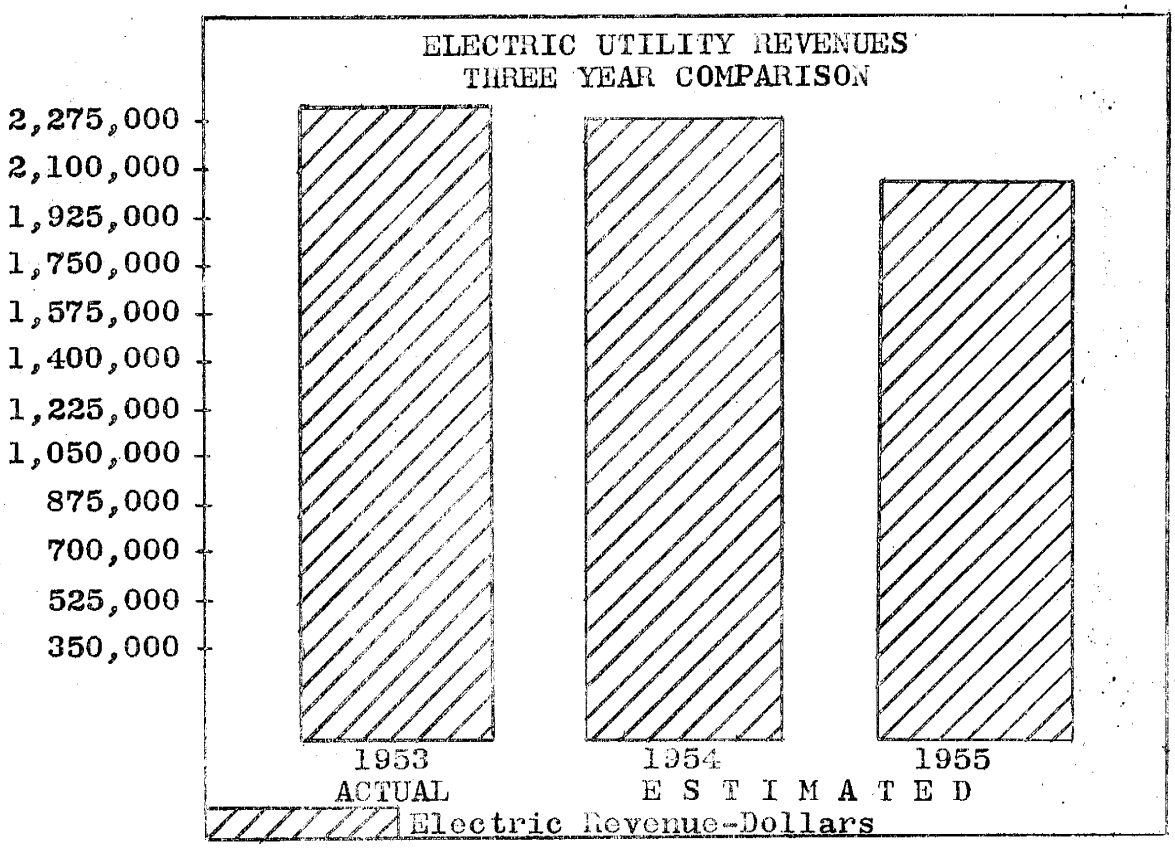
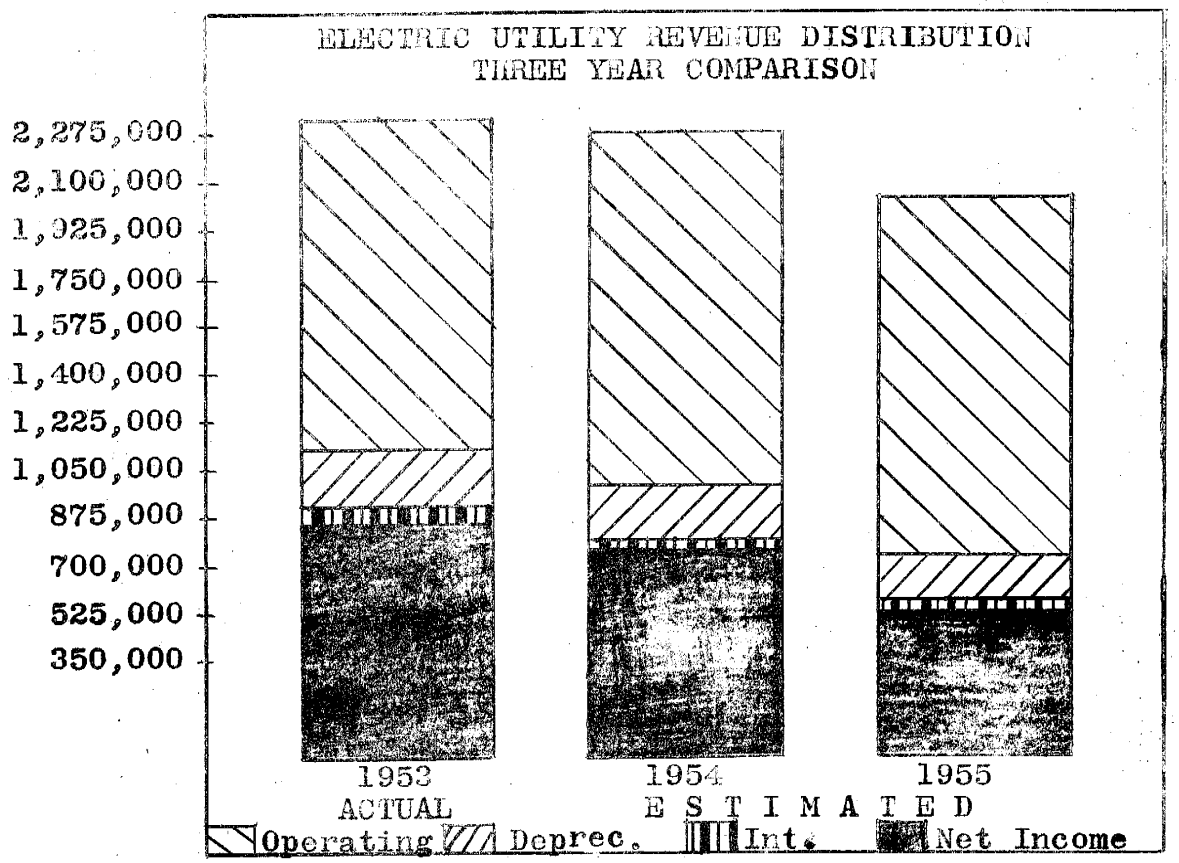
ELECTRIC UTILITY FUND BUDGET

City of Anchorage
1955


ELECTRIC UTILITY REVENUES
THREE YEAR COMPARISON
2,275,000
2,100,000
1,925,000
1,750,000
1,575,000
1,400,000
1,225,000
1,050,000
875,000
700,000
525,000
350,000
1953
ACTUAL
1954
E S T I M A T E D
1955
Electric Revenue-Dollars


ELECTRIC UTILITY REVENUE DISTRIBUTION
THREE YEAR COMPARISON
2,275,000
2,100,000
1,925,000
1,750,000
1,575,000
1,400,000
1,225,000
1,050,000
875,000
700,000
525,000
350,000
1953
ACTUAL
1954
E S T I M A T E D
1955
Operating
Deprec.
Int.
Net Income

ELECTRIC UTILITY FUND
1955 BUDGET

OPERATING REVENUES

Code		Estimated 1954	Estimated 1955
E 600	Residential & Domestic.....	$ 840,500	$ 752,700
E 602	Commercial & Industrial.....	1,254,701	1,117,300
E 603	Public Street Lighting.....	46,000	61,000
E 604	Other sales to Public Authority	60,000	60,000
E 607	Other Department Sales.....	23,320	22,000
E 612	Customer Forfeits & Discounts	13,288	14,000
E 614	Servicing Customers' Installations..	1,520	2,000
E 615	Misc. Electrical Revenue.....	4,200	11,300
		$2,243,529	$2,040,300
	Depreciation Reserve.....	108,790	173,191
	TOTAL RESOURCES.....	$2,352,319	$2,213,491

EXPLANATION OF ELECTRIC REVENUE ESTIMATES:

Revenues from residential and commercial customers were estimated to be approximately 10% below that for 1954. Beginning January 1 there will go into effect an average 20% reduction in rates, which loss is partially off-set by an estimated normal increase in consumption of 10% based on past records.

Street lighting revenues have been increased to allow for new units to be added as detailed in this budget. A new Account No. 603 represents energy sold for street lights and traffic signals only.

A new Account No. 604 has been set up for control of revenue from sales to other public agencies at rates other than our established schedule of rates. At present only the International Airport receives this special rate.

All energy sold to the City, except for street lighting and traffic signals, is reported in Account No. 607.

A 30-day period for payment of utility bills was started in 1954 and a 10% penalty imposed for delinquent payments. The 1955 estimate for customer forfeits and discounts follows the 1954 experience.

Servicing customers' installations for reimbursable items and miscellaneous revenue is derived from sale of surplus items and payment for personal services performed for other City departments.

A new source of revenue is included in Account No. 615 as a result of the new proposed policy of installing traffic signals by the Electrical Department and renting them to the General Fund Account.

Depreciation reserve is used to improve the system and replace existing worn-out installations. Therefore, it is added as a revenue item in order that it can be expended for capital improvements.

ELECTRIC UTILITY FUND
1955 BUDGET

EXPENDITURE SUMMARY

Expenditure Classification	Estimated 1954	Estimated 1955
Distribution Expenditures:		
Cost of Power	$1,287,500	$ 645,800
Operating Expenses	98,800	77,860
Maintenance Expenses	67,014	73,460
Customers Accounting & Collecting Expenses	83,200	101,980
Administrative & General Expenses	23,090	70,416
Clearing Accounts	27,300	41,800
Other Expenses	544,467	572,309
Total Distribution Expenses	$2,131,371	$1,583,625
Generation Expenditures:		
Steam Generation Oper. Expense		72,304
Steam Generation Maint. Expense		6,302
Diesel Generation Oper. Expense		102,160
Diesel Generation Maint. Expense		56,510
Transmission Expenses		4,080
General & Administrative Expenses		13,766
Depreciation		58,858
Total Generation Expenses		$ 313,980
Capital Expenditures	220,948	315,886
Total Electric Distribution & Generation Budget	(1) $2,352,319	$2,213,491

(1) 1954 estimates include only Electric Distribution figures.

ELECTRIC UTILITY EXPENDITURES

Code		Estimated 1954	Estimated 1955
	Cost of Power		
E 738	Purchased Power	$1,287,500	$ 645,800
	Operating Expenses		
E 756	Supervision & Engineering....	33,500	6,000
E 758.1	Distribution Maps & Records..	11,500	7,000
E 758.2	Distribution Office Expense..	100	120
E 759.1	Station Labor.....	4,800	2,000
E 759.2	Station Supplies.....	1,000	300
E 760.1	Station Storage Battery.....	100	120
E 761.1	Overhead Lines.....	4,400	6,000
E 761.2	Underground Lines.....	100	120
E 761.3	Removing & resetting transformers.....	13,000	20,000
E 762.1	Removing & resetting meters..	20,500	28,000
E 762.2	Other Services on Customers Premises.....	8,800	7,000
E 763.1	Operation of Overhead Street Light System.....	1,000	1,200
	Total Operating Expenses..	$ 98,800	$ 77,860
	Maintenance Expenses		
E 764	Supervision & Engineering....	9,800	6,000
E 765	Structures & Improvements....	500	4,000
E 766	Station Equipment.....	500	600
E 768.1	Poles, Towers & Fixtures.....	18,500	19,000
E 768.2	Overhead Conductors & Devices	13,200	15,000
E 769.2	Underground Conductors & Devices.....	- -	600
E 770	Line Transformers & Devices..	2,521	3,000
E 771	Services.....	4,000	4,000
E 772	Meters.....	7,800	7,000
E 773	Inst. on Customers' Premises.	100	120
E 775	Street Lighting and Signal Systems.....	10,000	14,000
E 776	Rents.....	93	140
	Total Maintenance Expenses	$ 67,014	$ 73,460
	Customer Accounting & Collecting Expenses		
E 780.3	Meter Reading.....	24,700	18,600
E 781	Billing & Collecting.....	58,500	83,380
	Total Customer Accounting & Collecting Expenses.....	$ 83,200	$ 101,980

Code		Estimated 1954	Estimated 1955
	Administrative & General Expenses		
E 790	Salaries of General Officers.	$ -	$ 13,856
E 791	Other General Office Salaries	-	6,000
E 792.1	Expenses of General Office...	-	500
E 793	General Office Supplies & Expense.....	660	2,436
E 795	Special Services.....	-	20,000
E 799	Injuries & Damage(Insurance).	-	7,200
E 800.1	Employees Welfare.....	830	1,200
E 800.2	Pension.....	-	3,000
E 801	Miscellaneous General Expense	21,000	4,824
E 802.3	Maintenance of Communications Equipment.....	400	1,800
E 802.4	Maintenance of Miscellaneous Property.....	200	600
E 803	Rent.....	-	9,000
	Total Administrative & General Expense.....	$ 23,090	$ 70,416
	Clearing Accounts		
E 902	Stores Expense.....	15,000	29,000
E 903	Transportation Expense.....	12,000	12,000
E 905	Shop Expense.....	100	600
E 909	Approved Nat'l Guard Leave...	200	200
	Total Clearing Accounts...	$ 27,300	$ 41,800
	Other Expenses		
E 503	Depreciation.....	108,790	114,333
E 507	Operating Tax.....	37,388	38,757
E 530	Interest on Long Term Debt..	13,969	19,219
E 411	Contribution to General Fund	359,320	360,000
E 210	Reserve for Bonds.....	25,000	40,000
	Total Other Expenses.....	$ 544,467	$ 572,309
	TOTAL DISTRIBUTION BUDGET.....	$2,352,319	$1,583,625

ELECTRIC GENERATION EXPENDITURES

Code		Estimated 1955
	Steam Generation Operating Expenses	
E 701	Operation, Supervision & Engr.	$ 2,024
E 702.1	Boiler Labor	10,080
E 702.2	Turbine & Generator Labor	14,000
E 702.4	Miscellaneous Station Labor	16,800
E 703	Fuel	26,400
E 704	Water	2,400
E 705.1	Lubricants	100
E 705.2	Station Supplies	100
E 705.3	Station Expense	400
	Total Steam Operating Expense	$ 72,304
	Maintenance Expense	
E 706	Maintenance Supervision & Engr.	2,000
E 707	Maintenance of Structures & Imp.	300
E 708.1	Fuel Storage	600
E 708.2	Furnace & Boilers	200
E 708.3	Boiler Apparatus	400
E 709.1	Maintenance of Turbine & Generator	800
E 709.2	Maintenance of Accessory Equipment	1,000
E 709.3	Maintenance of Miscellaneous Equip.	1,000
E 710	Rents	2
	Total Steam Maintenance Expense	$ 6,302
	Diesel Generation - Operating Expense	
E 727	Operations, Supervision & Engr.	6,000
E 728.1	Engine Labor	54,000
E 728.2	Electric Labor	5,400
E 728.3	Miscellaneous Station Expense	2,400
E 729	Engine Fuel	24,000
E 730.1	Water	60
E 730.2	Lubricants	3,000
E 730.3	Station Supplies	900
E 730.4	Station Expenses	6,400
	Total Diesel Operating Expense	$ 102,160
	Diesel Maintenance	
E 731	Supervision and Engr.	14,000
E 732	Structures	900
E 733	Fuel Holders	240

Code		Estimated 1955
	Diesel Maintenance (continued)	
E 734.1	Engines	$ 36,000
E 734.2	Generators	180
E 734.3	Accessory Equipment	360
E 734.4	Miscellaneous Equipment	4,800
E 735	Rents	30
	Total Diesel Maintenance Expenses	$ 56,510
	Transmission Expenses	
E 744	Load Dispatching	3,600
E 745.2	Station Supplies	480
	Total Transmission Expenses	$ 4,080
	General & Administrative Expenses	
E 791	Expenses of General Office Employees	7,000
E 793	General Office Supplies & Expenses	1,800
E 797	Regulatory Commission Expenses	866
E 800.1	Employees Welfare Expense	900
E 802.3	Maint. of Office Furniture & Equip.	200
E 803	Rents	3,000
	Total Gen. & Administrative Exp.	$ 13,766
	Other Expense Depreciation	$ 58,858
	Total Generation Budget	$ 313,980
E 100.3	Capital Expenditure Fund.....220,948 (see Schedule A)	315,886
	1954	
	TOTAL BUDGET..... $2,352,319	$2,213,491

Comparative Statement of Income & Expense:

	Actual 1953	Estimated 1954	Estimated 1955
Operating Revenues.....	$2,325,588	$2,282,178	$2,040,300
Less:			
Operating Expenditures	1,204,901	1,292,393	1,305,195
Depreciation.....	222,634	219,490	173,191
Net Operating Income.....	898,053	770,295	561,914
Less: Interest Expense....	50,531	31,741	19,219
Net Income.....	$ 847,522	$ 738,554	$ 542,695
Appropriation of Net Income			
Contribution to Gen.Fund	$ 348,000	$ 359,320	$ 360,000
City Equity Increase	405,544	349,234	182,695
Unappropriated Surplus	93,978	30,000	- -
Totals.....	$ 847,522	$ 738,554	$ 542,695

1955 WORK PROGRAM - ELECTRIC UTILITY

During 1954 the Anchorage Public Utilities was consolidated with the Electrical Distribution Department to form the Electrical Utility Department. This change was made possible through the purchase of the Little Eklutna facility by the Federal Government, the Bureau of Reclamation making available a 16,000 KW block of electrical energy as a primary source of power. This change has brought about the inclusion of generation as a part of the City Electric Department.

The proposed budget includes the operation of the Sacketts Harbor until May 1, 1955. It is expected that the plant will be disposed of by that time. It is not known how much the diesel plant will be operated during 1955. It appears that there will be six weeks full operation after the first of the year. The budget, as submitted, includes sufficient personnel, material and supplies to operate for the required time and in addition to put the engines in first class condition for standby operation.

A recommended plan for the provision of adequate standby generation to augment the present diesel plant will be submitted during 1955. This project should be undertaken on a "pay-as-you-go" basis using any funds now available from A.P.U., plus the annual credit to be received from the sale of Little Eklutna. It is possible that power demands will require faster development than can be met under this plan, but the year 1955 will provide experience and reveal the urgency of additional standby power development.

This budget provides for the installation of 20 intersections of traffic signals. We plan to make the capital outlay with Electrical Department funds and charge a monthly rental fee to the Public Works Department. This rental fee is based on amortization of the signals over a ten year period, plus electrical energy and maintenance.

Administrative projects to be undertaken during the year include:

(1) Integration of the generation phase of the City power operations into the Electrical Department organization.

(2) Complete a customer account numbering system to facilitate meter reading and operations in the Utility Billing Division.

(3) Revise job order and work order drawing format to reduce duplication of work by draftsmen.

(4) Continuing work on revising system drawings. Eventually to have a master set on tracing cloth.

(5) In close coordination with the Billing Division, to devise methods for indentifying types of customers in the meter books in order to minimize billing errors and allow meter readers to better police the accounts.

(6) Assemble data for the formulation of a five year plan of development of the utility. This plan will have three major factors taken into consideration.

a. Financial condition
b. Load growth
c. Additional facilities (including standby generation) required to serve added growth to the limit of financial ability.

Capital expenditures are substantially higher for 1955 than for 1954. This permits cash financing for the capital improvements, such as street lights, traffic signals, transmission lines, underground construction, sub-station installations, transformers, meters, tools and equipment, and other capital items which are needed to be purchased annually in the operation of a public utility business. It is recommended that the City should attempt to increase its capital expenditures annually until a $400,000 figure is obtained. At this point, it appears reasonable that additions to the system above this amount should be financed by bonds and surplus revenues should be eliminated by reduction in rates. Capital projects for 1955 include the following:

(1) Complete installation of new sub-station #3 and removal of the sub-station in the rear of City Hall.

(2) Install underground distribution facilities in the downtown area to the limit of funds available during 1955.

(3) Construct a second transmission line from Goose Lake sub-station to the present transmission loop to connect at the Post Road sub-station.

(4) Construct a transmission tie between Seward Highway and Northern Lights sub-station.

(5) Install 120 street lights in Airport Heights; Grandview Gardens; Spenard Road from 15th and "L" to City limits and 5th Avenue from East "K" to City limits in Mt. View.

(6) Install 20 intersections of traffic signals, seven of which will be semi-traffic actuated.

(7) Install automatic circuit protection in the 34 K.V. transmission loop.

(8) Install 34 K.V. tie with CEA steam plant.

(9) Do preliminary planning for adequate standby generation.

(10) Move diesel generator from Little Eklutna to main plant.

(11) Dispose of Sacketts Harbor.

(12) Remove unnecessary poles, wires and fixtures in the industrial area adjacent to Sacketts Harbor.

(13) Extend 4 K.V. primary from Government Hill sub-station to the industrial area adjacent to Sacketts Harbor.

(14) Increase conductor size from 3rd and Gambell to Post Road sub-station and install necessary switching at the diesel plant.

Capital expenditures for inventory and materials include the following:

E 1.358	Transformers	$ 10,000	
	Labor for Installation	2,000	$ 12,000
E 2.360	Meters	2,500	
	Labor for Installation	500	3,000
E 3.359	Service Material	7,500	
	Labor for Installation	2,500	10,000
E 4.377	Tools and equipment		4,225
E 5.372	Office Equipment:		
	3 - steel work tables	450	
	1 - dictating machine	340	
	1 - map rack	300	
	1 - 4 drawer legal file	100	
	1 - Redi Ref.catalogue file	180	
	1 - desk chair	100	
	3 - side arm chairs	150	
	1 - calculator	660	
	1 - P 712 Teletalk	100	2,380
E 6.373	Transportation Equipment:		
	2 - one tone 4 WD Willys	4,294	
	1 - meter installers body	1,000	5,294
E 7.387	Communications Equipment:		
	2 - dispatch point controls	400	
	1 - antenna, installed	500	900
E 8.363	Street Lighting & Signal Systems:		
	Purchase Eastchester lights from Inlet Power	1,500	
	20 Intersections of traffic signals	47,000	
	120 street lights	57,000	105,500

E 9.376	Laboratory Equipment:		
	1 - radio noise locater	$ 350	
	1 - portable high accuracy voltmeter	249	
	1 - portable ammeter	100	$ 699
	Remaining capital for allocation to work order projects		171,888
	TOTAL CAPITAL EXPENDITURE FUND.....		$315,886

Some progress was made during 1954 in the proper allocation of charges to the correct account numbers. There are still some changes in the allocation of charges to account numbers different from those that have been used in prior years. These are enumerated below.

Account 738 was decreased materially because of the anticipated purchase of power from the hydro-electric project to commence operation in 1955 by the Bureau of Reclamation. In addition to purchased power, the City will also provide for standby generation which totals $255,122 and is included in the Generation Division expenditures. By adding the generation costs and the purchased power costs, it is anticipated that total power costs will be $900,922. These savings have been passed on to the customers in the form of rate reductions.

Account 756 decreased by the amount of half the clerk's salary, superintendent's salary and a portion of general foreman's and electrical engineer's salaries. These reductions are spread to other more correct account numbers for these salaries.

Account 758.1 decreased by portions of the draftmen's salaries. These salaries will be charged to the particular capital construction and work orders.

Account 759.1 station labor decreased because of less frequent servicing of stations.

Account 761.1 increased to accomodate load and voltage check labor, previously charged to improper account.

Account 761.3 increased to allow for additional transformer changes due to increased loading.

Account 762.1 increased to include a portion of one clerk's salary. Increased number of cut-ins and cut-outs requires additional labor.

Account 764 decreased by part of one clerk's salary and part of general foreman's salary. These salaries are spread to other accounts.

Account 765 increased due to alterations needed to headquarters building.

Account 768.1 and 768.2 increased to allow for moving of poles and wires caused by street paving program.

Account 770 decreased by removing charges for load and voltage testing which are now reflected in Account 761.1.

Account 771 increased to provide for increased number of services to maintain.

Account 775 increased because of the additional number of street lights and traffic signals to maintain.

Account 780.3 decreased by one meter reader's time which was added to 781, since he is devising an account numbering system and will be used more under Account 781.

Account 781 increased as per work program of Comptroller and City Clerk.

Account 790 increased by superintendent's salary. Previously carried in 756.

Account 791 increased by one clerk's salary previously carried under 756 and 764.

Account 793 increased to provide for telephone charges and automobile allowance previously carried in 801 and 903.

Account 795 set up to provide funds for appraisals of Inlet Light and Power and Chugach facilities.

Account 799 set up for compensation insurance, previously carried in Account 801.

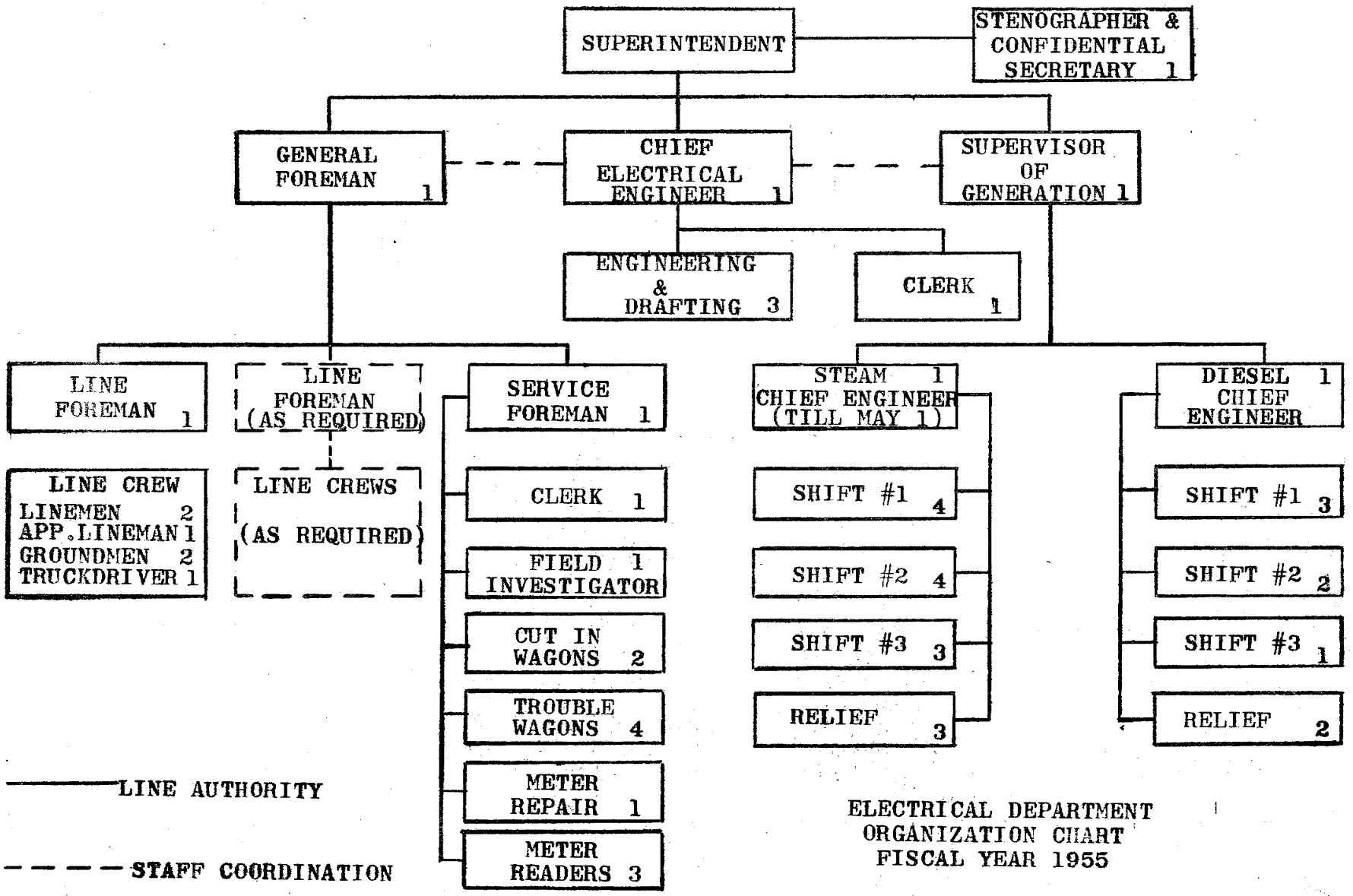
Account 801 decreased by spreading parts of the expenditures to more appropriate account numbers.

Account 802.3 increased by the amount of the radio maintenance contract.

Account 803 set up for rent for the headquarters building.

Comparative Statement of Income and Expense:

The comparative statement of income and expense for the Electrical Department appears to be losing ground at first glance. However, the operating revenues have been decreased by a 5% reduction for the last half of 1954 in the electrical rates with an average reduction in 1955 of 20% below the 1953 rates. The operating expenditures have increased as the number of customers and consumption of more kilowatts of power has increased. On the other hand, depreciation is decreasing annually because of the fast write-off of generation facilities and no major replacements in the next year. Interest expense has been materially decreased because of the paying off of $840,000 in bond obligations in the past two years. This rapid amortization has increased the City equity substantially in 1953 and 1954, as shown in the statement. Because of the high operating income, this favorable financial picture was possible. Now, with the 20% reduction in rates, the City's increase in equity to the system will drop but not in the corresponding amount. Analyzing the electrical net profit on the same basis as the water and telephone, the system should increase its equity at least 10% per year or $250,000 to take care of normal expansion. In the 1955 budget, only $40,000 of this equity will be obtained through the payment of debt amortization, which means that $210,000 net in additions to the plant should be made in 1955 out of current revenues. The City now has an equity in its electrical system of approximately two and one-half million dollars. Applying a 6% return, it would mean that the electrical distribution should contribute $150,000 per year as a net return to be used in general governmental services. Theoretically, this would mean that the total amount of net income from electrical distribution and generation should not exceed $400,000, based on our existing plant; whereas, the statement shows that net income will be $542,695. The distortion in the budget presentation is that the City equity should be increased $67,305, contribution to the General Fund decreased $210,000, and a further reduction in rates amounting to $142,000. However, before such drastic reductions can be made in contribution to the General Fund, the water utility and telephone utility should have rate structures capable of paying their share of contributions to the General Fund and some other source of revenue would have to be obtained to make up the $135,000 reduction in the return to the General Fund out of the utility operations. On the other hand, the City must consider making some substantial investment in generating facilities in the very near future. A financial plan to meet the commitments for such a large capital improvement should be prepared before embarking on further rate reductions.



ELECTRICAL DEPARTMENT
ORGANIZATION CHART
FISCAL YEAR 1955