toward reimbursement of the losses resulting from the operations of others, all liabilities accruing to the corporation from such source shall be charged to this account.

B. Uncollectible Bills;

Charge to this account, and credit the account receivable

which heretofore carried, the amount of any account for service which after a reasonably diligent effort to collect, has proved impracticable of collection. This account includes only uncollectible bills for amounts which have been treated as operating revenues.

C. Other contractual deduction from income.

Charge to this account all deductions from gross income, which are in the nature of fixed charges and not provided for elsewhere, such as those required by the terms of some agreement, contract, charter, provision, law or ordinance.

CORPORATE SURPLUS OR DEFICIT ACCOUNT.

Corporate Surplus or Deficit Account Defined:

This account or summary is the connecting link between the income account and the balance sheet. It summarizes the changes in the corporate surplus or deficit during a given fiscal period resulting from the business transactions during that period as well as those affected by any disposition of net profits made solely at the option of the corporation, by accounting adjustments not properly attributable to the period, or by miscellaneous losses or gains not provided for elsewhere. To this account should be carried the net balance of the accounts forming the Income Account, and in it should be summarized all optional appropriations (including dividends); miscellaneous adjustments due to errors in accounting in prior fiscal periods; profits from the sale of securities or other property; losses upon property sold or otherwise retired and not covered by reserves, and unusual losses and gains of like nature. For these matters the following accounts are provid-

ed; their net balance added to the net balance from the Income Account should show the net surplus or deficit on the date of the balance sheet.

110. DIVIDENDS ON OUTSTANDING STOCK:

When any dividend is declared upon any outstanding stocks of the corporation, the amount of such dividend shall thereupon be charged to this account. All entries to this account shall show the amount of stock upon which the dividend is declared as well as the amount thereof. If the dividend is payable in anything other than money such thing shall be described in the entry with sufficient particularity to identify it, and the actual money value thereof shall be stated as the amount of the dividend.

When any dividend is declared upon the stocks of the corporation owned by or held in the behalf of the corporation, the amount of such dividend thereon shall be credited to this account. Entries of credits to this account shall be made with the same degree of particularity as is prescribed in the preceding paragraph.

111. SINKING FUND APPROPRIATION:

Charge to this account all appropriations to sinking funds and accretions to such funds an account of income from previous investments. Such appropriations should include: (1) direct payments; (2) sums equal to the interest or dividends on securities issued or assumed by the corporation and held in sinking funds; (3) income from investments of sinking funds other than securities issued or assumed; (4) income from cash or special deposits held by trustees of sinking funds. All earnings of sinking funds and

contributions to such funds shall be included in this account whether such contributions are made at the option of the corporation or are required by the provisions of mortgages, deeds of trust, or other contracts.

112. MISCELLANEOUS DEDUCTIONS FROM SURPLUS:

A. Expenses Unprovided for Elsewhere. Charge to this account all expenses not chargeable as part of operating expenses or of non-operating expenses, such as fines levied on the corporation for violation of law, for misfeasance, for non-feasance, etc., fines levied on directors, officers, and other employees of the corporation and assumed by it, donations to funds, to churches and other associations, and other like expenses and outgoes.

B. Realized Depreciation Not Covered by Reserves. Charge to this account the realized depreciation (that is, the difference between the original cost and the salvage, if any) on tangible property retired, when such depreciation has not been provided for through a depreciation reserve.

C. Gifts to Controlled Corporations. Charge to this account all gifts made by the corporation to its controlled corporations, also such portions of all advances thereto as are not carried as assets.

D. Appropriations to Reserves. Charge to this account all optional appropriations to reserves.

E. Other Appropriations from Surplus. Charge to this account all optional appropriations made by the corporation and not provided for elsewhere.

Note: A complete analysis of this account will be required in annual reports of corporations to the Commission.

F. Other Deductions from Surplus. Charge to this account all deductions from surplus made to extinguish discount on stocks outstanding, optional amortization of debt discount and expense, deductions because of erroneous accounting in prior fiscal periods, and all other deductions from surplus not provided for elsewhere.

Note: A complete analysis of this account will be required in annual reports of corporations to the Commission.

113. Miscellaneous Additions to Surplus:

Credit to this account all additions to surplus due to erroneous accounting in previous fiscal periods, bad debts collected after being written off, profits arising from the sale of securities or other property, etc.

* * * * *

Each Gas and Electric Utility Company may report its financial operations in accordance with the preceding provisions governing balance sheet, income and corporate surplus and deficit accounts, but it shall not be considered that the result, or any particular deduction shown by such account shall be final, conclusive or binding upon the Commission, nor shall the same be considered as bearing the approval of said Commission.

In witness Whereof, we have hereunto set our hands and affixed the Seal of said Commission, this the 13th day of December, 1913.

CORPORATION COMMISSION OF

OKLAHOMA.

J.E. Love,
Chairman.

A.P. Watson,
Commissioner.

Geo. A. Henshaw,
Commissioner.

ATTEST:

J.H. Hyde,
Secretary.

The Commission, in making up this order as it is, evidently considered that the constitutional provision ordering it to make a valuation of all these properties, directed the first cost to be obtained. If this is not the case, then the Commission has had to assume that it should interpret the same, and has done so in that manner. The order, as seen, specifies that all original costs shall be shown wherever it is possible to do so, and, if the original cost cannot be ascertained, specifies that there shall be made an estimate of the original cost. The Commission has always had in mind that the valuation should be, as it expresses it, a "historical valuation." By this, it is meant that the Commission wishes to know the entire history of the plant, exactly how and when and where and why each item of money was spent on the production of the property. However, it must be thoroughly understood that the Commission does not consider that this is the value of the plant for rate purposes or for any other purpose. This much material, it is assumed, can best be furnished by the companies concerned and will serve the Commission as the best basis upon which to commence further work in valuation of any particular property which may be the subject of any investigation or case before the Commission. But it is quite evident, on the other hand, that this original cost will have great weight in the final determination of the Commission in any valuation case. No case has as yet been decided by the Commission, and it is impossible to point to any final decision of the Commission, all interpretations of the Commission's viewpoint being interpretations of the writer, gained from conversations with the Commissioners and the employees and from public speeches made by the Commissioners. In so far as plants constructed in

the future are concerned, the Commission, by this order, has means of keeping at all times a correct statement of the total money expended in the production of the property, the statement being analyzed according to the directions of the Commission. This same statement applies to all additions to property made by companies now operating. The problem produced, in order to comply with the order, was to find the "actual cost" or money expended on properties now existing. The Commission had in mind that it would accept the actual cost as reported by the companies wherever it could be supported by books, but that it would take it upon itself to judge the correctness of any estimated or doubtful items. But, basically, the Commission tried, through this part of the order, to get at the actually money invested, wisely or otherwise, by the different companies in the production of their properties.

As stated above, the Commission does not consider that the "actual cost" of the property as represented by the book value, even though kept according to the directions of the Commission, is the "present value" of the plant upon which the Supreme Court holds that rates shall be made. Many engineers and others who have worked on this order have been impressed by the absence from the order of such things as "Going Concern Value," "Bond Discount," "Depreciation," and "Working Capital," and have attempted to include some of the above items in their considerations. However, it suffices to say at this point that the Commission has not forgotten such items as these but it believes that they are matters subject to discussion before the Commission and upon which the Commission will have to take action as they are, with the possible exception of "Bond Discount," not matters of record but of opin-

ion. The Commission emphasizes that what it wants in answer to this order is a report of the actual money invested in the property which now exists in the service of the public. The Commission expects to use this cost as the general basis for its investigations, as stated above, and it expects to determine for each case the weight this actual cost shall have. It expects, also, to consider all of the above items in each case.

The above discussion pertains to the viewpoint of the Commission in calling for the "actual costs" for each item.

It is noticed, too, that the Commission calls for a set of maps and drawings which will indicate the exact location of all facilities devoted to the service of the public. The idea of the Commission in requiring this work as a part of the report is not so much that it will be a very great aid in making the valuation as that it will serve as a basis for the determination by the Commission of the sufficiency of service in relation to the distribution of the population to be served. Also, the Commission receives many complaints on account of the refusal by certain companies of extension of mains and distribution lines. If the Commission has in its files a complete and current record in the form of a map of the company's distribution system, it holds that it can refer to that map and determine the reasonableness of the request for extension and the company's refusal to grant the same. In cases of complaints from cities or citizens regarding street lighting, it is held that the Commission will be aided in its hearing by the maps mentioned. From the plans of the power plants, the Commission hopes to be able to criticize arrangements and to understand actual conditions in the different plants. In

cases of consolidation of plants, the Commission hopes to be able to give better judgment from study in its office of the maps of the companies concerned and from the plans of their plants.

By calling for quarterly reports, the Commission feels that it will be able to keep the files full of recent and live data and at the same time have an opportunity to see that the companies are complying with the order at all times. The Commission feels that, once the report of a company is filed with it, bringing the data up to date, then the following quarterly reports will not be burdensome in cost and will serve a most useful purpose. It is even provided that all work done by contract shall not hide actual cost in any way as the Commission feels it should know all of the inside dealings of the companies and should have the actual figures of cost as well as contractor's profit. Accordingly, the Commission orders that when any contract is let, the company shall require that costs shall be kept in such manner that they may be reported to the Commission in the manner prescribed.

The Commission, by this order, also wished to establish a uniform system of accounting for the electric utilities. The advantages of uniform accounting systems in the same kind of business need no support among those versed in engineering and management. The Commission feels that it is only by having all the companies of a given class, which are under its jurisdiction, keep their accounts according to a uniform and at the same time acceptable system that it will be able to make satisfactory comparisons between utilities of the same class in the State and with those of other states. It will also facilitate to a large degree the work of the Commission to have all the reports come in

in the same manner, regardless of the fact that it might be possible to make comparison if enough time were put upon the interpretation of the report .

The division of accounts which the Commission has adopted is intended to allow a thorough analysis of the investment and future additions and betterments and abandonments. The Commission is of the opinion that it will be impossible for any company to hide any property investment or to overcharge for any investment in physical structures. It also holds that the accounting system will show absolutely all expenditures which are made upon plant and that the company will at all times receive due credit in the considerations of the Commission. Intangibles have no place, of course, in this system of accounts, actual money expenditures being the only things considered. Overhead expenses are given their place, however, The Commission holds that Organization Expense, Franchise Cost, Engineering and Superintendence, Injuries During Construction, Law Expenditures During Construction, Interest During Construction, Taxes and certain other Miscellaneous Construction Expenditures have, by right, a place in the Original Cost of the property. It therefor provides for these in accounts Nos. 1,2, and 31 to 36 inclusive. However, percentages are not allowable as being the amounts expended in these overhead expenses. The Commission requires that actual expenditures be reported and that the company stand ready at all times to support any and all expenditures made under any of these accounts, by voucher.

The Commission also specified the exact size of the paper that should be used in all of these reports and the scale to which maps and

drawings should be, and, in general, tried to make all reports similar in nature.

The Commission further required that all reports of cost should be so thoroughly itemized as to show cost of material at factory, freight charges and labor charges, thus giving them a more detailed basis upon which to analyze the costs reported by the companies. The labor charges include all expense upon the material after it arrives on board the cars at the point of delivery -- the different items contemplated being unloading, drayage, storage costs, if any, and actual labor on the material preparing it for installation and making the installation. Thorough study of the way the orders written in regard to the details of reporting, show the minute detail in reporting items. A cross arm, for instance, may not be reported complete with pins and insulators in place, but the arm is reported, then the pins, then the insulators and even the nails which hold the pins in place in the cross arm. The interpretation of the Commission is that style and shop numbers should be given for all equipment having such; this includes engines, generators, switchboard instruments, pumps, and other like apparatus. In case of disagreement, the Commission would expect to trace the original sale from this and kindred data. In general, the Commission wants the report to be of such character that an intelligent engineer studying the same will be able to judge the correctness of the report without going to the plant in person. To carry this idea still further, one Commissioner stated that if this report were in sufficient detail and if the report complied with the order, it would be possible for him to turn it over to his stenographer who "with the cost data on all this stuff which we have

here in the office" could put on the costs and get as good a valuation as any engineer. It is a relief, then, to understand that some of the employees of the Commission, who have much influence in the decisions of the Commission, do not share this viewpoint but insist upon actually seeing the property in case any complaint is made which involves a valuation. However, the general viewpoint of the Commission is that the report should be as much in detail as possible and should give all the information known.

While the Commission does not hold that it has any control over the rates nor the operation of any allied business which may be handled by any public service corporation, still it does hold that it has the right to know all the details of the business in that the allied business may tend to throw some light on the total operations of the company as a public utility. The Commission holds that there are many facilities used by both businesses and that it has the right to say what proportion of the charge for such facilities should be made against the different businesses. It is noticed that the order calls upon the company to make a division of the property charges on property used in common, but calls upon the company to submit to the Commission for its approval a formula showing the basis of the division before making the same. The most common case met under this provision is that of a company operating an ice plant in connection with the electric plant. Since the gas business is a public utility, it is already under the supervision of the Commission and this provision will not pertain to the many cases of gas and electric utilities under the same ownership.

The particular problems which the writer wishes to discuss in

connection with work done in compliance with this order are the Reports of Original Cost and the first two Quarterly Reports for the following companies, all three being held by the Southwest Cities Utilities Company:

Comanche Light and Power Company, Lawton, Oklahoma.

Mangum Electric Company, Mangum, Oklahoma.

Duncan Electric and Ice Company, Duncan, Oklahoma.

The reports produced accompany this discussion and appear

as:

Appendix A -- Original Cost Report for the Comanche Light and Power Company as of June 30, 1914.

Appendix B -- First Quarterly Report for above company, from July 1, 1914 to September 30, 1914.

Appendix C -- Second Quarterly Report for above company, from October 1, 1914 to December 31, 1914.

Appendix D -- Original Cost Report for the Mangum Electric Company, as of June 30, 1914.

Appendix E -- First Quarterly Report for above company, from July 1, 1914 to September 30, 1914.

Appendix F -- Second Quarterly Report for above company, from October 1, 1914 to December 31, 1914.

Appendix G -- Original Cost Report for the Duncan Electric and Ice Company, as of June 30, 1914.

Appendix H -- First Quarterly Report for above company, from July 1, 1914 to September 30, 1914.

Appendix I -- Second Quarterly Report for above company, from October 1, 1914 to December 31, 1914.

- Appendix K -- Set of maps showing distribution system of the Comanche Light and Power Company, as of June 30, 1914, but with additions, bringing same up to December 31, 1914 to accompany Original Cost Report and Two Quarterly Reports.
- Appendix L -- Plan of power plant of Comanche Light and Power Company as of June 30, 1914, to accompany Original Cost Report.
- Appendix M -- Plan of power plant of Comanche Light and Power Company as of September 30, 1914, to accompany First Quarterly Report.
- Appendix N -- Plan of power plant of Comanche Light and Power Company as of December 31, 1914, to accompany Second Quarterly Report.
- Appendix O -- Set of maps showing distribution system of the Mangum Electric Company as of June 30, 1914, to accompany Original Cost Report..
- Appendix P -- Plan of power plant of Mangum Electric Company, as of June 30, 1914, to accompany Original Cost Report.
- Appendix Q -- Set of maps showing the distribution system of the Duncan Electric and Ice Company, as of June 30, 1914, to accompany Original Cost Report.
- Appendix R -- Plan of power plants of Duncan Electric and Ice Company, as of June 30, 1914, to accompany Original Cost Report.

Appendices A to I are bound with this discussion. Appendices K to R are bound separately and accompany the report.

The problem connected with these reports in so far as their form was concerned was to produce a satisfactory report in form as ordered by the Commission, a report which would readily show all details in a compact form, and at the same time to produce a report at a minimum expenditure of funds.

The field work was accomplished in the usual manner employed for complete inventories of physical property. Parties were sent into the field with sectionalized maps of the cities in which the plants were located. Absolutely all material in the distribution system was placed on these sections by symbol or letter or number, and in as nearly the correct place as it was practicable to determine for the purpose of the report. Data sheets were filled at the same time, these data sheets providing place for the complete description of all material located on the maps by symbol. Transformers were given complete name-plate description; street lighting units were noted by manufacturer and rating and type; poles by height, size of top, kind of wood; cross arms, pins, insulators, braces and like material were fully detailed in description. In fact, data was so complete that a comprehensive map of the whole system could be made with all apparatus in place. At the same time, a complete count and description had been made. In each field party was a regular employee of the company who was most useful in providing information.

Other parties visited the power plants and made complete plans of the same, including all piping, power wiring, etc. Factory and style

and type numbers on all machinery and instruments were taken in addition to complete descriptions. Complete bills of materials of construction as well as of all material in the plant were made;

It should be noted at this time that the Commission has not, in any case, called for the depreciated condition of any of the property or apparatus. This has made both the collection and transcription of the data much more simple than would have been the case if the Commission had called for the depreciated condition of each of the innumerable items into which the report is divided.

In general, the Commission requested minute detail in the report and data was taken with that point in view.

In making up the written or tabulated portion of the report, such as appear in Appendices A, D, and G, the writer attempted the description of all articles mentioned, in such detail that any intelligent engineer could readily understand the character of the article mentioned.

Several plans of recording the data were tried, using columns of different headings and with different arrangements. It appeared best, after much consideration, to list the material as follows, in order to provide clearly the data asked for by the Commission: first, a column in which the items are enumerated and thoroughly described; second, a column of unit material costs on each item; third, a column of unit freight charges on the item; fourth, a column of unit labor charges on the item (this labor charge must include drayage, handling, storage, treatment and preparation for installation, testing, and final installation); fifth, a column showing total unit cost of the item; sixth, a

column naming the unit in which the measure is taken, such as "feet", "each", "cwt", etc.; seventh, a column giving the total amount of the item as measured in the unit just given; and eighth, a column giving the total charge for the total number of units of that item.

It is believed that an arrangement of this sort will allow the thorough understanding of the elements entering into the valuation of any item or class of items. At a glance, it can be seen what unit material cost at point of shipment was used for poles, or wire, or any other item one examines. Likewise, total installed cost of the unit may be seen at a glance if a check is wanted in that direction. The writer can see no way in which the report could be rendered more in detail than can be done by the method outlined above. It would be impossible to divide the costs any further, with the possible exception that the items in the labor column could be analyzed to a certain extent, but the analysis would be so different for each item that it would be impossible of tabulation and therefore impractical in a report. As ordered by the Commission, each account starts on a new sheet and each account appears as a complete bill of material; there is one exception to this statement, and that is that each item does not show total material costs, total freight costs and total labor costs for the account. To have done this latter work would have been mere mechanical work of multiplying columns two, three and four by column seven and taking the totals. It would have served no useful purpose and the Commission has taken that viewpoint in its interpretation of compliance with the order.

The production of the maps and plans presented another problem. The order specifies that the different quarter sections must be

outlined and differentiated by some number or mark. The first decision was as to the form the map would take. The scale was defined in the order to be two hundred feet to the inch. After considerable planning, it was decided to make the map in the form of a book of plates of each of the towns, each plate representing a quarter section. However, an identifying method had to be found whereby the relative location of the different quarter sections could be marked. The method employed was as follows; a complete map of each city was made, with the scale two hundred feet to the inch. Quarter section lines were drawn in dotted and each quarter section was numbered with a two line number which could easily be read but did not interfere with the other work on the map. On these city maps were drawn the distribution lines with the equipment marked by symbol. In order to save the time and expense of making separate drawings for the different quarter sections, the quarter sections were separated in the printing process; a negative was made of each quarter section, by printing just that portion of the map, but a margin of three or four inches was left around the quarter section; this margin was later covered with india drawing ink and the white prints made from these negatives showed only the quarter sections wanted with a white border on each plate. It still remained to show the relative location of the quarter sections; this was done by taking a photograph of the tracing and making a print on a piece of paper of the same size as the quarter section plates. It should be stated that the title of the map was printed on a separate plate in the same manner as the quarter sections. As a result of all the above, a compact book of maps was produced for each city, there was no cumbersome, folded map to take care of, any long line could be followed, a quarter

section at a time in detail, and connection made by reference to the photograph; if a general idea of a line was wanted, this could be had from the photograph. It is noticed -- see appendices K, O and Q -- that the photograph is extremely plain. It is also noticed with what prominence the identifying numbers on the quarter sections stand out on this photograph.

The handling of the subject matter to be recorded on the maps was another question. It is easily seen that the maps might be made with endless detail, showing even the number of pins on the different cross arms, etc. For the purpose of this order, it was deemed that that was unnecessary. Accordingly, the following information was thought to suffice: the pole line, showing position of all poles; the distribution system, drawn as a single line along the pole line, but with explanatory figures -- thus, the figures "3-8" signify that at that part of the line there are three number eight Brown and Sharpe gauge wires, arrow heads being used to indicate the extent to which that data applies; all transformers, by correct position; all street lighting units, the kind indicated by symbol explained in the legend; the location of the plant, this indicated by cross hatched area; and the number of connected services per block, this indicated by a red figure in the block. The chief purposes of these maps are as follows: to use in connection with complaints about extension of service; to gain a general idea of the distribution system, its completeness and the general arrangement of the wiring; it is not expected that these maps will be of much use in determining cost.

One further advantage of having maps prepared as outlined above is that, in connection with the quarterly reports in which locations of additions, betterments and abandonments must be shown, it is possible

to file maps of only the quarter sections in which such changes occur rather than to file complete city maps every quarter. It is unusual, in the three cities in question, to have changes in more than one or two of the quarter sections. A number of prints are made of each plate, then, and these are kept on file for the purpose of using them to show locations of such changes.

The drawings showing the plans of the power plants were handled in the usual method, by showing location of all machinery, piping, valves, accessories, etc., all fully dimensioned. In order to produce a neater looking drawing, the long legend was omitted from the original tracing and typewritten copies of the legend were bound to the blue prints. A further advantage of this is that changes may be made on the tracing without having to disturb the legend, or rather, it merely means writing a new legend.

As can readily be imagined, the chief difficulty in the preparation of these reports lay in the determination of the different unit prices to be used. It must always be kept in mind that the order calls for original cost. It is not deemed necessary to discuss at this time the means of arriving at each individual figure but rather that a discussion of general methods be given.

The three cities did not present identical problems, in some ways. The Lawton property was, on June 30, 1914, in almost exactly the same condition as when purchased by the present management. The present management received no books from any of the three preceding managements in the three cities, which books would tend to throw any intelligent information on the original cost. However, the books of the present manage-

ment allow a thorough analysis of all moneys invested by it. With this in mind, it can be seen that the problem of the Lawton property was one largely of estimate; at least, the problem was entirely in the hands of the engineer and the company could throw no light on the question. In the case of Mangum, however, there existed two problems. The present management had bought this property in 1911. Since that time, the present management had thoroughly overhauled the plant and had made many additions, replacements and betterments. As stated above, all work done by the present management was so recorded that considerable information could be gained from the books; The problem resolved itself into subtracting, from the total inventory, the part or parts which had been installed by the present management in order to find out what of the old or original installation was left. This original part was a matter of estimate in the same manner as the whole Lawton property; the part installed by the present management was analyzed separately. The Duncan property presented a problem similar to that of the Mangum property, but far less difficult, for most of the work done in Duncan by the present management was in the nature of additions and not of replacements or betterments.

In the consideration of the work which was without supporting data from the books of the company, it must be remembered that most of this work was done under almost frontier conditions. Take the case of the Lawton property, for example: the part of the state in which Lawton is located was government land until 1901. At that time the land was opened for settlement and the townsite laid off. This was the center of a certain Indian region and was close to the military point, Fort

Sill. Accordingly, Lawton grew immediately into a town of no small proportions and the utilities had to grow apace. The original plant was built by some of the local business men who were the only ones that could finance the proposition. Their reasons for the production of the plant were not that they wanted to go into the public utility business but that the town needed the service and they were willing to provide it. It is no small wonder, then, that the plant represented, when later purchased, an investment much larger than its replacement cost.

In the determination of unit material prices, all original purchases were traced wherever possible, at least in the large pieces of machinery. While the books of the company would not show anything in regard to the cost, yet the books of the manufacturer would often contain that data, if it could be identified. By referring to engines, for example, by shop number, some of the engine manufacturers could identify the original sale, especially in all cases where they could identify the sale as having been made to the particular property in which it was located. Often, however, the machinery had been handled by an agent and the original sale could not be traced. At other times, sales could be traced in so far as identifying a manufacturer's price to an agent, but the agent's resale price -- which was the first cost to the property in question -- could not be determined. In cases such as this, it was necessary to assume an agent's profit in the resale and set the sum of the manufacturer's price and the agent's profit down as the estimated first cost to the property. This method of handling material prices was followed as far as it was practicable to do so.

All of the small material, however, could not be so traced. Prices for these items had to be worked out to agree, as closely as

possible, with the probable purchase price at the time of installation. Having determined, by inquiry from former owners of the plants and from the citizens of the different town, as much of the history of the plant as possible, in reference to the time that most of the work was done, it was possible to get the records of the commercial companies furnishing material and locate, with some degree of accuracy, the average prices of the material in question at the time it was supposed to have been placed. Even with this method, there must be some error in the figures as determined, though it is thought and hoped that the errors in the different items are more likely to be compensating than cumulative.

Some items presented even greater problems than this. In the case of the Mangum and the Duncan properties, it was impracticable, and probably impossible, to determine the amount of wire represented by the figures shown on the books of the present management as having been installed by it. Only total figures were available with any degree of accuracy. Accordingly, it was necessary to determine the cost of the total wire now installed, at the cost paid for it by the present management. Having this determined, it was possible to find the proportion of this represented by investment of the present management, and consequently the proportion of investment of the old management which is still in service. This argument applies to material only. Since the cost of wire at the time of the original installation of the plant was higher, on the average, than the cost of wire purchased and installed by the present management, the material charge for the older wire was increased by a percentage which approximates the difference in cost. The method employed in this division is fully outlined in the reports prepared---

for example, see appendices D and G, accounts EU 17 and EU 18. A further difficulty than mentioned above existed, also. The books of the present management, while showing the financial condition and operations of the companies in satisfactory manner, do not show the property accounts divided in the manner prescribed by the Commission in its order. One point of difference is that the companies did not separate service wire from distribution wire. Accordingly, these two accounts, EU 17 and EU 18, as defined by the Commission, appearing as one in the old accounts of the companies, could not be handled separately but had to be handled as one in the division mentioned above. Reference to the accounts, as given above, is the best possible explanation of the manner in which the question was handled.

Unit freight costs caused little trouble. In most of the large shipments, identified as above described from the manufacturers or original sales agents, the freight could also be identified. In other shipments, weights could easily be found as the material was all standard, and the freight rates from the average shipping points obtained from the tariffs of the railroads.

Unit labor costs were the real problem of the reports. Since the Commission had called for a historical analysis of the investment in the properties, and had called for the actual money expended in the production of the physical property, it seemed to the writer that the effect of piecemeal construction could not be neglected in arriving at fair prices. In addition to this consideration, the first mentioned fact in regard to these properties

had to be kept in mind, namely, the fact that these plants were constructed under frontier conditions, by men whose entire experience was in lines other than the work in which they were engaged, and under conditions which were not such as to promote economy in the production.

In connection with the question of piecemeal construction, the Oklahoma Supreme Court has laid down one decision. Whether or not this decision will be held pertinent in connection with the valuations turned in under this order remains to be seen. At least the Supreme Court seems to have set itself against the adding of a percentage to the total, to cover piecemeal construction.

I quote from the decision of the Supreme Court, in the case of Pioneer Telephone and Telegraph Company vs. Westenhaver. (Pioneer Telephone and Telegraph Company vs Westenhaver, 29 Okla.---, 118 Pac. 354, January 10, 1911.)

"In this proceeding the Oklahoma Supreme Court reversed an order of the Oklahoma Corporation Commission reducing the rates of the complainant in City of Enid, Okla. The Company asked for an allowance of \$6,000 on a total cost to reproduce of \$94,000, to cover piecemeal construction. The Supreme Court, however, refused to allow this item, holding that it formed no part of cost-of-reproduction-new (at page 357):" (Valuation of Public Service Corporations, R.H. Whitten, Vol. 1, p. 306.)

The evidence upon which appellant insists item No. 2, refused by the Commission, should have been allowed is substantially as follows, quoting from one of its witnesses; "The necessity of concentrating the large number of wires required of the larger city of Enid makes it advisable to adopt a different distribution or arrangement of pole lines. This involved the moving of some of the old poles in the lines, in order to shorten up spans to get sufficient strength for carrying the larger cables. The moving of the poles is an expensive undertaking, as same must be moved without crossing up or interfering with the wires then being used in the old plant. In a great many instances new leads crossed old leads in such a way that extra work had to be done to prevent the new work from interfering with the operation of the old plant. The subscrib-

ers' instruments had to be rewired and adapted to work temporarily on the new plant until final changes should be made. In fact, there was no part of the new work that did not have to be worked out with some special regard to the protection of the old plant in order that service might be continued." We think, however, the Commission committed no error in refusing to allow this item. The fact that appellant's plant has been constructed piecemeal does not increase its present value, although the cost of construction by such method may have been greater than if it had been constructed at one time. The plant, in our opinion, in arriving at its cost of reproduction new, should not be considered as an existing obstruction upon the streets which would have to be worked around in constructing a new plant of a similar kind. The fact that other obstructions, such as telegraph systems or other telephone plants, exist in the streets at the present time, and would have to be worked around at this time in building a plant like appellant's, might require an allowance in arriving at the cost of reproduction new of appellant's plant; but a determination of that question is not required here, for it is not for such obstruction that this item is claimed.

As seen in this decision, a peculiar phase of piecemeal construction is found, which, according to Whitten, shows that there "may be a close relation between piecemeal construction and inadequacy."

(Valuation of Public Service Corporations, R.H. Whitten, Vol.1, p.308.)

It is not improbable that the Supreme Court would modify its attitude in later cases and under different conditions or circumstances.

A further discussion of piecemeal construction will not be

undertaken here at this time as it is germane to the question only insofar as it may pertain to the unit labor costs found under this order. There are plenty of decisions in the United States to uphold the general principle of increased cost due to piecemeal construction. Whether it is finally held that piecemeal construction should be allowed as an element of "Present Value" is another question which hardly has a place in this discussion. If piecemeal construction, though, has an effect on "Original Cost" and if this report is to show true original cost, then it seems to the writer that it can not be neglected in the determination of the unit charges to be placed in the "labor" column of these reports.

As defined before, the column marked "labor" includes all handling of material after it arrives at the destination until it is placed in service---including cost of all material which goes into its treatment, store room expense, cost of tools used in the care or installation of the material, etc. With this in mind, an analysis of unit costs of the different handlings of each item of material was made.

For example, in the case of a pole in the pole line: the pole is inspected, unloaded, hauled, may be stored, it is roofed, galled and bored, treated, a hole is dug, the pole is erected, and the job completed. Average prices for this sort of work are on record in a large number of places. By ascertaining the average price of the labor available at the time these plants were built, it is possible to correlate the data and obtain unit figures which are approximately satisfactory. Now, the problem of the piecemeal construction comes in. Its

solution must be largely a matter of conjecture, but it can be based upon and supported by data of individual cases of which many can be found if they are watched for. If we assume that a large number or a certain percentage of the poles were installed under conditions approximating those of contract or steady work, and if we assume a certain percentage installed a few at a time and a certain percentage installed one or two at a time, then we can take the figures per unit for the different conditions, average the same by giving to each a weight corresponding to the percentage of its class, and finally arrive at a figure, which, for the purposes of tabulation, may be applied to the total number of poles. In arriving at the higher costs for individual pole setting, for example, it must be agreed that almost every item enumerated above would be increased if poles were handled individually. They would probably not be inspected one at a time, not unloaded that way, but they would be hauled, gained and bored, might be treated, and certainly would be erected one at a time. Time of men going to the place of work, transportation of tools and all the other items so thoroughly recognized as varying with the number installed at once would have to be considered.

In like manner, analyses of the costs of all other work was made. It remains to be seen how this interpretation of the charges to this item will be received when any case comes up for final decision. But the writer sincerely believes that he has complied with the intent of the order in trying to arrive at an equitable figure to represent the first cost or actual expenditure of money on the property.

When it came to the work on the property which had been in-

stalled by the present management, a few further difficulties arose, not in determining the amount of money charged to the account, but in the analysis of this so as to show unit labor costs. In some cases, unit freight costs could not be found. With all large items, in which each item was specified and was shipped separately, the freight item was easily shown. With the smaller items, it was almost impossible and sometimes entirely so, to locate the unit freight cost. Accordingly, unit costs were assigned as nearly as could be estimated or located from known weights and known points of shipment. Any differences between the sum of these unit costs and the total known to have been spent and charged to that account were noted in reference to the account and the discrepancy shown. However, it was found that the total of the units very closely and sometimes exactly agreed with the known total. This, working back, provided a fairly good check on some of the freight items on material installed before purchase by the present management. In a few cases, it was necessary to place the total freight charge as such in the account and call attention to the fact that an analysis could not be made. At times, too, certain material of negligible weight had been shipped with larger or heavier material and the actual freight charge against it was hard to ascertain or even estimate.

The labor costs presented the hardest problem in analysis. This was largely due to the fact that labor for several items was grouped under one head -- such as the distribution system, on the company's books, showing all labor on pole line, distribution wires, service wires, transformers and street lighting installations. In the order, all these are shown separately. In addition to this, in the case of the

Mangum plant, all the engineering and overhead had been divided among the labor costs of the different accounts and was not separable as such. If the writer had used the labor charges on the books and tried to work out unit prices for the work represented, the conclusions would not have been worth the trouble, for they would have been the merest estimates. Accordingly, it was deemed more advisable, in most cases, to list the total labor charged against any work, specifying at the time just what work that labor charge referred to, or with what accounts it should be identified. If the Commission, in its review of the report, deems it necessary to make a check of the total, an analysis will have to be approximated at that time.

The above methods were those used in the determination of the amounts chargeable to the actual items which were counted and listed in the report. As is well known by all who have had anything to do with appraisal or even inventory work, there are certain omissions in listing; in addition to this there are contingencies which cannot be seen, moneys spent where there is nothing now to indicate in what manner; there are errors in assigning values, which, it is found, usually average lower than the values which actually exist. It is a well known fact that all contractors, figuring on replacing a given or mythical plant, add, based on their experiences, certain items or amounts to cover contingent expense. Accordingly, the writer has added to almost all of the accounts pertaining to property in existence at the time of purchase by the present management an arbitrary percentage for "errors, omission and contingencies." This percentage differs in the different accounts on account of the fact that it is believed the errors do vary, and probably

in about the proportion represented by the different percentages. It has been deemed more advisable to handle this subject by accounts than to handle it as a general blanket percentage on the whole valuation. It is believed that this shows more clearly the real basis and allows a better analysis of the figures.

Another item added to the values or totals of the accounts as installed at the time of purchase is the contractor's profit. This is an item recognized by all valuation authorities. It is not specifically known that all of the work included in any one account, even, was done by a contractor. However, it is a recognized part of the cost of construction, as being an element in that cost. It may accrue sometimes to the owner of the property who has spent his own time in place of employing a contractor, but it still represents value. The contractor's profit was added to each account separately, also, in order more closely to relate the different items to the proper antecedents. Also, there are some accounts to which no contractor's profit should be added and error would thereby creep in if the contractor's profit were added as a percentage of the whole valuation.

Assuming that the above treatment has shown the method of making the tangible physical valuation, I have yet to show the method of handling the overhead charges in addition to the contractor's profit.

Account number EU-1 is for Organization Expenses. If there is no data from the records of the old company which will tend to assist in physical valuation, there is still less available for any analysis of such items as this. An attempt to analyze the possible expenditures which would have been made under this account would have practically no foundation, other than the cost of the articles of incorporation,

which, of course, could be found. It is recognized by this Commission as well as by courts and commissions in general that there is certain organization expense in any property and that it is a part of the actual cost of the production of the company. With no data at hand from which even an estimate could be made, the only thing left to do was to make that statement but to claim that the company reserved the right to file such amounts later if any were found which could be substantiated. Meanwhile, the company estimated that the amount for this account should be approximately the average percentage of total value, this average percentage being that found from experience in a great many cases where all the facts were known.

Account number EU-2 is for Franchises and is supposed to represent the actual money expended for the purpose of securing a franchise or any other operating privilege. Even an average percentage was felt to have no foundation in this case, for a franchise cost is not always found in utilities. However, the claim was made that the company had a right to file such cost if data at a later date could be found to substantiate any charge.

Account number EU-31 is for Engineering and Superintendence, representing the usual definitions of these words. As in the case of the contractor's profit, not all of the work was under the direction of an engineer -- it would not be under his direction even if the property were to be reproduced as a whole -- such items as services, meters, probably land, furniture and fixtures, etc., not being handled by an engineer in many cases, at least not in a growing plant. Accordingly it was necessary to figure the sum which would represent the investment

on those items probably handled by an engineer and take the engineering and superintendence percentages of this amount. Such was done in this case. It is believed that the figures used for engineering and superintendence closely approximate the percentages necessary at the time and under the conditions that this work was done.

Account number EU-32 is for Injuries During Construction. Again no data appears to assist in the determination of the answer to this question. Having absolutely no basis upon which to make an estimate of the amount that was expended, it was assumed that the work was done under normal business conditions in which a contractor or builder would carry liability insurance. Accordingly, the labor on the whole property in each case was found and the usual liability insurance percentage taken of this payroll. This sum was set down as approximately the cost which should certainly be charged to this account.

Accounts number EU-33 and EU-35 are for Law Expenditures During Construction and Miscellaneous Construction Expenditures, respectively. Both of these items probably appear in the original cost of any property. These accounts appear to the writer as similar in consideration to Organization. Accordingly, they were treated in the same manner and percentages of the total cost were taken, these percentages being averages of many plants in which data was obtainable.

Account number EU-34 is for Interest During Construction. A common rule to follow in regard to this item, when no specific charge can be found to have been made, is to charge a prevailing rate of interest for one half of the construction period. Interest in the days of building of these properties was higher than at present, and a figure

of six percent was deemed substantially correct.

Account number EU-36 is for Taxes. Again, no data was available, but, since the construction period was assumed to be of sufficient length to have taxes levied against the property before time for earnings to commence, a general average was assumed and estimated as a charge to the account.

As mentioned above, it was consistently stated that, in any of these estimated accounts, the company felt that it should and could reserve the right to file additional data if any which could be substantiated became available.

As is probably already understood, the above discussion of arriving at amounts to charge these overhead accounts applies only to those portions of the accounts, chiefly of Mangum and Duncan, which pertain to property installed at time of purchase.

It was very easy to trace every voucher of the present management in connection with most of the charges to these overhead expenses. As mentioned above, in the case of the Mangum property, Engineering and Superintendence had been charged in with the labor in the different accounts. Otherwise, it was possible to identify at least the greater part of the expenditures of the class under discussion.

One further problem existed in connection with the Duncan property. In this case, the ice business is handled by this same company and a division of property accounts is necessary. In making this division, no better way appeared than to base the same upon gross income of the two businesses; however, this might make too great a charge on the ice business, if we take the fundamental theory that each business

should bear its share of the burden and no more, and accordingly the writer allowed the gross income of the ice business to have weight only during the ice season or about half of the year. This is the basis of the division of the different accounts which represent property used in both businesses.

With the exception of a few items which are thoroughly self-explanatory in the texts of the three reports, the foregoing discussion explains the nature of the report on Original Cost and the writer's methods of handling these reports. The next problem to present itself was the quarterly report, it being the writer's duty to prepare the first two of these for each of the properties, bringing the data on the properties up to December 31, 1914.

The Commission has published standard forms for the making of these quarterly reports. These forms are copied, in so far as it is possible to do so and at the same time place on sheets of the specified size for this present report, and appear in Appendices B,C,E,F,H and I. There are two forms prepared -- one is known as Form V-1 and the other as Form V-2. Both of these forms are eight and one-half inches by fourteen inches. The material on Form V-1 did not lend itself sufficiently to condensation that it could be placed on a sheet such as specified for this book and accordingly the Form V-1, as reproduced in this work, consists of two sheets bound face to face so that the two, read clear across, make one sheet. Form V-2 could be sufficiently condensed to place on this smaller size sheet.

It is noticed, from the directions on the back of Form V-1, that one of these forms is required for every separate piece of work done

on the property during the quarter. The detail with which this report should be made, according to the form furnished, is the same as that of the original report. It is expected that the company books will be so kept that unit material, freight and labor and other charges may be taken directly from the books. If this is the case, the normal making out of these reports should be a rather simple process. The difficulty arises in keeping the unit costs with the detail that might be expected, especially in the case of the smaller companies. It would require an arbitrary, and therefore almost worthless, division of time of workmen in order to get unit labor costs, in cases in which the workmen do work on a large number of items of material during one day. Of course, a good timekeeper might do something on the job to make this estimate worth something, but the expense of his own time would be too heavy for some of the smaller companies. With this exception, the form allows a good analysis of the expense attached to any particular piece of work done by the company. Form V-2 is merely a summary to show the totals charged to the different accounts during the month, and, on the reverse side, to show the total charged to property during the month and the total charged up to date.

In the case of the three properties under consideration, the management did not consider it feasible to change its system of book-keeping until January 1, 1915. The work of making these quarterly reports, then, was chiefly an analysis of the vouchers, of which the management had a full file, of all expenditures made upon property during the periods under question. From these vouchers, it was, of course, possible to take off all material charges, with unit prices, and all

freight charges with the same analysis. The labor presented some of the difficulties pointed out above, in that the vouchers showed merely the total number of hours' work for which a given man was paid and the general character of the work -- such as line work, work on setting engine, etc. Accordingly, it was necessary to group certain labor costs under one head. This gave an accurate report of the expenditures of the company, but not in such a manner that all of the costs could be analyzed with the detail the Commission seems to desire and which might be advisable under certain conditions.

It is very evident, from analyses made for these reports, that an accurate account of the time of workmen is necessary if the companies can comply with the details of the reports at all times. Examples seen in these reports show transformers bought and freight paid, but no labor charge for installation appears. It is evident, of course, that it was installed on operating expense, but a time card system of analyzing the work done by the linemen would allow of a charge to capital being made for such work. Again, the question of the expense as related to the benefit, in the case of the small operating company, is of considerable importance.

The Lawton property is the only one which showed any changes necessary on the mapping system. The methods outlined above under the description of the original mapping system were followed -- that is, the original sheets were used and the additions and abandonments were shown thereon. On account of the fact that the original report was not filed until time for the first two quarterly reports to be filed, only one set of maps was filed, this set being made as of date June 30, 1914,

and all additions to December 31, 1914, appearing as red line changes.

Likewise, the Lawton property is the only one showing changes in power plant. This was taken care of by making additions to the original tracing and taking prints off at the time represented in the development. That is, the tracing of the drawing of the powerplant followed the developments of the plant and at the end of each period to be reported a negative of the tracing was made and prints made from this.

Up to the present time, the writer believes that he has shown: the Commission's viewpoint in making the order; the idea, so far as at present expressed, of the Commission of the relation of the Original Cost to the valuation; the Commission's interpretation of the items which enter into the cost; the writer's method of handling the reports to conform to the ideas of the Commission; and some of the difficulties encountered in the arriving at equitable figures to apply as unit costs.

To make the discussion complete, there remains, perhaps, a short discussion of the final relation of Original Cost to Present Value for rate making purposes.

The writer is not in any position to outline the final ideas of the Commission of this state in regard to what it will decide in any particular case. It can be said, with reference to that subject, that the writer believes the Commission is trying to get at the basic facts of the original cost of the different properties of the state and that the Commission will use these in the final determination of the fair Present Value. He also believes that the Commission is perfectly right in so doing. The Commission does not have the idea, nor should it,

that the Original Cost is the sole determining factor of Present Value. However, it appears only reasonable, and the majority of commission and court decisions now seem to point that way, that Original Cost should have some weight in the determination of that supposedly equitable conclusion. There are many other items which will enter into the final determination of the Present Value of any property. Such items as Reproduction Cost, Going Concern Value, Bond Discount, Working Capital, Depreciation and Appreciation, Purchase Price, and similar items may well be considered in the final determination of the Present Value and all of these items have the support of some court decisions. Each case of valuation is well known to have its own peculiarities, but there are general rules which the fraternity is trying to work out to make the general basis of valuation more nearly uniform. The discussion here rests on the general relation of Original Cost to valuation in general. As stated above, it is the writer's belief that Original Cost is a considerable factor in the determination of Present Value, but opinions of valuation makers avail but little except as supported by decision of courts upon whom the final word must rest.

A full and complete discussion of the relation of Original Cost to Present Value would entail the quotation and discussion of dozens of commission and court decisions. While such discussion might be profitable, it is believed to be beyond the scope of this work. Suffice it to say that there are very many decisions from both courts and commissions which declare that Original Cost, or Money Actually and Wisely Invested, should have a strong place among the elements which go to make a correct determination of the Present Value. True, there

a few who would neglect it, using other bases for the determination of the final result, but the general concensus of opinion seems to be that Original Cost should be used.

A decision which has brought together much of the argument on this question in a very few words is that of the California Railroad Commission in its Case No. 400, being the Town of Antioch vs. Pacific Gas and Electric Company, decided July 6, 1914. In the decision, the following is found:

* * * * * Held, That though the Commission is not committed to any one theory in determining the fair value of a utility for rate-fixing purposes, and will consider all the elements suggested by the Supreme Court of the United States, giving to each element its fair weight, considerable weight will be given to the money honestly and wisely invested in the property and in building up the business.

In his discussion of the final order, under the heading Report of the Commission, Mr. Max Thelen, Commissioner, has the following to say (at page 14 of the published decision.)

* * * * * After a consideration of these and other fine-spun theories, the mind of a practical man instinctively turns for first guidance to the simple question of the amount of money which has been honestly and wisely invested. While it is, of course, evident that there may be many circumstances under which the application of this basis alone would not be equitable, and that qualifications must be made as justice and equity require, it would seem to the lay mind that a rate-fixing authority will not go far wrong

if, in determining the basis for rates, it first ascertains the amount of money which the utility has invested honestly and with a fair degree of wisdom, in the business which it is conducting for and on behalf of the public.

As Justice Van Fleet says in the San Diego Water Company case, at Page 569:

"For the money which the company has expended for the public benefit it is to receive a reasonable, and no more than a reasonable reward. It is to be paid according to what it has done, and not according to what others may conceivably do. In effect, the bargain between the company and the public was made when the water works were constructed; and this matter is to be determined according to the state of things at that time."

Some of the necessary qualifications to this test are stated by Justice Van Fleet, at page 572, as follows:

"It should, of course, be said that it does not follow that in every case the company will be entitled to credit for all of its current expenditures, or to receive a compensation based on the entire cost of its works. Reckless and unnecessary expenditures, not legitimately incurred in the actual collection and distribution of the water furnished, or in the acquisition, construction or preservation of so much of the plant as is necessary for that purpose, can not be allowed.... It is the money reasonably and properly expended in the acquisition and construction

of the works actually and properly in use for that purpose which constitutes the investment on which the compensation is to be computed."

The same views were expressed by Franklin K. Lane, at that time a member of the Interstate Commerce Commission, in Western Advance Rate case, 20 Interstate Commerce Commission Reports 307. Referring to the claim of the Burlington railroad that it was entitled to a return on the entire present value of the property, including an item of one hundred and fifty million dollars of unearned increment of land, Mr. Lane, at page 339, says:

"In the face of such an economic philosophy, if stable and equitable rates are to be maintained, the suggestion has been made that it would be wise for the government to protect its people by taking to itself these properties at present value rather than await the day, perhaps thirty or fifty years hence, when they will have multiplied in value ten or twenty fold."

Mr. Lane then reaches the following conclusion as the proper basis of fixing rates:

"The trend of the highest judicial opinion would indicate that we should accept neither the cost of reproduction, upon which the Burlington's estimate of value is made, nor the capitalization which the Santa Fe accepts as approximate value, nor the prices of stocks and bonds in the market, nor yet the original investment alone, as the test of present value for the purposes of rate regulation. Perhaps the

nearest approximation to the fair standard is that of bona fide investment -- the sacrifice made by the owners of the property -- considering as a part of the investment any shortage of return that there may be in the early years of the enterprise. Upon this, taking the life history of the road through a number of years, its promoters are entitled to a reasonable return. This, however, manifestly is limited; for a return should not be given upon waste-fulness, mismanagement or poor judgement, and always there is present the restriction that no more than a reasonable rate shall be charged."

With this conclusion as establishing what will generally be the most important circumstances to be considered in ascertaining the fair value of public utility property for rate-fixing purposes I heartily concur. I do so, however, with the understanding that there must be a reasonable limit to the period during which a shortage of return may be capitalized. Otherwise, the rate-fixing authority will be in the ridiculous position of holding that the greater the early losses, the greater the value of the property for rate-making purposes. In concurring I also have in mind that these different tests are but aids in determining the ultimate fact, which will always be to determine on the facts of the case, what is fair and just as between the utility and its customers.

Certain objections at once occur to the universal application of the investment basis. The first objection is that it would not be fair in all cases to rely on this basis alone. The answer is

that it is not intended to urge this basis as one always to be applied under all circumstances, and that it is simply meant to urge this test as generally one of the most important to be applied, but that it must be modified as the justice of any particular situation demands. After all, the ultimate thing to be accomplished is to establish justice as between a utility and its customers, and these different tests which I have been considering are but different suggested methods of securing justice in particular cases.

The objection that the investment should not be used as a basis for utility rates, for the reason that it is often difficult to ascertain the original cost, goes not to the correctness of the principle but to the difficulty of applying it in a given case. If the original cost can not be ascertained in a given case, it, of course, can not be used in that case. In that event, it would seem that courts and commissions should strive to ascertain as nearly as possible what the original cost reasonably should have been. This result will, in such event, be accomplished by the use of the reproduction cost theory under the so-called historical method. This theory would be used in such event, not for the reason that it is necessarily in itself the proper theory, but because it furnishes in the particular case the best available evidence of what the original cost reasonably should have been.

In addition to calling for a valuation of the property, of course, this Order No. 774 serves another important purpose, namely the establishment of a uniform system of property accounts. With this uniform system and with the quarterly reports which accompany it, as

explained before, the Commission is at all times apprised of the condition of the different utilities under its supervision and of the moneys being invested. If this order can be made effective and will prove to work out without too much friction and expense, it will make unnecessary future work such as outlined in this general discussion. It will force upon many companies which now have poor accounting systems if any at all a knowledge of their own affairs and a method of doing business and keeping track of the same which is acknowledged to be most thorough.

It will be most interesting to the engineering fraternity to watch the later developments which will result from the valuations made under this order and from the enforcement of this order in regard to accounting.

APPENDIX A
ORIGINAL COST REPORT
FOR
THE COMANCHE LIGHT AND POWER COMPANY
AS OF JUNE, 30, 1914.

REPORT
OF
COMANCHE LIGHT & POWER COMPANY
LAWTON, OKLA.
TO
THE CORPORATION COMMISSION
ORDER #774

Prepared by

HAROLD V BOZELL
CONSULTING ENGINEER
NORMAN--OKLA.

PREFACE TO VALUATION

Comanche Light and Power Company, Lawton, Oklahoma.

In offering the following valuation to represent the original cost of its property, the company wishes the following facts to be considered:

The property was originally built in 1903 by local residents of Lawton. The original building was of corrugated iron in which were located two Russell engines, one 60 KW Westinghouse generator and one 90 KW Westinghouse generator. The plant was purchased in August, 1907 by a partnership of two individuals. At that time, the original power house was in very bad repair and needed replacement. The present brick power plant was built to cover the machinery originally housed by the iron house. Following this, one Russell engine and both generators were sold; the 100 KW Westinghouse generator, now in the plant, was then added. Later, namely in August, 1910, the Frick engine and its generator were added.

The present management purchased the property in August, 1913, for \$115,000. The present management has no data upon which to base any statement with regard to the manner in which the depreciated property which was abandoned by previous owners was taken care of on its books. In addition to the changes noted above, many of the poles which were originally of cypress were replaced by cedar poles. If any books were kept by the previous owners, which books would tend to throw any large amount of light upon the original cost, the present management does not hold the same. Since purchase, the present management has kept a complete set of books and has a complete file of vouchers to cover all payments of money made since August, 1913. The present management has always been satisfied that these books represent truly its actions. However, the division of accounts in this system of book-keeping is not such that a division can be made accurately into the accounts as specified by the Commission in its order #774. By going over its books, the present management is able to take off certain totals, which would check a valuation of property installed by it. These totals are noted in the accounts to which they apply. The rest of the values used in this report are, wherever possible, the quotations of the manufacturers who furnished the material originally. Other values are estimated, the estimates being based upon probable prices at time of installation.

Certain charges for omissions and contingencies have been made to many of the accounts. This is in just recognition of the fact that no appraisal can be complete, and that the values used in appraisal work are average values and that certain percentages must be added to take care of those items which cannot be set down specifically. They also cover the contingent expenses which a contractor always includes in his estimates.

The company also feels that there should be some allowance either in this property account or in some other way for the necessary Working Capital, which is certainly a part of the investment. Additional investment amounts have been absorbed in the present Going Values. While there is no provision for items of this character in order No. 774, the company believes that they represent actual investment, and are therefore a part of the Book Value of the company.

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

<u>Item</u>	<u>Organization</u>	<u>EU-1</u> <u>Total</u>
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Previous to purchase by present management: An estimated sum, though the right is claimed to change this if data subsequently found will indicate a different amount.

3000 00

DETAILED SUMMARY OF VALUATION

ComanchellLight and Power Company, Lawton, Oklahoma.

Item	Franchises	EU-2
		Total

There is no data at present available to support any charge to this account as having actually been made. However, its value is a part of the property value of the company, and the company wishes that the fact that no franchise cost is here claimed shall not be taken to mean that none was incurred--the company retaining the right to file such charge at some future time when data may be found to determine the exact size of the charge or when an approximate estimate may be made.

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Land Devoted to Electric Operations	EU-3
		Total
<p>Lots 1 and 2, block 1, Original Town of Lawton. Included in a lump sum purchase price to pre- sent owner.</p>		
<p>The property was bought in 1901 when Lawton was opened up--at \$1200. It was later sold to the original builder of the present company. It prob- ably cost, according to estimates by old citizens of Lawton-----</p>		\$2000 00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

	Buildings and Structures	EU-4
<u>Item</u>		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Power Plant Buildings	EU-5 Total
<p>The power plant building is shown in an accompanying blue print. It is built of brick with wooden trusses, supports and roof, and covered with prepared roofing. The floor is of concrete.</p>		
Estimated cost		\$6000 00
Contractor's profit 10%		600 00
Pump House at side		50 00
Work on Building by present owner		<u>4 70</u>
Total for this account		6654 70

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

<u>Item</u>	<u>Substation Buildings</u>	<u>EU-6</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Furnaces, Boilers and Accessories			EU-7			
	Material	Frt.	Labor	Total	Unit	Q't'y	Total
Erie R.T. Boiler, 150 HP, 72" x 18'	1000	215	100	1315	Ea.	1	1315 00
Brownell R.T. Boiler, 125 HP, 66" x 18'	900	200	90	1190	"	1	1190 00
Manning Maxwell Moore R.T. Boiler, 125 HP, 66" x 18'	900	200	90	1190	"	1	1190 00
Standard Suspended Setting for above three boilers, all set in one bank.	950	180	900	1930	"	1	1930 00
54" diam--100' steel stack for above boilers	800	150	175	1125	"	1	1125 00
Breeching over boilers and to stack 30' long, 2' wide--from 30" high to 54" high; also 2' of 21" x 42" over each boiler				250	Total		250 00
Platt Iron Works feed water pump--6" x 4" x 6"-- "Smithville"	125	25	75	225	Ea.	1	225 00
					Includes Base		
Scranton Steam Pump Co. feed water pump 6" x 4" x 6"	125	25	75	225	"	1	225 00
					Includes Base		
Jet condenser--"Burham" Vacuum pump 10" x 16" x 16"	Included with Frick Engine EU-8		150	150	"	1	150 00
Concrete base for same				30	Total		30 00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Furnaces, Boilers and Accessories.		EU-7-2	
Item	Material	Frts. Labor	Total Unit Q't'y Total
Union Steam Pump Co. "Burnham" circulating pump-10" x 12" x 12" on concrete base.	300	40 125 465	Ea. 1 465 00 Includes Base
Cookson feedwater heater #4, Bates Mfg. Co., 350 HP, on con- crete base	300	75 130 505	" 1 505 00 Includes Base and Covering
Cooling tower-21' square, 5' deep- frame 25' high		500	1 1 500 00
Pit--cement lined-- for setting of Burn- ham condenser, 11' x 13' x 8' deep		140	Ea. 1 140 00
Hot well, semi- circular in cross section--13 1/2' radius, 8 1/2' under- ground, Built of brick cement lined and cov- ered, 40' long.		1000	" 1 1000 00
<u>Pipe</u>			
5" steam feed to North Boiler	.418	.12 See below	.538 ft. 9 4 84
5" steam feed to Middle boiler	.418	.12 "	.538 " 9 4 84
5" steam feed to South Boiler	.418	.12 "	.538 " 9 4 84
5" Header	.418	.12 "	.538 " 17 9 15
5" Feed to Russell Engine	.418	.12 "	.538 " 18 9 68
5" exhaust from Russell Engine	.418	.12 "	.538 " 10 5 38

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Furnaces, Boilers and Accessories				EU-7-3			
Item	Material	Fr't.	Labor	Total	Unit	Q't'y	Total
5" steam from heater or Russell Exhaust	.418	.12	See below	.538	ft.	12	6.46
5" water from cir- culating pump to top of cooling tower	.418	.12	"	.538	"	58	31.20
6" steam feed to Frick Engine	.541	.154	"	.695	"	40	27.80
6" cold water cooling tower to condenser	.541	.154	"	.695	"	35	24.32
6" hot water, hot well to circulating pump	.541	.154	"	.695	"	79	54.91
7" steam header	.747	.18	"	.927	"	15	13.91
7" up to exhaust head from Russell	.747	.18	"	.927	"	18	16.69
8" hot water, con- denser to hot well	.795	.206	"	1.001	"	87	87.09
10" between cylinders of Frick	1.113	.288	"	1.401	"	16	22.42
15" OD 3/8" exhaust from Frick	1.80	.375	"	2.175	"	28	60.90
15" OD 3/8" riser to exhaust head	1.80	.375	"	2.175	"	20	43.50
<u>Small piping shown on plan</u>							
2 1/2"	.160	.047	"	.207	"	33	6.83
2"	.10	.026	"	.126	"	53	6.68
1 1/2"	.075	.022	"	.097	"	52	5.04
1"	.046	.02	"	.066	"	45	2.97
<u>Miscellaneous small pipe not shown on plan, estimated amounts</u>							
4"	.311	.087	"	.398	"	10	3.98
3"	.2099	.0616	"	.2715	"	25	6.78
2"	.10	.026	"	.126	"	200	25.20
1"	.046	.02	"	.066	"	50	3.30
1/2"	.026	.007	"	.033	"	25	.83

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Furnaces, Boilers and Accessories						EU-7-4	
Item	Material	Frts.	Labor	Total	Unit	Q't'y	Total
<u>Pipe Fittings and Valves</u>							
15" gate valve flanged	90.00	2.00	See	92.00	Ea.	2	184.00
15" x 13" x 13" flanged tee			Below				
15" flanged ell	36.00	1.25	"	37.25	"	1	37.25
15" flanges	24.00	.75	"	24.75	"	2	49.50
10" flanged ell	7.90	.20	"	8.10	"	14	113.40
10" x 10" x 2 1/2" flanged tee	10.80	.60	"	11.40	"	2	22.80
10" flanges	18.00	.60	"	18.60	"	1	18.60
10" angle valve, flanged	3.45	.15	"	3.60	"	4	14.40
8" flanged ell	48.00	1.75	"	49.75	"	1	49.75
8" flanges	7.50	.50	"	8.00	"	2	16.00
7" gate valve, flanged	2.45	.10	"	2.55	"	3	7.65
7" x 5" x 5" flanged tee	20.00	.50	"	20.50	"	2	41.00
6" x 5" x 7" flanged tee	8.60	.45	"	9.05	"	1	9.05
7" flanges	8.60	.45	"	9.05	"	1	9.05
6" x 6" x 2 1/2" flanged tee	2.17	.08	"	2.25	"	4	9.00
6" x 1" x 6" flanged tee	6.15	.40	"	6.55	"	1	6.55
6" gate valve flanged	6.15	.40	"	6.55	"	1	6.55
6" ell flanged	15.50	.50	"	16.00	"	2	32.00
6" flanges	4.00	.35	"	4.35	"	5	21.75
5" gate valves, flanged	1.50	.07	"	1.57	"	17	26.69
5" angle valve flanged	13.00	.45	"	13.45	"	8	107.60
5" x 2" x 5" flanged tee	12.50	.45	"	12.95	"	2	25.90
5" x 5" x 5" flanged tee	5.20	.35	"	5.55	"	1	5.55
5" flanged ell	5.20	.35	"	5.55	"	2	11.10
5" flanges	3.40	.30	"	3.70	"	14	51.80
4" gate valve	1.38	.06	"	1.44	"	55	79.20
4" ells	8.00	.40	"	8.40	"	1	8.40
4" x 3" x 3" tee	1.00	.15	"	1.15	"	2	2.30
3" globe valve	1.50	.18	"	1.68	"	1	1.68
3" ell	7.25	.20	"	7.45	"	2	14.90
2 1/2" 3 way cock	.60	.12	"	.72	"	3	2.16
2 1/2" valve	8.00	.20	"	8.20	"	1	8.20
2" ell	5.00	.15	"	5.15	"	1	5.15
2" tee	.36	.02	"	.38	"	25	9.50
2" angle valve	.40	.03	"	.43	"	15	6.45
2" globe valve	2.80	.10	"	2.90	"	2	5.80
2" 3 way cock	2.80	.10	"	2.90	"	15	43.50
1/2" globe valve	4.20	.12	"	4.32	"	1	4.32
	2.00	.08	"	2.08	"	5	10.40

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Plant, Lawton, Oklahoma.

Item	Furnaces, Boilers and Accessories				EU-7-5	
	Material	Frts.	Labor	Total	Unit Q't'y	Total
1 1/2" ells	.20	.02	"	.22	Ea. 10	est. 2.20
1 1/2" tee	.25	.03	"	.28	" 5	" 1.40
1" globe valve	.95	.06	"	1.01	" 6	" 6.06
1" ell	.14	.015	"	.155	" 10	" 15.50
1" tee	.17	.02	"	.19	" 6	" 1.14
1/2" globe valve	.40	.05	"	.45	" 3	" 1.35
1/2" tee	.08	.01	"	.09	" 2	" .18
1/2" ells	.05	.01	"	.06	" 3	" .18
Safety valves--5"	60.00	1.25	"	61.25	" 3	183.75
Pipe covering	200.00	10.00	"	210.00	"	210.00
6" Horizontal steam separator #07	52.90	1.00	"	53.90	" 1	53.90
Open float steam trap, 1" inlet	14.00	.75	"	14.75	" 1	14.75
14" exhaust head	100.00	3.00	"	103.00	" 1	103.00
7" " "	37.50	1.25	"	38.75	" 1	38.75
1 1/4" jet pump	6.00	.25	"	6.25	" 1	6.25
Labor for installation of above piping, including ditching and refilling for underground pipe, placing of pipe covering, etc.				1500.00 2000.00		1500.00 2000.00
Errors, omissions, contingencies, waste, etc. 5%						722.34
Contractor's profit, 10%						1516.92
Since purchasing the plant, the present management shows a charge for walling up a part of furnace setting	4.50			13.00	17.50	<u>17.50</u>
Total						16703.61

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Gas Engines			EU-9
	Material	Freight	Labor	Total
Foundation Bolts for new Diesel Oil Engine		24.30		24.30
Oil Analysis			8.00	<u>8.00</u> <i>ant</i>
Total for this account				32.30

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Electric Generators			Unit	Q't'y	EU-10 Total
	Material	Frts.	Labor Total			
Westinghouse A.C. generator direct connected to Frick Corliss Engine, 300 KVA, 72 ampere per terminal, 2400 V, 3 phase, 60 cycle, 100 RPM, serial #825428	4200		250 Included 555 4750 in material	Ea.	1	4750.00
Westinghouse D.C. Generator exciter to above, 125 V, 22.5 KW, 180 ampere, 450 RPM, driven by Morse silent chain from shaft of Frick Engine, serial #684430.	525		25 Included 50 575 in material	"	1	575.00
Both of above on base for Frick engine						
Westinghouse A.C. generator belted to Russell Engine, 100KVA, 24.1 ampere per terminal, 2400 V, 3 phase, 60 cycle, 900 RPM, serial #859990	1150		225 Included 400 1550 in material including material for base	"	1	1550.00
with Direct connected exciter, Westinghouse 125V, 3KW, 24 ampere, 900 RPM, serial #863895 All mounted on concrete base.			Included with generator			
Omissions, contingencies, etc. 3%						206.25
Contractor's profit, 10%						<u>708.22</u>
Total for this account						7789.37

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Accessory Electric Power Equipment.				EU-11	
	Material	Frts.	Labor	Total	Unit	Q't'y Total

SwitchboardPanel No.1Bracket panel
carrying

Tirrill voltage Regulator

Form F2, TA 125, #3192,

with transformers

320 00 15 00 25.00 360.00 Ea. 1 360.00

Panel No.2-GeneratorWestinghouse, black marine
slate 20" x 90", with

1

Westinghouse A.C. ammeter,
O-120, style DC 13884,
serial #136244

1

80-5 current transformers
for same.

2

Westinghouse polyphase inte-
grating wattmeter, style DC
13884, serial #49803, capa-
city 100000 KWH with 80-5
current transformers

1

2

2400-220 potential trans-
formers

2

8 point potential receptacle

1

4 " " plug

1

Concentric rheostat operating
mechanism

1

Field switch, 200 ampere,
250 V, DP ST, quick opening,
with discharge resistance

1

Oil switch, type D, style
27740, 200 ampere

1

Ground detector, transformer
type

1

S.P. ammeter switch

3

S.P. ammeter switch plug

1

And on bracketsWestinghouse D.C. voltmeter
O-150 style #119164 serial
#131460

1

Westinghouse AC voltmeter
O-3000, style #42954,D,
serial #118079--with

1

DETAILED SUMMARY OF VALUATION

Comanche Light and Power Company, Lawton, Oklahoma.

Item	Accessory Electric Power Equipment			EU-11-2	
	Material	Frt. Labor	Total	Unit Q't'y	Total
2400-120 V transformer				2	
<u>Panel No.3-2 feeder</u> Westinghouse, black marine slate, 24" x 90" carrying				1	
Westinghouse AC ammeter, style #11427C, serial #136168 and #136507, 0-80 scale				2	
80-5 transformers for same				4	
Automatic overload oil switch, type F, style #55901 A, 80 ampere, 60 cycle				2	
S.P. ammeter switch				6	
S.P. ammeter switch plug				2	
Total panels #2and #3	875.00	Included	75 950		950.00
		in	material		
<u>Panel #4-Generator</u>					
Vermont marble 32" x 90" carrying				1	
Covered fuses-2300 V				4	
Thompson H.E. ammeter G.E. 0-75 Nos.34165, 44402				2	
Thompson H.E. voltmeter G.E. 0-175 #42990				1	
DP DT 30 ampere knife switch				1	
6 point potential recept- acle and 4 point plug				1	

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Accessory Electric Power Equipment.		EU-11-3	
Item	Material	Frt. Labor	Total Unit Q't'y Total
Concentric field rheostat mechanism			1
DPST exciter switch			1
Oil switch and mechanism, 200 ampere			1
Thompson Recording watt-meter cat. #6575; 50 ampere 1000 volt, 1000000 KWH, serial Nos. #593600, 593601			2
Total panel	350 20	40 410	Ea. 410.00
<u>Panel No. 5 (arc)</u>			
Vermont marble 20" x 48" carrying			1
Wagner A.C. ammeter 0-10 with 10/5 transformer, Type F, serial #9237			1
Switch lever			1
Fuse plug			2
Total panel	150 15	20 185	" 185.00
Western Electric Arc transformer 2000-4000V, 6.6 ampere-cylindrical case			Included with next item. 1
Western Electric Constant current regulator, 6.6 ampere, #502 open	>40 940	70 15 825	" 1 825.00
American Booster Transformer 6.6 ampere, 800 volt, #10425	55.003	4 62	" 1 62.00
Westinghouse old style resistance type multigap lightning arresters	7.50 .25	.50 8.25	" 8 66.00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Accessory Electric Power Equipment.				Unit	Q't'y	Total
	Material	Frts.	Labor	Total			
EU-11-4							
<u>4" sewer pipe laid in concrete floor from switchboard</u>							
To 300 KW generator	.10	.02	.10	.22	ft.	40	8.80
							Includes cement
To 100 KW "	.10	.02	"	.22	"	7	1.52
To 100 KW " field	.10	.02	"	.22	"	7	1.52
To exciter to latter	.10	.02	"	.22	"	7	1.52
To Arc Transformers	.10	.02	"	.22	ft.	36	7.92
From " "	.10	.02	"	.22	"	35	7.70
To outside leads in 3 places	.10	.02	"	.22	"	9	1.98
4" sewer elbows	.33	.04	.20	.57	Ea.	17	9.69
<u>2" Black conduit</u>							
To Excitation 300 KW	.152	.03	.10	.782	ft.	40	11.28
To exciter 300 Kw	.152	.03	.10	.282	"	32	9.02
2" ells	.44	.04	.10	.53	Ea.	4	2.32
#0-2500 V-lead covered single conductor to 300 KW	.13	.02	.10	.25	ft.	140	35.00
#1-2 conductor-600 volt lead covered for excitation 300 KW	.20	.03	.14	.37	"	80	29.60
#4 single conductor as one lead to 100 KW-lead covered 2500 volt	.09	.01	.10	.20	"	10	2.00
#4-2 conductor as two leads to 100 KW-lead covered-2500 volt	.18	.02	.15	.35	"	10	3.50
#4-2 conductor for exci- tation 100 KW lead covered	.18	.02	.15	.35	"	20	7.00
#10-single conductor 600 volt, DBRC for exciter fields	.02	.002	.015	.037		45	1.66
Open wiring on wall back of switchboard--wall outlets-							

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Accessory Electric Power Equipment				Unit Q't'y	EU-11-5 Total
	Material	Frts.	Labor	Total		
bus bars--and miscellan- eous wiring	15.00	1.00	15.00	31.00	Total	31.00
Errors, omissions and contingencies, 4%						121.23
Contractor's profit 10%						<u>315.23</u>
Total for this account						3467.49

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Plant, Lawton, Oklahoma.

	Substation Equipment	EU-13
<u>Item</u>		<u>Total</u>
Blank		

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Poles and Fixtures				EU-14	
	Material	Frts.	Labor	Total	Unit	Q't'y Total
<u>Poles--Cedar</u>						
20'-6" top	.85	1.045	3.00	4.895	Ea.	23 112.58
20'-8" "	2.30	1.92	3.75	7.97	"	4 31.88
25'-5" "	.85	1.10	3.00	4.95	"	43 212.85
25'-6" "	1.75	1.37	3.50	6.62	"	339 2247.18
25'-7" "	2.30	1.92	3.75	7.92	"	5 39.60
25'-8" "	3.25	2.48	4.25	9.98	"	35 349.30
30'-5" "	3.00	1.51	4.00	8.51	"	4 34.04
30'-6" "	3.50	1.92	4.00	9.42	"	193 1818.06
30'-7" "	4.50	2.48	4.50	11.48	"	9 103.32
30'-8" "	5.50	3.30	5.00	13.80	"	34 401.20
35'-6" "	6.00	2.45	5.00	13.45	"	8 107.60
35'-8" "	9.00	4.67	6.00	19.67	"	12 236.04
<u>Poles-Cypress</u>						
15'-5" top	.85	1.10	3.00	4.95	"	2 9.90
20'-5" "	.85	1.10	3.00	4.95	"	2 9.90
20'-6" "	.85	1.10	3.00	4.95	"	7 34.65
20'-8" "	2.30	1.92	3.75	7.97	"	9 71.73
25'-5" "	.85	1.10	3.00	4.95	"	62 306.90
25'-6" "	1.75	1.37	3.50	6.62	"	40 264.80
25'-7" "	2.30	1.92	3.75	7.97	"	15 119.55
25'-8" "	3.25	2.48	4.25	9.98	"	3 29.94
30'-5" "	3.00	1.51	4.00	8.51	"	4 34.04
30'-6" "	3.50	1.92	4.00	9.42	"	24 226.08
35'-6" "	6.00	2.48	5.00	13.48	"	4 53.92
<u>Guy wires on</u>						
600 guys-33 overhead, 27 direct						
#8 iron wire	.0032	.002	.02	.025	ft.	455 11.37
#9 " "	.0024	.002	.02	.024	"	1646 39.50
#10 W.P. Copper wire	.006	.002	.02	.028	"	1180 33.04
#12 iron wire	.0014	.002	.02	.023	"	1886 43.37
5/16 inch steel strand	.03	.003	.035	.068	"	75 5.10
<u>Anchors</u>						
Short stubs	.85	1.04	1.00	2.89	Ea.	9 26.01
Patent Strombaugh-6"	1.46	.10	.40	1.96	"	17 33.32
Deadmen	.50	.10	.50	1.10	"	19 20.90
<u>Cross Arms-Fir</u>						
3'-2 pin	.22	.087	.40	.707	"	208 147.05
4'-4 "	.31	.116	.56	.986	"	1045 1030.37
8'-8 "	.76	.232	1.25	2.242	"	2 4.48
10'-10 pin	.95	.29	1.55	2.79	"	4 11.16

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Poles and Fixtures			EU-14-2		
	Material	Frts.	Labor	Total	Unit Q't'y	Total
<u>Galvanized Iron Braces</u>						
1 1/4" x 1/4" x 24"	.075	.02	Included	.095	Ea. 2508	est 238.26
			with cross arms			
<u>Steel Pole Steps</u>	.033	.003	.10	.136	" 83	11.28
<u>Break Arms</u>	.60	.10	.70	1.40	" 4	5.60
<u>Bracket Gross</u>						
Arm-8 pin	2.00	.30	1.50	3.80	" 1	3.80
8 ft.-1 1/2" pipe brace for same	1.12	.08	.50	1.70	" 1	1.70
<u>Pins</u>						
Locust 1 1/2" x 9"	.018	.007	.01	.035	" 3942	137.97
<u>Brackets</u>						
2" x 2 1/4" x 12" oak	.019	.01	.08	.109	" 769	83.82
<u>Insulators</u>						
Wesco #042540, DG DP glass pin	.04	.008	.015	.063	Ea. 3906	246.08
22 oz. porcelain strain	.10	.011	.30	.411	" 10	4.11
<u>Bolts, etc.</u>						
2 1/2" x 14" machine bolt	5.05	1.20	Included with	6.25	C 1254	est 78.37
4" carriage bolt	1.70		cross arms			
4" carriage bolt	1.70	.25	"	1.95	C 2508	est 48.91
4" lag screw	1.80	.20	"	2.00	C 1254	est 25.08
12 penny nail	.04	.01	"	.05	lb. 300	est 15.00
20 penny nail	.04	.01	"	.05	lb. 300	est 15.00
Omissions, contingen- cies, errors, 6%						549.85
Contractor's profit, 10%						971.49
Total for this account						10686.39
Of this amount, present ownership spent for cross arms and equipment	23.70	31.90	20.75			

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

<u>Item</u>	<u>Conduit System</u>	<u>EU-15</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Municipal Lighting				Unit	Q't'y	EU-16
	Material	Frts.	Labor	Total			Total
General Electric 6.6 ampere series arc-450 watt with cut-out	22.00	1.10	2.00 3.00	26.10	Ea.	8	208.80 X
Western Electric 6.6 ampere series arc-450 watt with cut out	22.00	1.10	2.00 3.00	26.10	"	42	1096.20 X
Adams Bagnall 6.6 ampere series arc-450 watt with cut out	22.00	1.10	2.00 3.00	26.10	"	12	313.20 X
Westinghouse 6.6 ampere series arc-450 watt with cut out	22.00	1.10	2.00 3.00	26.10	"	8	208.80 X
Cutter mast arm 8 ft.	5.00	.75	2.50	8.25	"	70	577.50
3/8" strand	.03	.003	.04	.073	ft.	2000	146.00
Omissions, errors, contingencies, 5%							127.52
Contractor's profit, 10%							<u>267.80</u>
Total							2945.82
Of the above, present management has record of	88.50	9.75					

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Transmission and Distribution System								EU-17	
Item	Ft. #	/M ft.	Material	Frts.	Labor	Total	Unit	Q't'y	Total
#4 TBWP	11416	164	17.30	1.75	5.00	24.05	Cwt.	1872	450.28
#6	11045	112	17.30	1.75	5.00	24.05	"	1237	297.51
#8	159960	75	17.30	1.75	5.00	24.05	"	11997	2885.27
#10	164724	53	18.30	1.75	5.00	25.05	"	8730	2186.96
#12	1325	35	19.30	1.75	5.00	26.05	"	46	12.08
Omissions, errors, contingencies, 5%									291.60
Contractor's profit, 10%									<u>612.37</u>
Total for this account									6736.07

In above lengths, 5% was allowed for sag, span and waste and 1% was allowed for ties.

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Ft.	#/M ft.	Electric Service Wires				EU-18		
			Material	Frts.	Labor	Total	Unit	Q't'y Total	
#2 TBWP	259.2	260	17.30	1.75	7.50	26.55	CWT	67.00	17.89
#4	588.6	164	17.30	1.75	7.50	26.55	"	97.00	25.63
#6	21253.00	112	17.30	1.75	7.50	26.55	"	1260.00	330.64
#8	11546	75	17.30	1.75	7.50	26.55	"	866.00	229.92
#10	150917	53	18.30	1.75	7.50	27.55	"	7999.00	1203.61
#12	39219	35	19.30	1.75	7.50	28.55	"	1373.00	391.89

In above lengths, 7% was allowed for sag, span and waste, and 1% was allowed for ties.

Pins

1 1/2" x 9" Locust .018 .007 .01 .035 Ea. 30 1.05

Brackets

2" x 2 1/4" x 12" oak .019 .01 .08 .109 "1042 113.58

Insulators

Wesco #042549 D&DP
Glass pin .04 .008 .015 .063 " 1055 66.46

20 penny nails .04 .01 Included.05 lb. 50 2.50
above

Errors, omissions,
contingencies, 5% 119.16
Contractor's profit, 10% 250.33

Total for this account 2753.66

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Electric Meter Installations,					EU-19	
<u>Item</u>	<u>Material</u>	<u>Frts.</u>	<u>Labor</u>	<u>Total</u>	<u>Unit Q't'y</u>	<u>Total</u>
Meters set			1.00		Ea. 791	791.00
Omissions, errors, contingencies, 2%						<u>15.82</u>
Total for this account						806.82

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Line Transformers and Appurtenances EU-20

Item Material Frts. Labor Total Unit Q't'y Total

Transformers, Single
Phase, 2200-110/220 V

<u>Manufacturer</u>	<u>Type</u>	<u>Size</u>	<u>K.W.</u>							
Westinghouse	S.	1	23.10	1.74	4.50	29.34	Ea.	13	381.42	
"	"	2	32.40	2.16	5.00	39.56	"	10	395.60	
"	"	3	40.50	3.12	5.00	48.62	"	4	194.48	
"	"	4	48.70	4.24	5.50	58.44	"	1	58.44	
"	"	5	56.90	4.42	6.00	67.32	"	6	403.92	
"	"	7.5	75.25	5.58	7.00	87.83	"	1	87.83	
"	"	10	93.40	7.20	8.25	108.85	"	5	544.25	
"	"	15	126.60	10.60	9.50	147.70	"	1	147.70	
Maloney	H.E.	1	23.10	1.74	4.50	29.34	"	7	205.38	
"	"	2	32.40	2.16	5.00	39.56	"	2	79.12	
"	"	3	40.50	3.12	5.00	48.62	"	8	388.96	
"	"	4	48.70	4.24	5.50	58.44	"	1	58.44	
"	"	5	56.90	4.42	6.00	67.32	"	9	605.88	
"	"	10	93.40	7.20	8.25	108.85	"	5	544.25	
"	"	15	126.60	10.60	9.50	147.70	"	4	590.80	
"	"	20	154.70	13.00	10.75	178.45	"	1	178.45	

Omissions, Contingencies,
errors, 3%
Contractor's profit, 10%

148.95
511.39

In addition, present manage-
ment has charged for transformers
not paid for on July 1st and not
yet in service 45.50
Total for this account

45.50
5670.66

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Electric Meters						EU-21	
	Material	Frts.	Labor	Total	Unit	Q't'y	Total	
<u>Meters - 110 volt,</u> single phase								
Manufacturer	Type	Wires	Amp					
Westinghouse	B	2	5	11.50	.20	11.70	Ea.	30 351.00
"	C	2	5	10.50	.20	10.70	"	694 7445.80
"	C	2	10	11.40	.20	11.60	"	34 394.40
"	C	3	20	15.00	.30	15.30	"	16 244.80
"	C	3	40	18.70	.30	19.00	"	11 209.00
"	C	3	80	28.00	.50	28.50	"	4 114.00
"		3	150	35.00	1.00	36.00	"	2 72.00
Omissions, Errors, Contingencies, 2%								<u>176.62</u>
Total for this account								9007.62
Of the above sum, charged to this account, the present management has record of				151.99	10.43	162.42		

DETAILED SUMMARY OF VALUATION

Comanche Light and Power Company, Lawton, Oklahoma.

Item	Commercial Arc Lamps	EU-22
		Total

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Electric Tools and Implements			EU-23		
	Material	Frts.	Labor	Total	Unit Q't'y	Total
Shovel, long handle			2.00		Ea. 3	6.00
Spoon, " "			2.00		" 3	6.00
Tamping Bar			3.50		" 3	10.50
Pike Pole			1.50		" 4	6.00
Pole support, Jenney Pattern			5.00		" 1	5.00
3" black and rope			3.00		Pair 2	6.00
5" black and rope			5.00		Pair 1	5.00
Blow torch			4.00		Ea. 3	12.00
Climbers pair			2.00		" 2	4.00
Miscellaneous, errors, omissions, contingencies, 2%						<u>1.20</u>
Total						62.70

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Electric Laboratory Apparatus		EU-24	
	Material	Frts.	Labor Total	Unit Q't'y Total
Westinghouse single phase test watt hour meter. 10-20-40-ampere Style #54884 A Serial #140038	81.00	2.50	83.50	Ea. 1 83.50

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Dams, Canals, and Pipe Lines

EU-25

Item

Total

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Turbines and Waterwheels	EU-26
	•	Total

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Electric Motors	EU-27
		Total

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light and Power Company, Lawton, Oklahoma.

<u>Item</u>	<u>Other Tangible Electric Property</u>	<u>EU-28</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Other Tangible Property of the Respondent							EU-29
Item	Material	Frt.	Labor	Total	Unit	Q't'y	Total
<u>Live steam service to Comanche Ice Company, including</u>							
5" steam pipe	.418	.12	See below	.538	ft.	125	62.25
5" gate valve flanged	13.00	.45	"	13.45	Ea.	2	26.90
5" x 5" x 5" flanged tee	5.20	.35	"	5.35	"	1	5.35
Pipe covering			"	50.00	Total		50.00
Supports	15.00			15.00	"		15.00
Total labor on above			150.00	150.00			150.00
<u>Exhaust steam service to Comanche Ice Company, including</u>							
5" pipe installed underground	.418	.12	See below	.538	ft.	160	86.08
5" gate valve flanged	13.00	.45	"	13.45	Ea.	2	26.90
5" x 5" x 5" screw tee	5.00	.35	"	5.35	"	1	5.35
5" screw ell	3.05	.30	"	3.35	"	2	6.70
Total labor on above			200.00				200.00
<u>Live steam service to Crystal Laundry, including</u>							
1 1/2" pipe	.075	.022	See below	.097	ft.	120	11.64
1 1/2" Globe valve	2.00	.08	"	2.08	Ea.	1	2.08
Pipe covering				40.00	Total		40.00
Supports	12.00		"	12.00	"		12.00
Total labor on above			100.00	100.00			100.00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Other Tangible Property of the Respondent				EU-29-2
<u>Item</u>	<u>Material</u>	<u>Frts.</u>	<u>Labor Total</u>	<u>Unit Q't'y Total</u>
Errors, omissions, contingencies, 3%				24.16
Contractor's profit, 10%				<u>82.94</u>
Total for this account				912.35

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	General Equipment			EU-30	
	Material	Fr't.Labor	Total	Unit Q't'y	Total
<u>EU-30-A--General Office Equipment</u>					
Flat mahogany table desk, 36" x 66"			35.00	Ea.	2 70.00
Flat pine table desk, 30" x 60"			14.00	"	3 42.00
Swivel desk chair, mahogany			9.00	"	3 27.00
Burroughs Adding Machine, 10 column #9			275.00	"	1 275.00
Bookkeeper's High Desk, Oak, 32" x 72"			40.00	"	1 40.00
Bookkeeper's Revolving High Chair, oak,			8.00	"	1 8.00
Safe-Hall Safe Company, 28" x 48" x 31"			350.00	"	1 350.00
Rug-9' x 12'			50.00	"	1 50.00
Rail-3' high, mahogany			4.00	ft.	25 100.00
Partitions, carpet, curtains			115.38	Total	115.38
Water cooler			7.50	Ea.	1 <u>7.50</u>
Total					1084.88
<u>EU-30-B-General Shop Equipment</u>					
Blank					
<u>EU-30-C-General Store Equipment</u>					
Blank					
<u>EU-30-D-General Stable Equipment</u>					
Blank					
Total for this account					1084.88

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Engineering and Superintendence	EU-31 Total
Engineering and Superintendence on the estimated amount in the hands of an engineer and superintendent during construction before purchase by present management		
Engineering 5%		4800.00
Superintendence 5% <i>2 1/2</i>		2400 4800.00
<u>Since purchase by present management</u>		
Salary McClintic for June, 1914		<u>250.00</u>
Total for this account		9850.00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

<u>Item</u>	<u>Injuries During Construction</u>	<u>EU-32</u>
		<u>Total</u>
Chargeable to this account is the liability insurance on the payroll during construction		
Figured at an average of 3%, it is, approximately		700.00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	EU-33 Total
<p>There is no better basis to make a charge against this account than to estimate the general average of past experience of approximately 2% of the total valuation of the property. Consequently, there is here charged 2% (approximately) of the value of the property at time of purchase, as indicated by present value of the plant less money expended upon same by present management. If data is later found to substantiate any specified sum against this account, company claims the right to file same at some future date.</p>	2200.00
<p>No charge against this account is found on the books of the present management</p>	
<p>Total for this account</p>	2200.00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Interest During Construction	EU-34
		Total

The only method of making a charge against this account to represent expenditure before purchase by the present management, is to take the average value of approximately 6% of the total value.

6600.00

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Miscellaneous Construction Expenditures	EU-35
Item	Total
The only method of making a charge against this account previous to purchase by present management is to take the general average of approximately 2%, which is	2200.00
Since purchase by present management, there is charged for extension and development of plant, time and expenses	<u>666.27</u>
Total for this account	2866.27

DETAILED SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Item	Taxes	EU-36
		Total
No specific amount can be supported in this account from the known history of the Company. Average charge of 1/2% is suggested		550.00

GENERAL SUMMARY OF VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Acct.No.	Name of Account	Amount
EU 1	Organization	3000.00
EU 2	Franchises	
EU 3	Land Devoted to Electric Operations	2000.00
EU 4	Buildings and Structures	
EU 5	Power Plant Buildings	6654.70
EU 6	Sub-station Buildings	
EU 7	Furnaces, Boilers and Accessories	16703.61
EU 8	Steam Engines	11953.15
EU 9	Gas Engines	32.30
EU 10	Electric Generators	7789.37
EU 11	Accessory Electric Power Equipment	3467.49
EU 12	Miscellaneous Power Plant Equipment	535.74
EU 13	Sub-station Equipment	
EU 14	Poles and Fixtures	10686.39
EU 15	Conduit Systems	
EU 16	Municipal Lighting	2945.82
EU 17	Transmission and Distribution System	6736.07
EU 18	Electric Service Wires	2753.66
EU 19	Electric Motor Installations	806.82
EU 20	Line Transformers and Appurtenances	5670.66
EU 21	Electric Motors	9007.62
EU 22	Commercial Arc Lamps	
EU 23	Electric Tools and Implements	62.70
EU 24	Electric Laboratory Apparatus	83.50
EU 25	Dams, Canals, and Pipe Lines	
EU 26	Turbines and Water Wheels	
EU 27	Electric Motors	
EU 28	Other Tangible Electric Property	
EU 29	Other Tangible Property of the Respondent	912.35
EU 30	General Equipment	1084.88
EU 31	Engineering and Superintendence	9850.00
EU 32	Injuries During Construction	700.00
EU 33	Law Expenditures During Construction	2200.00
EU 34	Interest During Construction	6600.00
EU 35	Miscellaneous Construction Expenditures	2866.27
EU 36	Taxes	550.00

Grand Total, representing original cost of property 115653.10

VALUATION

Comanche Light & Power Company, Lawton, Oklahoma.

Total amount charged to property account June 30, 1914, \$115659.20

STATE OF OKLAHOMA)
) ss
 _____ COUNTY)

This is to certify that this report was prepared under the requirements of Order No. 774, and instructions as promulgated by the Corporation Commission of Oklahoma, under my personal supervision. I further certify that it is in accordance with the books and records of this company, and that the above is correct.

 Chief Engineer

 Managing Officer

Subscribed and sworn to before me this ___ day of _____ A.D., 1915.

 Notary Public.

APPENDIX B
FIRST QUARTERLY REPORT
FOR
THE COMANCHE LIGHT AND POWER COMPANY
FROM JULY 1, 1914, TO SEPTEMBER 30, 1914.

CORPORATION COMM-

NAME OF UTILITY, Comanche Light and Power Company,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Electric Sign,

Give Source of Receipts of Money Expended on this Work _____

No.		FOR MATERIAL ONLY			
of					
Acct.	Units	KIND-TYPE-CLASS	Unit Cost	Cost	
30 A		Expansion Bolts for sign		1.30	
		Hangers and other material		19.25	
		Galvanized pipe guys		5.04	
	1	Electric sign - "Light and Power"		196.00	
	34 lbs.	#9 Iron Wire		1.36	

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

N o. 1

Three Month Period Ended September 30, 1914.

Located, On office,

Date Completed, July 15th.

FOR LABOR COSTS ONLY				OTHER CHARGES				Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	Cost	by Accounts
								1.30	
								19.25	
				Freight		.50	5.54		
				Freight		20.05	216.05		
								1.36	30A- 243.50

No labor was charged to this account for hanging sign-work done by regular men.

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

NAME OF UTILITY, Comanche Light and Power Company,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Addition to Power House,

Give Source of Receipts of Money Expended on this Work _____

FOR MATERIAL ONLY				
No.	of	KIND-TYPE-CLASS	Unit Cost	Cost
5		Tear down pump house		
	14 ft.	4" pipe for outlets	.10	1.40
		On new addition as shown in accompany- ing blue print-first payment of contract price		
9		Telephone St. Louis about Diesel Engine		
		Express on gaskets		
	1	Centrifugal Pump-Schwaby #3 for Circulating water		66.00
		Fittings for same		11.95
	1	10 HP motor for above pump, 3 phase G.E. 1200 R.P.M. 220 volt		130.00
		Oil Engine Parts		
		Compressor foundation bolts		
		3 sacks cement (1.95) Lumber (.50) for foundation		2.45
	1	Split pulley for pump		2.90
	1	Diesel Oil Engine-Busch Sulzer Bros., 3 cylinder, 225 HP, 164 R.P.M. and accessories		2768.00
	1	Foundation for above-contract		485.35
	1	Air compressor for engine		
		Pipe for connection to pump		
		Muffler Bolts		
		Castings		
		Exhaust pipe		
		Diesel Engine coupling		
	3	Exhaust pipe 8" Gaskets-nuts-flanges	(*)	87.78
	1	Long radius bend 8"	(*)	10.75
		Labor unloading and setting engine		
		Total cost of engine-Total items	(*)	
11		Generator leads		
		" " 250' - #2-7/64" Rubber		33.42
		" " 100' - #0-7/64" "		

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

No. 2-a

Three Month Period Ended, September 30, 1914.

Located _____ Date Completed, Incomplete.

FOR LABOR COSTS ONLY				OTHER CHARGES				Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	Cost	by Accounts
			3.00				3.00	3.00	
								1.40	
								1000.00	5- 1004.40
				Telephone (*)			9.04		
				Express (*)			9.29		
								77.95	
				Freight			3.60	133.60	
				" (*)			84.80		
				" (*)			2.00		
				Drayage			.50	2.95	
								2.90	
Included in contract								485.35	
				Freight	1	(*)		98.94	
		(*) 1.50		"		(*)	1.14		
				Drayage		(*)	.25		
				Freight		(*)	2.32		
				"		(*)	22.43		
				"		(*)	4.48		
(Part) Salary			60.00					60.00	
								13102.72	9- 13862.52
				Telephone			5.88		
				Freight			6.50	45.80	

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

NAME OF UTILITY, Comanche Light and Power Company,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Addition to Power House

Give Source of Receipts of Money Expended on this Work _____

FOR MATERIAL ONLY				
No.				
of				
Acct.	Units	KIND- TYPE-CLASS	Unit Cost	Cost
		Accessories		
		Angle iron-2 pc 1 1/4" -12" long		5.40
12		Chain Hoist		74.79
		Trolley for same		32.00
31		Drawing paper, pencils, ink, etc.		.95
		Salary A.H. Keys		
		Drawing Instruments		
		A.H. Keys'trip to Mangum		
		A.H. Keys'salary		
		E.W. McClintic Salary		

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

No. 2-b

Three Month Period Ended, September 30, 1914.

Located, Power House,

Date Completed, Incomplete.

FOR LABOR COSTS				OTHER CHARGES				Total	Total Cost
Unit	Unit	Total	Total Cost	Unit	Unit	Cost	Cost	by Accounts	
Hours	Kind	Cost	Cost	Kind	Units	Cost	Cost		
				Express		.96	.96		
				Freight		.68	6.08	11- 52.84	
							74.79		
							32.00	12- 106.79	
Month Eng'g		155.00							
				Express		.30			
				Expense		10.00			
Month Eng'g		125.00							
3months "		750.00						31- 1041.25	

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

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NAME OF UTILITY, Comanche Light and Power Company,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Miscellaneous Expenditures

Give Source of Receipts of Money Expended on this Work _____

No.		FOR MATERIAL ONLY		
of				
Acct.	Units	KIND-TYPE-CLASS	UNIT COST	COST
1		Express valuation books, to Battles, Philadelphia		
7		Boiler pump parts		11.06
		Grate Bars		42.70
		Spare parts to engine and pumps		48.22
14		Drayage on Poles		
		Rope and Jack		
		Gasoline for Motor Truck		
		Labor-gaining, roofing, boring, treating poles, etc.		
		Lumber for pole line		4.10
16	12	Westinghouse 6.6 ampere series arc lamps-(SH.)	5.166	62.00
20	3	3 KW Westinghouse single phase-2200- 110 V-Type D, Transformer, sold	36.45	109.35
	1	15 KW Do		85.00
21	6	5 ampere, 110 V, single phase OA Westinghouse meter	6.50	39.00
	18	10 ampere Do	7.25	130.50
	6	20 ampere Do	8.00	48.00
24		Portable Watthour Meter-Repair		
30 A	2	34 x 60 Glass Tops to Desk		
	2	33 x 66 " " " "		39.73
		Tables		75.00
	1	Table		
	1	Chair sold, credit.		23.00
	1	Underwood typewriter		101.25
	1	Burroughs Adding Machine		250.00
30 D		Casing for Auto tires		23.00
		Ford Auto with truck body		575.00

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

No. 3-a

Three Month Period Ended

Located _____ Date Completed _____

FOR LABOR COSTS				OTHER CHARGES			Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	by Accounts
				Express		2.68	2.68	1- 2.68
				Freight		.73	11.79	
				"		8.27	50.97	
							48.22	7- 110.98
				Drayage		1.00		
				Freight		1.30		
				Drayage		1.90		
		78.00						14- 86.30
				Freight		11.15	73.15	16- 73.15
							109.35	
				Freight		7.30	92.30	20- 17.05 cr.
				Freight		2.43		21- 219.93
		43.54						24- 43.54
				Freight		1.30	41.03	
							75.00	
							23.00	
							101.25	
							250.00	30-A- 444.28
							23.00	
							575.00	30-D- 598.00

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

CORPORATION COMM-

NAME OF UTILITY, Comanche Light and Power Company,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Miscellaneous Expenditures,

Give Source of Receipts of Money Expended on this Work _____

No. _____ FOR MATERIAL ONLY _____				
of _____				
Acct.	Units	KIND-TYPE-CLASS	Unit Cost	Cost
35		New business investment advertising,		
		Cards and contracts		4.80
		City Carnival Donation		100.00
		Rinefort salary		
		Automobile repairs		27.90
		" "		6.35
		Penant for advertisement		3.50
		Walker Salary and expense		
		Rinefort salary		
		Walker salary and expense		
		Printing		33.00
		Auto repairs		7.15
		Advertisements		41.28
		Rinefort salary		
		Walker salary		

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

No 3-b

Three Month Period Ended September 30, 1914.

Located _____ Date Completed _____

FOR LABOR COSTS ONLY				OTHER CHARGES			Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	By Accounts

Month 75.00

Month 280.26
 Month 75.00
 2 months 338.71

1/2 month 37.50
 Month 125.00

35- 1154.55 *out*

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

CORPORATION COMMISSION OF OKLAHOMA.

Summary of Completion Reports for Quarter Ending September 30, 1914.

Comanche Light and Power Company,

Lawton, Oklahoma.

No. of Acct.	Give Name of Account and Individual Numbers on Completion Reports.	Totals of Accounts as shown on Completion Reports
30A	General Office Equipment #1	243.50
5	Power Plant Buildings #2	1004.40
9	Gas (and oil) Engines #2	13862.52
11	Accessory Electric Power Equipment #2	52.84
12	Miscellaneous Power Plant Equipment #2	106.79
31	Engineering and Superintendence #2	1041.25
1	Organization #3	2.68
7	Furnaces, Boilers and Accessories #3	110.98
14	Poles and Fixtures #3	86.30
16	Municipal Lighting #3	73.15
20	Line Transformers and Appurtenances #3 credit	17.05
21	Electric Meters #3	219.93
24	Electric Laboratory Apparatus #3	43.54
30A	General Office Equipment #3	444.28
30D	General Stable (and garage) Equipment #3	598.00
35	Miscellaneous Construction Expenditures #3	1154.55
	Total	19027.66

APPENDIX C
SECOND QUARTERLY REPORT
FOR
THE COMANCHE LIGHT AND POWER COMPANY.
FROM OCTOBER 1, 1914 to DECEMBER 31, 1914.

NAME OF UTILITY, Comanche Light and Power Co.

Detailed Completion Report of Construction Expenditures During the

Description of Work, Addition to Power House,

Give Source of Receipts of Money Expended on this Work _____

No.	FOR MATERIAL ONLY			
of	Acct. Unit	KIND-TYPE-CLASS	Unit Cost	Cost
5		Second payment-final-on building contract	2086.35	1086.35
		Excavation and level around bldg.		
		Labor on work on building		
		"		
		"		
		Floor in Engine Room and Pump shed		196.92
		Conduit and Plant wiring material for lighting from stock		35.83
9		Engine parts		
		Diesel Oil Engine-see V-1,2		
		Express on Jack for Engine works		
		Anchor Bolts		
		Pipe fittings		120.61
		Red lead and emery		.40
		Auto repairs and gasoline		
		Pipe straps, etc.		.25
		Auto repairs and gasoline		
		Litharge		.10
		Express on parts		
		Sand for foundation		1.50
		Engine parts		
		Pipe union		.34
		Gaskets		.88
		Pipe fittings		2.55
		" "		.70
		" "		54.19
		Auto repairs and gas		
		Sewer pipe for drain at engine		14.08
		Team for unloading engine		
		Auto parts, gasoline, storage		
		Pipe fittings		1.60
		Cement and drayage-foundation		25.90
		Braces for tank and muffler against wall		10.20
		Bolts		.15
		Engine parts		

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

No. 4-a

Three Month Period Ended, December 31, 1914.

Located, Power House,

Date Completed, Incomplete.

FOR LABOR COSTS ONLY				OTHER CHARGES				Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Unit	Unit Cost	Cost	Cost	by Accounts

								1086.35	
		7.00							
		7.00							
		7.50							
		7.00						28.50	
								196.92	
								35.83	5- 1347.60
	Freight					1.32		1.32	
	"					957.15		957.15	
	Express					.58		.58	
	"					.58		.58	
	Freight					10.65		131.26	
								.40	
	Drayage					5.10		5.10	
								.25	
	Drayage					9.75		9.75	
								.10	
	Express					.35		.35	
								1.50	
	Express					2.45		2.45	
								.34	
								.88	
								2.55	
								.70	
								54.19	
	Drayage					63.10		63.10	
								14.08	
	Drayage					40.00		40.00	
						8.65		8.65	
								1.60	
								25.90	
								10.20	
								.15	
	Express					.44		.44	

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

NAME OF UTILITY, Comanche Light and Power Co.,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Addition to Power House,

Give Source of Receipts of Money Expended on this Work _____

No.		FOR MATERIAL ONLY		
of				
Acct.	Unit	KIND-TYPE-CLASS	Unit Cost	Cost
		Pipe hangers		.80
		Motor oil for starting engine first trial		3.10
		Labor setting engine and on generator- total sum. The company holds detailed vouchers showing time and payment to each individual man.		
10	1	175 KVA coupled A.C. Generator 2400- Volt, 3 phase, 60 cycle, 164 R.P.M. Frame #20-E, F 1353008, A 1353009, SO 737258, 43 1/2" Diam. 9" face, S.R. 6568		
	1	12 1/2 KW-125 V-DC Generator SH-WD- "SK" 875 R.P.M. #100-L Frame with slide rails. F-1353791, A 1353792, SO 738367		
		Total for above machines		3600.00
		Generator spare coils		9.04
		Anchor Bolts		5.50
11	1	Complete switchboard S0-704637 packed in packages-97420-F. TC 97428- 97429-97431 consisting of:- 1 Panel 165 x 24 x 2" Mtd. 1 Drilling for "T1" Voltmeter 1 Rheo Mtg. S-115007 comp. with chain wire turnbuckle 1 Drilling for Rheo Mtg. Plugged 2 200-A 2P S.T. "D" SW S-15641-A 1 Panel 25 x 24 x 2" Mtd. 2 card holders S-55190-A 2 150-A Shunt ser. 233340-233339. (on rear) 10 Gallons Oil (1 can) (HF) 5 gallons HF oil (1 can) 2 D.C. Ammeter Type T.L. 0-150 serial 223339,223340, style #119183 "C",		

MISSION OF OKLAHOMA

LOCATION, Lawton, Oklahoma.

No. 4-b

Three Month Period Ended, December 31, 1914.

Located, Power House,

Date Completed, Incomplete

FOR LABOR COSTS ONLY				OTHER CHARGES				Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	Cost	by Accounts

								3.10	
Total			639.92					639.92	9- 1977.31

79.05	Part Freight	19.00	3698.05					9.04	
								5.50	10- 3712.59

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

NAME OF UTILITY, Comanche Light and Power Co.

Detailed Completion Report of Construction Expenditures During the
Description of Work, Addition to Power House,

Give Source of Receipts of Money Expended on this Work _____

No. of		FOR MATERIAL ONLY		Unit Cost	Cost
Acct.	Unit	KIND-TYPE-CLASS			
		1 DC Voltmeter, type TL, serial 231429, style 119164 "C"			
		1 Panel 65 x 24 x 2" Mtd.			
		3 Ammeter recpt. S-57976-A			
		1 Ammeter plug S-57975-A			
		8 PT Voltmeter recpt S-6745			
		1 4PT GRD Det Recpt S-99081			
		1 Grd Det push recpt & plug S-76825			
		2 Wall Sockets comp with lamps, S-53288			
		1 2' P.F. Grd. Det. Plug			
		1 Syn recpt S-56365-D			
		1 Syn plug S-56364-B			
		1 200-A 2PST Q.B. Field SW S-15800-A			
		1 Rheo Mtg. S-115007 Comp with chain wire turnbuck&&			
		1 100 A 3P S.T. "H" Auto Oil Cir. BKR comp with timelimit device SO-731547			
		1 Panel 25 x 24 x 2" Mtd.			
		1 Card holder S-55190-A			
		1 Field Dis Res S-159100 (on rear)			
		1 A.C. Ammeter O-80, style 155085 B, serial #233721, Type TM.			
		1 A.C. Polyphase Indicating Wattmeter Style DC 17385, serial #233799			
		1 A.C. Polyphase Integrating Wattmeter style DC 17385, serial #1517754, capacity 100000 KWH Panel #5			
		1 Panel 65 x 20 x 2" Mtd.			
		2 100 A 2P S.T. "D" Oil SW S 27735 A			
		1 Panel 25 x 20 x 2" Mtd.			
		2 Card Holder S 55190 A			
		1 Angle iron frame complete with top and bottom irons			
		1 A.C. Ammeter type TM, O-10, style DC 17385, serial #236542			
		1 A.C. Single phase Integrating Wattmeter,			

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

NAME OF UTILITY, Comanche Light and Power Co.,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Addition to Power House,

Give Source of Receipts of Money Expended on this Work _____

No.	FOR MATERIAL ONLY		Unit Cost	Cost
of	Acct. Unit	KIND-TYPE-CLASS		
		capacity 10000 KWH, style DC 17385,		
		serial #1517752		
		Mtd. at left of panel		
		1 Swinging bracket S 138887 A		
		Material apart from panel		
		6 meter screws 14-24 x 3 1/2"		
		2 PC W.I. strap 1/2 x 1 3/8 x 4'-0"		
		1 PC 6" Channel Iron 4'-0" LG.		
		8 Corner angles S 15392		
		6 Mach. Bolts 1/2 x 1"		
		2 Wall Brace Ends S 55335-A		
		2 Shunt Transf 2000/100 S 30045-A		
		2 Fuse blocks S 117375-A		
		8 Fuses S 32304-A		
		2 "KA" Curr Transf 80/5 S 125007		
		1 "KA" " " 10/5 S 125001		
		4 C.I. Bkts. Pat K 5511		
		24 Ins S 79634 A		
		5 Ins S 79635		
		24 RD HD Stove Bolts 3/8 x 3 3/4"		
		5 RD HD Stove bolts 3/8 x 4 1/4"		
		8 Aux Bkts S 72752 Pat-N-7327		
		3 C.I. Bkts S 109014 Pat-R-5805		
		1 C.I. Strap Bkt S-72749 Pat-R-1742		
		26'-0 of 460 Wire Pds-1532, 30' of .258 wire Pds. 1532		
		5 Tee Conn S-15265 Drilled 15/32" Bus		
		and Branch		
		9 B.B Clamps S-121749		
		8 B.B Clamps S-121750		
		16 Mach Bolts, 1/4 x 1"		
		1 Floor support S-136233 35 1/2" LG		
		1 Dis #231452-2		
		6 Bus Bar Pore S-164649		
		2 PC H.R. Copper 1/8 x 2 x 69"		
		2 PC H.R. Copper 1/8 x 2 x 32" Bent		
		2 PC H.R. Copper 1/8 x 2 x 25 1/2" Bent		
		1 PC H.R. Copper 1/8 x 2 x 14 1/2"		
		1 PC H.R. Copper 1/8 x 2 x 16" Bent		

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

No. 4- d-

Three Month Period Ended, December 31, 1914.

Located, Power House,

Date Completed, Incomplete.

FOR LABOR COSTS ONLY				OTHER CHARGES				Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	Cost	by Accounts

Complete switchboard included in generator, purchase price by contract, See EU 10.

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

NAME OF UTILITY, Comanche Light and Power Co.,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Addition to Power House,

Give Source of Receipts of Money Expended on this Work _____

No.		FOR MATERIAL ONLY	
of			
Acct.	Unit	KIND-TYPE-CLASS	Unit Cost Cost
		25' -0" of 102 wire Pds-1532	
		20' -0" of 102 wire Pds-1531	
		1 Exciter Rheo S-50287-A except with	
		Sprocket Wheels S-61672 SO-704637	
		1 Rheo S-186936-A	
		Wire for switchboard, etc.	
		Express on fittings	
		Constant Current Regulator 22 KW	
		Westinghouse 6.6 ampere, style 125722,	
		serial 349485	306.00
		Conduit for generator connection	31.77
		Material from stock for generator	
		connection	114.90
12		Oil tank, 10' diameter, 30' long	444.00
		Exciter Belt	51.35
31		A.H. Keys salary, superintendence	
		A.H. Keys salary, superintendence	
		Freight on supplies for test	
		E.W. McClintic Salary, Engineer	
34		Exchange on check to Busch Sulzer	1.15
		Interest on note on engine	10.00
		" " " " Generator	9.00
		" " " " engine	13.67
35		Fuel-coal to keep up steam during	
		acceptance test of Diesel Engine	550.00
		Pictures of Installation, New	
		building Engine, etc. to financial	
		representatives	17.89
		Fuel-Experimenting with oil engine	301.20
		Telephone calls on construction	
		Total	

MISSION OF OKLAHOMA.

LOCATION, Lawton, Oklahoma.

No. 4-a.

Three Month Period Ended, December 31, 1914.

Located, Power House,

Date Completed, Incomplete

FOR LABOR COSTS ONLY				OTHER CHARGES				Total Cost	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	Cost	by Accounts

				Freight		.42	.42		
				Express		1.81	1.81		
Included with generator				Freight		5.66	311.66		
							31.77		
							114.90	11-	460.56
				Freight		196.43	640.43		
				Express		.78	52.13		
								12-	692.56
Month		125.00							
"		125.00					250.00		
				Freight		.67	.67		
3 months		750.00					750.00	31-	1000.67
							33.82	34-	33.82
							17.89		
							301.20		
Telephone						3.41	3.41	35-	872.50

550.00

10097.61

INSTRUCTIONS

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Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

NAME OF UTILITY, Comanche Light and Power Co.,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Addition to Pole Line and Lighting,

Give Source of Receipts of Money Expended on this Work & _____

No.		FOR MATERIAL ONLY			
of					
Acct.	Unit	KIND-TYPE-CLASS	Unit Cost	Cost	
14	153	25' 6" top Cedar poles from stock	1.75	267.75	
	6	30' 6" " " " "	3.50	21.00	
		Auto parts and gasoline			
		Drayage on some poles			
	200	Pins		3.50	
	200	Insulators		8.63	
	100	Brackets		1.75	
		Cross arms, anchor rods, pins, insulators, bolts, etc.		95.83	
		Bolts, lag screws, etc.		7.90	
	200	Brackets		3.50	
		Total labor on pole line for which the company holds all vouchers showing time, rate, etc. in each case or payment			
16	20	Westinghouse 6.6 ampere series arc lamp (S.H.)	4.01	80.20	
	12	Cutter Junior mast arm			
		6 from stock		70.92	
		Nails		.10	
17		Auto parts and gasoline			
	646 lbs.	#8 TBWP wire		92.05	
	292 "	#4 " "			
	1009 "	"8 " "		185.39	
		Total			

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number Form V-1 consecutively as of July 1st, 1914.

001.016

001.016

CORPORATION COMM--

NAME OF UTILITY, Comanche Light and Power Co.,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Miscellaneous,

Give Source of Receipts of Money Expended on this Work _____

FOR MATERIAL ONLY				
No. of Acct.	Unit	KIND-TYPE-CLASS	Unit Cost	Cost
7		Large bolts		2.60
14	20	25' - 6" top cedar poles, sold	3.00	60.00
21	12	5 ampere type OA Westinghouse single phase wattour meter	6.50	78.00
	24	Do	6.50	1156.00
	4	Do Sold	6.25	25.00
30A		Lumber for "Light and Power" sign		1.30
30D		Cushion for auto truck		5.25
35		Stationery and Books for new business campaign		35.63
		Auto parts and repair		
		Salary and expense-Walker		
		Advertising		26.46
	2	Slide advertising at theatres	3.00	6.00
		Express report to Corporation Commission		
		Salary, Walker		
		Advertising, News		20.07
		Walker salary		125.00
		Total		

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

CORPORATION COMMISSION OF OKLAHOMA.

Summary of Completion Reports for Quarter Ending December 31, 1914.

Comanche Light and Power Company,

Located at Lawton, Oklahoma.

No. of Acct.	Give Name of Account and Individual Numbers on Completion Reports			Total of Accounts as Shown on Completion Reports
5	Power Plant Building	V-1	#4	1347.60
9	Gas (and oil) Engines	V-1	#4	1977.31
10	Electric Generators	V-1	#4	3712.59
11.	Accessory Electric Power Equipment	V-1	#4	460.56
12	Miscellaneous Power Plant Equipment	V-1	#4	692.56
31	Engineering and Superintendence	V-1	#4	1000.67
34.	Interest During Construction	V-1	#4	33.82
35	Miscellaneous Construction Expenditures	V-1	#4	872.50
14	Poles and Fixtures	V-1	#5	1163.20
16	Municipal Lighting	V-1	#5	189.78
17	Transmission and Distribution System	V-1	#5	324.62
7	Furnaces, Boilers and Accessories,	V-1	#6	2.60
14	Poles and Fixtures	V-1	#6 credit	60.00
21	Electric Meters	V-1	#6	214.25
30	General Equipment	V-1	#6	6.55
35	Miscellaneous Construction Expenditures	V-1	#6	605.11

INSTRUCTIONS

Utilities will summarize completion reports, by accounts under headings on Form V-2. The number and name of the accounts should be inserted by the respondent and the completion order No. and amount chargeable to each account, entered opposite the completion order number.

OATH

Total amount charged to property accounts as reported June 30, 1914--
-----\$115653.10

Total net charges to property accounts for the period July 1st, 1914, to the last day of Calendar Quarter, both inclusive, preceding the quarter for which this report is rendered, per quarterly reports filed with the Corporation Commission of Oklahoma-----\$ 19027.66

Total net charges to property accounts for the quarter covered by this report, (see opposite side)-----\$ 12543.72

Total charges to property accounts on last day of calendar quarter for which this report is made-----\$147224.48

STATE OF Oklahoma:
 : ss
COUNTY OF _____:

This is to certify that this report was prepared under the requirements of order No. 774, and instructions as promulgated by the Corporation Commission of Oklahoma, under my personal supervision. I further certify that it is in accordance with the books and records of this Company, and that the above report is correct.

(Chief Engineer)

(Managing Officer)

Subscribed and sworn to before me this the _____ day of _____, 1914.

REPORT
OF
MANGUM ELECTRIC COMPANY
MANGUM, OKLAHOMA
TO
THE CORPORATION COMMISSION
ORDER #774

Prepared by
HAROLD V. BOZELL
CONSULTING ENGINEER
NORMAN, OKLA.

PREFACE TO VALUATION

Mangum Electric Company, Mangum, Okla.

In offering the following valuation to represent the original cost of its property, the company wishes the following facts to be considered:

The property was purchased by the present management in December, 1911, for a lump sum. If any books were kept before that time, which books would tend to throw any light upon this original cost, the present management does not hold the same. Since purchase, the present management has kept a complete set of books and has a complete file of vouchers to cover all payments of money made since December, 1911. The present management has always been satisfied that these books represent truly its actions. However, the division of accounts in this system of bookkeeping is not such that a division can be made accurately into the accounts as specified by the Commission in its order No. 774. By going over its books, the present management was able to take off certain totals, which would check a valuation of property installed by it. Without a complete listing of the subject matter of all the vouchers of the last three years, it would be impossible to list the exact material and labor which these sums, mentioned above, represent. Accordingly it has been sometimes necessary in this valuation to make certain assumptions, which however are clearly outlined at the points where they are made.

The company wishes to express its entire willingness and wish to comply to the fullest extent with the orders of the Commission in the making of this valuation and, in that matter, in all other reports. If the Commission desires that this company go to the immense amount of work, which seems to it needless, in order to find out exactly what material it installed and at what price, it is perfectly willing to do so. It believes, however, that the Commission will see that very little information can be gained in addition to what is here set forth, and that the expense of such an investigation would be prohibitive upon a plant of this size.

The total amounts expended by the present management can easily be taken from the books and the sum of all items indicated as having been installed by the present management will be found to equal this total sum, and in addition the items in each account equal the sum shown to be expended on this account by the present management.

Certain charges for omissions and contingencies have been made to many of the accounts. This is in just recognition of the fact that no appraisal can be complete, and that the values used in appraisal work are average values and that certain percentages must be added to take care of those items which cannot be set down specifically. They also cover the contingent expenses, which a contractor always includes in his estimates.

The company also feels that there should be some allowance either in this property account or in some other way for the necessary Working Capital, which is certainly a part of the investment. Additional investment amounts have been absorbed in the present Going Values. While there is no provision for items of this character in order No. 774, the company believes that they represent actual investment, and are therefore a part of the Book Value of the company.

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Organization	EU 1
		Total
Previous to purchase by present organization: An estimated sum, though the right is claimed to change this if data subsequently found will indicate a different amount	<i>Preliminary by organization,</i>	\$800.00
Since purchase by present organization:		203.00
Incorporation		203.00
Abstract		21.85
Printing stock		48.54
Attorney fee		100.00
Attorney fee		22.30
Map of Mangum		5.00
Automobile hire for investigation survey		10.00
" " " "		4.00
Stock certificates		40.00
Attorney fee		900.00
Maps of Mangum		6.00
Automobile hire for survey		38.50
Printing of bonds		120.00
Maps		5.00

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

<u>Item</u>	<u>Organization</u>	<u>EU-1-2</u> <u>Total</u>
Engineering inves- tigation by the Triumph Ice, Machine, and Engine Works		<u>54.30</u>
Total for this account		\$2324.19

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Franchises	EU-2
		Total

There is no data at present available to support any charge to this account as having actually been made. However, its value is a part of the property value of the company, and the company wishes that the fact that no franchise cost is here claimed shall not be taken to mean that none was incurred - the company retaining the right to file such charge at some future time when data may be found to determine the exact size of the charge or when an approximate estimate may be made.

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

<u>Item</u>	<u>Land Devoted to Electric Operations</u>	<u>EU-3</u> <u>Total</u>
The east ninety (90) feet of block twelve (12) in Rock Island Addition to Mangum, Oklahoma, Included in a lump sum purchase price to present owner. Valued in 1911 by H.M. Byllesby & Co. as having an original cost of		\$1200.00
Total for this account		1200.00

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Buildings and Structures	EU-4 Total
Blank		

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Power Plant Buildings			EU-5	
	Material	Frt. Labor	Total	Unit	Q't'y Total

The power plant building is shown in an accompanying blue print. It is built of wood sheathing on wooden frame work with wooden trusses. The side walls are covered on the outside with corrugated galvanized iron. The roof is covered with prepared tar roofing compound.

The building was valued by H.M. Byllesby & Co. in 1911 at \$3800.00, and that probably represents its original cost very closely

\$3800.00 ✓

Since that time the following additions have been made:

- (a) New roof
- (b) Concrete floor
- (c) Partition finished between boiler and engine rooms
- (d) Extension added on the east side of boiler room to add to firing alley
- (e) Toilet and sewer line added.
- (f) Store room partitioned off and concrete floor put in same.

Total cost of above improvements:

\$490.09	\$1719.59	\$2209.68	1	2209.68	X
----------	-----------	-----------	---	---------	---

Total for this account

6009.68 ✓

\$ 4000 total

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

<u>Item</u>	<u>Substation Buildings</u>	<u>EU-6</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Furnaces, Boilers and Accessories			EU-7	
	Material	Fr't.	Labor	Total	Unit Q't'y Total
Brownell R.T. Boiler, 150 HP, 72" x 18'	1000.00	215	100	1315	Ea. 2 2630.00 ✓
Standard suspended setting for the above 2 boilers in one bank, including steel for supports	665.50	139.30	800 600	1604.80	" 1 1604.80 ✓ 4234.80
42" - 65' steel stack for above boilers	400.00	75	100	575	" 1 575.00
Breeching for same			75		" 1 75.00 650.00 ✓
Canton Boiler Feed Pump, serial #6126, 4-1/2" x 3" x 5" including foundation	150.00	10	100 50	265	" 1 265.00 ✓ 62.50
Union steam pump, serial #50144, 5" x 3" x 6", now used for treating tank	125.00	20	125 62.50	405	" 1 405.00 ✓ 177.50
Receiver steam sep- arator, 5"	150.00	10	15	175	" 1 175.00 ✓
10" steam header pipe	1.113	.20		1.353 ft.40	54.12
6" steam feed to Murray engine	.541	.154		.695 ft.41	28.50
6" steam feed to Hamilton engine	.541	.154		.695 " 23	15.99
6" steam feed south boiler	.541	.154		.695 " 10	6.95
6" steam feed middle boiler	.541	.154		.695 " 10	6.95
7" exhaust pipe	.747	.18		.927 " 26	24.15
5" riser to exhaust pipe head between engines	.418	.12		.538 " 18	9.68

14634 ✓

Onium in summa
Pneumonia in alveol
Accidit in Cerebrum
Cerebrum delicia, studium, fandum,
scientia, gloria etc.
Teata & sapientia
Oxy in summa
Small pharynx
Replante de to summa of
in summa.

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Furnaces, Boilers and Accessories.

EU-7-3

Item	Material	Wrt.Labor	Total	Unit	Q't'y	Total
The following was purchased and installed by the present management:						
250 HP Casey Hedges boiler, steel cased	1933.65	433.35	2367.00	Ea.	1	2367.00
42" - 70-ft. steel stack	Included with boiler					
Setting and lining above boiler	202.50	20.00	222.58	"	1	222.58
Union steam pump - 5" x 7" x 5" for boiler feed, foundation included			251.56	"	1	251.56 ✓
7' 6" x 20' Bartlett water treating tank, type C.	1183.80	67.20	1251.00	"	1	1251.00 ✓
						Included with material
<u>Steam Pipe</u>						
6" connection to north boiler	.541	.097	.638	ft.	10	6.38
7" riser to trap	.747	.1208	.8578	"	8	6.94
5" horizontal to trap	.418	.0995	.5175	"	6	3.10
3" water line to treating tank	.21	.057	.267	"	35	9.35
10" x 10" x 6" flanged tees	20.00	.50	20.50	Ea.	1	20.50
6" flanged ells	4.00	.35	4.35	"	1	4.35
6" angle valve	16.40	.60	17.00	"	2	34.00
Miscellaneous small piping to pumps, boilers, etc.	65.00	12.00	77.00	Total		77.00

161.62

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Furnaces, Boilers and Accessories			EU-7-4	
	Material	Frts. Labor	Total	Unit	Q't'y Total
Water Storage tank 10' diameter, 3' high, set on concrete base	27.63	2.35	29.98	Ea.	1 29.98
Pipe covering	98.00	55.58	153.58		153.58
Stilwell Water Heater, class C, 600 HP, #7, Shop #12695, set on concrete foundation	310.00	70.15	380.15	"	1 380.15
1 ton Gump platform scales	42.15	Included else- where	42.15	"	1 42.15
Miscellaneous and contingent items, such as waste and scrap pipe, lead, sand, lime, crushed rock, and other foundation material, and parts not assigned above	613.44	29.67			643.11
Installation of above material and other labor on the steam plant in the rearrange- ment made by the present owner			2500 ✓ 3839.24		2500 3839.24
Total expended by present owner					9341.97
Total old installation, brought forward from page #2					8937.16
Total for this account					18279.13

*Hot Well**added, not on Property's name
just estate.**40000**4 16441.37*

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Steam Engines			EU-8		
	Material	Frts.	Labor	Total	Unit Q't'y	Total
Hamilton Corliss engine - 200 HP - 96 RPM, 16" x 36" - 15'6" fly wheel - serial #2947, all on concrete base, 8' deep	2550.00	400.00	1800 1000	4750.00	Ea. 1	3750.00 4750.00
			Includes base			
Allis-Chalmers heavy duty engine - 18" x 36" - 104 RPM - 150 HP(not in service), all on concrete base	2300.00	375.00	1500	4175.00	" 1	400 4175.00
			Includes base			
Omissions, errors, contingencies, 3%						142.00 267.75
Contractor's profit, 10%						919.27 500
<u>Installed since purchase</u>						
Murray Corliss engine - 300 HP - 100 RPM - 18" x 36" - 13'6" fly wheel - serial #3541 on concrete base 8' deep	2467.27	345.98	1700 1000	4513.25	" 1	4513.25 ✓
			Includes base			
Valve gear, bonnet and other new parts to Hamilton Corliss engine	115.18	47.55	285.31	448.04		(448.04) ant
Total for this account						15073.31

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Gas Engines	EU-9
		Total

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Generators			EU-10		
	Material	Frts.	Labor	Total	Unit Q't'y	Total
General Electric Co. revolving field al- ternating current generator, serial #70987 - form M-3 phase - 2300 volt, 60 cycle - 600 RPM, 50 ampere per ter- minal, mounted on concrete base, belt driven from Ham- ilton Corliss en- gine.	1830.00	192.00	475.00	2497.00	Ea. 1	2497.00
Omissions, con- tingencies, 3%						74.91
Contractor's profit, 10%						257.10
<u>Installed since purchase</u>						529.01
Electric Machinery Co., alternating current generator, serial #402259, 3 phase, 2300 volt, 60 cycle, 180 KVA, 500 RPM, 45 ampere per terminal, furn- ished by Wesco Supply Co., mounted on concrete base, belt driven from Murray Corliss engine	1753.00	209.64	447.60	2410.24	" 1	2410.24
Exciter, Electric Machinery Co., 8 KW, 120 volt, 64 ampere, 1200 RPM, serial #2493, belt driven from gener- ator shaft	1600.00					
	Included with generator					

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Generators			EU-10		
	Material	Frts.	Labor	Total	Unit Q't'y	Total
New shaft for above generator	145.00	27.50	Included above	172.50 "	1	172.50
Miscellaneous and unassignable	31.80	Included above	"	31.80		31.80
Exciter, Triumph Electric Co., 7.5 KW, 125 volt, 60 ampere, 1400 RPM, serial #16337, class DL, belt driven from G.E. generator	123.30	"	24.24	147.54 "	1	<u>147.54</u>
Total for this account						5591.09

DETAILED SUMMARY OF VALUATION
 Mangum Electric Company, Mangum, Oklahoma.

Item	Accessory Electric Power Equipment			EU-11	
	Material	Frts.	Labor	Total	Unit Q't'y Total
Switchboard					
Panel #1					
GE Panel, #31012, type ATG, 24" x 90" x 2" BV marble					1
GE Primary Ammeter, 0-150 ampere(not in service)					3
GE voltmeter 0-150 volt(not in service)					1
GE, 3p, ST non- automatic oil break switch					1
Concentric generator and exciter field rheostat mechanism					1
GE 2200/110 poten- tial transformer, Form B, type P, serial #323976, 321921					2
DP, ST field switch					1
8-point potential receptacle and four- point plug					1
4-point synchronizing receptacle and plug					1
Total board as above with supports	300.00	20.00	35.00	355.00	Ea. 1 355.00
(*) Wagner 100 am- pere, AC, ammeter, type P, serial #17562, #17807, #17608	18.00	See below	18.00	"	3 54.00
(*) Wagner 150 volt,					

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Accessory Electric Power Equipment				EU-11-2	
	Material	Frts.	Labor	Total	Unit	Q't'y Total
AC voltmeter, Type F	18.00	See below		18.00	Ea.	1 18.00
(*) Westinghouse						
Polyphase Watthour						
meter, style X300788,						
serial #814952, 100						
ampere, 2000 volt	36.35	"	"	36.35	"	1 36.35
(*) Wagner 100/5						
current transformer,						
type RWD, serial						
#6157, #6158, #6159.	8.50	"	"	8.50	"	3 25.50
<u>Panel #2</u>						
BV marble panel 32" x						
90" x 2" carrying						1
AC Ammeter, GE, pri-						
mary, 100 Ampere,						
(not in service)						1
GE AC voltmeter 150						
volt, (not in service)						1
DP, ST, field switch						1
4 point synchronising						
receptacle and plug						1
DP, ST 100 ampere oil						
switch (now on panel						
#4, and valued there)						1
Generator Rheostat						
mechanism, Cutler						
Hammer						1
Exciter Rheostat mechan-						
ism, Cutler Hammer						1
GE Potential Trans-						
former, 2200/110 volt,						
Type P, form B, serial						
#325928						1

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma;

Item	Accessory Electric Power Equipment				EU-11-3		
	Material	Frts.	Labor	Total	Unit	Q't'y	Total
Total board as above with supports	215.00	26.00	30.00	271.00	Ea.	1	271.00
(*) Wagner 100 ampere, AC. Ammeter, Type F, serial #17926, #17366, and #13757	18.00	See below		18.00	"	3	54.00
(*) Wagner 150 volt, A.C. voltmeter, Type F, serial #15232	18.00	"	"	18.00	"	1	18.00
(*) 8 point Potential Receptacle	3.00	"	"	3.00	"	1	3.00
(*) 3P, ST, Hartman, Type G oil switch, #1227	20.00	"	"	20.00	"	1	20.00
(*) Westinghouse Poly- phase, watt-hour meter, style X300788, serial #814951	36.35	"	"	36.35	"	1	36.35
(*) Wagner 100/5 Curr- ent transformer, serial #7262, #6872, #7176	8.50	"	"	8.50	"	3	25.50
(*) Wagner 2200/110 Potential Transformer, Type XDD, serial #55613	13.00	"	"	13.00	"	1	13.00
(*) <u>Panel #3</u>							
(*) GE BV marble two- feeder panel 32" x 90" x 2" carrying						1	
(*) 3P, ST oil switch, 200 ampere with 50 ampere overload re- lease, style 1235						2	
style 1236						2	
Total board as above	200.00	"	"	200.00	"	1	200.00

$$\frac{116.00}{331.00} = 300.15$$

327.75

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Accessory Electric Power Company,		EU-11-4					
Item	Material	Frts.	Labor	Total	Unit	Q't'y	Total
<u>P Panel #4</u>							
GE BV Marble panel, 32" x 90" x 2", type ASF, carrying					1		
10 ampere AC Ammeter					1		
Wagner Current trans- former for above, type RB serial #9267					1		
DP, ST 200 volt oil switch non-automatic, 50 ampere, GE #18955, (formerly on panel #2)					1		
Total panel as above described with supports	180.00	22.00	20.00	222.00	Ea.	1	222.00
(*) 3P, ST 200 ampere oil switch with over- load release, DL 87818, WSF90060	30.00	See below		30.00	"	2	60.00
Adams-Bagnall 6.6 ampere, constant current regulator, 60 cycle, 4650 volt, serial #351						1	
							Included with next item
Moloney 35 KW Arc trans- former, serial #13264	890.00	54.00	12.00	956.00	"	1	956.00
Wesco, 3 KW Arc trans- former, booster	55.00	2.75	4.00	61.75	"	1	61.75
Horn gap and resistance type arrester in arc circuit	5.00	.10	.50	5.60	"	2	11.20
Moloney single phase 7.5 KW 2200/110 Lighting transformer type HE	75.50	5.60	6.00	87.10	"	1	87.10
<u>Black Conduit</u>							
(*) 2"-panel #1 to GE Generator	.152	See below		.152	ft.	18	2.70

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Accessory Electric Power Equipment				EU-11-5	
	Material	Frts.	Labor	Total	Unit	Q't'y Total
(*) 1-1/2"-panel #1 to field and exciter	.103	See below	.103	Ea.	10	1.03
(*) 2"-panel #2 to E.M.Co. Generator	.152	" "	.152	"	12	1.82
(*) 1-1/2" - panel #2 to E.M. Co. Generator exciter	.103	" "	.103	"	20	2.06
(*) 1-1/2" - panel #2 to E.M. Co. Generator Field	.103	" "	.103	"	14	1.44
<u>Fittings</u>						
(*) 2" type F, Condulet	2.34	" "	2.34	"	4	9.36
(*) 1/2" Type E "	1.10	" "	1.10	"	4	4.40
(*) 1-1/2" Type B "	1.10	" "	1.10	"	2	2.20
(*) 2" ells	.44	" "	.44	"	4	1.76
(*) 1-1/2" ells	.24	" "	.24	"	6	1.44
(*) #0-2500 VC Conductor to generators	Included in EU 17			ft.	108	
(*) #2-600 volt DBRC Conductor for excitation	"	"	"	"	178	
(*) #10-600 volt DBRC Conductor for Exciter Fields	"	"	"	"	94	
(*) Freight assignable to this account.	21.60		21.60			21.60
(*) Labor for this account	Included in EU 7, 8 & 10.					
Bus bars, switchboard, etc.			15.00			15.00

At the time of purchase by the present owner all wiring from switchboard to generator was open. This equipment is not now in

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Accessory Electric Power Equipment				EU-1166	
Item	Material	Frt. Labor	Total	Unit Q't'y	Total
service. There is added for its value the estimated amount of					75.00
(*) Indicates installed by present owner					
Total of items not (*)					2054.05
Omissions and contingencies, 4%					82.08
Contractor's profit, 10%					213.61
Total of items marked (*)					<u>607.51</u>
Total for this account					2957.25

2732.70

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Miscellaneous Power Plant Equipment				EU-12	
	Material	Frts.	Labor	Total	Unit	Q't'y Total
17" Heaviest 2-ply dynamo belt	2.70	.09	.125	2.915	ft.	100 291.50
Contractor's profit on same, 10%				2.91		<u>2.91</u>
Desk, bookkeeper's style				30.00	Ea.	1 30.00
Firing tools				15.00		15.00
Iron railing				50.00		50.00
Chairs				10.00		10.00
Wheelbarrow				12.00		12.00
Lantern				2.00	"	1 2.00
Clothes locker				5.00	"	1 5.00
Locker now used for treating tank testing outfit				5.00	"	1 5.00
Oil tanks				6.00		6.00
Miscellaneous plant tools, wrenches, oil cans, etc.				30.00		30.00
Ladder				2.00	"	1 2.00
Omissions and contingencies, 4% of total						18.35
(*) 17" heaviest double-ply dynamo belt	263.75	8.77	In-	272.52	Total	100 272.52
			cluded			ft.
			in EU 10			
(*) 4" two-ply dynamo belt for E.M. Co. exciter	28.10	3.05	"	31.15	"	30 31.15
						ft.

18535

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Miscellaneous Power Plant Equipment		EU-12-2		
Item	Material	Frnt. Labor	Total Unit Q't'y Total	
(*) 4" two-ply dynamo belt for Triumph Exciter	38.81	4.20	Includ- 43.01 ed in EU-10	Total 35 ft. 43.01
(*) Neat's foot oil for large belts	18.46	.25	"	18.71 18.71
(*) Small accessories				4.90 4.90
(*) Pulley for E.M.Co. Generator	Included in gener- ator price			20.40 20.40
(*) Set of wrenches and engine tools	59.40	In- clud- else- where		59.40 59.40 <i>103.41</i>
(*) Indicates purchased by present owner				
Total of items not (*)				479.76
Total of items marked (*)				<u>450.09</u>
Total for this account				929.85

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Substation Equipment				EU-13		
Item	Material	Fr't.	Labor	Total	Unit Q't'y	Total

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Poles and Fixtures

EU-14

Preface

The present management has installed a total of 172 30' 6" top poles. As mentioned in the general preface to this report, a great many items are not known in their exact amounts, without further search into old vouchers of the company. Consequently, the method of handling this account is to assume that the same proportion of the other items of this account were placed in service by the present management. The total charged to this account by the present management is known and agrees with the total on page 4 of this account.

Poles addy # & lab
not included = 1950

changed fight club : 3220 + 460
640
1980

changed 3980
1950

Hand - 2020
Diff

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Poles and Fixtures			EU-14-4	
	Material	Frts.	Labor	Total	Unit Q't'y Total
EU 17, EU 18 and part of EU 20			3320.32	3320.32	<u>3320.32</u>
Total items on this page, installed by present management					4759.15
Brought forward from page 2					<u>4904.91</u>
Total for this account					9664.06

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Conduit Systems	EU-15
		Total

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Municipal Lighting				EU-16		
	Material	Frts.	Labor	Total	Unit	Q't'y	Total
<u>Poles - Cedar</u>							
20' - 6" top	.05	1.102	3.00	4.952	Ea.	6	29.71
30' - 6" "	2.76	2.00	4.00	8.76	"	8	70.08
40' - 5" "	7.00	3.48	6.00	16.48	"	1	16.48
							<u>114.27</u>
<u>Steel Strand Guy</u>							
1/2" for suspension	.04	.004	.04	.084	ft.	1265	106.00
<u>Arc Lamps</u>							
Westinghouse 6.6 ampere series	22.00	1.10	3.00 ^{2.05}	26.10	Ea.	27	704.70
Standard suspension sets for same	4.00	.30	6.00 ^{5.60}	10.30	"	27	278.10
Omissions, contingencies and waste, 5%				60.29			60.29
Contractor's profit, 10%				126.53			126.53
(*) <u>Poles - Cedar</u>							
30' - 6" top				Included elsewhere		10	
(*) <u>Arc Lamps</u>							
Adams Bagnall 6.6 ampere series	22.00	1.10		Includ-23.10	"	37	856.94
				ed in			
				EU-14			
(*) <u>Standard Suspensions for same</u>							
	4.00	.30	"	4.30	"	37	159.10
(*) <u>Steel Strand Guy</u>							
3/8"	.0326	.004	"	.0366	ft.	1735	62.46

Items marked (*)
installed by present
management

Total for this account

2470.39

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Transmission and Distribution System.

EU-17

Item	Ft.	#/M	Ft.	Material	Frts.	Labor	Total	Unit	Q't'y	Total
<u>EU 17a - - Blank</u>										
<u>EU 17b</u>										
Wire										
#0 TBWP	2014	407	16.30	1.75	5.00	23.05	Cwt.	818.82	188.78	
#4 "	1590	164	16.30	1.75	5.00	23.05	"	260.76	60.09	
#6 "	61114	112	16.30	1.75	5.00	23.05	"	6844.10	1577.54	
#8 "	117829	75	16.30	1.75	5.00	23.05	"	8828.10	2033.85	
#10 "	38292	53	17.30	1.75	5.00	24.05	"	2028.90	487.97	
#14 "	1908	25	19.30	1.75	5.00	26.05	"	47.70	12.42	
Primary total									4360.65	
Total value of wire in place at time of purchase plus the total material account of wire since purchase, (See note following EU 18)									4197.00	
Freight charged to wire bought since purchase									48.01	
Total for this account									4245.01	

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Ft. #/M	ft.	Electric Service Wires				EU-18		
			Material	Frts.	Labor	Total	Unit	Q't'y	Total
<u>Wire</u>									
#0 TBWP	43	407	16.30	1.75	7.50	25.55	Cwt.	17.49	4.47
#2 "	65	260	16.30	1.75	7.50	25.55	"	16.89	4.32
#4 "	32	164	16.30	1.75	7.50	25.55	"	5.25	1.34
#6 "	1296	112	16.30	1.75	7.50	25.55	"	145.16	37.07
#8 "	7743	75	16.30	1.75	7.50	25.55	"	583.11	148.98
#10 "	70642	53	17.30	1.75	7.50	26.55	"	3744.10	994.03
#14 "	24214	25	19.30	1.75	7.50	28.55	"	605.35	<u>172.81</u>

Primary wire total 1263.02

Corrected total 1216.43
(See note following this sheet)

Services

Flat	41
Dead	53
Metered	415

Pins

Locust 1-1/2" x 9"	.018	.007	.01	.035	Ea.	263	9.20
--------------------	------	------	-----	------	-----	-----	------

Insulators

Wesco #042549 DG DP							
Glass - pin	.04	.008	.015	.063	"	592	37.25

Brackets

2" x 2-1/4" x 12" oak	.019	.01	.08	.109	"	143	15.60
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(*) Pins

Locust 1-1/2" x 9"	.018	.007	.01	.035	"	133	4.66
--------------------	------	------	-----	------	---	-----	------

(*) Insulators

Wesco #042549 DG DP							
Glass - pin	.04	.008	.015	.063	"	299	18.84

(*) Brackets

2" x 2-1/4" x 12" oak	.019	.01	.08	.109	"	72	<u>7.85</u>
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(Item marked (*) installed
under present management)

Total for this account

1309.83

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Note pertaining to EU 17 and 18

The following explanation pertains to the method of arriving at the total of the wire accounts of EU 17 and 18:

All wire lengths given on EU 17 are straight lineal measurements with the addition of five percent for sag, span and waste and of one percent for ties. In EU 18, seven percent is used for sag and waste.

The wire measured and indicated in these two accounts consists of wire put in before purchase and after purchase by present management. The figures on material only are all that are available from the present management. In order to arrive at an equitable division between the two parts of the construction the following method was employed:

Total of wire accounts, 17 and 18, Primary totals	5623.67
Total of material accounts 17 and 18	3969.17
Total material bought since purchase of plant	2103.06
Fraction of wire in place at time of purchase	<u>1865.88</u>
	3969.17
Value of wire in place at time of purchase according to amounts used in the above estimates	$\frac{1865.88}{3969.17} \times 5623.67 = 2632.00$
Twelve and a half percent higher copper price before purchase adds	<u>233.50</u>
Total cost of wire in place at time of purchase (Sum of last two items)	2865.50
Errors, omissions and contingencies, five percent	143.75
Contractor's profit, ten percent	300.92
Total cost of material bought since purchase	<u>2103.26</u>
Total amount EU 17 plus the wire of EU 18	<u>5413.43</u>

This amount was divided between accounts EU 17 and EU 18 in the same proportion as indicated by their primary totals, giving

EU 17	4197.00
EU 18	1216.43

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Meter Installations			EU-19	
	Material	Frts.	Labor Total	Unit Q't'y	Total
Meters set			1.00	Ea. 381	381.00
Omissions, contingencies, and errors, 2%					<u>7.62</u>
Total for this account					388.62

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

		Line Transformers and Appurtenances					EU-20		
Item			Material	Frnt.	Labor	Total	Unit	Q't'y	Total
Transformers - 2200/110-220									
Manufacturer	Type	K.W.							
Moloney	H E	2	32.40	2.34	5.00	39.74	Ea.	3	119.22
"	"	3	40.50	3.12	5.00	48.62	"	2	97.32
"	"	5	56.90	4.42	6.00	67.32	"	2	134.64
"	"	2.5	35.98	2.795	5.00	43.70	"	1	43.70
Westinghouse	S	2	32.40	2.16	5.00	39.56	"	1	39.56
"	"	7.5	75.25	5.58	7.00	87.83	"	1	87.83
"	"	3	40.50	2.88	5.00	48.38	"	2	96.76
General Electric	H	.6	18.00	1.38	4.00	23.38	"	1	23.38
"	"	1	23.10	1.74	4.50	29.34	"	6	176.04
"	"	2	32.40	2.16	5.00	39.56	"	2	79.12
"	"	7.5	75.25	5.58	7.00	87.83	"	1	87.83
"	"	25	182.84	14.22	12.00	209.06	"	3	627.18
Wesco	H E	2	32.40	2.34	5.00	39.74	"	1	39.74
"	"	5	56.90	4.42	6.00	67.32	"	1	67.32
"	"	15	126.60	10.60	9.50	147.70	"	3	443.10
"	"	25	182.84	15.40	12.00	210.24	"	6	1261.44
Pittsburgh	-	3	40.50	2.88	5.00	48.38	"	2	96.76
"	-	5	56.90	4.08	6.00	66.98	"	1	66.98
Primary total									3587.92
Material bought since purchase									1890.62
Value of material in place at purchase								$\frac{1175.27}{3065.89} \times 3594.92$	1378.00
(Total material above account - 3065.89)									
Omissions, errors and contingencies, 3%									41.34
Contractor's profit, 10%									141.93
Material bought since purchase									1890.62
Freight charged to this account by present management									80.22
Labor " " " " " " " "									4.80
Total to this account									3536.91

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Meters				EU-21	
	Material	Frt.	Labor	Total	Unit	Q't'y Total
<u>Meters - 2 wires single phase 110 volts</u>						
Manufacturer	Type Amp					
Sangamo	H					
(Type H Sangamo Meters are now installed. These were sent the Company by the manufacturer in exchange for Type F, originally purchased. Prices of F are therefore given.)						
Sangamo	H	5	10.50	.20	10.70	Ea. 90 963.00
"	"	10	11.40	.20	11.60	" 7 81.20
"	"	20	13.50	.28	13.78	" 2 27.56
"	"	40	17.20	.28	17.48	" 2 35.96
"	"	60	21.00	.40	21.40	" 1 21.40
"	"	100	29.00	.60	29.60	" 1 29.60
Westinghouse	C	5	10.50	.20	10.70	" 126 1348.20
"	"	10	11.40	.20	11.60	" 23 266.80
"	"	20	13.50	.28	13.78	" 14 192.92
"	"	40	17.20	.28	17.48	" 1 17.48
Thomson	-	20	13.50	.28	13.78	" 1 13.78
General Electric		5	10.50	.20	10.70	" 3 <u>32.10</u>
Total installed at time of purchase						3030.00
Omissions, errors and contingencies, 2%						<u>60.60</u>
Total forwarded to bottom of page						3090.60
Sangamo	H	5	10.5427		"	100 1054.27
"	"	10			"	4
"	"	20			"	5
"	"	40			"	1

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Meters			EU-21-2
	Material	Frts.	Labor	Total
Bill for these ten meters				130.03
Freight on all above meters				92.23
Primary polyphase ^{Amp} 2500 volt with transformers 25				1
" " 15				1
Above meters with transformers	213.95	28.70		242.65
Repair of old meters on hand	83.78			83.78 <i>adj</i>
Freight on exchange of Type F for Type H Sangamo meters	(66.75)			66.75 <i>adj</i>
Total new items				<u>1669.71</u>
Total for this account				4760.31

4610.08

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Commercial Arc Lamps

EU-22

Item

Total

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Tools and Implements			EU 23	
	Material	Frts.	Labor Total	Unit	Q't'y Total
Blow torch	4.00			1	4.00
Climbers, pair	2.00			1	2.00
Shovel, long handle	2.00			3	6.00
Spoon	2.00			3	6.00
Pike	1.50			3	4.50
Malleable iron pulley and rope	3.00			2	6.00
Hand saw	3.00			1	3.00
Haven clamp	3.00			2	6.00
Hand axe	1.50			1	1.50
Digging bar	2.50			1	2.50
Tamping bar	3.50			1	3.50
Miscellaneous tools, hand tools, etc. charged to this account					70.25
Total for this account, all acquired since purchase					115.25

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Laboratory Apparatus			Unit Q't'y	EU-24
	Material	Frts.	Labor Total		Total
General Electric test watt-hour meter			65.00	Ea. 1	65.00
Thomson 300 volt A C volt-meter			45.00	" 1	45.00
Steam Engine Indicator			97.45	" 1	<u>97.45</u>
Total for this account					207.45 ✓

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Dams, Canals and Pipe Lines

EU-25

Item

Total

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Turbines and Waterwheels	EU-26
		Total

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Electric Motors	EU-27
		Total

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

<u>Item</u>	<u>Other Tangible Electric Property</u>	<u>EU-28</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Other Tangible Property of the Respondent	EU-29
		Total
Ice Plant, total value to date		\$16181.85
Equity in City Pumping Plant		<u>1500.00</u>
Total for this account		17681.85

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	General Equipment			EU-30	
	Material	Frts.	Labor Total	Unit	Q't'y Total
<u>EU-30-A-General Office Equipment</u>					
Typewriter desk			22.00	Ea.	1 22.00
Underwood Typewriter, 14" carriage			115.00	"	1 115.00
Letter press			5.00	"	1 5.00
35" x 59" Sanitary oak table desk			29.00	"	3 87.00
3 section filing cabinet, oak					
2 letter size sections					
1 section of 4-4" x 6" drawers			30.00	"	1 30.00
28" x 30" x 24" Mosler safe			125.00	"	1 125.00
Burroughs Adding Machine 10 column #9, serial #20491			275.00	"	1 275.00
Swivel chair, oak, leather on cane seats			14.00	"	3 42.00
Stenographer's chair			11.00	"	1 11.00
Stove, radiant air blast #14			20.00	"	1 20.00
Straight oak chairs			9.00	"	4 36.00
Water cooler			2.50	"	1 2.50
Linoleum			.90	sq.yd.	64 57.60
Ceiling fan			31.00	Ea.	1 31.00
Electric light fixtures, 6 bracket and 1 central			65.00		65.00
Plumbing and toilet					105.10

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	General Equipment			EU-30-2		
	Material	Frts.	Labor	Total	Unit Q't'y	Total
Partition and papering						<u>83.49</u>
Total						1112.69
<u>EU-30-B-General Shop Equipment</u>						
Blank						
<u>EU-30-C-General Store Equipment</u>						
Blank						
<u>EU-30-D-General Stable Equipment</u>						
(*) Horse			150.00	Ea.	1	150.00
Spring wagon			103.40	"	1	103.40
Single Harness			35.00			<u>35.00</u>
Total						288.40
(*) This is the only item not purchased by present management						
Total for this account						1401.09

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Engineering and Superintendence		EU-31	
Item	Material	Frt. Labor	Total Unit Q't'y Total

Engineering and Superintendence
on the estimated amount in the
hands of an engineer during
construction before purchase
by the present management,

Engineering 5% 2200.00

Superintendence 5% 2 1/2% 2200.00

Since purchase by present
management the engineering
is included in labor charges,
distributed over the different
items.

Total for this account

2700
~~4400.00~~

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

<u>Item</u>	<u>Injuries During Construction</u>	<u>EU-32</u> <u>Total</u>
Chargeable to this account is the liability insurance on the payroll previous to purchase by present management. Figured at an average of three percent it is approximately		375.00
No specific charges are known to have been made by the present management. Any charges to liability insurance have been carried elsewhere on the books		
Total for this account		375.00

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Law Expenditures During Construction	EU-33
		Total
<p>There is no better basis to make a charge against this account than to estimate the general average of past experience of approximately 2% of the total valuation of the property. Consequently there is here charged 2% (approximately) of the value of the property at time of purchase, as indicated by present value of the plant less money expended upon same by present management. If data is later found to substantiate any specified sum against this account, company claims the right to file same at some future date.</p>		1400.00
<p>No charge against this account is found on the books of the present management.</p>		
<p>Total for this account</p>		1400.00

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Interest During Construction	EU-34
		Total
<p>The only method of making a charge against this account to represent expenditure before purchase by the present management, is to take the average of approximately 6% of the total value which is</p>		\$4200.00
<p>Since purchase by present management, the following interest charge has been paid and made:</p>		
<p>One years interest on bonds during part of construction period-5%</p>		<u>7500.00</u>
<p>Total for this account</p>		11700.00

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Item	Miscellaneous Construction Expenditures	EU-35 Total
The only method of making a charge against this account previous to purchase by present management, is to take a general average of approximately 2%, which is		1400.00
Since purchase, there is charged against this account, the traveling expense of general officers and engineers to the amount of		3720.76
Telegrams and telephones		<u>31.73</u>
Total for this account		<u>5152.49</u>

DETAILED SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

<u>Item</u>	<u>Taxes</u>	<u>EU-36</u> <u>Total</u>
No specific amount can be claimed against this account. An average charge was suggested of 1/2% of the value of the property, this applying to previous to purchase by present management.		350.00
No charge against this account has been made by the present management.		
Total for this account		350.00

GENERAL SUMMARY OF VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Acct.No.	Name of Account	Amount
EU 1	Organization	2324.19
EU 2	Franchises	-
EU 3	Land Devoted to Electric Operations	1200.00
EU 4	Buildings and Structures	-
EU 5	Power Plant Buildings	6009.68
EU 6	Substation Buildings	-
EU 7	Furnaces, Boilers and Accessories	18279.13
EU 8	Steam Engines	15073.31
EU 9	Gas Engines	-
EU 10	Electric Generators	5591.09
EU 11	Accessory Electric Power Equipment	2957.25
EU 12	Miscellaneous Power Plant Equipment	929.85
EU 13	Substation Equipment	-
EU 14	Poles and Fixtures	9664.06
EU 15	Conduit Systems	-
EU 16	Municipal Lighting	2470.39
EU 17	Transmission and Distribution System	4245.01
EU 18	Electric Service Wires	1309.83
EU 19	Electric Meter Installations	388.62
EU 20	Line Transformers and Appurtenances	3536.91
EU 21	Electric Meters	4760.61
EU 22	Commercial Arc Lamps	-
EU 23	Electric Tools and Implements	115.25
EU 24	Electric Laboratory Apparatus	207.45
EU 25	Dams, Canals and Pipe Lines	-
EU 26	Turbines and Water Wheels	-
EU 27	Electric Motors	-
EU 28	Other Tangible Electric Property	-
EU 29	Other Tangible Property of the Respondent	17681.85
EU 30	General Equipment	1401.09
EU 31	Engineering and Superintendence	4400.00
EU 32	Injuries During Construction	375.00
EU 33	Law Expenditures During Construction	1400.00
EU 34	Interest During Construction	11700.00
EU 35	Miscellaneous Construction Expenditures	5152.49
EU 36	Taxes	350.00
Grand total representing original cost of property		121512.72

VALUATION

Mangum Electric Company, Mangum, Oklahoma.

Total amount charged to property account June 30, 1914, 121512.72

STATE OF OKLAHOMA*
) ss
 _____ County)

This is to certify that this report was prepared under the requirements of Order No. 774, and instructions as promulgated by the Corporation Commission of Oklahoma, under my personal supervision. I further certify that it is in accordance with the books and records of this company, and that the above is correct.

 Chief Engineer

 Managing Officer

Subscribed and sworn to before me this the ____ day of _____
 A.D. 1915.

 Notary Public

APPENDIX E
FIRST QUARTERLY REPORT
FOR
THE MANGUM ELECTRIC COMPANY
FROM JULY 1, 1914, TO SEPTEMBER 30, 1914.

CORPORATION COMM-

NAME OF UTILITY, Mangum Electric Company

Detailed Completion Report of Construction Expenditures During the

Description of Work, Material and Freight,

Give Source of Receipts of Money Expended on Work _____

No. FOR MATERIAL ONLY				
of				
Acct.	Unit	KIND-TYPE-CLASS	Unit Cost	Cost
EU 17	90 lbs.	#6 TBWP Wire		14.80
	137 lbs.	#10 TBWP Wire		26.35
EU 18	50 lbs.	#10 TBWP Wire		9.41
EU 20	1	2.5 KW Transformer, Westinghouse Type S		30.00
	1	15 KW Transformer, (S.H.) Freight on above Transformers		85.00

MISSION OF OKLAHOMA

No. 1

LOCATION, Mangum, Oklahoma.

Three Month Period Ended, September 30, 1914.

Located _____ Date Completed _____

FOR LABOR COSTS ONLY				OTHER CHARGES				Total Cost	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	Cost	by Accounts
								14.80	
								26.35	EU 17- 41.15
								9.41	EU 18- 9.41
								30.00	
								85.00	
				Freight			3.58	3.58	EU 20- 118.58

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

CORPORATION COMMISSION OF OKLAHOMA

Summary of Completion Reports for Quarter Ending September 30, 1914.

Mangum Electric Company,

Mangum, Oklahoma.

No. of Acct.	Give Name of Account and Individual Numbers on Completion Report.	Totals of Accounts as Shown on Completion Reports
EU 17	Transmission and Distribution Com- pletion Report No. 1	41.15
EU 18	Electric Service Wires Completion Report No. 1	9.41
EU 20	Line Transformers and Appurtanences Completion Report No. 1	<u>118.58</u>
	Total	169.14

APPENDIX F
SECOND QUARTERLY REPORT
FOR
THE MANGUM ELECTRIC COMPANY
FROM OCTOBER 1, 1914 to DECEMBER 31, 1914.

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

CORPORATION COMMISSION OF OKLAHOMA

Summary of Completion Reports for Quarter Ending December 31, 1914.

Mangum Electric Company,

Mangum, Oklahoma.

No. of Acct.	Give Name of Account and Individual Numbers on Completion Reports	Totals of Accounts as Shown on Completion Reports
EU 20	Line Transformers and Appurtanences C'P'N', R'P'T' #2	60.00
EU 21	Electric Meters, C'P'N', R'P'T' #2	156.00
EU 35	Miscellaneous Construction Expendi- tures	<u>16.50</u>
	Total	232.50

INSTRUCTIONS

Utilities will summarize completion reports, by accounts under headings on Form V-2. The number and name of the accounts should be inserted by the respondent and the completion order No. and amount chargeable to each account, entered opposite the completion order number.

OATH

Total amount charged to property accounts as reported June 30, 1914-
-----\$121512.72

Total net charges to property accounts for the period July 1
1st, 1914, to the last day of Calendar Quarter, both inclusive,
preceding the quarter for which this report is rendered, per
quarterly reports filed with the Corporation Commission of
Oklahoma-----\$ 169.14

Total net charges to property accounts for the quarter
covered by this report, (see opposite side)-----\$ 232.50

Total charges to property accounts on last day of Calendar
quarter for which this report is made-----\$121914.36

STATE OF Oklahoma:
 :ss.
County of _____:

This is to certify that this report was prepared under the require-
ments of order No. 774, and instructions as promulgated by the Corporation
Commission of Oklahoma, under my personal supervision. I further certify
that it is in accordance with the books and records of this Company, and
that the above report is correct.

(Chief Engineer)

(Managing Officer)

Subscribed and sworn to before me this the _____ day of _____
1914.

APPENDIX G
ORIGINAL COST REPORT
FOR
THE DUNCAN ELECTRIC AND ICE COMPANY
AS OF JUNE 30, 1914.

REPORT
OF
DUNCAN ELECTRIC & ICE COMPANY
DUNCAN, OKLA.
TO
THE CORPORATION COMMISSION
ORDER #774

Prepared by

HAROLD V. BOZELL
CONSULTING ENGINEER
NORMAN, OKLA.

PREFACE TO VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

In offering the following valuation to represent the original cost of its property, the company wishes the following facts to be considered:

The property was purchased by the present management in August, 1910, for a lump sum. If any books were kept before that time, which books would tend to throw any light upon this original cost, the present management does not hold the same. Since purchase, the present management has kept a complete set of books and has a complete file of vouchers to cover all payments of money made since August, 1910. The present management has always been satisfied that these books represent truly its actions. However, the division of accounts in this system of bookkeeping is not such that a division can be made accurately into the accounts as specified by the Commission in its order No. 774. By going over its books, the present management was able to take off certain totals, which would check a valuation of property installed by it. Without a complete listing of the subject matter of all the vouchers of the last four years, it would be impossible to list the exact material and labor which these sums, mentioned above, represent. Accordingly, it has been sometimes necessary in this valuation to make certain assumptions, which, however, are clearly outlined at the points where they are made.

The company wishes to express its entire willingness and wish to comply to the fullest extent with the orders of the Commission in the making of this valuation and in that matter, in all other reports. If the Commission desires that this company go to the immense amount of work, which seems to it needless, in order to find out exactly what material it installed and at what price, it is perfectly willing to do so. It believes, however, that the Commission will see that very little information can be gained in addition to what is here set forth, and that the expense of such an investigation would be prohibitive upon a plant of this size.

The total amounts expended by the present management can easily be taken from the books and the sums of all items indicated as having been installed by the present management will be found to equal this total sum, and in addition the items in each account equal the sum shown to be expended on this account by the present management.

Certain charges for omissions and contingencies have been made to many of the accounts. This is in just recognition of the fact that no appraisal can be complete, and that the values used in appraisal work are average values and that certain percentages must be added to take care of those items which cannot be set down specifi-

cally. They also cover the contingent expenses, which a contractor always includes in his estimates.

The company also feels that there should be some allowance either in this property account or in some other way for the necessary Working Capital, which is certainly a part of the investment. Additional investment amounts have been absorbed in the present Going Values. While there is no provision for items of this character in Order No. 774, the company believes that they represent actual investment, and are therefore a part of the Book Value of the company.

DETAILED SUMMARY OF VALUATION

Duncan Ice & Electric Company, Duncan, Oklahoma.

Item	Organization	EU-1 Total
Previous to purchase by present management: An estimated sum, though the right is claimed to change this if data subsequently found will indicate a different amount		\$650.00
Since purchased by present organization:		
Charter		80.00
Record Deed		18.15
Attorney Fee		161.43
Attorney Fee		54.05
Printing Bonds		125.00
Attorney Fee		60.00
Court House Donation		25.00
	Total	1173.63

In order to divide this between Ice and Electric,
the gross annual income of the two businesses for 1913
was used:

Ice	\$8481.28
Electric	\$14896.91

Since Ice is practically a six month business,
it's income is given only half weight. Therefore,
28.5% of all common property is charged to ice and
carried to account EU 29.

28.5% of \$1173.63, carried to EU 29	335.00
Total Electric for this account	838.63

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Franchises	EU-2
		Total

There is no data at present available to support any charge to this account as having actually been made. However, its value is a part of the property value of the company and the company wishes that the fact that no franchise cost is here claimed shall not be taken to mean that none was incurred--the company retaining the right to file such charge at some future time when data may be found to determine the exact size of the charge or when an approximate estimate may be made.

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	EU-3. Total
Lot 11 in block 31 in the city of Duncan, Stephens County, Oklahoma, 170' long by 90' wide.	
Lot 7 in block 51 in city of Duncan, with the following dimensions: Beginning at the S.W. corner of lot 7 of block 51, and running N 75 feet; thence W 75 feet, thence S 25 feet, thence W 10 feet to beginning.	
Lot 3 in block 51 in City of Duncan with the following dimensions: Beginning at the SW corner of lot 3; thence N 140.8 feet; thence E 61.2 feet; thence S 140 feet; thence W 46 feet to beginning.	
Lot 1 and the north 90 feet of Lot 2 in block 233 in the City of Duncan: Beginning at the SW corner of lot 2, block 233; thence N 90 feet; thence E 50 feet; thence N 60 feet to lot 1, block 233; thence E 50 feet; thence S 150 feet; thence W 100 feet to beginning, including all of lot 2, block 233.	
Also 20 feet of ground condemned by city council on the West side of Sixth street, from South line of lot 1, block 233, to North line of said lot.	
Included in a lump sum purchase price to present owner valued in 1910 by H.M. Byllesby & Co. as having an original cost of	5000.00
Total for this account for ice - 28.5%	1425.00
Total charged Electric	3575.00

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Buildings and Structures

EU-4

<u>Item</u>	<u>Total</u>
-------------	--------------

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Power Plant Buildings			Unit	Q't'y	Total
	Material	Frt. Labor	Total			
The power plant is shown on accompanying blue print. It is constructed of brick with concrete floor and wooden joists. The roof is covered with prepared tar roofing compound. The building was valued in 1910 by H.M. Byllesby & Co. This value closely approximates original cost.						4750.00
Since purchase by present organization, the following additions have been made:						
(a) Concrete floor						
(b) Tar paper roof						
(c) Partition for office and store room						
(d) Sidewalk around two sides of building						
Total cost of above improvements including contract price for some of it	395.05	196.21	591.26	1		<u>591.26</u>
Total						5341.26
Charged to Ice -- 28.5%						1522.00
Charged to Electric						3819.26

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Substation Buildings	EU-6
		Total

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Furnaces, Boilers and Accessories.							EU-7
Item	Material	Frts.	Labor	Total	Unit	Q't'y	Total
Ames R.T. Boiler, 80 HP, 60" x 16"	680.00	288.00	80.	1018	Ea.	2	2036
Breeching for same				60	"	1	60
Standard suspended setting for above boilers with steel supports	550.00	100.00	400	1050	"	1	1050
30" x 3/16" x 70' steel stack for above boilers	230.18	16.82		248.00	"	1	248
Burnham boiler feed pump, Serial #1919, 7-1/8" x 4" x 8", including foundation	250.00	25.00	75	350.00	"	1	350
Webster Feed water heater and purifier No. 2610 R, P 2040, including foun- dation	350.00	75.00	75	500.00	"	1	500
Dean steam gage 180#	1.25		.75		"	1	2
Ames steam gage 180#	1.25		.75		"	1	2
6" connection to boilers	.541	.154		.695	ft.	8	5.56
6" gate valves on connect- ions	15.00	.50		15.50	Ea.	2	31.00
8" steam main from boilers	.795	.19		.985	ft.	47	46.30
8" x 8" x 6" flanged tee on steam main	13.65	.50		14.15	Ea.	5	70.75
6" steam feed to Chuse engine	.541	.154		.695	ft.	12	8.34
6" flanged ell	4.00	.35		4.35	Ea.	1	4.35
6" gate valve	15.00	.50		15.50	"	1	15.50

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Furnaces, Boilers and Accessories.				EU-7-2			
Item	Material	Frts.	Labor	Total	Unit	Q't'y	Total
4" steam feed to compressor	.311	.08		.391	ft.	36	14.07
4" flanged ells	2.65	.30		2.95	Ea.	2	5.90
4" gate valve	8.75	.25		9.00	"	1	9.00
4" globe valve	8.80	.25		9.05	"	1	9.05
7" exhaust from Chuse	.747	.18		.927	ft.	45	41.71
7" gate valves	20.00	.50		20.50	Ea.	2	41.00
7" flanged ells	5.50	.40		5.90	"	8	47.20
8" exhaust head pipe	.795	.19		.985	ft.	16	15.77
4" exhaust from compressor	.311	.08		.391	"	30	11.73
4" flanged ells	2.65	.30		2.95	Ea.	4	11.80
4" gate valve	8.75	.25		9.05	"	1	9.05
2" steam and water mains	.10	.028		.128	ft.	158	20.22
2" globe valves	2.80	.10		2.90	Ea.	10	29.00
2" tees	.40	.03		.43	"	10	4.30
2" ells	.36	.02		.38	"	24	9.12
1 1/2" pipe pumps and boilers	.075	.024		.099	ft.	181	18.00
1 1/2 " ells	.25	.02		.27	Ea.	26	7.02
1 1/2" tees	.30	.02		.32	"	14	4.48
1 1/2" globe valves	2.00	.08		2.08	"	13	27.04
1 1/2" key valves	1.50	.06		1.56	"	10	15.60
1" piping water and steam	.046	.02		.066	ft.	344	22.70
1" ells	.14	.015		.155	Ea.	18	2.79

DETAILED SUMMARY OF VALUATION

Duncan Electric and Ice Company, Duncan, Oklahoma.

Item	Furnaces, Boilers and Accessories.			EU-7-3	
	Material	Frts.	Labor Total	Unit	Q't'y Total
1" tees	.17	.02	.19	Ea.	24 4.56
1" valves	1.75	.05	1.80	"	13 23.40
Pipe covering			150.00	"	150.00
Installation of above piping and connections			1 500 1500.00		1500.00
Contingencies, omissions, waste, & errors, 5%					324.21
Contractor's profit, 10%					<u>680.85</u>
Total as represented at time of purchase (Forwarded to end of account)					7489.32
The following items were purchased & installed by the present management:					
Brownell R.T. Boiler 100 HP, 66" x 16" (S.H.)	500	60.32 (See below)	560.32	Ea.	1 560.32
Standard setting for above including steel supports	464.60 (installed)			"	1 464.60
30" x 3/16" x 70' steel stack for above boiler. By contract.	230.18	16.82	247.00	"	1 247.00
Gardner boiler feed pump 4" x 6" x 4" No 1305 AG 6 (S.H.)	96.00	(Included below)	96.00	"	1 96.00
Fairbanks Morse steam gage 180#	1.25		1.25	"	1 1.25

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Furnaces, Boilers and Accessories			EU-7-4	
	Material	Frt.	Labor Total	Unit Q't'y	Total
6" connection to boiler	.541	Included elsewhere	.541	ft. 5	2.70
6" gate valve	15.00	" "	15.00	Ea. 2	30.00
8" x 8" x 6" flanged tee on main	13.65	" "	13.65	" 1	13.65
6" steam feed to Twin City engine	.541		.541	ft. 18	9.75
6" flanged ells	4.00		4.00	Ea. 2	8.00
6" gate valve	15.00		15.00	" 2	30.00
2" pipe on pump, etc.	.10		.10	ft. 130	13.00
2" ells	.36		.36	Ea. 12	4.32
2" tees	.40		.40	" 6	2.40
2" globe valves	2.80		2.80	" 10	28.00
Miscellaneous piping on pumps and boilers	65.00		65.00		65.00
Asbestos pipe covering	60.00		60.00		60.00
Miscellaneous waste and foundational materials, small fittings, etc., and 2 sets grate bars	231.23		231.23		231.23
Installation of above material and other labor in connection with rearrangement of plant			959.03		<u>959.03</u>
Freight charges not assignable above		3.65			3.65
Total expended by present owner	1790.08	80.79	959.03		2829.90

DETAILED SUMMARY OF VALUATION

Duncan Electric & Gas Company, Duncan, Oklahoma.

Furnaces, Boilers and Accessories				EU-7-5
Item	Material	Frts.	Labor Total	Unit Q't'y Total
Old installation brought forward				<u>7489.32</u>
Total				10319.22
Total charged to Ice-28.5%				2941.00
Total charged to Electric				7378.22

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Steam Engines				EU-8	
	Material	Frts.	Labor	Total	Unit Q't'y	Total
Chuse Engine, 13 1/2" x 13", 257 R.P.M. #13 4 valve concrete foundation	1350	100	500 (Includes base)	1950	Ea. 1	1950.00
Omissions, errors, contingencies, 3%						58.50
Contractor's profit, 10%						200.85
<u>Installed since purchase</u>						
Twin City Corliss Engine, serial #2155, 12" x 26", 180 R.P.M. Concrete foundation, simple valve	1573.83	165.91	719.85 (Includes base)	2459.59 "	1	<u>2459.59</u>
Total for this account						4668.94

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

<u>Item</u>	<u>Gas Engines</u>	<u>EU-9</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Accessory Electric Power Equipment				EU-11	
	Material	Frts.	Labor	Total	Unit Q't'y	Total
<u>Switchboard</u>						
<u>Panel #1</u>						
Vermont Marble G.E. 1 1/2" x 36" x 78" carrying					1	
Wagner A.C. Voltmeter on bracket, Type R #11706, 0-150					1	
Wagner A.C. Ammeter Type R 0-30 Nos. 12560, 12558, 12432					3	
Cutler Hammer Con- centric Rheostat Mechanism					2	
Knife switch DP ST 60A. 250 Volt					1	
Fused switch, 3P ST 150 A. 250 V quick break					1	
Sangamo watt-hour meter Type F 2200 V, 20A, 40-240, cycles #111132					1	
Rheostat for exciter, Cutler Hammer 50 Ohm					1	
Rheostat for generator Cutler Hammer Cat. #2178					1	
Total panel	300	20	30	350	E a.	1 350.00
Bus bars, switch- board, wiring, etc.				15.00		15.00
<u>For street lights</u>						
G.E. Ammeter Type H #81614 0-25 mounted on piece of wood	25	.50	1.00	26.50	1	26.50
A B Electric Co. Constant Current regulator						

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Accessory Electric Power Equipment				EU-11-2	
	Material	Frts.	Labor	Total	Unit Q't'y	Total
1400 V 60 cycles, 6.6 A, #416	500	8.00	25.00	533.00	1	533.00
Wesco Transformer for plant lighting 2KW Type HE	32.40	2.34	4.00	38.74	2	77.48
Omissions, contin- gencies, etc. 4%						40.08
Contractor's profit, 10%						104.21
Total represented at time of purchase, forwarded to end of account						1146.27

Added since purchase
by present management.

Panel #2

Vermont marble	
G.E. S.O. 964433	
#116806 Type ATGF	
160 KW 2300 V 50A	
Size:	
Top 1½ x 32 x 48	
Bottom 1½ x 32 x 28	1
carrying	
G.E. Ammeter	
Type R6 #282608,	
276474, 276660.	3
G.E. Voltmeter	
Type R6 #263520	1
8 point potential	
receptacle	1
G.E. Concentric	
rheostat mechanism	1
Field switch, SP.	
quick break, 100A	1
G.E. Oil switch 2	
lever 9 terminal,	
overload trip	1
40A. WSF 90078	
G.E. Wattmeter,	

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Accessory Electric Power Equipment				EU-11-3	
	Material	Frt.	Labor	Total	Unit Q't'y	Total
3 phase 40A, 2300 V, 60 cycle #2620553, Type DS 5					1	
Oil switch 6 terminal no trip					1	
<u>On Rear</u>						
Oil switch mechanism 9 terminal--6 terminal					2	
Exciter rheostat CH #4168					1	
Generator rheostat CH #605715					1	
G.E. Potential transformer Form A, type P 1100/2200/110/112					2	
G.E. Current transformers, type S, Form K6 8:1					2	
Total of above with supports	255.94	22.79	See below	278.73	Ea. 1	278.73
<u>Black Conduit</u>						
2"-Panel #2 to generator	.152	See below		.152 ft.	46	6.99
2"-Panel #1 to generator	.152			.152 ft.	15	2.28
1½" Panel #1 to generator and exciter	.103			.103 ft.	90	9.27
1½"-Panel #2	.103			.103 ft.	32	3.30
<u>Fittings</u>						
2" type F conduit	2.34			2.34	Ea. 2	4.68
2" type F conduit	2.34			2.34	" 2	4.68
1½" type E conduit	1.10			1.10	" 6	6.60
1½" type E conduit	1.10			1.10	" 4	4.40
2" ells	.44			.44	" 4	1.76

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Miscellaneous Power Plant Equipment						EU-12	
Item	Material	Frts.	Labor	Total	Unit	Q't'y	Total
4" 2 ply dynamo belt for exciter	.94	.0100	Included in EU 10	.9501	ft.	22	20.90
Contractor's profit, 10%							2.09
(*) 4" 2 ply dynamo belt for exciter	.94	.0101	"	.9501	ft.	30	28.80
(*) Set of wrenches and engine tools	40.00			40.00		1	40.00
(*) Belt-dressing and accessories	5.00			5.00			5.00
Firing tools				20.00			20.00
Chair, common				1.50	Ea.	2	3.00
Wheelbarrow				5.00	"	1	5.00
Table pine 3' x 5'				5.00	"	1	5.00
Oil tanks				6.00	"	2	12.00
Ladder				4.00	"	1	4.00
Oil cans, wrenches and miscellaneous tools				30.00			30.00
Omissions, and contin- gencies, 4%				6.93			6.93
(*) Indicates purchased by present owner							
Total of items marked(*)							73.80
Total of items not marked (*)							<u>101.99</u>
Total for this account							175.79

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

	Substation Equipment	EU-13
Item		Total
Blank		

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Poles & Fixtures

EU-14

Preface

The present management has installed a total of 100, 25'-6" top poles. As mentioned in the general preface to this report, a great many items are not known in their exact amounts, without further search into old vouchers of the company. Consequently, the method of handling this account is to assume that the same proportion of the other items of this account were placed in service by the present management. The total charged to this account by the present management is known and agrees with the total on page 3 of this account.

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Poles & Fixtures				EU-14		
	Material	Frts.	Labor	Total	Unit	Q't'y	Total
<u>Poles-Cedar</u>							
15'-5" top	.85	.98	3.00	4.83	Ea.	5	24.16
20'-5" "	.85	.98	3.00	4.83	"	94	455.95
25'-5" "	.85	.98	3.00	4.83	"	1	4.83
25'-6" "	1.75	1.23	3.50	6.48	"	124	803.50
25'-7" "	2.30	1.72	3.75	7.77	"	1	7.77
30'-6" "	2.76	1.72	4.00	8.48	"	3	25.44
30'-7" "	4.50	2.20	4.50	11.20	"	10	112.00
30'-8" "	5.50	2.94	5.00	13.44	"	1	13.44
35'-6" "	6.00	2.20	5.00	13.20	"	3	39.60
<u>Steel Strand Guy</u>							
3/8"	.03	.003	.035	.068	ft.	628	42.70
<u>Fir Cross Arms</u>							
3'-2 pin	.22	.0735	.40	.6935	Ea.	1	.69
4'-4 "	.31	.098	.56	.968	"	248	240.50
6'-6 "	.50	.147	.76	1.407	"	2	2.81
<u>Galvanized iron braces</u>							
24" x 1 1/4" x 1/4"	.075	.02	Included	.095	"	253	24.35
			with				
			cross				
			arms				
<u>Pins</u>							
Locust 1 1/2" x 9"	.018	.007	.01	.035	"	788	27.58
<u>Metal Brackets</u>							
Wesco #042006	.15	.02	.07	.24	"	112	26.88
<u>Brackets</u>							
2" x 2 1/4" x 12" oak	.019	.01	.08	.109	"	130	14.17
<u>Insulators</u>							
Hemingray 036461							
DG DP glass, pin	.04	.008	.015	.063	"	884	55.69
22 oz. strain, porcelain	.10	.011	.30	.411	"	9	3.70
<u>Bolts</u>							
1/2" x 14" machine	5.05	1.20	Included	6.25	C	242 est	15.12
			with				
			cross				
			arms				

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Poles & Fixtures				EU-14-2		
	Material	Frts.	Labor	Total	Unit	Q't'y	Total
4" carriage bolt	1.70	.25	Included	1.95	C	253 est	4.93
			with				
			cross arms				
4" lag screw	1.80	.20	"	2.00	C	175 "	3.50
12 penny nail	.04	.01	"	.05	lb.	100	5.00
20 penny nail	.04	.01	"	.05	lb.	25	1.25
Omissions, errors, contingencies, etc. 5%							117.33
Contractor's profit, 10%							<u>207.29</u>
Forwarded to end of account, representing							
Total installed at time of purchase							2280.18
<u>Installed by present owner</u>							
<u>Poles-Cedar</u>							
25'-6" top delivered				1.8482	Ea.	100	184.82
<u>Steel Strand Guy</u> 3/8"					ft.	260	
<u>Fir Cross Arms</u> 4'-4 pin						103	
<u>Pins</u> Locust 1 1/2" x 9"						326	
Total Arms and Pins delivered				107.46	Lot		107.46
<u>Galvanized Iron Braces</u> 24" x 1 1/4" x 1/4"						104	
<u>Insulators</u> Hemingray glass pin #036461 22 oz. strain						365 4	

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Conduit System	EU-15
		Total

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Municipal Lighting				EU-16		
	Material	Frts.	Labor	Total	Unit	Q't'y	Total
<u>Arc Lamps</u>							
Cutter series tungsten, #107964, 6.6 A						29	
Shade						29	
Socket						29	
Cutter series tungsten 6.6 A #30774 on Cutter "Hotel" bracket with Interurban crook						40	
Shade						40	
Socket						40	
All purchased and installed by present owner							
Total for this account	943	148.41	647.60	1739.01	Lot		1739.01

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Transmission and Distribution System							EU-17		
Item	ft.	#/M	ft. Material	Frts.	Labor	Total	Unit	Q't'y	Total
EU 17 a Blank									
EU 17 b									
<u>Wire</u>									
#0-TBWP	9116	407	16.30	1.75	5.00	23.05	Cwt.	3710	855.05
#4-TBWP	10483	164	16.30	1.75	5.00	23.05	"	1720	396.33
#6-TBWP	6084	112	16.30	1.75	5.00	23.05	"	682	157.08
#8-TBWP	105587	75	16.30	1.75	5.00	23.05	"	7920	1825.40
#10-TBWP	11776	53	17.30	1.75	5.00	24.05	"	624	150.10
#12-TBWP	1972	35	18.30	1.75	5.00	25.05	"	69	17.28
#14-TBWP	170	25	19.30	1.75	5.00	26.05	"	4	<u>1.10</u>
Primary Total								3402.34	
Total value of wire in place at time of purchase plus the total material charge of wire since purchase (See note following EU 18)									3794.10
Freight charged to wire since purchase									<u>4.63</u>
Total for this account								3798.73	

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Electric Service Wire						EU-18		
	ft.	#/Mft.	Material	Fr't.	Labor	Total	Unit	Q't'y	Total
#8 TBWP	11428	75	16.30	1.75	7.50	25.55	Cwt	857.10	219.01
#10 TBWP	497	53	17.30	1.75	7.50	26.55	"	26.33	6.99
#12 TBWP	11163	35	18.30	1.75	7.50	27.55	"	390.70	107.63
#14 TBWP	173	25	19.30	1.75	7.50	28.55	"	4.32	<u>1.23</u>
Primary Wire total									334.86
Corrected total (See note following this sheet)									373.64
Services								194	
<u>Insulators</u>									
Hemingray Petticoat									
glass pin #036461			.04	.008	.015	.063	Ea.	400	25.20
<u>Brackets</u>									
2" x 2 $\frac{1}{4}$ " x 12" oak			.019	.01	.08	.109	"	370	<u>40.30</u>
Total for this account									439.14

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Note pertaining to EU 17-18

The following explanation pertains to the method of arriving at the total of the wire accounts of EU 17 and 18:-

All wire lengths given in EU 17 are straight lineal measurements with the addition of five percent for sag, span and waste and of one percent for ties.

All wire lengths given in EU 18 are straight lineal measurements with the addition of seven percent for sag, span and waste and of one percent for ties.

The wire measured and indicated in these two accounts consists of wire put in before purchase and after purchase by present management. The figures on material only are all that are available from the present management. In order to arrive at an equitable division between the two parts of the construction, the following method was employed:

Total of wire accounts, 17 and 18, Primary total:	3737.20
Total of material only accounts 17 and 18	2624.92
Total material bought since purchase of plant	669.30
Fraction of wire in place at time of purchase	<u>1955.62</u>
	2624.92

Value of wire in place at time of purchase according to above figures -- $\frac{1955.62}{2624.92} \times 3737.20 = 2784.50$	2784.50
---	---------

12½% higher copper wire before purchase adds 12½% of 1955.62	<u>244.45</u>
---	---------------

Total cost of wire in place at time of purchase (Sum of last two items)	3028.95
--	---------

Errors, omissions and contingencies - 5%	151.45
Contractor's profit, 10%	318.04
Total cost of material bought since purchase	<u>669.30</u>
Total for EU 17 plus wire of EU 18, minus labor and freight on wire installed since purchase	4167.74

This amount was divided between accounts EU 17 and EU 18 in the proportion indicated by their primary totals, giving

EU 17	3794.10
EU 18	373.64

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Line Transformers and Appurtenances					EU-20	
	Material	Frts.	Labor	Total	Unit	Q't'y	Total
Transformers-							
2200/110-220							
Manufacturer Type K.W.							
Wesco	H.E.	1	23.10	1.74	4.50	29.34	3 88.02
"	"	2	32.40	2.16	5.00	39.62	9 356.58
(* ")	"	3	38.76	See below		38.76	Ea. 2 77.52
(* ")	"	5	57.76	" "		57.76	" 1 57.76
"	"	5	57.76	4.42	6.00	68.18	" 2 136.36
"	"	10	90.20	7.55	8.25	106.00	" 2 212.00
Ft. Wayne	A	15	126.60	10.60	9.50	146.70	" 2 293.40
(* Lightning Arresters		2.1666	See below			2.1666	" 3 6.50
(*) Indicates purchased by present owner							
(*) Freight charged							
on (*) items			17.65		17.65		
(*) Labor charged							
on (*) items			30.53		<u>30.53</u>		
Total items not (*)							1086.36
Omissions, errors and contingencies, 3%							32.59
Contractor's profit, 10%							111.90
Total items marked (*)							<u>189.96</u>
Total for this account							1420.81

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Electric Meters				EU-21	
	Material	Frt.	Labor	Total	Unit Q't'y	Total
<u>Meters - 2 wires</u>						
single phase 110 volts						
Manufacturer Type Amp.						
Sangamo	H.	5	10.50	.20	10.70	Ea. 88 941.60
"	F	5	10.50	.20	10.70	" 4 42.80
Ft. Wayne	K	5	13.00	.20	13.20	" 59 778.80
"	"	K	10	15.00	.20	15.20 " 12 182.40
Westinghouse						
Style 574260		5	10.50	.20	10.70	" 2 21.40
" 575260		20	13.50	.28	13.78	" 2 27.56
" 575260		40	17.20	.28	17.48	" 1 17.48
(The Type H Sangamo meters now installed were sent the company by the manufacturer in exchange for Type F, originally purchased. Prices of Type F are therefore given.)						
Total						2012.04
H.M. Byllesby & Co. reports 76 meters on hand at time of purchase by present owner. Since that time the present owner has spent						
			684.24	17.99	Total	<u>702.23</u>
Meter account at time of purchase						1309.81
Omissions, contingencies and errors, 2% of above						<u>26.19</u>
Total for this account						2038.23

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

<u>Item</u>	<u>Commercial Arc Lamps</u>	<u>EU-22</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Electric Tools and Implements		EU-23
	Material	Quantity	Total
Blow torch	4.00	1	4.00
Climbers, pair	2.00	1	2.00
Spade	1.50	1	1.50
Pick	2.00	1	2.00
Hammer, machinist	1.50	1	1.50
Spoon	2.00	1	2.00
Wrench, monkey 10"	.80	1	.80
Wrench, pipe 18"	1.50	1	1.50
Shovel, short handle	1.00	1	1.00
Shovel, long handle	2.00	1	2.00
Saw, bracket	2.00	1	2.00
Saw, hand	1.75	1	1.75
Brace	2.00	1	2.00
Set bits	3.00	1	3.00
3" pipe cutter	4.00	1	4.00
3" pipe threader	4.00	1	4.00
Digging bar	2.50	1	2.50
Tamping bar	3.50	1	<u>3.50</u>
Total for this account			40.05

Of this above account,
25.59 was spent since
purchase by present
owner.

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

	Electric Laboratory Apparatus	EU-24
<u>Item</u>		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Dams, Canals & Pipe Lines	EU-25
		Total

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

<u>Item</u>	<u>Turbines and Water Wheels</u>	<u>EU-26</u>
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

<u>Item</u>	Electric Motors	EU-27
	<u>Total</u>	

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Other Tangible Electric Property	EU-28
		<u>Total</u>

Blank

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Other Tangible Property	EU-29 Total
From EU 1		335.00
" EU 3		1425.00
" EU 5		1522.00
" EU 7		2941.00
Ice property as of date of Byllesby valuation		10000.00
Expended on same since purchase		1094.22
From EU 30		186.30
" EU 31		997.30
" EU 32		62.70
" EU 33		256.50
" EU 34		769.50
" EU 35		256.50
" EU 36		<u>64.15</u>
Total for this account		19910.17

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	General Equipment			EU-30
	Total	Unit	Q't'y	Total
<u>EU 30-A General Office Equipment</u>				
Typewriter desk	22.00	Ea.	1	22.00
Underwood Typewriter, 14" carriage (S.H.)	85.00	"	1	85.00
Burroughs Adding Machine 10 column #3	200.00	"	1	200.00
(*) Hall Safe	125.00	"	1	125.00
Stenographers chair, oak, straight chair, oak, swivel, chair, oak.	34.00	"	1 each	34.00
Globe file - 3 section 2 sections letter size, 1 section of 4 - 4" x 6" drawers	30.00		1	30.00
Oil stove			1	
Sanitary oak table desk, 35" x 59"	29.00		1	29.00
Papering and repair to office				<u>28.69</u>
(*) In office at time of purchase, all other items bought since purchase				
Total				653.69
<u>EU 30 B - General Shop Equipment</u>				
Blank				
<u>EU 30 B - General Store Equipment</u>				
Blank				
<u>EU 30 D - General Stable Equipment</u>				

No wagon equipment owned by Electric.

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	General Equipment	EU-30-2
	Total	
Use the ice property		
Total for this account		653.69
Charged to Ice EU 29 - 28.5%		186.30
Charged to Electric		467.39

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Engineering & Superintendence	EU-31- Total
Engineering and Superintendence on the estimated amount in the hands of an engineer during construction before purchase by present management.		
Engineering	5%	1750.00
Superintendence	5%	1750.00
Since purchase by present management, the engineering is included in labor charges, distributed over the different items.		
Total for this account		3500.00
Carry 28.5% to EU 29 for Ice		997.30
Charged to Electric		2502.70

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Injuries During Construction	EU-32 Total
Chargeable to this account is the liability insurance on the payroll previous to purchase by present management. Figured at an average of 3%		220.00
No specific charges are known to have been made by present management. Any charges to liability insurance have been carried elsewhere on the books.		
Total for this account		220.00
Charged to Ice EU 29, 28.5%		62.70
Charged to Electric		157.30

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Law Expenditures During Construction	EU 33 Total
<p>There is no better basis to make a charge against this account than to estimate the general average of past experience of approximately 2% of the total valuation of the property. Consequently there is here charged 2% (approximately) of the value of the property at time of purchase as indicated by present value of the plant less money expended upon same by present management. If data is later found to substantiate any specified sum against this account, company claims the right to file same at some future date.</p>		900.00
<p>No charge against this account is found on the books of the present management.</p>		
Total for this account		900.00

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Interest During Construction	EU-34 Total
The only method of making a charge against this account to represent expenditure before purchase by present management, is to take an average of 6% of total value, which is		2700.00
Since purchase by present management no interest charge has been made.		
Total for this account		2700.00
Charged to Ice EU 29, 28.5 %		769.50
Charged to Electric		1930.50

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Miscellaneous Construction Expenditures	EU-35 Total
The only method of making a charge against this account previous to purchase by present management, is to take a general average of approximately 2%, which is		900.00
Since purchase, there is no charge on the books of the company.		
Total for this account		900.00
Charge to Ice EU 29, 28.5%		256.50
Charge to Electric		643.50

DETAILED SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma.

Item	Taxes	EU-36
		Total
No specified amount can be claimed against this account. An average charge is suggested of 1/2% the value of the property, this applying to previous to purchase by present management.		225.00
No charge against this account has been made by present management.		
Total for this account		225.00
Charged to Ice EU 29, 28.5%		64.15
Charged to Electric		160.85

GENERAL SUMMARY OF VALUATION

Duncan Electric & Ice Company, Duncan, Oklahoma

Acct. No.	Name of Account	Total	Amount Charged to Elec.
EU 1	Organization	1173.63	838.63
EU 2	Franchises		
EU 3	Land Devoted to Electric Operations	5000.00	3575.00
EU 4	Buildings and Structures		
EU 5	Power Plant Buildings	5341.26	3819.26
EU 6	Substation Buildings		
EU 7	Furnaces, Boilers and Accessories	10319.22	7378.22
EU 8	Steam Engines	4668.94	4668.94
EU 9	Gas Engines		
EU 10	Electric Generators	4510.39	4510.39
EU 11	Accessory Electric Power Equipment	1619.69	1619.69
EU 12	Miscellaneous Power Plant Equipment	175.79	175.79
EU 13	Substation Equipment		
EU 14	Poles and Fixtures	3585.81	3585.81
EU 15	Conduit System		
EU 16	Municipal Lighting	1739.01	1739.01
EU 17	Transmission and Distributing System	3798.73	3798.73
EU 18	Electric Service Wire	439.14	439.14
EU 19	Electric Meter Installation	212.92	212.92
EU 20	Line Transformers and Appurtenances	1420.81	1420.81
EU 21	Electric Meters	2038.23	2038.23
EU 22	Commercial Arc Lamps		
EU 23	Electric Tools and Implements	40.05	40.05
EU 24	Electric Laboratory Apparatus		
EU 25	Dams, Canals and Pipe Lines		
EU 26	Turbines and Waterwheels		
EU 27	Electric Motors		
EU 28	Other Tangible Electric Property		
EU 29	Other Tangible Property of the Respondent	19910.17	19910.17
EU 30	General Equipment	653.69	467.39
EU 31	Engineering and Superintendence	3500.00	2502.70
EU 32	Injuries During Construction	220.00	157.30
EU 33	Law Expenditures During Construction	900.00	643.50
EU 34	Interest During Construction	2700.00	1930.50
EU 35	Miscellaneous Construction Expenditures	900.00	643.50
EU 36	Taxes	225.00	160.85

Grand total representing original cost
of property

66276.53

VALUATION

Duncan Electric and Ice Company, Duncan, Oklahoma.

Total amount charged to property account June 30, 1914, \$66276.53

STATE OF OKLAHOMA)
) ss.

 COUNTY)

This is to certify that this report was prepared under the requirements of Order No. 774, and instructions as promulgated by the Corporation Commission of Oklahoma, under my personal supervision. I further certify that it is in accordance with the books and records of this company, and that the above is correct.

 Chief Engineer

 Managing Officer

Subscribed and sworn to before me this ___ day of _____ A.D., 1915.

 Notary Public.

APPENDIX H
FIRST QUARTERLY REPORT
FOR
THE DUNCAN ELECTRIC AND ICE COMPANY
FROM JULY 1, 1914 TO SEPTEMBER 30, 1914.

CORPORATION COMM-

NAME OF UTILITY, Duncan Electric and Ice Company

Detailed Completion Report of Construction Expenditures During the

Description of Work, Material.

Give Source of Receipts of Money Expended on this Work _____

No. of Acct. Units KIND-TYPE-CLASS Unit Cost Cost				
FOR MATERIAL ONLY				
EU 20	1	Westinghouse Type S, 5 KW transformer, 2200/110 V (SH)		
	1	Do 3 KW (SH)		
Total cost of the two				75.00

MISSION OF OKLAHOMA.

Location, Duncan, Oklahoma.

No. 1

Three Month Period Ended September 30, 1914.

Located _____ Date Completed* _____

FOR LABOR COSTS ONLY				OTHER CHARGES			Total	Total Cost
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost	Cost	By Accounts.

75.00 20- 75.00

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

CORPORATION COMMISSION OF OKLAHOMA

Summary of Completion Reports for Quarter Ending September 30, 1914.

Duncan Electric and Ice Co.

Duncan, Oklahoma.

No. of Acct.	Give Name of Account and Individual Numbers on Completion Reports	Totals of Accounts as Shown on Completion Reports
EU 20	V-1 #1 Transformers and Appurtenances	75.00

INSTRUCTIONS

Utilities will summarize completion reports, by accounts under headings on Form V-2. The number and name of the accounts should be inserted by the respondent and the completion order No. and amount chargeable to each account, entered opposite the completion order number.

OATH

Total amount charged to property accounts as reported June 30, 1914,
-----\$66276.53

Total net charges to property accounts for the period July 1st, 1914, to the last day of Calendar Quarter, both inclusive, preceding the quarter for which this report is rendered, per quarterly reports filed with the Corporation Commission of Oklahoma.-----\$-----

Total net charges to property accounts for the quarter covered by this report, (see opposite side)-----\$ 75.00

Total charges to property accounts on last day of calendar quarter for which this report is made-----\$66351.53

STATE OF Oklahoma:
 : ss.
COUNTY OF _____:

This is to certify that this report was prepared under the requirements of order No. 774, and instructions as promulgated by the Corporation Commission of Oklahoma, under my personal supervision. I further certify that it is in accordance with the books and records of this Company, and that the above report is correct.

(Chief Engineer)

(Managing Officer)

Subscribed and sworn to before me this the _____ day of _____, 1914.

APPENDIX I
SECOND QUARTERLY REPORT
FOR
THE DUNCAN ELECTRIC AND ICE COMPANY
FROM OCTOBER 1, 1914 to DECEMBER 31, 1914.

... ..
... ..
... ..

CORPORATION COMM-

NAME OF UTILITY, Duncan Electric and Ice Company,

Detailed Completion Report of Construction Expenditures During the

Description of Work, Change of Type of Furnace,

Give Source of Receipts of Money Expended on this Work _____

No.	FOR MATERIAL ONLY				
of	Acct.	Units	KIND-TYPE-CLASS	Unit Cost	Cost
EU 7			Changing furnace from coal to gas burning, change made in 1913 but no charge made till 1914.		200.00

MISSION OF OKLAHOMA.

Location, Duncan, Oklahoma.

No. 2.

Three Month Period Ended December 31, 1914.

Located _____ Date Completed _____

FOR LABOR COSTS ONLY				OTHER CHARGES			Total Cost	Total Cost by Accounts
Hours	Kind	Unit Cost	Cost	Kind	Units	Unit Cost		
							200.00	

200.00

INSTRUCTIONS

A Form V-1 must be furnished for each job, except for minor work where several jobs may be reported on one form, but the detail of each job should be shown the same as if a separate report was made.

Where jobs cover more than one account, the items chargeable to each account should be shown opposite the account number.

Utilities will number each Form V-1 consecutively as of July 1st, 1914.

CORPORATION COMMISSION OF OKLAHOMA.

Summary of Completion Reports for Quarter Ending December 31, 1914.

Duncan Electric and Ice Co.

Duncan, Oklahoma.

No. of Acct.	Give Name of Account and Individual Numbers on Completion Reports	Totals of Accounts as Shown on Completion Reports
EU 7	V-1 #2 Furnaces, Boilers and Accessories	200.00

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BIBLIOGRAPHY

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<u>Volume</u>	<u>Page</u>	<u>Date</u>	<u>Reference</u>
3	149	June 4, 1913	Mayor of Buffalo vs. Cataract Power and Conduit Company; New York Public Service Commission, (Second District)
3	169	June 11, 1913	Same case, continued.
4	67	October 29, 1913	Merger of Berlin Electric Light Company, The Cascade Electric Light and Power Company and the Cascade Light and Power Company, with the Twin State Gas and Electric Company; New Hampshire Public Service Commission.
4	72	October 29, 1913	Buffalo Gas Company vs. the City of Buffalo; New York Public Service Commission. (Second District)
4	137	November 26, 1913	Valuation Decisions of the New York Public Service Commission, First District, by Robert H. Whitten.
4	142	November 26, 1913	The Accounting Side of Rate Making, by Edward W. Bemis.

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