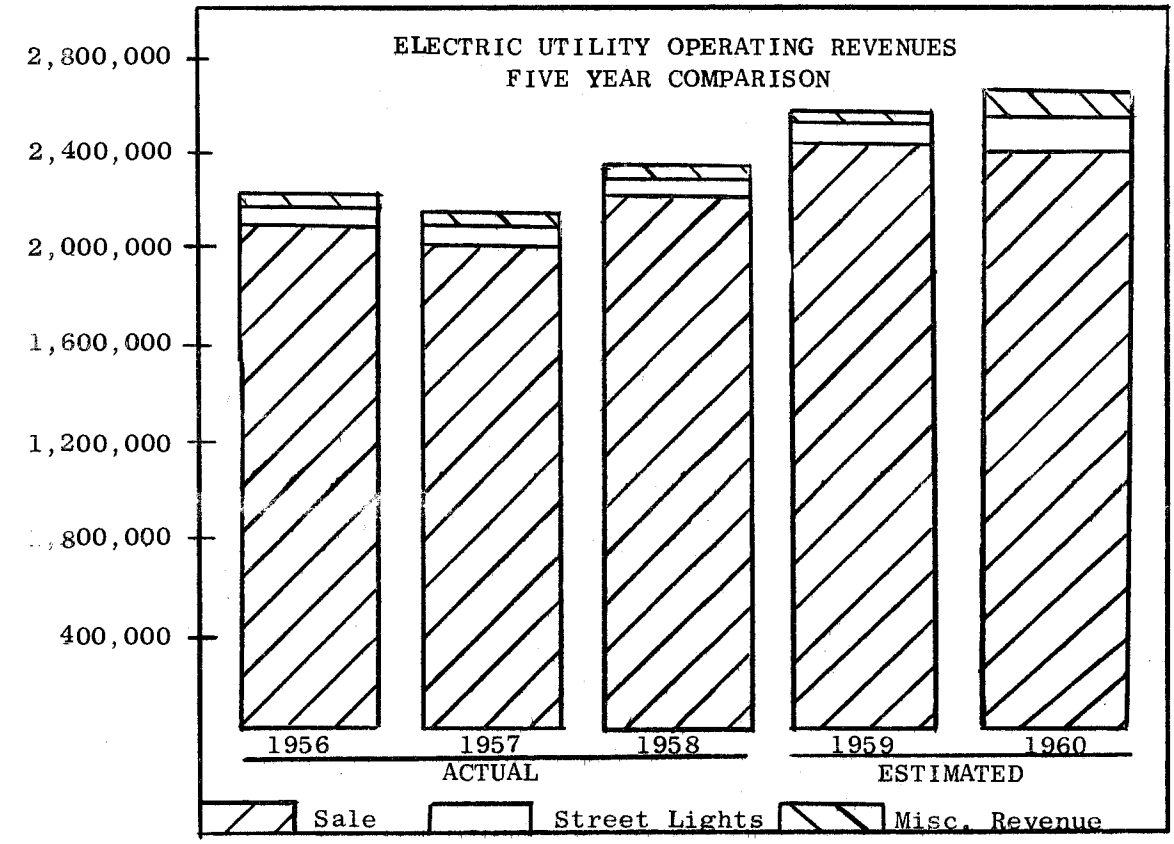
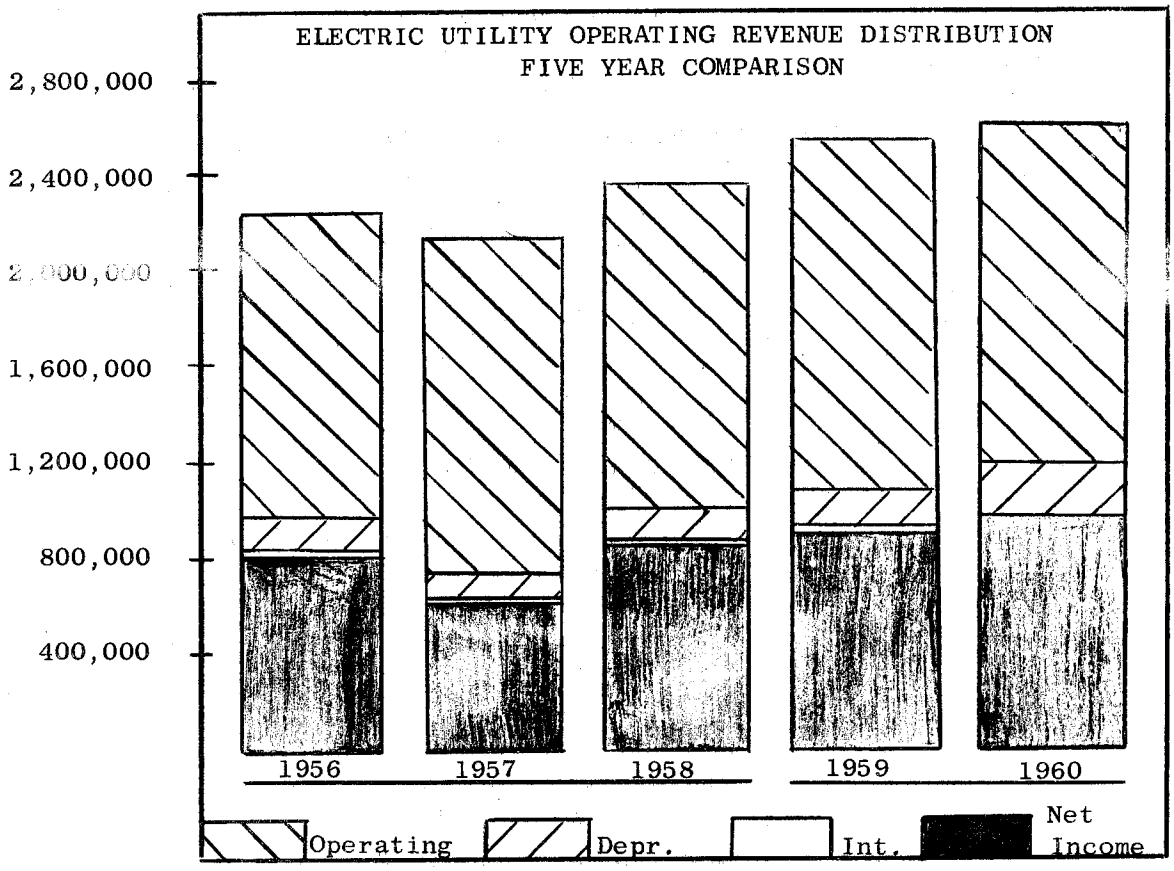
ELECTRIC UTILITY FUND BUDGET

The City of Anchorage, Alaska
1960


ELECTRIC UTILITY OPERATING REVENUES
FIVE YEAR COMPARISON
2,800,000
2,400,000
2,000,000
1,600,000
1,200,000
800,000
400,000
1956
1957
1958
1959
1960
ACTUAL
ESTIMATED
Sale
Street Lights
Misc. Revenue


ELECTRIC UTILITY OPERATING REVENUE DISTRIBUTION
FIVE YEAR COMPARISON
2,800,000
2,400,000
1,600,000
1,200,000
800,000
400,000
1956
1957
1958
1959
1960
Operating
Depr.
Int.
Net Income

ELECTRIC UTILITY FUND
1960 BUDGET

BUDGET SUMMARY

	Estimated 1959	Estimated 1960
REVENUES		
Estimated Revenues	$ 2,329,502	$ 2,409,828
Depreciation	217,306	221,500
TOTAL FUNDS AVAILABLE	$ 2,546,808	$ 2,631,328
EXPENDITURES		
Generation Expense	$ 56,630	$ 121,930
Purchased Power	850,000	841,000
Total Cost of Power	906,630	962,930
Distribution Operation	114,800	119,450
Distribution Maintenance	79,520	98,120
Total Distribution Expense	194,320	217,570
Customers' Accounting & Billing Expense	167,700	183,930
Administrative and General Expense	100,820	100,200
Clearing Accounts	9,360	16,760
Total Accounting & Administrative	277,880	300,890
Other Expenses	296,494	221,500
Transfer to General Fund	402,571	435,038
Construction Fund*	468,913	493,400
TOTAL EXPENSE	$ 2,546,808	$ 2,631,328

*Construction Fund

5% of $ 5,437,975	$ 271,900
Depreciation	221,500
	$ 493,400

ELECTRIC UTILITY FUND
1960 BUDGET

Code		Estimated 1959	Estimated 1960
	OPERATING REVENUES		
E 600	Residential & Domestic	$ 786,000	$ 802,948
E 602	Commercial & Industrial	1,226,002	1,262,780
E 603	Public Street Lighting	84,300	86,800
E 604	Sales to Other Public Authorities	58,000	59,700
E 606	Water Heating	65,000	60,000
E 607	Other Department Sales	64,700	66,600
E 612	Customers' Forfeits & Discounts	20,500	20,000
E 614	Service Customers' Installations	5,000	6,000
E 615	Miscellaneous Electric Revenues	20,000	45,000
	Total Operating Revenues	$ 2,329,502	$ 2,409,828
	NON-OPERATING REVENUE		
	Depreciation Reserve	217,306	221,500
	TOTAL RESOURCES	$ 2,546,808	$ 2,631,328

EXPLANATION OF ELECTRIC REVENUE ESTIMATES:

Revenues are estimated to increase about 3% over the 1959 revenues, actually the load growth expected is 8%; however the 10% rate reduction for the last six months of the budget year leaves only a net increase of 3% in revenues. This rate reduction is discussed in the City Manager's Budget Message.

E 600 Residential and Domestic. 1959 revenues increased 8% over 1958, and it is estimated that this conservative growth will increase at the rate of 8% except for proposed rate reduction which reduces net increase to 3%.

E 602 Commercial and Industrial. Same as E 600, Residential and Domestic.

E 603 Public Street Lighting. Revenues will increase about 3% due to lights to be added in annexed areas.

E 604 Sales to Other Public Authorities, which is International Airport, is expected to follow the general trend.

E 606 Water Heating. Revenue is reduced due to customers changing from water heater rate to D-2 schedule.

E 607 Other Department Sales. Revenues show an increase in line with general business increase.

E 612 Customers' Forfeits & Discounts. No change.

E 614 Service Customers' Installation. No change.

E 615 Miscellaneous Electric Revenues. This account is double over 1959 due to increased traffic signal rental.

COMPARATIVE STATISTICS

	1958 Actual	1959 Actual 7 Mo. Est. 5 Mo.	% Over 1958	1960 Estimated	% Over 1959
Power Sales					
Commercial	36,224,767	40,642,582	12.19%	44,275,085	8.91%
International Airport	2,576,000	2,800,341	8.71%	3,035,569	8.40%
Residential	20,817,137	24,330,221	16.87%	26,554,003	9.14%
Water Heating	3,539,249	3,157,378	(10.79%)	2,775,507	(12.09%)
City Use	4,314,285	4,713,841	9.26%	5,081,990	7.81%
Total KWH Sold	67,471,438	75,644,363	12.11%	81,722,154	8.03%
Power Sales Revenue	$ 2,124,337.37	2,284,002.00		2,348,828.00	
Average Revenue per KWH (Total)	.031484	.029863		.028741	
Average Number of Meters (By Class)					
Commercial	1,690	1,763	4.31%	1,810	2.67%
Residential	5,801	5,983	3.14%	6,200	1.95%
Water Heating	715	604	(15.52%)	490	(18.84%)
Total Average Number of Meters	8,206	8,350	1.75%	8,500	1.79%
Average Revenue per KWH (By Class)					
Commercial	.031234	.030165		.028521	
International Airport	.020482	.023105		.019667	
Residential	.035321	.032302		.030239	
Water Heating	.020097	.020586		.021617	
City Use	.030988	.031609		.030185	
Average KWH per month per Customer (By Class)					
Commercial	1,787.217	1,931.090		2,038.447	
International Airport	214,666.666	233,361.750		254,964.083	
Residential	299.045	338.879		356.908	
Water Heating	412.499	435.621		472.025	

ELECTRIC UTILITY FUND EXPENDITURES

Code		Estimated 1959	Estimated 1960
	DIESEL GENERATION OPERATION EXPENSE		
727	Operation Supervision & Engineering	$ 6,600	$ 7,000
728.1	Engine Labor	6,300	20,000
728.3	Miscellaneous Station Labor	2,400	2,400
729	Engine Fuel	6,500	45,000
730.1	Water	300	300
730.2	Lubricants	400	600
730.3	Station Supplies	400	400
730.4	Station Expense	300	300
	Total Diesel Operation Expense	$ 23,100	$ 76,000
	DIESEL MAINTENANCE EXPENSE		
731	Maintenance Supervision & Engineering	$ 6,000	$ 7,000
732	Structures and Improvements	6,000	6,000
733	Fuel Holders	200	200
734.1	Engines	15,600	30,000
734.2	Generators	200	200
734.3	Accessory Electric Equipment	2,000	2,000
734.4	Misc. Power Plant Equipment	3,500	500
735	Rent	30	30
	Total Diesel Maintenance Expense	$ 33,530	$ 45,930
	TOTAL DIESEL OPERATION AND MAINTENANCE	$ 56,630	$ 121,930
738	Purchased Power	$ 850,000	$ 841,000
	TOTAL COST OF POWER	$ 906,630	$ 962,930
	Estimated Kilowatt Hours	79,000,000	85,000,000
	Estimated Average Cost - mills per KWH	12.1	11.3

Code		Estimated 1959	Estimated 1960
	DISTRIBUTION OPERATION EXPENSE		
756	Supervision and Engineering	$ 9,000	$ 9,000
757	Load Dispatching	4,000	4,000
758.1	Distribution Maps & Records	21,000	22,000
758.2	Distribution Office Expense	500	550
759.1	Station Labor	2,000	2,000
759.2	Station Supplies	600	600
761.1	Overhead Lines	10,000	12,000
761.2	Underground Lines	2,000	2,400
761.3	Remove & Reset Transformers	16,000	17,000
762.1	Remove & Reset Meters	37,000	37,000
762.2	Other Services on Customers' Premises	4,800	5,000
762.25	Free Services	1,000	1,000
763.1	Operation of Street Lights	900	900
763.12	Operation of Traffic Signals	6,000	6,000
	Total Distribution Operations	$ 114,800	$ 119,450
	DISTRIBUTION MAINTENANCE EXPENSE		
764	Engineering and Supervision	$ 8,000	$ 8,000
765	Structures and Improvements	1,200	600
766	Station Equipment	1,200	1,200
768.1	Poles, Towers and Fixtures	9,000	16,000
768.2	Overhead Conductors	14,000	20,000
769.2	Underground Conductor & Devices	1,200	1,200
770	Distribution Transformers & Devices	10,000	12,000
771	Services	5,000	6,000
772	Meters	600	600
773	Installations on Customers' Premises	120	120
775.1	Street Lighting	17,000	19,000
775.2	Traffic Signals	11,000	12,000
776	Rents	1,200	1,400
	Total Distribution Maintenance	$ 79,520	$ 98,120
	TOTAL DISTRIBUTION EXPENSE	$ 194,320	$ 217,570
	ADMINISTRATIVE & GENERAL EXPENSE		
790	Salary of General Officers	$ 14,900	$ 14,600
791	Other General Office Salaries	15,600	15,600
792.1	Expenses of General Officers	650	700
793	General Office Expense	7,500	7,000
795	Special Services	6,000	6,000
796	Legal Services	13,000	13,890
798	Insurance Loss & Damage	12,000	8,085
799	Insurance Injury & Damage	4,800	6,600

Code		Estimated 1959	Estimated 1960
800.1	Employees Welfare	$ 150	$ 200
800.2	Pensions	6,000	5,300
801	Miscellaneous General Expense	600	600
802.1	Maintenance Structure & Improvements	300	300
802.2	Maintenance of General Office Furniture	300	300
802.3	Maintenance of Communications Equipment	2,000	4,000
802.4	Maintenance of Miscellaneous Property	100	100
803	Rents	16,920	16,925
	Total Administrative & General Expense	$ 100,820	$ 100,200
	CUSTOMERS' ACCOUNTING & COLLECTING		
780.3	Meter Reading	$ 27,000	$ 27,600
781	Billing and Collecting	133,700	143,330
783	Uncollectible	4,000	4,000
787.2	Advertising	3,000	9,000
	Total Customers' Accounting & Collecting	$ 167,700	$ 183,930
	CLEARING		
902	Stores	$ 8,200	$ 15,500
903	Transportation	100	200
904	Laboratory	- - -	- - -
905	Shop	1,000	1,000
909	Military Leave	60	60
	Total Clearing	$ 9,360	$ 16,760
	TOTAL ACCOUNTING AND ADMINISTRATION EXPENSE.	$ 277,880	$ 300,890
	OTHER EXPENSES		
503	Depreciation	$ 217,306	$ 221,500
507	Operating Tax (Property)	74,838	
530	Interest	4,350	
	Total Other Expenses	$ 296,494	$ 221,500
	TRANSFER TO GENERAL FUND	$ 402,571	$ 435,038
	CONSTRUCTION FUND	$ 468,913	$ 493,400
	TOTAL EXPENSES.	$ 2,546,808	$ 2,631,328

1960 MAINTENANCE AND OPERATION:

Diesel Operation:

These accounts are increased double because of increased operation of the diesel generation units. During 1960 we will generate about 2.5 million KWH with these units, which affects engine labor and engine fuel.

Diesel Maintenance:

These accounts are increased due to the added running time mentioned under Diesel Operation. One complete engine rebuild is budgeted to keep engines in top working condition.

Purchased Power:

This will be about the same as 1959.

Distribution Operation Expense:

These accounts have increased about 4% because of increased labor rates and increased use of facilities due to general system growth.

Distribution Maintenance Expense:

These accounts are increased due to increased labor cost, increased business, and expenses due to moving facilities in connection with the 1960 paving programs.

Customers' Accounting and Collecting:

Increased nearly 10% due to increased costs in City Hall and increase in the Advertising budget.

Administration and General Expense:

1959 and 1960 remain about the same. Some accounts are increased, but this is compensated by savings in others.

Clearing Accounts:

Stores expense shows nearly a 100% increase due to increase in expenses.

Other Expenses:

Depreciation shows the expected increase due to normal growth, however taxes are zero, and interest is zero. During 1959 the Department became debt-free, consequently there is no more interest to pay. The tax situation is covered in the City Manager's Budget Message.

Transfer to General Fund

Increase due to gross plant value increase.

CONSTRUCTION FUND

Work Order		
	MINOR ITEMS	
1-358	Purchase and Install Transformers	$ 30,000
2-360	Purchase and Install Meters	15,000
3-359	Install New Services	12,000
4-377	Purchase Tools and Equipment	600
5-372	Purchase Office Equipment	1,300
6-373	Transportation Equipment	- - -
7-378	Communication Equipment	10,075
8-several	Street Lights and Signal System	40,000
9-	Purchase Laboratory Equipment	- - -
10-several	Install Short Line Extensions	22,300
11-several	Miscellaneous Plant Replacements	25,000
	Total Blanket Work Orders.	$ 156,275
	MAJOR ITEMS	
	Purchase 3750 KVA Substation	$ 100,000
	New Feeder Cable & Ducts, H Street	40,000
	Feeder Ties & New Feeders, South Addition	50,000
	Rebuild Lines in Spenard	117,125
	Construct Line Extensions, New Subdivisions	30,000
	Total Major Items.	$ 337,125
	TOTAL CONSTRUCTION FUND.	$ 493,400

DETAIL OF MINOR CONSTRUCTION FUND

E 1-358	Purchase and Install Transformers		$ 30,000
E 2-360	Purchase and Install Meters		15,000
E 3-359	Install New Services		12,000
E 4-377	Purchase Tools & Equipment		
	Chain Saw and Misc.		600
E 5-372	Purchase Office Equipment		
	1 - Steel Map File (2 Bank)	$ 300	
	2 - Office Chairs	170	
	1 - Vertical Hanging File	150	
	1 - Drafting Table	680	
			1,300
E 6	None		
E 7-378	Communication Equipment		
	Police Dept. 3 Units	$1,950	
	City Engineer 6 Units	3,750	
	Telephone Dept. 5 Units	2,700	
	Electric Dept. 2 Units	1,200	
	Lab. Equip.	475	
			10,075
E 8-363	Install Street Lights & Signals		
	Street Lights	$20,000	
	Traffic Signals (see Traffic Engineer's Budget)	20,000	40,000
E 9-376	Laboratory Equipment		- - -
E 10-several	Install Short Line Extensions		22,300
E 11-several	Miscellaneous Plant Replacements		25,000
	Total.		$ 156,275

Minor Items:

This group consists of routine work orders which are considered each year and approved as blanket work orders.

Work Order No. E-1 Purchase and Install Transformers. This work order is increased $5,000 over 1959, which reflects increase of load expected.

Work Order No. E-2 No change from 1959.

Work Order No. E-3 No change from 1959.

Work Order No. E-4 No change from 1959.

Work Order No. E-5 No change from 1959.

Work Order No. E-6 Not used.

Work Order No. E-7 Approximately the same as 1959.

Work Order No. E-8 Street Lights and Signal System. This item is double due to new annexed areas.

Work Order No. E-9 No purchase of Laboratory Equipment is contemplated.

Work Order No. E-10 This is increased $2,300 over 1959 due to accelerated business.

Work Order No. E-11 Miscellaneous Plant Replacements. No change, 1960 over 1959.

Major Items:

Purchase 3750 KVA Substation: During the year 1960 one unit substation similar to stations now on the system should be purchased.

Analysis of load and load growth in the area north of Chester Creek and west of Gambell Street indicates non-coincidental total peak load of 13,500 kw during the winter of 1960-61. Serving this area we will have 14,500 kw of station capacity.

We therefore propose to purchase one unit substation, rated 3750 KVA, to have on hand during 1960 and to be installed during 1961 at a site yet to be chosen, probably in the South Addition.

Planning based on load is impossible in the fringe areas since this depends on resolution of the Boundary Area Agreement.

In the area north of Ship Creek on Government Hill and near the Municipal Port Dock, additional capacity will be needed during 1961 and will be planned for the 1961 Budget.

In the industrial area adjacent to Post Road, additional capacity will be needed during 1961 and will be planned in the 1961 Budget.

Rebuild lines in Spenard: Line now on Spenard Road needs replacement of poles. These are old, untreated spruce poles and are in poor condition.

Construct line extensions in new subdivisions, i.e. College Village and Fireweed Manor.

CITY OF ANCHORAGE

ELECTRIC POWER FORECAST TO 1979

This study is made to advise on the trend of load growth as of the current year, and as a guide for expenditures during the 1960 budget year.

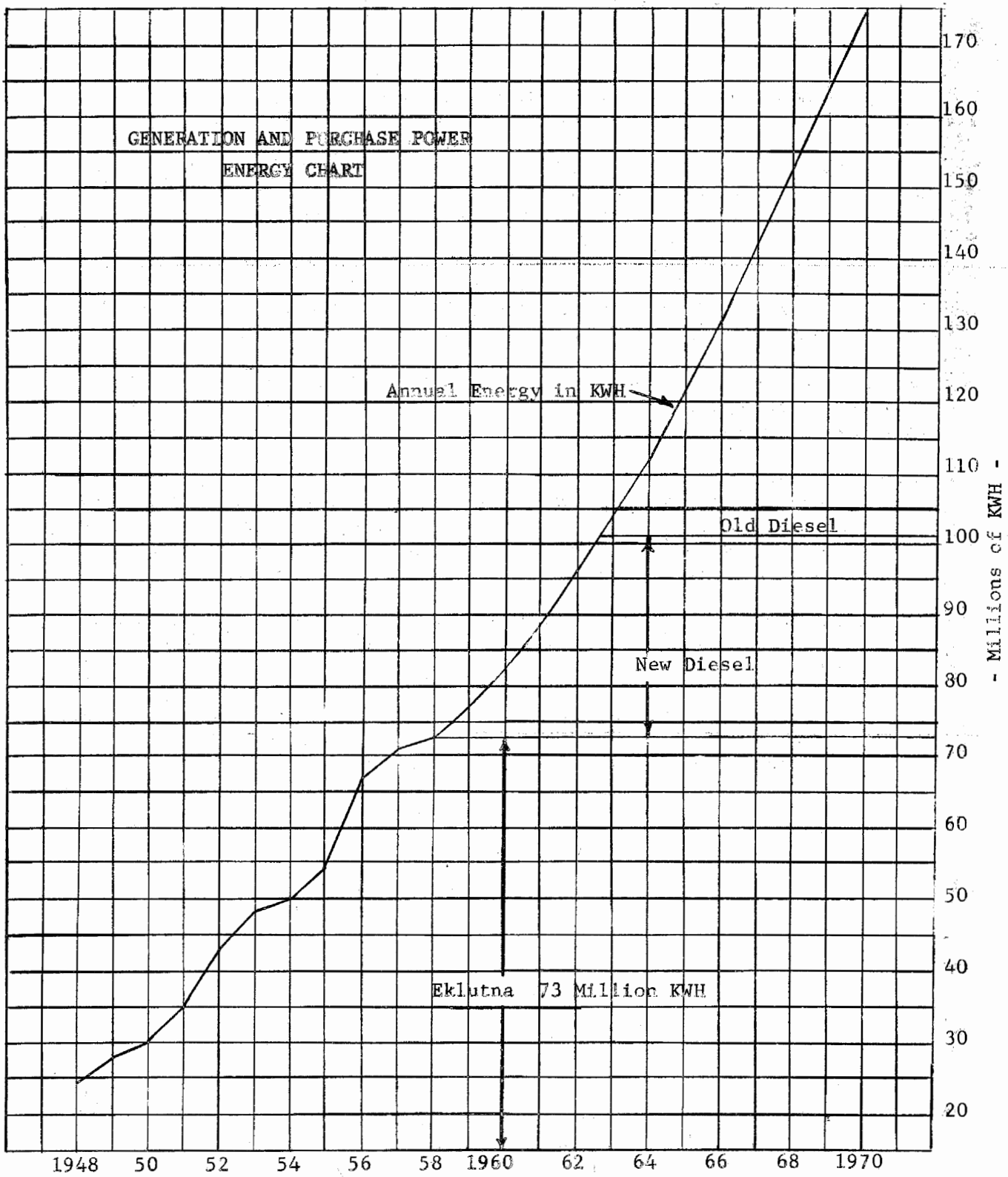
The experience during the first seven months of 1959 indicates an accelerated growth over past rates of increase. We increased over a like period of one year ago at the rate of 8.7%, while last year we were only growing 3%, and on a long time average were growing at a rate of 12%. Probably the labor difficulties will lessen the acceleration during 1959 and produce an overall increase of something less than the indicated 8%. However, the trend of the community is in the direction of 8% for 1960 and succeeding years, therefore distribution planning should follow that trend.

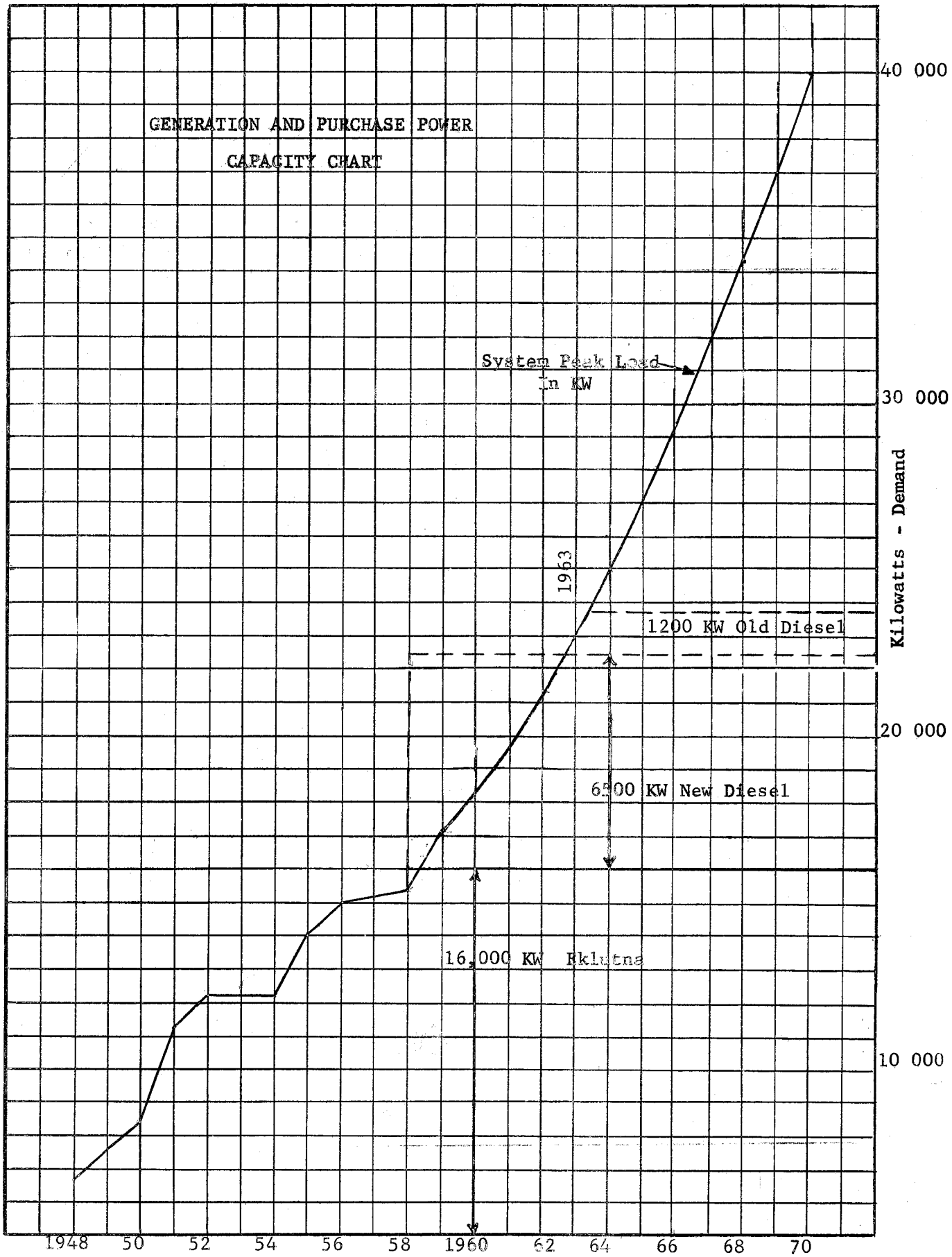
New sources of power will have to be obtained in the near future. The roughly 6,500 KW capacity of diesel power, plus our contract with the Bureau of Reclamation, will soon be saturated.

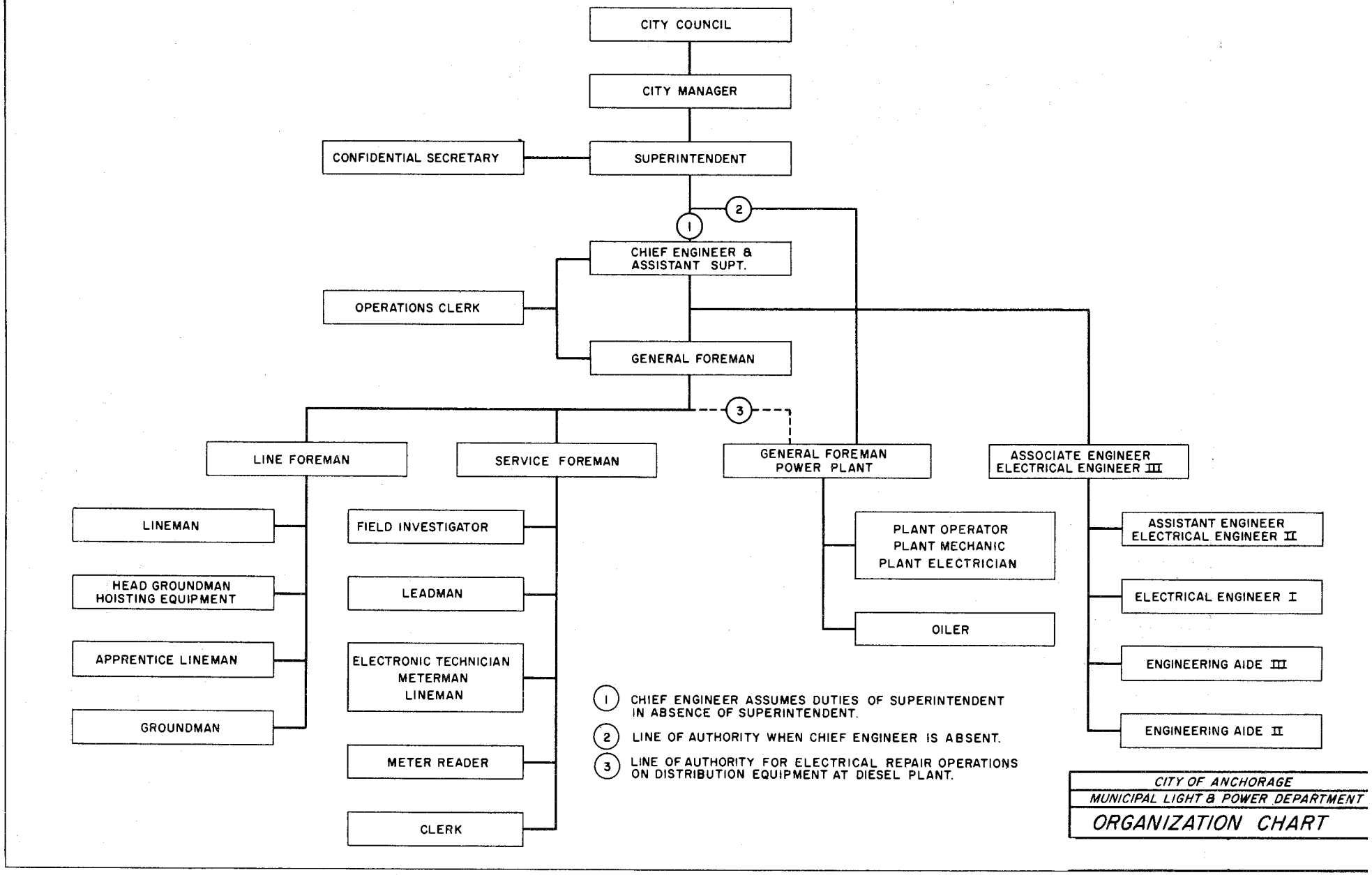
We expect the December peak of 1959 to be 17,000 KW, and that of 1960 to be 18,600 KW, and by 1963 to be exceeding our peaking capacity. During 1959 we expect to purchase and generate 79 million KWHs, and during 1960, 85 million. Since our firm power commitment from the Bureau is only 73 million KWH, we will have a large block to generate with City-owned facilities.

We are still negotiating with Chugach Electric Association for a purchase power contract through a power pool, but as yet nothing definite has been accomplished.

It is recommended that a firm of Engineers be retained early in 1960 to make a complete study of future power supply to cover relative merits of development of City-owned diesel plant, steam plant, or hydro-plant.


GENERATION AND PURCHASE POWER
ENERGY CHART
Annual Energy in KWH
Old Diesel
New Diesel
Eklutna 73 Million KWH
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
- Millions of KWH -
1948
50
52
54
56
58
1960
62
64
66
68
1970


GENERATION AND PURCHASE POWER
CAPACITY CHART
System Peak Load
In KW
1963
1200 KW Old Diesel
6800 KW New Diesel
16,000 KW Eklutna
40 000
30 000
20 000
10 000
Kilowatts - Demand
1948
50
52
54
56
58
1960
62
64
66
68
70


CITY COUNCIL
CITY MANAGER
CONFIDENTIAL SECRETARY
SUPERINTENDENT
2
1
CHIEF ENGINEER & ASSISTANT SUPT.
OPERATIONS CLERK
GENERAL FOREMAN
3
LINE FOREMAN
SERVICE FOREMAN
GENERAL FOREMAN POWER PLANT
ASSOCIATE ENGINEER ELECTRICAL ENGINEER III
LINEMAN
HEAD GROUNDMAN HOISTING EQUIPMENT
APPRENTICE LINEMAN
GROUNDMAN
FIELD INVESTIGATOR
LEADMAN
ELECTRONIC TECHNICIAN METERMAN LINEMAN
METER READER
CLERK
PLANT OPERATOR PLANT MECHANIC PLANT ELECTRICIAN
OILER
ASSISTANT ENGINEER ELECTRICAL ENGINEER II
ELECTRICAL ENGINEER I
ENGINEERING AIDE III
ENGINEERING AIDE II
1 CHIEF ENGINEER ASSUMES DUTIES OF SUPERINTENDENT IN ABSENCE OF SUPERINTENDENT.
2 LINE OF AUTHORITY WHEN CHIEF ENGINEER IS ABSENT.
3 LINE OF AUTHORITY FOR ELECTRICAL REPAIR OPERATIONS ON DISTRIBUTION EQUIPMENT AT DIESEL PLANT.
CITY OF ANCHORAGE
MUNICIPAL LIGHT & POWER DEPARTMENT
ORGANIZATION CHART