

Definitions and Directions

1. "Electric utility" and "utility" means any private corporation, cooperative or membership corporation, municipality, or any political subdivision, agency or instrumentality of the Federal or any state or municipal government which owns or controls facilities for the generation, transmission or distribution of electrical power and energy, or which in the past has done so.
2. "Coordination" and "coordinating" shall include, but are not limited to, reserve sharing, economic dispatch or economic interchange, and pooling of load growth for joint or staggered additions of generating or transmission facilities.
3. "Integration" and "integrating" shall mean the coordination or coordinating of bulk power supply facilities by a single utility or by two or more utilities owned or controlled by a common entity or common financial interest.
4. "Municipality" shall mean each city, town, village or other political subdivision, incorporated or unincorporated, in which the system principally provides electric service.
5. The account titles used herein shall be defined as in the Uniform System of Accounts Prescribed for Public Utilities and Licensees (Class A and B).
6. In all cases where data are requested by years, indicate whether the information is provided on a calendar or fiscal year basis. Such basis shall be the usual accounting

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period used by the system. If data are provided on a fiscal year basis, state the day on which each fiscal year ended and provide data through fiscal year 1972 if such fiscal year ended on or before September 30, 1972.

7. Answers referring to documents shall include all documents relating to the time period specified therein, whether prepared before, during or after said period.

8. If any question is inapplicable, so state and provide a brief explanation of why it is inapplicable.

9. As hereinafter used, "document request" refers to those requests for documents which were served upon respondent pursuant to an Atomic Energy Commission subpoena.

Initial Interrogatories

1. Define in detail the customer characteristics required for service under each rate schedule, tariff, rate contract or agreement provided in response to document request 1(d).

2. (a) Identify all electric rate schedules, tariffs and rate contracts or agreements furnished in response to document request 1(c) under which five or fewer customers were served in 1971 or 1972.

(b) State the name and address of each customer so served and for each year 1960 to date state each such customer's annual peak demand, annual kilowatt-hour consumption and the gross annual electric revenues received by the system from such customer.

(c) For each rate schedule, tariff, rate contract or agreement identified in subparagraph (a), state the number of customers served thereunder in each year 1960 through 1971 and provide the name and address of each such customer.

3. State whether in the period 1960 to date, the system has proposed, or discussed the possibility of proposing, to any customer or other person any electric rate schedule, tariff, rate contract or agreement, conditions and terms of service or any other statement of rates other than those furnished in response to document request 1(c).

4. State the adjustment level of each fuel, purchased power, materials, commodity, tax, age, or other adjustment clause or surcharge applicable on January 1 and June 30 of each year 1960 through 1972 and explain the basis on which each adjustment was determined.

5. State the effective date and describe the substance of each change made in any rate schedule, tariff, contract, agreement or terms and conditions of service at any time during the period January 1, 1960 to date. State the effect on revenues of each change in dollar and percentage terms.

6. For each of the dates January 1, 1960, January 1, 1965, January 1, 1970, January 1, 1972, and June 30, 1972, state the typical net monthly bills for electric service employing the assumptions and definitions set forth in Attachment A for the following customer classification and monthly demand-energy combination (designate the rate schedule used for each calculation and identify any discount or special charge):

(a) Residential

(i) minimum bill and number of kilowatt-hours included; indicate the number of minimum bills rendered each month of each of these years;

- (ii) 100 kilowatt-hours;
- (iii) 250 kilowatt-hours;
- (iv) 500 kilowatt-hours;
- (v) 750 kilowatt-hours;
- (vi) 1,000 kilowatt-hours.

(b) Commercial

- (i) 3.0 kilowatts-375 kilowatt-hours;
- (ii) 6.0 kilowatts-750 kilowatt-hours;
- (iii) 12.0 kilowatts-1,500 kilowatt-hours;
- (iv) 30.0 kilowatts-6,000 kilowatt-hours;
- (v) 40.0 kilowatts-10,000 kilowatt-hours.

(c) Industrial

- (i) 75 kilowatts-15,000 kilowatt-hours;
- (ii) 75 kilowatts-30,000 kilowatt-hours;
- (iii) 150 kilowatts-30,000 kilowatt-hours;
- (iv) 150 kilowatts-60,000 kilowatt-hours;
- (v) 300 kilowatts-60,000 kilowatt-hours;
- (vi) 300 kilowatts-120,000 kilowatt-hours;
- (vii) 500 kilowatts-100,000 kilowatt-hours;
- (viii) 500 kilowatts-200,000 kilowatt-hours;
- (ix) 1,000 kilowatts-200,000 kilowatt-hours;
- (x) 1,000 kilowatts-400,000 kilowatt-hours;



(xi) 2,500 kilowatts-1,000,000 kilowatt-hours;

(xii) 5,000 kilowatts-2,000,000 kilowatt hours.

7. (a) For each township or incorporated area served by the system, state for each year 1960 through 1971 the name and address of the five industrial and five commercial customers consuming the largest number of kilowatt hours of electricity supplied by the system.

(b) For each customer named in 7(a) state for each year 1960 through 1971 the following:

- (i) kilowatt-hour sales to the customer;
- (ii) revenues derived from the customer;
- (iii) the customer's peak demand, the month in which that peak occurred, and the customer's demand in the month of the system's peak;
- (iv) the annual load factor for the customer in the month of the customer's peak demand and in the month of the system's peak;
- (v) applicable rate schedules for service to the customer;
- (vi) the minimum monthly charge applicable to the customer;
- (vii) the voltage at which service was provided to the customer.

8. (a) State the length and voltage of each transmission or distribution line running from the bulk power supply delivery point or common supply facility, to each of the customers identified in response to Interrogatory 7. Describe each delivery point used.

(b) State separately the cost of constructing each line and the cost and description of each related facility required to deliver power to such customers.

9. (a) State whether the system or the municipality in which it serves, or any agency or department of that municipality, at any time from January 1, 1960 to date has had an industrial development department or an individual or a group of individuals which has engaged in activities or other efforts, alone or with any other person or entity, designed to attract commercial and/or industrial facilities to locate in the municipality or within the area served by its electric facilities. If so:

(i) state the name and address of such department or individual(s);

(ii) state the name and address of each person in charge of such activities or other efforts during the period January 1, 1960 to date together with the dates during which such person held such position;

(iii) state the name and address of any person or other entity with whom the system engaged in such

activities or other efforts and the dates during which it did so.

(b) State whether the system or the municipality in which it serves, or any agency or department of that municipality, at any time from January 1, 1960 to date has retained, employed or consulted with any person or organization to advise on, investigate or in any way conduct activities or other efforts designed to attract commercial and/or industrial facilities to locate in the municipality or within the area served by its electric facilities. If so, state the name and address of each person or organization employed, retained or consulted with for this purpose during the period January 1, 1960 to date, together with name of the entity by whom and the dates during which such person or organization was employed, retained or consulted.

(c) Describe in detail the activities or other efforts undertaken during the period January 1, 1960 to date by the system or the municipality in which it serves, or any agency or department of that municipality, or by any person or other entity employed, retained or consulted by or on behalf of the system or the municipality or any of its agencies or departments, to attract commercial and/or industrial facilities to locate in the municipality or within the area served by any of its sewage, gas, water, or electric facilities, specifying in each case the name of the entity

conducting such activity or other efforts and the dates relevant thereto.

10. State whether the system or the municipality or any agency or department thereof, has prepared, or caused to be prepared, surveys, made site investigations or engaged in, or caused others to engage in, other activities or other efforts for the purpose of encouraging increased use of electricity or to analyze the potential for locating commercial and/or industrial facilities in the area served with electric power or other utility services by the system. If so, furnish copies of all advertising, brochures, letters or other documents prepared in regard thereto from January 1, 1960 to date for the purpose of encouraging commercial and/or industrial customers to locate in the service area of the system or for the purpose of encouraging increased use of electricity in said service area.

11. List the name and address of each commercial and/or industrial customer or potential customer with whom any discussion, approach or other contact was made during the period January 1, 1960 to date utilizing, in whole or in part, information or material described in Interrogatories 9 and 10.

12. State whether the municipality in which the system serves has, or had at any time during the period January 1, 1960 to date, an ordinance or other statute, regulation, rule or order requiring that any person or any class

of persons inside or outside the corporate limits purchase electricity from the system. If so, identify each such document and state the time period in which it is or was effective.

13. (a) Does the system, the municipality, or any of its departments, agencies or agents, now suggest, recommend or require or had it ever suggested, recommended or required that a person or other entity served by the municipality's gas, water and/or sewage facilities, also purchase electricity from the system. Describe each such instance in which any of the foregoing occurred.

(b) State whether and under what circumstances the system's electric service has, since January 1, 1960, been made a condition for receiving the municipality's gas, sewage and/or water service.

(c) Describe any discount or any other inducement, whether or not related to the provision of other services provided by the municipality, offered by the system or the municipality in which it serves, or any agency or department thereof, during the period January 1, 1960 to date if the system's electric service were taken.

(d) Describe the terms and conditions on which electric service has been provided to each customer class, or to any individual customer for which a contract is now, or was in effect at any time since January 1, 1960 to date, pursuant

to any suggestion, recommendation or requirement referred to in subparagraphs (a) through (c) of this Interrogatory.

14. (a) State the current rates, respectively, of real estate, personal property, gross receipts, income or other taxes imposed by the municipality or any of its agencies or departments.

(b) State the rates in effect at any time during the period January 1, 1960 to date of each tax specified in response to Interrogatory 14(a) or any other tax imposed by the municipality during that period and indicate the dates during which each rate was in effect.

15. (a) Is real property presently assessed at true cash value?

(b) If any real property is now, or at any time since January 1, 1960 has been, assessed at other than true cash value, set forth:

(i) the type of property (residential, commercial, industrial, e.g.) for which a lesser valuation is or was assessed;

(ii) the effective date(s) of such valuation;

(iii) the percentage of true cash value that the assessed valuation represents for each type of property.

16. (a) State the system's operating revenues, excluding any sales tax receipts, for each year 1960 through 1971.



(b) State whether the figures provided include an imputation for the value or cost of services donated to or provided to the municipality or any of its agencies or departments. If so:

(i) state the amount of any such imputation;

(ii) state whether each amount is classified as a tax equivalent.

17. (a) State the system's operating expenses for each year 1960 through 1971.\*

(b) State whether the figures provided in response to Interrogatory 17(a) include an imputation for the value or cost of services donated to or provided to the municipality or any of its agencies or departments. If so:

(i) state the amount of any such imputation;

(ii) state how that value was determined;

(iii) state whether this amount is classified as a tax equivalent;

(iv) state whether this imputation is included in the system's operating revenue figures furnished in response to Interrogatory 16.

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\* In response to this Interrogatory and to all others indicated by an asterisk use the same time period as was used in response to Interrogatory 16; e.g., if calendar years were used there, use calendar years, if fiscal years ending June 30, use fiscal years ending June 30. Data should be provided for each year ending on or before September 30, 1972.

18. State the annual depreciation and amortization expense applicable to the system's electric plant(s) for each year 1960 through 1971.\* State the basis on which such expenses were calculated.

19. State the amount of taxes paid which are applicable to electric operations for each year 1960 through 1971.\*

(a) Classify such taxes by type (e.g., local property, franchise, federal income, etc.);

(b) State to whom paid;

(c) State on what date each tax was paid;

(d) State whether these taxes are included for each year in the system's operating expense data furnished in response to Interrogatory 17. If so, state for what year and under what account designation.

20. (a) State the amount of tax equivalents for each year 1960 through 1971.\*

(b) Describe in detail each service provided or payment made which is classified by the system as tax equivalents and set forth:

(i) the estimated value given to each such service in each year;

(ii) the method by which the value of any service donated to or provided to the municipality or any of its agencies or departments was determined;

(iii) whether each amount specified in response to subparagraphs (a) and (b) of this Interrogatory

is included in the operating revenue and expense data furnished in answer to Interrogatories 16 and 17, respectively.

21. (a) State the cost and estimated value of, and describe in detail each service donated to or provided to the municipality or any of its agencies or departments.

(b) List the amount and date of each payment made to the municipality, or any of its agencies or departments, which is not classified as a tax equivalent but is included in the operating revenue and cost data furnished in response to Interrogatories 16, 17 and 20.

(c) For each payment specified in response to subparagraph (b) of this Interrogatory, state how the value of any service donated to or provided to the municipality or any of its agencies or departments was determined.

22. State the amount of the total funds transferred by the system to the general funds, or other account, of the municipality or to the account of any other municipal department or agency during each year 1960 through 1971.\*

In each case specify:

- (a) the amount;
- (b) title of the account to which such funds were transferred;
- (c) the year in which such transfer was made;
- (d) the year in which it is reflected in the data.

23. State the total kilowatt-hours supplied to the municipality and any of its agencies and departments by the system for each year 1960 through 1971\* and the total revenues actually derived therefrom for each such year.\*

24. State the price per kilowatt-hour paid by the municipality and any of its agencies and departments for electric energy supplied to it by the system during each year 1960 through 1971.\*

25. State the system's total electric plant in service, accumulated provisions for depreciation of electric utility plant and net electric utility plant at the end of each year 1960 through 1971.\*

26. (a) State the electric total transmission plant in service and the accumulated provisions for depreciation of electric utility transmission plant at the end of each year 1960 through 1971.\*

(b) For each year 1960 through 1971 state the basis on which the system classified such facilities as transmission plant.

27. (a) State the electric total distribution plant in service and the accumulated provisions for depreciation of electric utility distribution plant at the end of each year 1960 through 1971.\*

(b) For each year 1960 through 1971 state the basis on which the system classified such facilities as distribution plant.

29. State the total outstanding long-term debt attributable to electric utility operations at the end of each year 1960 through 1971\* and state the type, the date of issuance, the maturity date, the principal amount and the interest rate of securities or other documents evidencing this debt as of each of said dates.

30. State the total outstanding short-term debt attributable to the electric utility operations at the end of each year 1960 through 1971 and state the type, the date of issuance, the maturity date, the principal amount and the interest rate of the securities or other documents evidencing this debt as of each of said dates.

31. (a) State the total interest, respectively, on long-term debt and on short-term debt attributable to electric utility operations during each year 1960 through 1971.\*

(b) For each year 1960 through 1971, state whether the amount of short-term interest specified in response to subparagraph (a) of this Interrogatory was included as an operating expense in data furnished in response to Interrogatory 17. If not, state how much of such interest was included in the operating expense data.

32. State the interest rate on the most recent bond issue of the municipality, or any agency or department thereof, the date of said issue and its maturity date.

33. State the most recent credit rating applicable to debt instruments of the system or the municipality.

34. State the amount of construction work in progress-electric at the end of each year 1960 through 1971.\*

35. State the amount of customer contributions in aid of electric plant construction at the end of each year 1960 through 1971.\*

36. State the amount of each of the following expenses for each year 1960 through 1971:\*

- (a) Customer accounts expenses;
- (b) Administrative and general expenses;
- (c) Distribution expenses;
- (d) Transmission expenses;
- (e) Production operation and maintenance expenses.

37. (a) State the effective date of and describe in detail each change in record keeping, accounting methodology or reporting which affects the strict comparability over the requested time periods of the material furnished in response to Interrogatories 16 through 37.



(b) If any such change has occurred, furnish data in response to Interrogatories 16 through 37 which are adjusted for each such change and are comparable over the time period 1960 through 1971.

38. For each year 1960 through 1971, if other services such as gas, water or sewage are supplied by the same municipal department, agency, or like entity which supplies electric service, specify:

(a) The costs which are allocated among these services and describe the basis on which each cost is allocated;

(b) Describe any allocation of general or common plant to electric operations and the basis on which each such allocation was made.

39. For each year 1960 through 1971 state the municipal electric system's annual kilowatt-hour sales, average and year-end number of customers, and annual revenue, by class of customer (residential, commercial, industrial, other and ultimate):

(a) Within the municipality's corporate limits;

(b) For each township, incorporated or unincorporated area served outside of the corporate limits of the municipality;

(c) Total used in response to Interrogatory

16.

40. (a) State in detail the basis used in each year for classifying customers into the residential, commercial, industrial and other classifications employed in response to Interrogatory 39.

(b) If this basis has been changed at any time during the period covered by Interrogatory 39, state the date(s) on which such change(s) became effective and describe the substance of such change.

(c) If any change is noted in response to subparagraph (b) of this Interrogatory, furnish data in response to Interrogatory 39 which are adjusted for each such change and are comparable over the time period 1960 through 1971.

41. State whether the data furnished in response, respectively, to Interrogatories 39 and 40 include customers counted more than once who are served by more than one meter and/or served under more than one rate schedule. If so, state average and year-end number of customers eliminating such duplication for each of the classes, service areas and time periods furnished in response to Interrogatory 39 and/or 40.

42. (a) State in detail the basis used by the system for categorizing customers into the "farm, excluding irrigation and drainage pumping", "irrigation and drainage pumping", "nonfarm-residential", "commercial", "industrial", and other classifications utilized in completing either Schedule

4 of the Federal Power Commission's (FPC) Form 12A for the year ended December 31, 1971 or Schedule 10 of the Federal Power Commission's Form 12 for the year ended December 31, 1971.

(b) State whether a different basis ever has been used during 1960 through 1971 for purposes of reporting to the FPC on Forms 12 or 12A? If so, state the date(s) on which such change(s) became effective and describe the substance of each such change.

43. State the number of customers and kilowatt-hour sales by customer class for each of the years ended December 31, 1960 through December 31, 1971 using the same customer classification and accounting method used in reporting to the FPC on Schedule 4 of Form 12A or Schedule 10 of Form 12 for the year ended December 31, 1971.

44. state whether the data furnished in response to Interrogatory 43 include customers counted more than once who are served by more than one meter and/or served under more than one rate schedule. If so, state average and year-end number of customers eliminating such duplication for each of the classes and time periods furnished in response to Interrogatory 43.

45. (a) For each township or incorporated area served by the system, state the names and addresses of the system's ten largest commercial and ten largest industrial

customers in terms of annual kilowatt-hour consumption which ceased taking electric service from the system during the period 1960 to date. In making this determination, use the kilowatt-hours consumed by each such customer in the full year preceding such termination.

(b) State the reasons, if known, for the loss of each customer specified in response to subparagraph (a) of this Interrogatory, and the date each terminated service.

(c) State whether any service drops or other facilities were transferred by the system to any other electric supplier as a result of such termination. If so, specify:

(i) the facilities transferred;

(ii) the compensation, if any, received by the system for such transfer;

(iii) the date on which such transfer was made.

(d) Name the electric supplier who now serves each customer named in response to subparagraph (a) of this Interrogatory.

46. (a) For each township or incorporated area served by the system, state the names and addresses of the system's ten largest commercial and ten largest industrial customers in terms of annual kilowatt-hour consumption which began taking electric service from the system during the period

1960 to date. In making this determination, use the kilowatt-hours consumed by each such customer during 1971, or fiscal year 1972 if such fiscal year ended on or before September 30, 1972. State the date on which service was initiated to each such customer.

(b) State which of such customers were acquired as a result of relocation into the service area of the system, from where each came and the utility previously supplying electricity to each such customer.

(c) As to each of those customers for which relocation was not involved, state:

(i) the electric utility formerly providing service to each of the customers in question;

(ii) the reasons for the change in electricity suppliers.

(d) State whether any service drops or other facilities were transferred by the utility formerly providing service to the system as a result of acquiring the new customer. If any transfer of facilities occurred, specify:

(i) the facilities transferred;

(ii) the compensation, if any, paid by the system;

(iii) the date on which such transfer was made.

(e) Furnish all documents relating to any customer acquisition and any facilities transferred in con-

nection with such acquisition specified in response to subparagraphs (a) to (d) of this Interrogatory.

47. State whether the system has refused, or declined to seek the opportunity, to provide electric service to any prospective industrial or commercial customer during the period January 1, 1960 to date. If so:

(a) Detail the circumstances of each such refusal or decision;

(b) State the name, address, and estimated annual electric requirement and desired delivery voltage of each such customer and the present electricity utility supplier of each such customer.

48. Describe each change in territory served with electricity by the system from January 1, 1960 to date, the classification and number of customers affected and annual kilowatt-hour sales to such customers.

49. Draw maps or sketches, or mark city maps of present system facilities and of system facilities as of year-end 1960 through 1971 so as to show the geographic location of power plants, principal substations, power lines, all connections and transfer points with other systems, and the boundary line of the area served together with the communities therein supplied with electric energy. On such documents, state and show:



(a) For each line of 12 kilovolts and above (and for any other line regardless of voltage which constitutes a tie line between generating stations or from generating stations to voltage systems of 12 kilovolts or above):

- (i) the length in miles;
- (ii) the voltage at which it is operated;
- (iii) the voltage for which it is insulated if different than the operating voltage.

(b) For all alternating current lines:

- (i) the number of cycles per second;
- (ii) the phase (one-phase, two-phase, or three-phase).

(c) The rating and locations of transformer banks at power plants and principal substations including interconnections with other systems.

(d) The approximate scale (feet per inch or miles per inch).

[In lieu of the foregoing, respondent may provide documents which show all of the information requested in this interrogatory].

50. Describe any studies or other inquiries presently being prepared by or for the system concerning any matter identified in Document Request 5(a), and state the name of the person or other entity preparing the same and the expected completion date of such project.

51. State the system's net generating capacity expressed in kilowatts as of year-end (calendar or fiscal) 1960 through 1961.

52. State the systems total annual kilowatt-hours generated, exclusive of station use, during each year 1960 through 1971.

53. (a) State the system's number of pole miles of transmission facilities and the number of circuit miles of transmission facilities by voltage as of year-end 1960 through 1971.

(b) If the basis for classifying such facilities differs from that used in response to Interrogatory 26:

(i) explain each change made and the reason for each such change;

(ii) furnish data in response to subparagraph (a) of this Interrogatory which are comparable to those provided in response to Interrogatory 26.

54. (a) State the system's number of pole miles of distribution facilities and the number of circuit miles of overhead and underground distribution facilities as of year-end 1960 through 1971.

(b) If the basis for classifying such facilities differs from that used in response to Interrogatory 27:

(i) Explain each change made and the reason for each such change;

(ii) Furnish data in response to subparagraph (a) of this Interrogatory which are comparable to those provided in response to Interrogatory 27.

55. (a) State the system's number and capacity of transmission and distribution substations and transformer installations with capacity exceeding 12 kilovolts as of year-end 1960 through 1971.

(b) If the basis for classifying such facilities differs from that used in response to Interrogatories 26 or 27:

(i) explain each change made and the reason for each such change;

(ii) furnish data in response to subparagraph (a) of this Interrogatory which are comparable to those provided in response to Interrogatories 26 and 27.

56. State whether a franchise has been granted to any supplier of electric service within the corporate limits of or in the area served with electricity by the system. If so, for each such utility franchised to render service state its name and the area it serves within the corporate limits of or the area served with electricity by the system.

57. (a) State whether commercial or industrial customers within the corporate limits of the municipality or within the area generally rendered electric service by the system presently have, or at any time during the period January 1, 1960 to date had, the option of

(i) changing from electric service by the system to service by any other utility, or

(ii) changing from electric service by another utility to service by the system.

(b) State for each year 1960 through 1971:

(i) the number of customers by customer class (commercial or industrial) who changed during each year from electric service by another electricity supplier to service by the system:

(ii) the kilowatt-hour sales to such customers in each year in which service was supplied by the system.

(c) State for each year 1960 through 1971:

(i) the number of customers by customer class (commercial or industrial) who changed during the year from electric service by the system to service by another electricity supplier;

(ii) the kilowatt-hour consumption by such customers and supplied by the system in the year such change occurred and in the five years immediately preceding such change.

58. State whether any other electric utility renders electric service to customers within the corporate limits of or in the area served with electricity by the system. If so, list the name of any other electricity supplier rendering such service and designate the area and types of customers served by the utility named.

59. State whether the municipality, or any agency or department thereof, ever declined to provide, or declined

to seek the opportunity to provide, electric service to any or all customers served by any other electricity supplier in the corporate limits of or in the area served with electricity by the system. If so:

(a) State the name and address of each such customer;

(b) Describe each such incident.

50. (a) State the name and address of each customer served at any time during the period January 1, 1960 to date by any other electricity supplier within the corporate limits of or in the area served with electricity by the system which has ever declined to accept an offer of electric service by the system.

(b) Describe the circumstances of each such incident and provide the date(s) on which it occurred.

61. State whether any electricity supplier, other than the system, is legally or otherwise limited in its present ability to acquire new customers within the corporate limits of or in the area served with electricity by the system. If so, describe each limitation and the basis of it.

62. State whether there are any legal restrictions which presently limit the ability of the system to provide electric service, either at retail or wholesale, outside the municipality's corporate limits. If so, describe such restriction(s) and state the date on which each such restriction became effective.

63. (a) State the number of residential, commercial and industrial customers (by customer class) which are located outside the municipality's corporate limits and which are served simultaneously by the municipality or any agency or department thereof with electricity and/or gas and/or water and/or sewage service.

(b) State the annual kilowatt-hour sales to and gross revenues derived from such customers during the year 1971.

64. (a) State each source of electric energy utilized by the system in the years 1960 through 1971.\*

(b) State for each of the aforementioned years:

(i) the kilowatt-hours obtained from each source;

(ii) the maximum kilowatt demand placed on each source;

(iii) the cost of the electricity obtained from each source.

(c) In each case where energy was not system-generated specify any breakdown between capacity, demand, energy or other charge incurred and indicate the voltage at which each such supply was received.

65. State the names, dates of installation, types (e.g., hydro, diesel, steam), nameplate capacity, heat rates, kilowatt-hours generated, capacity factors, investment costs, depreciation rates, accumulated depreciation, operation and



maintenance costs exclusive of fuel, types of fuel burned and fuel costs of each generating unit purchased, constructed, owned or operated by the system for each of the years 1960 through 1971.

66. State whether the municipality or any agency or department thereof, alone or jointly with any other utility or entity, presently plans to install additional generating or transmission capacity. If so, describe in detail:

(a) any such plans;

(b) the stage of their progression;

(c) the name and address of each utility or entity involved in any such plan.

(d) any present effort being made by or for the system on any of these matters, state the name and address of the person or other entity engaged in such effort and the expected completion date of the project.

67. Except for information and/or data already supplied in response to Interrogatory 66 state the cost per kilowatt hour, including both estimated capacity and energy costs, for the system's most recent generation and transmission expansion programs and those forecasted as of 1960, 1965 and 1970, for the following ten-year period, or such other or shorter periods as may have been utilized by the system for planning purposes. Include a statement of the estimated (and where applicable, the realized) cost of generation and transmission programs undertaken or proposed during the production period indicating:

(a) For generation and  
(b) For transmission subdivided by voltage classes, the estimated costs as follows:

(i) investment cost in dollars per kilowatt;  
watt;

(ii) energy cost in mills per kilowatt hours;

(iii) investment carrying charges and energy cost in mills per kilowatt hour.

68. Describe any present effort being made by or for the system relating to any studies or other efforts described in Document Requests 7(c) and 7(d), and state the name and address of the person or other entity engaged in such effort and its expected completion date.

69. State whether, during the period January 1, 1960 to date, the system or the municipality in which it serves, or any agency or department of that municipality, ever has sought, requested, considered, or inquired into the initiation of wholesale electricity supply to it by any electric utility or any other entity or group of such entities. If so, describe in detail each such instance and furnish each document relating to each such instance.

70. Is the system or municipality or any municipal official a member of any electric, power, energy or similar association or organization? If so:

(a) List the name and address of each such association or organization and state the year in which the system first became a member of each;

(b) State the name and address of any system or municipal employee who is or has been an officer or director of each such association or organization during the period of January 1, 1960 to date; the title of the position held; the period of time during which such office or directorship was held; and the present position of the employee in the system or the municipality, or if not now employed by the system, the date on which such employment terminated.

71. During the period January 1, 1960 to date, has the system paid for, or otherwise reimbursed to its employees, dues or fees charged by any electric, power, energy or similar association or organization in which any of its employees are members. If so, list the name and address of each such association or organization, the time period over which such payment or reimbursement was made and the name and job position of the employee for whom the payment or reimbursement was made.

72. State the name, address and present position of each person employed by the system during the period January 1, 1960 to date who had or now has managerial responsibility in each of the following areas, together with the dates during which each person held the position:

- (a) Marketing;
- (b) Sales;
- (c) Accounting;
- (d) Financial planning;
- (e) Chief executive officer, supervisor or manager;
- (f) Chief operating officer;
- (g) Research and development;
- (h) Engineering.

If any such person is no longer employed by the system, state the date on which such person left the system's employ.

73. Is the system now, or has it been at any time during the period January 1, 1960 to date, a member of any bulk power supply coordinating group? If so:

- (a) State the name by which the group is known;
- (b) Name the other members of the group; and
- (c) Indicate the particular coordinating functions of each group.

74. State the names of each employee of the system who holds an engineering degree of the bachelors level or above. Indicate the specific degree or degrees held by each such employee and the number of years each has been employed by the system.

75. State whether the system now provides, or provided at any time during the period January 1, 1960 to date, engineering services such as assistance in the design of in-plant

distribution facilities, substations, protective devices, transformers, heating and light systems and the like. If so:

(a) Furnish a description of any such services offered;

(b) State the charges made for the rendering of such services;

(c) For each of the years 1960 through 1971, state the system's expenditures for the provision of each such service.

76. State whether any engineering services are provided to the system or its customers by any other supplier of electric power. State the nature and cost to the system in 1971 (fiscal or calendar) of any such services received.

77. (a) State for each year, 1960 to date, whether the design and engineering of transmission facilities is performed by system employees or by other persons or entities and state the estimated proportion of such work performed by each group in each year.

(b) If any such services were performed by other persons or entities, state the name and address of such person or other entity and the dates during which he or it performed such services.

78. (a) State for each year 1960 to date whether the design and engineering of distribution facilities is performed by system employees or by other persons or entities and

state the estimated proportion of such work performed by each group in each year.

(b) If any such services were performed by other persons or entities, state the name and address of such person or other entity and the dates during which he or it performed such services.

79. (a) State for each year 1960 to date whether the design and engineering of generation facilities is performed by system employees or by other persons or entities and state the estimated proportion of such work performed by each group in each year.

(b) If any such services were performed by other persons or entities, state the name and address of such person or other entity and the date during which he or it performed such services.

80. (a) For each year 1960 through 1971 and as projected for each of the next ten years, 1972 through 1981; state the installed reserve and operating reserve criteria on the following bases:

- (i) megawatts-electrical;
- (ii) percentage of the system's largest generating unit.

(b) State the method used to determine such reserve criteria (e.g., probability analysis, judgment, etc.).

81. State the system's annual load factor data for each year 1960 through 1971 and as projected for each of the next ten years, 1972 through 1981.

82. State whether the information in response to each of the foregoing interrogatories furnished is within the personal knowledge of the deponent answering the interrogatories, and, if not, the name, address, occupation and title of each person to whom the information is a matter of personal knowledge, if known, or from whom information was obtained upon which said answer or a part thereof was based.



ATTACHMENT A

INSTRUCTIONS FOR REPORTING TYPICAL  
NET MONTHLY BILLS FOR ELECTRIC SERVICE  
AS OF JANUARY 1 OF THE YEARS  
1960, 1965, 1970 and 1972  
and JUNE 30, 1972.

SECTION I. GENERAL INSTRUCTIONS

1. EFFECTIVE DATE. Use rate schedules in effect on January 1 of the years 1960, 1965, 1970 and 1972, and June 30, 1972 for computing bills. A rate schedule is deemed effective on January 1 or June 30 of the year if any energy used on that day could have been billed thereunder. Insert the schedule designation and the date on which the new rate schedule first became effective.
2. NET BILLS. Compute all bills on a net basis, i.e., after prompt payment discounts or before delayed payment penalties.
3. MONTHLY BASIS. Compute all bills on a monthly basis. Where rate schedules or any part thereof are quoted on an annual, quarterly, or bimonthly basis, prorate the bills to a monthly basis.
4. FUEL ADJUSTMENT. Adjust bills to reflect fuel adjustments, if any, for energy billed on January 1 of each of the stated years, and on June 30 for 1972. Enter the adjustment per kwh, the fuel cost and other pertinent data.
5. METER RENTALS. In computing bills include where applicable any charge made for meter rentals if the majority of customers are required to pay such meter rentals, but exclude such charge if the majority of customers furnish their own meters. In either case, state in a footnote the amount of the meter rental and whether or not the majority of customers furnish or rent meters.
6. LAMP RENEWALS. Compute bills on the assumption that lamp renewal service is not included in the rates. When the charge for lamp renewal service cannot be segregated, state in a footnote that such charge is included in the bills shown.
7. SEASONAL RATES. Do not compute bills under seasonal rates where year-round rates are available. Where year-round rates are not available, compute bills for all seasons for which there are different rates and state the periods or seasons of the year for which each rate is available.

8. TAX, PRICE, AND WAGE LEVEL ADJUSTMENTS. The bills furnished are to reflect the charges actually paid by customers in accordance with the terms of the rate schedules, rules and regulations, etc. Adjust bills to reflect tax, price and wage level adjustments, if any, for energy billed on January 1 of each of the stated years, and on June 30 of 1972. Sales taxes are not to be included in computing the bills, but where the revenue collected pursuant to the tax adjustment clause becomes an operating revenue of your system, the bills should reflect such tax adjustment.

9. OTHER FACTORS. Show by footnotes any other facts affecting the computations of the bills furnished or the choice of the schedules used. Such factors would include rebates, periodic free service and inducement rates.

## SECTION II. SPECIAL INSTRUCTIONS FOR RESIDENTIAL SERVICE

1. DEFINITION. Residential service is defined as service which is supplied to residential customers for lighting, refrigeration, cooking, water heating, and other domestic uses.

2. RATE SCHEDULES TO BE USED. Compute each bill using the rate schedule or combination of rate schedules on which the largest group of residential customers was billed for the specified consumption as of January 1 of each of the stated years, and as of June 30 of 1972.

3. DEMAND ASSUMPTIONS. Where charges are based on the number of rooms or measured demand, assume the following for computing bills:

- (a) Number of rooms - A five-room residence consisting of living room, dining room, kitchen and two bedrooms.
- (b) Measured demand - For 500 kwh consumption assume a measured demand of 4.5 kw. For 750 kwh consumption assume a demand of 5 kw. For 1,000 kwh consumption assume a demand of 5.5 kw.
- (c) Water heating - Use demand and size of tank most generally applicable to water heaters using from 250 to 350 kwh per month, and state what demand and/or size of tank is used.

4. KWH ASSUMPTIONS. TWO OR MORE METERS. Where residential service can be taken through more than one meter and such is the general practice, assume the following:

- (a) For the 500 kwh bill assume that 250 kwh for lighting, small appliances, refrigeration, and cooking are measured through the general service meter and that 250 kwh for water-heating are measured through the water-heating meter.
- (b) For the 750 kwh bill assume that 400 kwh for lighting, appliances, refrigeration and cooking are measured through the general service meter and that 350 kwh are measured through the water heating meter. If cooking is metered separately from lighting and water heating, assume 150 kwh for cooking consumption. If refrigeration is not metered with lighting and appliance load, assume 40 kwh for such consumption.
- (c) For the 1,000 kwh bill assume that 650 kwh for lighting, appliances, refrigeration and cooking are measured through the general service meter and that 350 kwh are measured through the water-heating meter. If cooking is metered separately from lighting and water heating, assume 150 kwh for cooking consumption. If refrigeration is not metered with lighting and appliance load, assume 40 kwh for such consumption.
- (d) In the case of rates providing for special night rates when water heating is used, assume for the 500 kwh bill that 250 kwh are billed at the night rate. For the 750 and 1,000 kwh bills assume that 350 kwh are billed at the night rate.

SECTION III. SPECIAL INSTRUCTIONS FOR COMMERCIAL SERVICE

1. DEFINITION. Commercial service is defined as service which is supplied to commercial or business establishments such as stores, offices, restaurants, and garages for lighting and power purposes.

2. RATE SCHEDULES TO BE USED. Use all rate schedules ordinarily applicable to commercial service at the range of consumptions and demands given in Interrogatory 7(b). Do not use rate schedules restricted to a special class of enterprise such as department stores, hotels, laundries or apartment houses; nor to a special purpose such as sign lighting, refrigeration, heating, cooking, welding, auxiliary, or temporary service. Industrial schedules specifically limited to manufacturing customers should not be included.

3. BILLS TO BE FURNISHED. If but one schedule is applicable to commercial service, a bill is to be furnished under that schedule for every demand-energy combination listed in Interrogatory 7(b). If more than one schedule is applicable, bills should be shown for each schedule for those demand-energy combinations shown in that interrogatory, which come within the range of demand and/or energy consumptions for which the schedule is, or would be used in actual utility billing practice. Bills outside of this range need not be shown. At least one bill for each demand-energy combination should be furnished.

4. SCHEDULE USE. When a new schedule is used, state the minimum and maximum demands and consumptions beyond which the schedule is not, or would not be used.

5. DIRECT CURRENT. Do not compute any bills under schedules for direct-current service only.

6. OFF-PEAK SERVICE. Do not compute bills from rates which restrict service to off-peak hours.

7. SERVICE VOLTAGE. Compute bills only for energy delivered at secondary voltage (550 volts or less) and metered at such voltage on the secondary side of system-owned transformer.

8. TERM OF CONTRACT. Footnote cases where contract term is over one year.

9. DEMAND.

- (a) Billing Demand. The kilowatt demands requested are the actual billing demands of a customer after all adjustments, except for power factor, have been made.
- (b) Power Factor. Compute all bills for schedules applicable to motive power and incidental or no lighting at 85% lagging power factor. For schedules permitting unrestricted lighting in addition to power, compute bills for 375, 750, and 1,500 kwh at unity power factor. For the 6,000 and 10,000 kwh bills assume a lagging power factor of 85% (unless only a small motive power load is permitted, in which case assume unity power factor).
- (c) Kilovolt-amperes or Horsepower. For schedules basing charges on kilovolt-amperes or horsepower, assume the following conversions:

BILLING DEMAND

<u>KW</u>	<u>Kva</u>	<u>Hp</u>
3	3(1)	4
6	6(1)	8
12	12(1)	16
30	35.3	40
40	47	54

(1) For power schedules permitting incidental or no lighting assume 3.5 kva, 7 kva, and 14 kva for 3 kw, 6 kw and 12 kw, respectively.

10. TYPE OF SERVICE. Show the application of rate schedules, using the following symbols:

- L - lighting, and appliances with or without single phase or incidental power
- PL - motive power, and incidental lighting
- GEN - lighting, single or 3-phase power, and other used in any proportion desired
- P - motive power but no lighting



SECTION IV. SPECIAL INSTRUCTIONS FOR INDUSTRIAL SERVICE

1. DEFINITION. Industrial service is defined as service which is supplied to industrial establishments having demands of 50 kw or more, or consumptions of 15,000 kwh or more per month.

2. RATE SCHEDULES TO BE USED. Use all rate schedules for motive power applicable to industrial service as defined under paragraph 1 of this section. Do not use rate schedules restricted to commercial establishments or to special classes of enterprise, such as cement, mining, oil, or textile industries; or to a special purpose, such as auxiliary, breakdown, temporary, or intermittent services, industrial heating, or irrigation, or to industrial lighting.

3. BILLS TO BE FURNISHED. If but one schedule is applicable to industrial service, a bill must be furnished under that schedule for every demand-energy combination listed in Interrogatory 7(c). If more than one schedule is applicable to this class of service, bills should be furnished for each schedule for those demand-energy combinations shown in that interrogatory, which come within the range of demand and/or energy consumptions, for which the schedule is, or would be used in actual system billing practice. Bills outside of this range should be noted.

4. SCHEDULE USE. When a new schedule is used, state the minimum and maximum demands and consumptions beyond which the schedule is not, or would not be used.

5. DIRECT CURRENT. Do not compute any bills under schedules for direct-current service only.

6. OFF-PEAK SERVICE. Off-peak rates which do not restrict the use of energy during the normal hours of operation of industrial concerns may be shown.

7. SERVICE VOLTAGE. Use all rate schedules applicable to industrial service as defined in paragraphs 1 and 2 of this section, regardless of voltage. Indicate whether the bills furnished are for primary metering or for secondary metering, and whether the system or the customer owns the transformer.

When a rate schedule provides different rates for primary and secondary metering compute bills for primary metering only, assuming customer ownership of transformer. Where the schedule permits, compute bills for 75 kw and 150 kw demands at voltages between 2,200 and 4,000 and bills for 300 kw, 500 kw and 1,000 kw demands at voltages between 11,000 and 13,200. Otherwise compute bills for the voltage at which service is most generally rendered, and state in a footnote the voltages used.

8. TERM OF CONTRACT. If the rate schedule allows a discount to customers contracting for service for a period longer than one year, compute bills based on the longer contract term.

9. DEMAND.

- (a) Billing Demand. The kilowatt-demands shown in Interrogatory 7(c) are the actual billing demands of a customer after all adjustments, except those for power factor and voltage, have been made.
- (b) Power Factor. Compute all bills for motive power at 85% lagging power factor. Note any adjustments.
- (c) Kilovolt-amperes or Horsepower. For schedules basing charges on kilovolt-amperes or horsepower assume the following conversions:

<u>BILLING DEMAND</u>		
<u>Kw</u>	<u>Kva</u>	<u>Hp</u>
75	88	100
150	176	200
300	353	400
500	588	667
1,000	1,176	1,333

10. TYPE OF SERVICE. Show the application of the rate schedules using the following symbols:

- M - where the schedule permits unrestricted motive power only
- MUL - where the schedule permits unrestricted lighting in addition to unrestricted motive power
- MRL - where the schedule permits unrestricted motive power and in addition restricting lighting