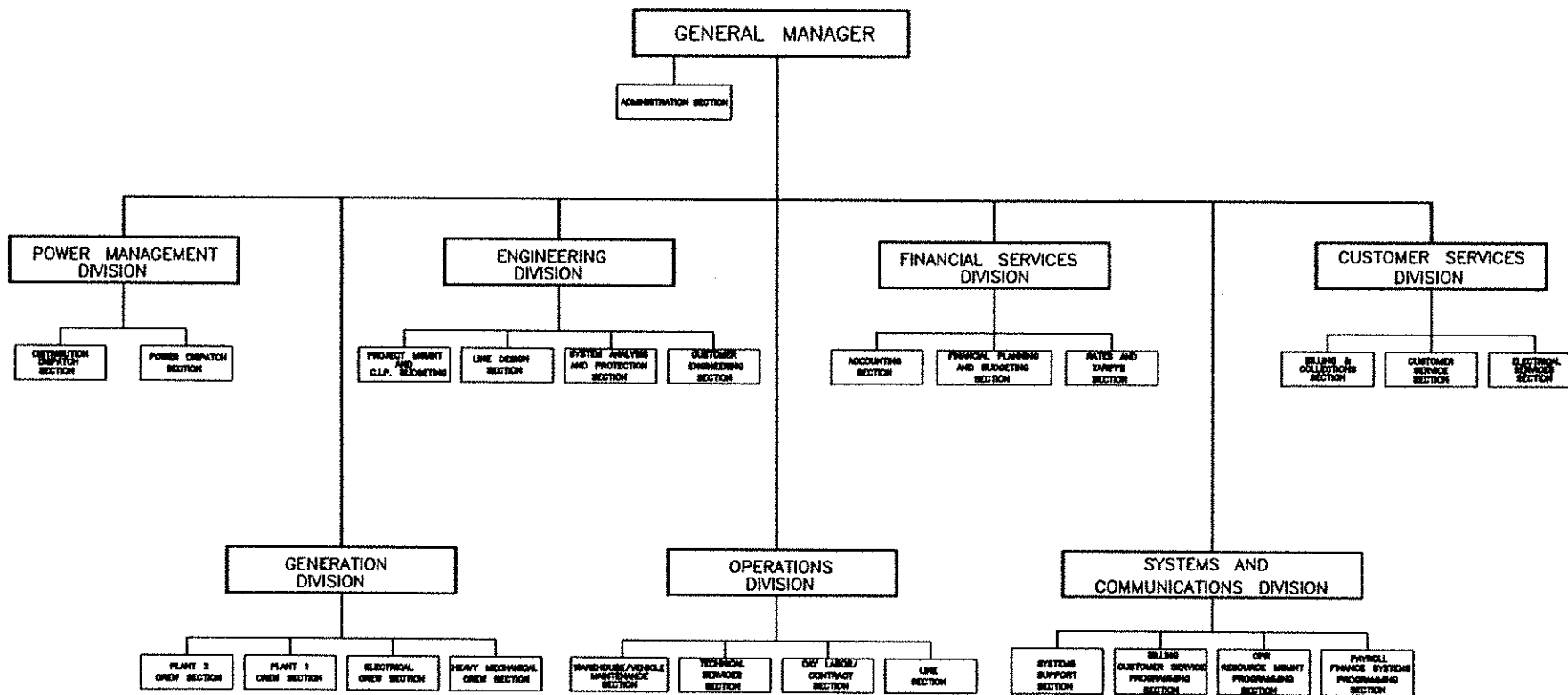




Municipal Light & Power Organization Chart



MLP/9944/0002/00000

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division	Budget Year 1990
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MISSION

Municipal Light and Power is committed to providing our customers' needs for safe, economical and reliable electrical service.

GOALS

The goals of Municipal Light and Power (ML&P) are to:

- o Ensure ML&P's financial well-being while supplying our customers' electrical energy requirements
- o Operate and maintain the electrical system with optimum economic efficiency
- o Emphasize customer assistance, and prompt and reliable service
- o Provide for the safety of the public and employees in the operation of the electrical system
- o Comply with environmental regulations
- o Promote Economic Development
- o Continue to identify customers with special electrical needs for life support systems
- o Continue programs that increase community knowledge of the electric utility and of electrical safety
- o Plan with regard to aesthetics, within budget constraints
- o Assume leadership role in developing an Anchorage area PUD
- o Comply with objectives of approved Equity Management Plan

Utility MUNICIPAL LIGHT & POWER	Division	Budget Year 1990
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FACTORS DRIVING THE UTILITY

- o 1990 kWh sales to increase slightly as projected by the 1989 load forecast
- o Municipal governments will have lower budgets
- o Environmental regulations will cause increased cost in electric service
- o New building construction activity by consumers will be minimal for the budget period
- o Consumers will continue to expect low cost reliable service

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division ADMINISTRATION	Budget Year 1990
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FUNCTIONAL DESCRIPTION

GENERAL MANAGER'S OFFICE

Through the seven Divisions reporting to it, this office is responsible for administering the Municipality's energy plan. The General Managers office oversees the Utility's planning efforts for its future needs, development of the programs to meet those needs, designing of projects, construction of those projects and operates and maintains those projects and facilities essential to providing electric service to its consumers.

Administrative Section

Provides administrative support to the General Manager. Also administers the utility personnel, safety, public relations, Federal and State regulatory compliance, central records management, billing preparation and mailing programs and the utility telephone switchboard/receptionist area.

OBJECTIVES AND TASKS

- o IMPROVEMENT IN EMPLOYEE RELATIONS
- o AIR QUALITY STUDY
 - Collect air quality and meteorological information to refine data base
 - Model dispersion effects as required by regulatory agencies
- o SECURITY SYSTEMS FOR ALL ML&P FACILITIES
 - Electronically monitor plants and substations
 - Ongoing review and enhancement of security needs
- o CONTINUE PCB TESTING AND REMOVAL
- o CONTINUE HAZARDOUS CHEMICALS CONTROL PROGRAM
- o COMPLIANCE WITH EQUITY MANAGEMENT PLAN
- o UPDATE GOALS OF THE APPROVED 10 YEAR SYSTEMS PLAN

Utility MUNICIPAL LIGHT & POWER	Division ADMINISTRATION	Budget Year 1990
<p><u>OBJECTIVES AND TASKS - CONTINUED</u></p> <ul style="list-style-type: none"> o PROVIDE FOR THE SAFETY OF ML&P PERSONNEL AND THE PUBLIC <ul style="list-style-type: none"> - Training program refinements - Enhancements of inspection programs o CONTINUE EDUCATIONAL PROGRAMS ON ENERGY AND SAFETY MATTERS <ul style="list-style-type: none"> - School presentations: "ZAP" and "Safety City" o PROMOTE COMMUNITY UNDERSTANDING OF THE UTILITY <ul style="list-style-type: none"> - Handout information for new customers - Educational programs for industry - Community Council participation o REFINE UTILITY-WIDE DOCUMENT MANAGEMENT AND RETRIEVAL PROGRAM <ul style="list-style-type: none"> - Policies and procedures updates - Technical library and archive refinements - Initiate computerized indexing - Provide internal training program o IMPLEMENT UPDATED EMERGENCY PREPAREDNESS PLAN <ul style="list-style-type: none"> - Continue plan tasks in 1990, with balance complete by 1993 - Provide internal training program - Refine plan objectives as required 		

MUNICIPALITY OF ANCHORAGE

Utility	MUNICIPAL LIGHT & POWER	Division ENGINEERING	Budget Year 1990
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FUNCTIONAL DESCRIPTION

ENGINEERING DIVISION

Conduct system planning, analysis, design, prepare Transmission & Distribution (T&D) system improvement budgets, does project management and provides support to the General Manager and other divisions.

Project Management and C.I.P. Budgeting Section

Under the direction of the Chief Engineer, provide administrative support and overall management and direction to all sections. Has specific responsibility toward professional services contract administration; continuing property records-field data management; work order tracking and project review; Engineering Division six-year C.I.P. budgeting; and special projects.

System Analysis and Protection Section

Provide for electrical system planning, design and protection including relaying and control for transmission and distribution system; substation and switchyard design; long-range transmission, distribution and generation planning; two-year transmission and distribution work plans; transmission, distribution and generation analysis; energy management/load research/conservation; forecasting and projections; and all system-user mapping.

Transmission/Distribution Line Design Section

Conduct designs for system improvements, relocations and major line extensions including transmission and distribution system improvement design; construction standards; material standards; right-of-ways and permitting; and plat reviews.

Customer Engineering Section

Provide engineering services to new customers including new service line extension design; minor and major system improvement design and NESC compliance; line extension coordination and customer contact; and centralized customer complaints.

Utility MUNICIPAL LIGHT & POWER	Division ENGINEERING	Budget Year 1990
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OBJECTIVES AND TASKS

- o DESIGN TRANSMISSION AND DISTRIBUTION FACILITIES TO PROVIDE SERVICES FOR NEW AND EXISTING CUSTOMERS
 - Reconstruct generation plant 1 34.5KV ring bus
 - Install alternate 34.5KV feed into C.B.D.
 - Construct 12.47KV distribution feeders
 - Automation of key 12.47KV distribution feeders
 - Construct street lighting to meet community needs
 - Develop SCADA into an energy management system
 - Continue conversion of 34.5KV loads in the port dock and C.B.D. areas
 - Construct new distribution system to serve Ship Creek dock
 - Construct distribution system to serve new Alaska Native Hospital

- o PROVIDE FOR SAFETY AND DESIGN
 - Utilize feedback from safety officer and work crews
 - Review of material and construction standards
 - Identify defective equipment and correct product deficiencies

- o PROMOTE UTILITY COORDINATION PROGRAM
 - Support participation in joint trenching
 - Support municipal underground utility placement standards
 - Support compatible geographic information system development
 - Coordinate utility requirements with railbelt energy needs
 - Support full membership in EPRI.

Utility MUNICIPAL LIGHT & POWER	Division ENGINEERING	Budget Year 1990
<u>OBJECTIVES AND TASKS - Continued</u>		
<ul style="list-style-type: none"> o DEVELOP AND IMPLEMENT A PROGRAM FOR ENGINEERING DESIGN WORK EFFICIENCY <ul style="list-style-type: none"> - Develop a design manual and provide a feedback system to measure the success of the program, and to update design standards - Encourage and aid employees in education and training - Write and implement performance standards 		
<ul style="list-style-type: none"> 5. IMPROVE AREA AND STREET LIGHTING DESIGN PROCESS <ul style="list-style-type: none"> - Improve Coordination between ML&P and Public Works - Use of computer aided design of area and street lighting - Ongoing updates of street light maps - Continue to improve design of street light systems 		
<ul style="list-style-type: none"> 6. COMPLY WITH LOAD RESEARCH REQUIREMENTS AND CONTINUE SYSTEM STUDIES <ul style="list-style-type: none"> - Replace obsolete load research equipment - System load forecast by voltage level's - Perform fault studies on transmission and distribution systems - Automate system analysis data base through interface with C.P.R. System 		
<ul style="list-style-type: none"> 7. REVIEW AND EVALUATE THE EXISTING SYSTEM PROTECTIVE DEVICES <ul style="list-style-type: none"> - Update impedance diagrams - Conduct load flow and short circuit studies - Catalog existing devices - Conduct a fault duty check on existing equipment 		

MUNICIPALITY OF ANCHORAGE

Utility	Division	Budget Year
<p>MUNICIPAL LIGHT & POWER</p> <p>OBJECTIVES AND TASKS - CONTINUED</p> <ul style="list-style-type: none"> o INTEGRATE COMPUTER AIDED DESIGN CAPABILITIES INTO DESIGN PROCESS <ul style="list-style-type: none"> - Develop standard construction assemblies for drawings - Modify existing software programs to accept standards - Format Computer-Aided Design (CAD) System output to HP 3000 input requirements - Interface to Continuing Property Records (CPR) System o UPDATE MATERIAL AND CONSTRUCTION STANDARDS <ul style="list-style-type: none"> - Research industry standards - Improve vendor information channels - Review standards for assembly efficiency - Utilize computerized drafting o CONTINUE PRODUCTION OF COMPUTER DRAWN DISTRIBUTION MAPS <ul style="list-style-type: none"> - Distribution Maps - Substation Feeder Maps o UPDATE TEN-YEAR LONG-RANGE PLAN FOR ML&P GENERATION, TRANSMISSION AND DISTRIBUTION REQUIREMENTS o IMPROVE CONSTRUCTION ESTIMATING PROCESS <ul style="list-style-type: none"> - Develop further standardization - Conduct work order reviews during construction in progress - Utilize information review and construction feedback system 	<p>ENGINEERING</p>	<p>1990</p>

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division FINANCIAL SERVICES	Budget Year 1990
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FUNCTIONAL DESCRIPTION

FINANCE DIVISION

Provides full line of financial services including budget, accounting, and rates and tariffs to the General Manager and other Divisions

Planning and Budget Section

Responsible for financial forecasting, financial modeling, bond sale activities and the yearly budget submissions.

Rates and Tariffs Section

Participates in regulatory activities such as tariff revisions, revenue requirements, cost of service and intervention on matters before the APUC.

Accounting Section

Responsible for the financial analysis and reporting of the utility in the manner prescribed by the Federal Energy Regulatory Commission, the Alaska Public Utilities Commission, and generally accepted accounting principles.

Utility MUNICIPAL LIGHT & POWER	Division FINANCIAL SERVICES	Budget Year 1990
<p><u>OBJECTIVES AND TASKS</u></p> <ul style="list-style-type: none">o PROVIDE ACCURATE AND TIMELY FINANCIAL AND ACCOUNTING INFORMATION<ul style="list-style-type: none">- Review management financial reporting requirements- Revise and/or prepare reports necessary to meet the requirements- Streamline in-house generated financial reports o EDUCATE ML&P PERSONNEL ON REGULATORY ISSUES<ul style="list-style-type: none">- Conduct training sessions on interpretation of specified tariff sections o UPGRADE ELECTRONIC SPREADSHEETS TO EVALUATE REGULATORY FINANCIAL POSITION<ul style="list-style-type: none">- Enhance cost of service allocation model for use with year end data- Modify standardized formats to facilitate current and updated revenue requirement studies o PROVIDE TIMELY RESPONSE TO REGULATORY DECISIONS<ul style="list-style-type: none">- Monitor federal and state regulatory proceedings- Plan the extent of regulatory involvement to minimize the need for overtime- Revise tariffs as required during the year		

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division FINANCIAL SERVICES	Budget Year 1990
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OBJECTIVES AND TASKS - CONTINUED

- o PRODUCE TIMELY BUSINESS PLANS AND BUDGETS
 - Define ML&P's budget policies and strategies
 - Provide budget guidance to division managers throughout the year
 - Coordinate divisional input to the annual business plan and budgets during the first and second quarters
 - Produce the annual business plan, operating and capital budgets during the second and third quarter
 - Prepare management presentation packages on the budget during the third quarter
 - Develop and implement long-range financial forecasts and reports
 - Prepare annual analysis of Equity Management Plan

- o ADVISE MANAGEMENT ON FINANCIAL ALTERNATIVES FACING THE UTILITY
 - Provide a yearly financial plan to division managers and the general manager
 - Monitor the financial plan monthly and recommend alternatives to deviations
 - Project results of various actions using financial modeling
 - Implement approved controls to the financial plan
 - Provide guidelines to management on attaining Equity Management Plan objectives
 - Provide variance analysis
 - Bond and Refunding monitoring

Utility MUNICIPAL LIGHT & POWER	Division CUSTOMER SERVICES	Budget Year 1990
<p data-bbox="220 284 577 316"><u>FUNCTIONAL DESCRIPTION</u></p> <p data-bbox="220 381 630 414"><u>CUSTOMER SERVICE DIVISION</u></p> <p data-bbox="220 446 1879 511">Provides full line of customer services for electric customers within our service area for the General Manager and other divisions.</p> <p data-bbox="315 576 724 609"><u>Customer Services Section</u></p> <p data-bbox="315 641 1921 738">Responsible for customer contact for establishing, maintaining, terminating electrical service including telephone orders, mail orders, personal contact, for connects, disconnects, cash receipts and customer record maintenance.</p> <p data-bbox="315 771 556 803"><u>Billing Section</u></p> <p data-bbox="315 836 1879 901">Responsible for the timely scheduling and accurate billing of customers accounts, and data entry and verification of service orders.</p> <p data-bbox="315 933 808 966"><u>Credit and Collections Section</u></p> <p data-bbox="315 998 1900 1063">Responsible for the handling of the credit and collections activity in accordance with our tariff, Alaska Statutes, and Fair Credit practices.</p> <p data-bbox="315 1096 682 1128"><u>Meter Services Section</u></p> <p data-bbox="315 1161 1648 1201">Responsible for meter connects, disconnects and accurate and timely meter reading.</p>		

Utility MUNICIPAL LIGHT & POWER	Division CUSTOMER SERVICES	Budget Year 1990
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OBJECTIVES AND TASKS

- o BILLING, COLLECTION AND CUSTOMER SERVICES
 - Promote excellent public relations
 - Refine the billing function for producing accurate and timely bills
 - Analyze customer records for billing accuracy
 - Analyze document retention schedules
 - Maintain high collections indices while providing excellent customer services

- o METER SERVICES
 - Identify and initiate the replacement of failing meters and equipment
 - Restructure meter reading for efficiency
 - Study and evaluate new technologies and alternatives for metered service

- o PROCEDURAL IMPROVEMENTS
 - Review and improve security requirements
 - Develop job standards requirements
 - Enhance the employee development program
 - Review policies, procedure and tariff for compliance and possible improvements

Utility

MUNICIPAL LIGHT & POWER

Division

GENERATION

Budget Year
1990FUNCTIONAL DESCRIPTIONGENERATION DIVISION

Responsible for the planning, engineering, operation, maintenance, and installation of equipment used in conjunction with the Utility's power production.

Plant #1 Crew Section

Operates and maintains power production equipment and facilities on a 24-hour basis

Plant #2 Crew Section

Operates and maintains power production equipment and facilities on a 24-hour basis

Electrical Crew Section

Engineers, installs and maintains the Generation Division control systems, and production plant electrical services

Heavy Mechanical Crew Section

Performs overhauls and major maintenance of the Generation Division power production equipment, refurbishment of turbine parts and new construction

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division GENERATION	Budget Year 1990
<p>OBJECTIVES AND TASKS</p> <ul style="list-style-type: none"> o CONTINUE AN ACTIVE MAINTENANCE PROGRAM TO OBTAIN THE BEST RELIABILITY AND EFFICIENCY OF POWER PRODUCTION EQUIPMENT <ul style="list-style-type: none"> - Maintain high level of reliability/availability by providing good quality of maintenance - Enhance in-house repair and refurbishment capability to improve utilization of existing manpower, equipment reliability, and efficiency - Provide maintenance for the Eklutna station (when it is acquired from federal government) o PROMOTE RELIABILITY, AVAILABILITY AND EFFICIENCY WITH POWER PRODUCTION EQUIPMENT IMPROVEMENTS <ul style="list-style-type: none"> - Improve predictive/preventative maintenance capability - Improve on power production equipment documentation processing procedures - Provide black start capability at Plant II - Improve anti-icing and air filtration of older units - Install water conservation equipment - Continue investigation of alternative types of generation - Improve combined cycle and simple cycle efficiency - Improve facility to meet new safety, seismic and fire protection standards - Improve turbine-generator controls and automated data gathering - Improve SCADA equipment - Improve communication equipment between facilities - Improve emission levels as reliable technology is available - Enhance part/maintenance system o IMPROVE STAFF EFFICIENCY <ul style="list-style-type: none"> - Improve quality assurance - Improve technical training of staff o SECURE RELIABLE FUEL SUPPLIES <ul style="list-style-type: none"> - Continue with the emergency fuel supply improvements as required - Investigate gas storage alternatives - Investigate alternate energy/fuel sources 		

Utility MUNICIPAL LIGHT & POWER	Division OPERATIONS	Budget Year 1990
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FUNCTIONAL DESCRIPTIONOPERATIONS DIVISION

Provides construction, maintenance, and operation of the transmission and distribution systems, contract administration of contracted projects and personnel, facility and grounds maintenance, vehicle maintenance and repair, and warehousing of construction and maintenance material. Provides support to the General Manager as well as other divisions.

Line Section

Provides the maintenance and operational personnel necessary to complete the construction, maintenance and operation of the transmission and distribution system, provides personnel for the customer service division.

Contract Section

Provides the contract administration and quality control of construction projects and supervision of contracted personnel. Provides Construction Assistance Contracts in order to supplement the completion of transmission, distribution and substation projects.

Technical Services Section

Provides the technical personnel necessary to complete electrical metering, substation operation and maintenance, transformer repair and warehousing, radio installation and maintenance, building maintenance and repair, and field locating of underground distribution.

Warehouse/Vehicle Maintenance Section

Provides the storage and issuance of construction and maintenance utility material. Provides the maintenance and repair of all utility department vehicles.

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division OPERATIONS	Budget Year 1990
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OBJECTIVES AND TASKS

- o IMPROVE RELIABILITY AND REDUCE SERVICE INTERRUPTIONS THROUGH ONGOING INSPECTION AND PREVENTIVE MAINTENANCE PROGRAMS
 - Maintain the pilot wire system
 - Annually inspect and maintain the CBD vault-duct system
 - Annual tree trimming
 - Maintain the SCADA System
 - Annual inspection and maintenance of distribution system
 - Preventive maintenance of substations and 115KV switch yards
 - Continue comprehensive meter audit program
 - Continue system inspection program, using infrared and x-ray technologies

- o PROVIDE RELIABLE FLEET SERVICE, AND VEHICLE MAINTENANCE
 - Perform annual IM Inspections on all vehicles
 - Continue annual vehicle safety inspections
 - Continue to provide reliable vehicles, which minimize costly down time

- o PROVIDE IMPROVED STREET LIGHTING
 - Continue the upgrade of older street lighting systems

- o PROVIDE EFFICIENT SYSTEM CONSTRUCTION
 - Refine Comprehensive Construction and Scheduling Program
 - Annually monitor and evaluate:
 - Unit Price Contract
 - Expedite Bid Program
 - Provide effective reliable construction feedback and tracking system

Utility MUNICIPAL LIGHT & POWER	Division OPERATIONS	Budget Year 1990
<p><u>OBJECTIVES AND TASKS - CONTINUED</u></p> <ul style="list-style-type: none">o PROVIDE EFFECTIVE SYSTEM COMMUNICATIONS<ul style="list-style-type: none">- Continued maintenance of intertie microwave system- Improved radio repair facility- Annual inspection and maintenance of all mobile and portable radios- Provide reimbursable cost effective repair service to other utilities o PROVIDE COST EFFECTIVE FACILITY MAINTENANCE UTILITY WIDE<ul style="list-style-type: none">- Annually inspect facility heating and cooling system- Improve efficiency of facility contracts- Continued building maintenance		

MUNICIPALITY OF ANCHORAGE

Utility	MUNICIPAL LIGHT & POWER	Division	POWER MANAGEMENT	Budget Year 1990
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FUNCTIONAL DESCRIPTION

POWER MANAGEMENT DIVISION

Manage and execute economic dispatch and control of ML&P generation, scheduling and control of electrical interchanges with other utilities, control and switching of the transmission and distribution facilities

Power Dispatch Section

Schedule and control generation and power interchanges, control and switch transmission and distribution facilities

Distribution Section

Control and switch sub-transmission and distribution facilities

Utility MUNICIPAL LIGHT & POWER	Division POWER MANAGEMENT	Budget Year 1990
<p><u>OBJECTIVES AND TASKS</u></p> <ul style="list-style-type: none"> o OPERATE CONTINUOUS LINE AND GENERATION DISPATCH CENTER <ul style="list-style-type: none"> - Dispatch for system safety and reliability - Improve economic selection of generation - Improve centralized control of generation o ACT AS SOUTHERN AREA CONTROLLER FOR ALASKA INTERTIE <ul style="list-style-type: none"> - coordinate interchange schedules of AEGT, CEA, MEA & HEA - Continue to develop and improve operating procedures - Develop area-wide outage restoration contingency plans o IMPLEMENT BENEFICIAL WHOLESALE POWER TRANSACTIONS <ul style="list-style-type: none"> - Negotiate power sales and interchange agreements with other utilities - Computerize accounting and billing of wholesale power transactions - Negotiate and schedule spot economy energy sales o IMPROVE DISPATCHER PROFICIENCY <ul style="list-style-type: none"> - Conduct familiarization visits to other dispatch centers - Utilize UAF and GVEA facilities for outage simulation training - Develop dynamic simulator o PLAN FOR AND INSTALL INTEGRATED ENERGY MANAGEMENT SYSTEM (EMS) <ul style="list-style-type: none"> - Replace existing SCADA controller with EMS system - Integrate EMS system with existing AGC (automatic generation control) system 		

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division SYSTEMS AND COMMUNICATIONS	Budget Year 1990
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FUNCTIONAL DESCRIPTION

SYSTEMS AND COMMUNICATIONS DIVISION

Provide decentralized, cost effective data processing and communication resources to each ML&P Division.

System Support Section

Install, operate and maintain computer and communications hardware and operating system software. Provide training and assistance to system users. Complete nightly scheduled processes. Ensure data integrity and system Security.

Billing and Customer Service Programming Section

Analyze, design, develop, implement, maintain and support billing, accounts receivable and customer service related systems.

CPRMS and Resource Management Systems Programming Section

Analyze, design, develop, implement, maintain and support continuing property records management and resource management related systems.

Pre-Payroll and Financial Systems Programming Section

Analyze, design, develop, implement, maintain and support pre-payroll and financial information related systems.

Utility

MUNICIPAL LIGHT & POWER

Division

SYSTEMS AND COMMUNICATIONS

Budget Year

1990

OBJECTIVES AND TASKS

- o Maintain computer system security to ensure data integrity
- o Provide maintenance to operational systems
- o Continue to manage hardware, software and procedures to improve operating efficiency and performance
- o Provide enhancements to operational systems
- o Update Long-Range Data Processing Plan
- o Manage and maintain an efficient and cost effective telecommunications system
- o Provide advanced customer access technology
- o Comply with approved Equity Management Plan (EMP) objectives of attaining a debt/equity ratio of 70/30 in ten years

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division							Budget Year 1990
<u>WORKFORCE PROJECTIONS</u>								
<u>DIVISIONS</u>	1989	1990	1991	1992	1993	1994	1995	
ADMINISTRATION	12	13	13	13	13	13	13	
SYSTEMS & COMMUNICATIONS	14	14	14	15	15	16	16	
PRODUCTION (GENERATION)	43	44	44	44	44	44	45	
CUSTOMER SERVICE	37	38	38	38	38	38	39	
FINANCIAL SERVICES	17	18	18	18	19	19	19	
POWER MANAGEMENT	9	10	10	11	11	11	11	
OPERATIONS	44	44	45	45	46	46	46	
ENGINEERING	<u>22</u>	<u>22</u>	<u>23</u>	<u>23</u>	<u>23</u>	<u>24</u>	<u>24</u>	
SUB-TOTAL	<u>198</u>	<u>203</u>	<u>205</u>	<u>207</u>	<u>209</u>	<u>211</u>	<u>213</u>	
NECA/SUMMER TEMPS	<u>23</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	
TOTAL	<u>221</u>	<u>228</u>	<u>230</u>	<u>232</u>	<u>234</u>	<u>236</u>	<u>238</u>	

Utility MUNICIPAL LIGHT & POWER	Division	Budget Year 1990
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PLANNING ASSUMPTIONS

The following assumptions have been used in developing ML&P's 1990 - 1995 long-range plans. They have been developed from the best data available at this time.

- o kWh sales will remain stabilized in 1989
- o Intra-governmental charges to utility will increase slightly in 1990
- o Expenses excluding labor and fuel will be increased by a 2% inflation factor in 1990; labor costs have no inflation factor and fuel costs have been escalated by 1%
- o ML&P's interest income will be based on 7.5% short-term
- o Revenue requirement calculations will be made in accordance with the Equity Management Plan using financial modeling techniques. The objective of the EMP is to attain 30% equity in 10 years.
- o Cost for maintenance will increase as net plant gets older

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division	Budget Year 1990
RECONCILIATION FROM 1989 PRO-FORMA TO 1990 BUDGET		
1989 PRO-FORMA BUDGET	<u>COST</u> \$71,329,000	<u>POSITIONS</u>
<u>RECONCILIATION</u>		
1. Personnel and benefits cost	\$ 370,000	5 Perm. 2 Temp.
2. Professional services primarily due to mitigation of environmental liabilities	250,000	
3. Travel	-0-	
4. Depreciation increase	651,000	
5. Net of Interest expense and amortization costs reduced because of bond refunding	(1,041,000)	
6. MUSA	339,000	
7. IGC's	74,812	
8. Fuel - Enstar rate increase	532,000	
9. All other expenses increase because of inflation and general maintenance activity is increasing with age of plant.	<u>677,000</u> \$ 1,852,812	
<u>1990 PROPOSED BUDGET</u>	\$73,181,812	

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division						Budget Year 1990
STATISTICAL AND PERFORMANCE TRENDS							
	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Average Number of Customers*	21,932	30,348	29,957	29,786	29,181	29,381	29,577
Retail Sales (MWH)	670,030	813,894	817,214	789,231	756,978	769,142	772,390
Resale (MWH)	22,058	166,887	170,095	176,476	62,770	60,000	60,000
Total Sales (MWH)	692,088	980,781	987,309	965,707	819,748	829,142	832,390
Total Operating Expenses	\$ 30,641	\$ 44,140	\$ 51,156	\$ 49,418	\$ 49,998	\$ 53,538	\$ 56,442
Operating Expense per Retail Kilowatt Hour	4.6	5.5	6.3	6.3	6.6	7.0	7.3
% Change	4.5%	19.6%	14.5%	0%	4.8%	6.0%	4.3%
Total Expense per Customer	\$ 1,954	\$ 1,985	\$ 2,255	\$ 2,255	\$ 2,322	\$ 2,428	\$ 2,474
% Change	3.2%	1.6%	13.6%	0%	3.0%	4.6%	1.9%
Number of Employees (Actual at Year End) **	182	206	213	203	194	198	203
Customers per Employee	121	148	142	147	151	148	146
Electric Plant in Service (000)	\$141.100	\$150,559	\$155,820	\$154,311	\$150,092	\$151,500	\$149,000
Electric Plant per Customer	\$ 6,434	\$ 4,927	\$ 5,140	\$ 5,182	\$ 5,143	\$ 5,156	\$ 5,038
<p>*Number of Billings Processed Shown in 1987 and Later Years; in earlier years, actual customers are shown. Actual customer count can be misleading because one customer can have one or more billings.</p> <p>**Does not Include Temporary Employees</p>							

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division						Budget Year 1990
<u>RATIO</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>		<u>1990</u>
Current Ratio	2.1/1	2.8/1	3.0/1	4.2/1	4.2/1		5.1/1
Long Term Debt/Gross Plant	90.9/1	98.7/1	94.7/1	89.5/1	90.7/1		83.4/1
Debt/Equity Ratio	83.0/17	93.0/7	92.0/8	86.1/13.9	85/15	83.9/16.1	
Operating Ratio controllable Cost	63.0/1	65.1/1	63.5/1	61.4/1	63.3/1		62.2/1
<u>OPERATING STATEMENT</u>							
Rate of Return on Equity (Regulatory)	(3.4)%	(10.9)%	(.06)%	3.7 %	1.4 %		6.5 %
Bond Debt Coverage (1.35 Bond Covenant Requirement)	1.46	1.47	1.41	1.57	1.67		1.68
Operating Margin	22.0 %	19.9 %	19.8 %	22.1 %	20.3 %		21.6 %
Net Profit Margin (Regulatory)	(1.7)%	(1.6)%	(2.6)%	1.8 %	.7 %		3.2 %

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division					Budget Year 1990
	1990	1991	1992	1993	1994	
<u>Growth Factors</u>						
Billings	29,577	29,712	29,839	30,083	30,327	
kWh Sales Retail (MWH)	772,390	775,724	781,392	790,479	801,084	
kWh Sales for Resale (MWH)	60,000	60,000	60,000	60,000	60,000	
Bond Sales (000)	-0-	-0-	-0-	-0-	-0-	
<u>Personnel Increases</u>						
Management	1	0	0	0	0	
Systems & Communication	0	0	1	0	1	
Production	1	0	0	0	0	
Customer Service	1	0	0	0	0	
Financial Services	1	0	0	1	0	
Power Management	1	0	1	0	0	
Operations	0	1	0	1	0	
Engineering	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>	
Total	5	2	2	2	2	
REVENUE (000)	\$75,066	\$78,345	\$82,927	\$85,874	\$89,155	
EXPENSE (000)	<u>72,752</u>	<u>73,552</u>	<u>77,797</u>	<u>80,413</u>	<u>83,282</u>	
NET INCOME (000)	2,314	4,793	5,130	5,461	5,873	
Dividend (000)	<u>-0-</u>	<u>2,261</u>	<u>2,391</u>	<u>2,473</u>	<u>2,567</u>	
Retained Earnings (000)	\$ 2,314	\$ 2,532	\$ 2,739	\$ 2,988	\$ 3,306	
Possible Rate Increases	7.9	5.2	5.0	2.2	2.4	
Debt Service Coverage	1.68	1.93	1.96	1.99	2.03	
* Net Income in all years calculated to derive just enough income to marginally offset dividend payments and incremental increase in principal payment on refunding financing. Equity improves approximately 1%/year.						

MUNICIPALITY OF ANCHORAGE

Utility	Division	Budget Year
MUNICIPAL LIGHT & POWER		1990

1990 BUDGET IMPACTS

OPERATING

There are no major impacts in ML&P's 1990 operating budget. ML&P assumes a slight increase in retail kWh sales in accordance with the recently updated load forecast prepared by CH2M Hill. Expense increases result primarily from inflation, depreciation and increased maintenance cost on the plant. It is assumed that Enstar gas prices will increase slightly during the next year.

CAPITAL

ML&P's Capital Budget for 1990 and beyond is a continuation of the maintenance level of construction instituted by ML&P in 1986. Based upon the current budget assumptions, ML&P will not require any bond sales for construction until after the year 2000. Operating cash will be used for construction activities until that time. The budget does contain funds for ML&P's involvement in a possible purchase of the Eklutna project from the Federal Government.

Utility MUNICIPAL LIGHT & POWER	Division		Budget Year 1990
Municipality of Anchorage Financial Data			
Line Item Description	Year: 1988 Actual	Year: 1989 Pro-Forma	Year: 1990 Budget
<u>STATEMENT OF REVENUE AND EXPENSES</u>			
<u>OPERATING REVENUES</u>			
4400-Residential Sales	\$12,282,375	\$14,600,000	\$15,820,000
4420-Commercial & Industrial	43,347,588	48,695,000	52,593,000
4440-Public Highway & Street Lighting	1,157,561	1,250,000	1,375,000
4450-Public Authority	26,951	26,000	28,000
4570-Sales for Resale	2,993,904	2,400,000	1,800,000
4491-COPA Contra Account	4,036,500	-0-	-0-
4510-Misc. Service Revenue	235,214	135,000	150,000
4540-Rent from Electric Property	114,643	55,000	60,000
4560-Miscellaneous Revenue	<u>-0-</u>	<u>55,000</u>	<u>35,000</u>
Total Operating Revenue	<u>\$64,194,736</u>	<u>\$67,216,000</u>	<u>\$71,861,000</u>
<u>OPERATING EXPENSE</u>			
Production Expense	\$25,907,643	\$27,010,000	\$27,985,000
Transmission Expense	277,158	320,000	390,000
Distribution Expense	5,023,472	5,100,000	5,345,000
Customer Account Expense	3,052,870	3,370,000	3,405,000
Customer Service & Information	143,603	220,000	245,000
Administrative & General Expense	3,280,868	3,775,000	4,338,812
9403-Depreciation	9,712,631	10,200,000	10,840,000
9404-Depreciation Contributed Plant	442,694	420,000	430,000
9405-Amort. Intangible Plant	307,779	308,000	308,000
9406-Amort. Plant Acquisition	61,571	61,000	62,000
9408-Municipal Utility Service Assmt.	<u>1,787,686</u>	<u>2,754,000</u>	<u>3,093,000</u>
Total Operating Expense	<u>\$49,997,975</u>	<u>\$53,538,000</u>	<u>\$56,441,812</u>
Operating Income	\$14,196,761	\$13,678,000	15,419,188

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division		Budget Year 1990
Municipality of Anchorage Financial Data			
Line Item Description	Year: 1988 Actual	Year: 1989 Pro-Forma	Year: 1990 Budget
<u>NON-OPERATING REVENUE</u>			
4191-Interest From Operating Reserve	\$ 310,073	\$ 365,000	\$ 375,000
4192-Interest From Bond Redemption Cash	2,070,407	1,875,000	1,590,000
4193-Interest From General Cash Pool	1,466,743	1,555,000	1,125,000
4194-Interest From Debt Service Account	419,748	350,000	105,000
4210-Misc. Non-Operating Revenue	43,203	10,000	10,000
Total Non-Operating Revenue	<u>\$ 4,310,174</u>	<u>\$ 4,155,000</u>	<u>\$ 3,205,000</u>
<u>NON-OPERATING EXPENSE</u>			
9426 Community	\$ 48,259	\$ 85,000	\$ 100,000
9427-Interest on Bonded Debt	16,851,988	15,566,000	13,720,000
9428-Amortization of Bond Discount	474,423	425,000	355,000
9429-Amortization of Bond Sale Cost & Ins.	240,032	280,000	315,000
9430-Amort. Loss on Refunded Debt	218,861	1,505,000	2,380,000
9431-Other Interest Expense	51,385	55,000	20,000
9320-Interest During Construction	(115,810)	(125,000)	(150,000)
Total Non-Operating Expense	<u>\$ 17,769,138</u>	<u>\$ 17,791,000</u>	<u>\$ 16,740,000</u>
Non-Operating Income (Loss)	<u>\$ (13,458,964)</u>	<u>\$ (13,636,000)</u>	<u>\$ (13,535,000)</u>
Net Income (Loss)	<u>\$ 737,797</u>	<u>\$ 42,000</u>	<u>\$ 1,884,188</u>
Add: Depreciation of Contributed Plant	442,694	420,000	430,000
Net Income (Regulatory)	<u>\$ 1,180,491</u>	<u>\$ 462,000</u>	<u>\$ 2,314,188</u>
Less: Depreciation of Contributed Plant	(442,694)	(420,000)	(430,000)
Add: Restricted Interest Income	<u>728,616</u>	<u>470,000</u>	<u>115,000</u>
Net Income Governmental Financial Reporting	\$ 1,466,413	\$ 512,000	\$ 1,999,188
Does Not Include Extraordinary Gain of Aprx \$2,340,000 on Debt restructure or Arbitrage Liability of Aprx \$2,500,000			

Utility MUNICIPAL LIGHT & POWER	Division		Budget Year 1990
Municipality of Anchorage Financial Data			
Line Item Description	Year: <u>1988</u> Actual	Year: <u>1989</u> Pro-Forma	Year: <u>1990</u> Budget
<u>STATEMENT OF SOURCES AND USES OF CASH</u>			
Sources of Cash Funds			
Net Income	\$ 1,466,412	\$ 512,000	\$ 1,999,188
Depreciation	10,155,325	10,200,000	10,840,000
Amortized Bond Discount	474,423	425,000	355,000
Amortization & Acquisition Adjustments	369,350	369,000	370,000
Net (Increase) Decrease in Current Assets	3,456,704	-	-
Net Increase (Decrease) in Current Liabilities	(3,436,682)	(2,029,000)	-
Amortization on Refunded Debt	218,862	1,505,000	2,380,000
Contributions	<u>2,325,952</u>	<u>400,000</u>	<u>500,000</u>
TOTAL SOURCES	\$15,030,346	\$ 11,382,000	\$ 16,444,188
Uses of Cash Funds			
Additions to Plant	\$ 6,305,528	\$ 6,987,000	\$ 18,610,000
Debt Retirement Long Term	1,710,000	4,950,000	4,330,000
Retire Other Debt	325,806	-	-
Increase in Prepays & Deferreds	<u>3,287,364</u>	<u>13,912,000</u>	<u>-</u>
TOTAL USES	\$11,628,698	\$ 25,849,000	\$ 22,940,000
Net Increase (Decrease) In Cash Funds			
Cash Balance Jan. 1	\$ 3,401,648	\$(14,467,000)	\$ (6,495,812)
Cash Balance Dec. 31	\$20,998,700	\$ 24,400,348	\$ 9,933,348
Cash Balance Dec. 31	\$24,400,348	\$ 9,933,348	\$ 3,437,536
Detail of Cash Balance			
Equity In General Cash Pool	\$24,400,348	\$ 9,933,348	\$ 3,437,536*
<p>* Does not reflect restricted bond reserve funds which must be maintained until bonds are paid off</p>			

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division		Budget Year 1990
Municipality of Anchorage Financial Data			
Line Item Description	Year: <u>1988</u> Actual	Year: <u>1989</u> Pro-Forma	Year: <u>1990</u> Budget
<u>NET PROFIT MARGIN</u>			
Net Income Governmental Reporting	\$ 1,466,412	\$ 512,000	\$ 1,999,188
Operating Revenues	\$64,194,736	\$67,216,000	\$71,861,000
Net Profit Margin Governmental Reporting	2.3	.8	2.8
Net Income Regulatory	\$ 1,180,490	\$ 462,000	\$ 2,314,188
Operating Revenues	\$64,194,736	\$67,216,000	\$71,861,000
Net Profit Margin Regulatory	1.8	.7	3.2

Utility MUNICIPAL LIGHT & POWER	Division	Budget Year 1990
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Municipality of Anchorage
Financial Data

Line Item Description	Year: <u>1988</u> Actual	Year: <u>1989</u> Pro-Forma	Year: <u>1990</u> Budget
<u>DEBT SERVICE COVERAGE</u>			
Income Available for Debt Service Coverage	\$29,031,610	\$28,822,000	\$30,264,188
Debt Service Requirement	\$18,451,988	\$17,272,388	\$18,045,949
Debt Coverage	1.57	1.67	1.68

MUNICIPALITY OF ANCHORAGE

Utility MUNICIPAL LIGHT & POWER	Division FINANCE				Budget Year 1990
OPERATING BUDGET					
EXPENSE ITEMS	1986	1987	1988	1989	1990
Personnel Costs	\$ 7,793,553	\$ 8,543,171	\$ 8,293,400	\$ 8,350,000	\$ 8,620,000
Benefit Costs	3,795,172	4,322,844	4,243,609	4,250,000	4,350,000
Professional Services	377,154	385,537	157,363	300,000	550,000
Travel	157,412	69,700	51,600	67,000	67,000
Depreciation & Amortization	9,548,166	10,279,007	10,524,675	10,989,000	11,640,000
Interest	17,207,361	17,734,000	17,836,690	17,831,000	16,790,000
MUSA	<u>1,024,755</u>	<u>1,479,748</u>	<u>1,787,686</u>	<u>2,754,000</u>	<u>3,093,000</u>
Sub Total	<u>\$39,903,573</u>	<u>\$42,814,007</u>	<u>\$42,895,023</u>	<u>\$44,541,000</u>	<u>\$45,110,000</u>
Intergovernmental Charges					
Finance Department	\$ 544,765	\$ 507,883	\$ 609,100	\$ 665,000	635,000
Information Systems Department	13,553	149,158	19,366	20,000	25,000
Enterprise Activities	200,460	189,908	22,682	88,000	115,000
Public Utilities Customer					
Service	216,451	48,072	-0-	-0-	-0-
Public Utilities Credit and					
Collections	674,345	-0-	-0-	-0-	-0-
Human Resources Department	151,072	159,922	145,474	55,000	245,000
Self Insurance	830,600	735,812	395,691	364,000	275,000
Other Intergovernmental Charges	<u>229,838</u>	<u>272,645</u>	<u>224,337</u>	<u>309,000</u>	<u>280,812</u>
Sub Total IGC	\$ 2,861,084	\$ 2,063,400	\$ 1,416,650	\$ 1,501,000	\$ 1,575,812
Purchased Power	\$ 1,423,851	\$ 1,570,996	\$ 1,737,170	\$ 1,550,000	\$ 1,550,000
Fuel	22,182,030	18,331,955	20,177,633	21,325,000	21,857,000
Other Expenses(materials, supplies)	1,992,344	2,371,859	1,656,437	2,537,000	3,239,000
Interest During Construction	<u> </u>	<u> </u>	<u>(115,800)</u>	<u>(125,000)</u>	<u>(150,000)</u>
TOTAL EXPENSES	\$68,362,882	\$67,152,217	\$67,767,113	\$71,329,000	\$73,181,812

Utility MUNICIPAL LIGHT & POWER	Division	Budget Year 1990
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1990 CAPITAL IMPROVEMENT BUDGET FINANCIAL SUMMARY

<u>PROJECT TITLE</u>	<u>TOTAL PROJECT COST 1990</u>	<u>REVENUE BONDS</u>	<u>G. O. BONDS</u>	<u>OPERATIONS</u>	<u>STATE GRANTS</u>	<u>FEDERAL GRANTS</u>
Steam Production	540	0	0	540	0	0
Other Production	4,519	0	0	4,519	0	0
Hydraulic Production	5,110	0	0	5,110	0	0
Transmission	110	0	0	110	0	0
Distribution	5,549	0	0	5,549	0	0
General Plant	<u>2,782.5</u>	<u>0</u>	<u>0</u>	<u>2,782.5</u>	<u>0</u>	<u>0</u>
TOTAL (000)	18,610.5	0	0	18,610.5	0	0

MUNICIPALITY OF ANCHORAGE

BUDGET YEAR PROJECTS						Budget Year
Utility <u>MUNICIPAL LIGHT & POWER</u>						1990
Project Category	Project Title	Location	Funding			
			Bonds G-GO Bonds R-Rev Bonds	Operations	Grants F-Federal S-State	Total
Steam Production	Structures and Improvements	Plant 1 & 2	-0-	480	-0-	480
	Boilers	Plant 1 & 2	-0-	60	-0-	60
Prepared by _____ Date _____ Total			-0- G -0- R	540	-0- F -0- S	540

BUDGET YEAR PROJECTS

Budget Year
1990

Utility MUNICIPAL LIGHT & POWER

Project Category	Project Title	Location	Funding			
			Bonds G-GO Bonds R-Rev Bonds	Operations	Grants F-Federal S-State	Total
Other Production	Structures and Improvements	Plant 1 & 2	-0-	240	-0-	240
	Fuel Handling and Storage	Plant 1 & 2	-0-	-0-	-0-	-0-
	Turbines and Generators	Plant 1 & 2	-0-	3,011	-0-	3,011
	Control Equipment	Plant 1 & 2	-0-	1,243	-0-	1,243
	Misc. Equipment	Plant 1 & 2	-0-R	25	-0-	25
Prepared by _____ Date _____ Total			-0- G -0- R	4,519	-0-F -0-S	4,519

MUNICIPALITY OF ANCHORAGE

BUDGET YEAR PROJECTS						Budget Year 1990
Utility <u>MUNICIPAL LIGHT & POWER</u>						
Project Category	Project Title	Location	Funding			Total
			Bonds G-GO Bonds R-Rev Bonds	Operations	Grants F-Federal S-State	
Hydraulic Production	Eklutna		-0-	5,110	-0-	5,110
Prepared by _____ Date _____ Total			-0- G -0- R	5,110	-0- F -0- S	5,110

BUDGET YEAR PROJECTS

Budget Year
1990

Utility MUNICIPAL LIGHT & POWER

Project Category	Project Title	Location	Funding			
			Bonds G-GO Bonds R-Rev Bonds	Operations	Grants F-Federal S-State	Total
Transmission	Relocations	State Roads	-0-	55	-0-	55
		Muni Roads	-0-	55	-0-	55
Prepared by _____ Date _____ Total			-0- G		-0- F	
			-0- R	110	-0- S	110

MUNICIPALITY OF ANCHORAGE

BUDGET YEAR PROJECTS						Budget Year	
Utility <u>MUNICIPAL LIGHT & POWER</u>						1990	
Project Category	Project Title	Location	Funding				
			Bonds G-GO Bonds R-Rev Bonds	Operations	Grants F-Federal S-State	Total	
Distribution	Land & Land Rights	-	-0-	300		300	
	Station Equipment	Substations	-0-	1,480	-0-	1,480	
	Overhead Lines	Throughout System	-0-	109	-0-	109	
	Underground Lines	Throughout System	-0-	2,060	-0-	2,060	
	Conversions	CBD	-0-	500	-0-	500	
	Relocations	State Roads		-0-	120	-0-	120
			Muni Roads	-0-	125	-0-	125
	Transformers/ Capacitors	Throughout System	-0-	250	-0-	250	
	Meters/Services	Throughout System	-0-	455	-0-	455	
	Street Lighting	Throughout System	-0-	150	-0-	150	
Prepared by _____ Date _____ Total			-0- G -0- R		-0- F -0- S	5,549	

BUDGET YEAR PROJECTS

Budget Year
1990

Utility MUNICIPAL LIGHT & POWER

Project Category	Project Title	Location	Funding			
			Bonds G-GO Bonds R-Rev Bonds	Operations	Grants F-Federal S-State	Total
General Plant	Structures and Improvements	Plant 1 & 2 Operations & Headquarters	-0-	830	-0-	830
	Stores/Tools/ Garage/Lab	Plant 1 & 2 Operations & Headquarters	-0-	535	-0-	535
	Furniture & Communications	Plant 1 & 2 Operations & Headquarters	-0-	1,055.5	-0-	1,055.5
	Transportation	Plant 1 & 2 Operations & Headquarters	-0-	362	-0-	362
Prepared by _____ Date _____ Total			-0- G -0- R	2,782.5	-0- F -0- S	2,782.5

MUNICIPALITY OF ANCHORAGE

Utility	MUNICIPAL LIGHT & POWER						Division	Budget Year 1990		
	CIP/CIP 1990-1995									
<u>PROJECT TITLE</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>OPERATIONS</u>	<u>STATE GRANTS</u>	<u>FEDERAL GRANTS</u>	<u>TOTAL</u>
Steam Production	540	827	176	-0-	-0-	-0-	1,543	-0-	-0-	1,543
Other Production	4,519	6,603	6,325	3,578	2,771	2,238	26,034	-0-	-0-	26,034
Hydraulic Production	5,110	-0-	-0-	-0-	-0-	-0-	5,110	-0-	-0-	5,110
Transmission	110	115	125	1,035	145	155	1,685	-0-	-0-	1,685
Distribution	5,549	5,807	6,540	7,282	7,191	5,582	37,951	-0-	-0-	37,951
General Plant	<u>2,782.5</u>	<u>2,609.5</u>	<u>1,962</u>	<u>1,780</u>	<u>1,967.5</u>	<u>1,928</u>	<u>13,029.5</u>	<u>-0-</u>	<u>-0-</u>	<u>13,029.5</u>
Total (000)	18,610.5	15,961.5	15,128	13,675	12,074.5	9,903	85,352.5	-0-	-0-	85,352.5
<u>SOURCE OF FUNDING:</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>				<u>TOTAL</u>
Revenue Bonds	-0-	-0-	-0-	-0-	-0-	-0-				-0-
Operations	<u>18,610.5</u>	<u>15,961.5</u>	<u>15,128</u>	<u>13,675</u>	<u>12,074.5</u>	<u>9,903</u>				<u>85,352.5</u>

FUTURE CAPITAL PROJECTS

Budget Year
1989

Utility MUNICIPAL LIGHT & POWER

Project Category	Project Title	Location	BUDGET BY YEAR				
			1991	1992	1993	1994	1995
Transmission	Station Equipment	Along Transmission System	-0-	-0-	300	-0-	-0-
	Conversions	Transmission System	-0-	-0-	600	-0-	-0-
	Relocations	State Roads	60	65	70	75	80
		Municipal Roads	55	60	65	70	75
Source of Funding:							
G.O. Bonds							
Revenue Bonds							
Operations			115	125	1,035	145	155
State Grants							
Federal Grants							
Total			115	125	1,035	145	155
Prepared by _____ Date _____							

MUNICIPALITY OF ANCHORAGE

FUTURE CAPITAL PROJECTS			Budget Year				
Utility <u>MUNICIPAL LIGHT & POWER</u>			1990				
Project Category	Project Title	Location	BUDGET BY YEAR				
			1991	1992	1993	1994	1995
Distribution	Land & Land Rights	New Substation Sites	275	300	-0-	-0-	250
	Station Equipment	Substations and Plants	1,492	1,152	2,645	2,835	1,397
	Overhead Lines	Throughout System	246	190	90	108	136
	Underground Lines	Throughout System	1,987	2,902	2,364	1,846	1,884
	Conversions	Central Business District	595	550	625	660	450
	Relocations	State Roads	125	130	140	150	150
	Municipal Roads		130	140	150	155	160
	Transformers/ Capacitors	Throughout System	500	650	700	750	500
	Meters/Services	Throughout System	275	307	333	439	395
	Street Lighting	Throughout System	182	219	235	248	260
Source of Funding:							
G.O. Bonds							
Revenue Bonds							
Operations			5,807	6,540	7,282	7,191	5,582
State Grants							
Federal Grants							
Total			5,807	6,540	7,282	7,191	5,582
Prepared by _____	Date _____						

FUTURE CAPITAL PROJECTS

Budget Year
1990

Utility MUNICIPAL LIGHT & POWER

Project Category	Project Title	Location	BUDGET BY YEAR				
			1991	1992	1993	1994	1995
Steam Production	Structures and Improvements	Plant 1 & 2	765	17	-0-	-0-	-0-
	Boilers	Plant 1 & 2	62	159	-0-		-0-
Source of Funding:							
G.O. Bonds							
Revenue Bonds							
Operations			827	176	-0-	-0-	0
State Grants							
Federal Grants							
Total			827	176	-0-	-0-	-0-
Prepared by _____ Date _____							

MUNICIPALITY OF ANCHORAGE

Utility <u>MUNICIPAL LIGHT & POWER</u>			FUTURE CAPITAL PROJECTS					Budget Year 1990
Project Category	Project Title	Location	BUDGET BY YEAR					
			1991	1992	1993	1994	1995	
Other Production	Structures and Improvements	Plant 1 & 2	340	740	340	355	250	
	Fuel Handling & Storage	Plant 1 & 2	675	925	625	625	-0-	
	Turbines & Generators	Plant 1 & 2	3,593	2,036	2,426	1,751	1,946	
	Control Equipment	Plant 1 & 2	1,975	2,617	187	40	42	
	Miscellaneous	Plant 1 & 2	20	7	-0-	-0-	-0-	
Source of Funding:								
G.O. Bonds								
Revenue Bonds								
Operations			6,603	6,325	3,578	2,771	2,238	
State Grants								
Federal Grants								
Prepared by _____ Date _____			Total	6,603	6,325	3,578	2,771	2,238