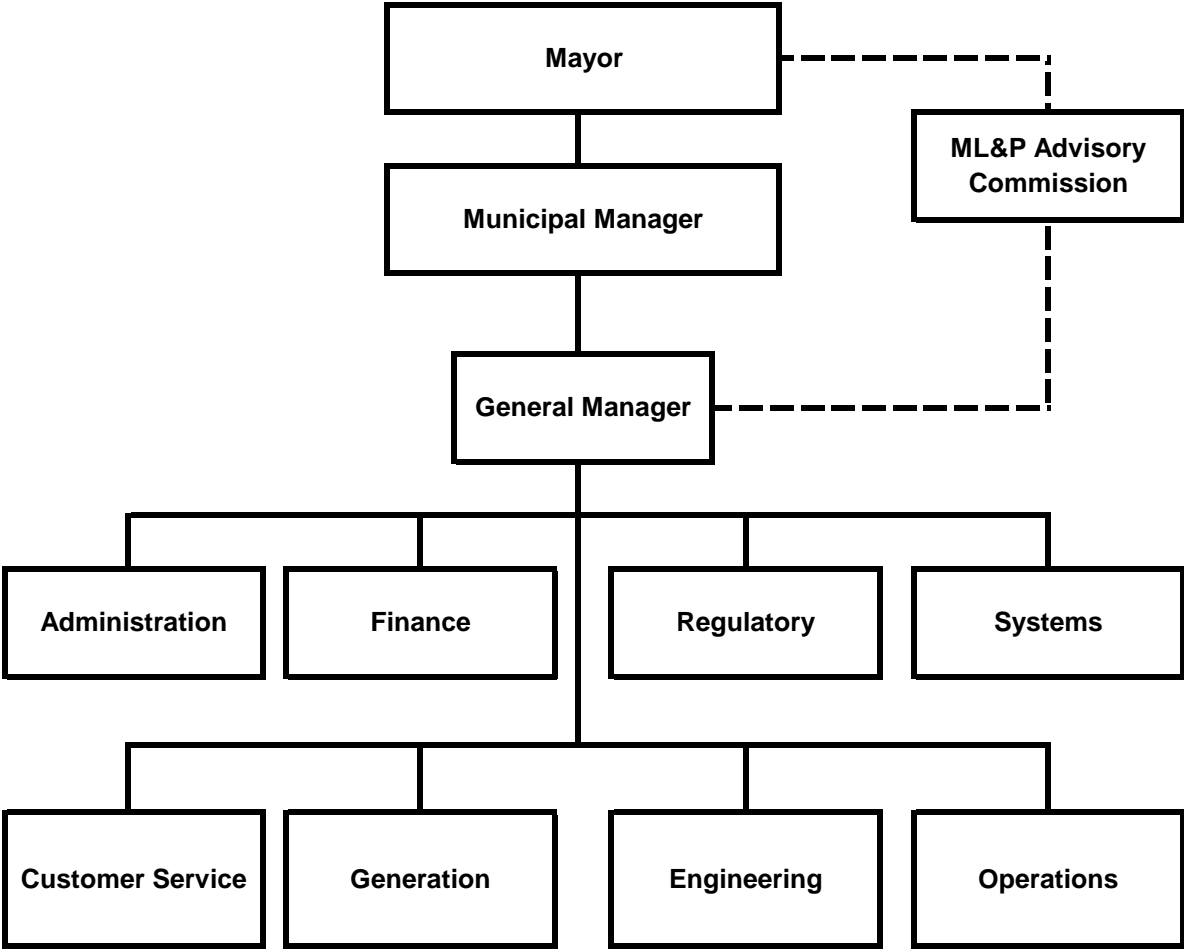


# Municipal Light & Power



## Municipal Light & Power Organizational Overview

### General Manager's Office

The General Manager is responsible for the overall management of Municipal Light & Power (ML&P). ML&P is functionally structured into eight operating divisions: Administration, Generation, Engineering, Operations, Finance, Customer Service, Regulatory Affairs, and Systems. Each division manager reports directly to the General Manager. The General Manager and Division Managers are responsible for coordinating both the strategic planning efforts and the efficient application of resources necessary to achieve ML&P's mission.

### Administration Division

The Administration Division provides support to the General Manager. Functions carried out by the Administration Division include: human resources, safety, security, public relations, environmental, telephone switchboard/receptionist duties, and courier/mailroom operations.

### Generation Division

The Generation Division is responsible for the production of all thermal electricity at ML&P and the Eklutna Hydroelectric plant.



*Figure 1. ML&P Plant 2A Main Building Dynamic Mural, "Cosmic Rise"*

This includes operation, maintenance, engineering, and installation of equipment used in conjunction with the three Municipally-owned electric power plants. The division also provides full spectrum maintenance and support for the Eklutna Hydroelectric Power Plant (ML&P owns 53%), the Southcentral Power Plant (SPP) (ML&P owns 30%).

The **Generation Plant Operators** operate the turbines as required by the dispatch center. The operator's primary function is to monitor and respond to equipment alarms and trips. This is done on a 24-hour basis. The operators coordinate lock-out/tag-out safety procedures in the plant when equipment is taken out of service for maintenance.

The **Heavy Mechanical** crew performs overhauls and major maintenance of power production equipment. This experienced crew is trained to disassemble large industrial turbines, evaluate their condition and make necessary repairs.

The **Electric/Electronic** section provides maintenance and installation of all instrumentation, which includes generation control and protective systems, supervisory control and data acquisition systems (SCADA), general plant electrical systems, and other related plant and construction work.

The **Eklutna** hydroelectric plant is managed by a ML&P Superintendent but operated by a Chugach Electric Association (CEA) Operator. Plant electrical production and costs are shared between ML&P, CEA, and Matanuska Electric Association (MEA) based on a predetermined percentage of ownership.

The **Generation Warehouse** section maintains an inventory of critical spare parts for the generation division.

### **Engineering Division**

The Engineering Division is responsible for the planning, budgeting, design, coordination, and construction of transmission and distribution facilities that are required to provide consumers with safe and reliable electrical power.

The **Engineering Support** section is responsible for ML&P's Geographic Information System (GIS), rights-of-way acquisition of easements/permits/lands and record keeping, land surveying and project staking, underground locates, support, administration, and Autodesk utility design (AUD) encompassing ML&P's electronic engineering design workflow. The section is also responsible for the continuing property/facility records, computer aided drafting (CAD), mapping, and the professional services contract administration as related to these responsibilities.

This section is also responsible to provide and develop tools to maintain the GIS, streamline engineering business processes using workflows and technology to increase efficiency, and maintain the integrity and accuracy of ML&P's design and asset data.

The **Station Design, System Protection and System Planning** section prepares complete substation and switchyard design packages, implements all the distribution and transmission system protection, conducts transmission and distribution load flow studies, performs distribution system fault and failure analyses, purchases substation equipment, and is responsible for the annual transformer distribution order, prepares specifications and contract documents, and procures construction contracts.

In addition, conducts distribution system normal studies and transmission system load flow studies, prepares substation construction standards and provides technical support to other sections and divisions for system upgrades; performs distribution system fault analyses, protective devices coordination and coordinates with other intertie utilities for transmission protection and transmission line improvements.

Additional Tasks:

- Construction and Material standards
- Substation construction inspection/field engineering
- 10-Year Plan studies
- Arc-Flash Studies

The **Transmission/Distribution Line Design and Customer Engineering** sections are responsible for the design of major system improvements, relocations, pole replacement applications, undergrounding, and line extensions of the transmission and distribution systems. These sections also approve customer interconnection generation applications; and provides engineering services to new customers, including new service line extension design, minor customer service, and non-ML&P construction project reviews. They perform National Electric Safety Code (NESC) safety compliance assessments, update material specifications, prepare new and update construction standards and construction methods, develop standards and maintenance methods, evaluate material bids, prepare and administer the "unit price" construction contract and other project construction contracts, and do other special projects. They coordinate with other Municipal departments, governmental agencies, community organizations and other utilities.

## **Operations Division**

The Operations Division oversees the construction, maintenance, and operation of the transmission and distribution systems, administration of contracts and contractors, facility maintenance, fleet and equipment maintenance, and warehousing of required material. The Power Management section is responsible for dispatch of all thermal electricity at ML&P and the dispatch of the Eklutna Hydroelectric plant.



*Figure 2. ML&P Lineman*

The **Line Section** is responsible for the construction and maintenance of the transmission and distribution systems. This section also provides cut-in/cut-out assistance for the Customer Service Division and switching services as directed by the Generation and Power Management Division.

The **Technical Services** section provides services associated with electrical metering and substation maintenance including installation, calibration and testing of circuit breakers, relays, meters, transformers, and SCADA equipment.

The **Fleet Services** section provides pre-purchase technical specifications, preventive and nonscheduled maintenance of all utility rolling stock, miscellaneous equipment, and hot line tools.

The **Electrical Services** section provides testing, repairs and tracking of transformers, facility maintenance and associated contract administration, as well as management of ML&P's Polychlorinated Biphenyls (PCB)/Hazardous materials testing and disposal program.

The **Warehouse** section is responsible for receipt, storage and issuance of construction and maintenance material for Engineering and Operations. They also provide support to other divisions in processing purchase requisitions, including change orders and receiving goods.

The **Radio Shop** section is responsible to support process control and internal communications for all ML&P divisions. They work closely with MOA general government communications shop to provide adequate and interoperable two-way radio communications for ML&P and fulfill service contracts in support of wireless communications for Municipal Enterprise Activities (AWWU, Solid Waste Services, and Port of Alaska).

The **Power Management** section performs studies and analyses to determine the optimal operation of ML&P's Generation and Hydroelectric resources and conducts a variety of power pooling and marketing studies to identify power sales opportunities between ML&P and other Railbelt utilities. The three major functions of the Power Management section are as follows:

- **Power Dispatch** is responsible for the safe and efficient control and dispatch of ML&P's interconnected electrical system, including the Eklutna Hydroelectric Project and the southern portion of the Alaskan Intertie. This section responds to emergencies or unscheduled outages on the Interconnected System, ML&P Transmission System, and/or ML&P Power Plants and directs outage restoration procedures.
- **Distribution Dispatch** operates the ML&P distribution system in a safe and reliable manner, responds to distribution system emergencies and unscheduled outages, directs restoration procedures to restore service as soon as practicable, and directs switching and tagging of scheduled maintenance, new services, and system improvements.

### **Finance Division**

The Finance Division provides financial management, financial reporting, budgeting and analysis to the Municipal Administration, Assembly, ML&P's Advisory Commission and staff. The Finance Division is responsible for long-range resource planning, forecasts, financial support for ML&P's interest in the Beluga River Unit (BRU) gas field, and pursuit of initiatives necessary to support the utility's financial health and competitive position.

The **Accounting** section is responsible for general and plant accounting, and financial reporting according to regulatory requirements and Generally Accepted Accounting Principles (GAAP). The Accounting section is also responsible for meeting accounting and tax compliance requirement for ML&P's gas field operations.

The **Budgeting** section is responsible for financial forecasting, financial modeling, bond sale support, yearly operating and Capital Improvement Plan budget submissions, developing budgeting standards, ensuring budget compliance, and providing other situational fiscal analysis as required.

The **Payroll** section reviews time-related audit reports and ensures correct time reporting per Municipal Personnel Rules and collective bargaining agreements, monitors timecard approvals and assists with timecard and leave entries.

### **Customer Service Division**

The Customer Service Division provides a full line of customer services for ML&P's electric customers.

The **Customer Service** section is responsible for any customer contact necessary to establish, maintain, and terminate electrical service and landlord contracts. This section explains rates and tariff applications as required, responds to residential and commercial service requests and bill inquiries, and processes cash receipts, while maintaining security of customer records. Customer Service is the focus for customer contact in the utility.

The **Credit and Collections** section is a primary function of the division as it is responsible for negotiating payment schedules in accordance with ML&P's tariff, Alaska Statutes, and accepted Fair Credit Act practices, as well as providing anti-identity theft measures demanded by Federal statutes and practices. This section is also responsible for maintaining a low percentage of write-offs, coordinating all customer refunds and reviews, as well as preparation of accounts for legal referral.

**Billing**, another key section of the division, receives the read data collected by the meter readers and processes, records, and renders billing statements to clearly inform the customer of their energy consumption.

The **Meter Reading** section is responsible for accurate and timely scheduled monthly meter reads, timely reads on customer connects and disconnects, and delinquent door hanger notices. This section also investigates customer energy usage patterns, high bill complaints, customer equipment access issues and power theft incidents.

### **Regulatory Affairs Division**

The Regulatory Affairs Division is responsible for overseeing and managing ML&P's participation in all regulatory proceedings affecting the utilities ability to perform its mission including general rate cases, tariff, negotiating and administering special contracts, quarterly

cost of power adjustment filings, annual compliance filings, investigatory dockets and rulemaking dockets opened by the Regulatory Commission of Alaska. Regulatory also negotiates and administers operational agreements with other regulated entities, such as gas transportation providers, gas storage providers, and interconnected Railbelt utilities.

The Regulatory Affairs Division is also responsible for overseeing the administration and operations of ML&P's Gas Supply. This includes oversight of ML&P's 56.67% ownership interest in the Beluga River Unit (BRU), as well as negotiating natural gas purchases and sales agreements with third-party gas producers. The Gas Controller works closely with Power Dispatch to establish daily gas requirements and nominates those requirements to gas field operators and pipeline transmission/distribution operators using day-ahead nomination procedures. The Gas Controller monitors daily natural gas usage to develop trends, forecasting models, and reports.

### **Systems Division**

The Systems Division provides internal communications, business systems installation and process control support for all ML&P Divisions and the General Manager. In addition, this division provides recommendations for communication system upgrades, improvements and replacements of technology to ensure equipment compatibility and cost efficiency.

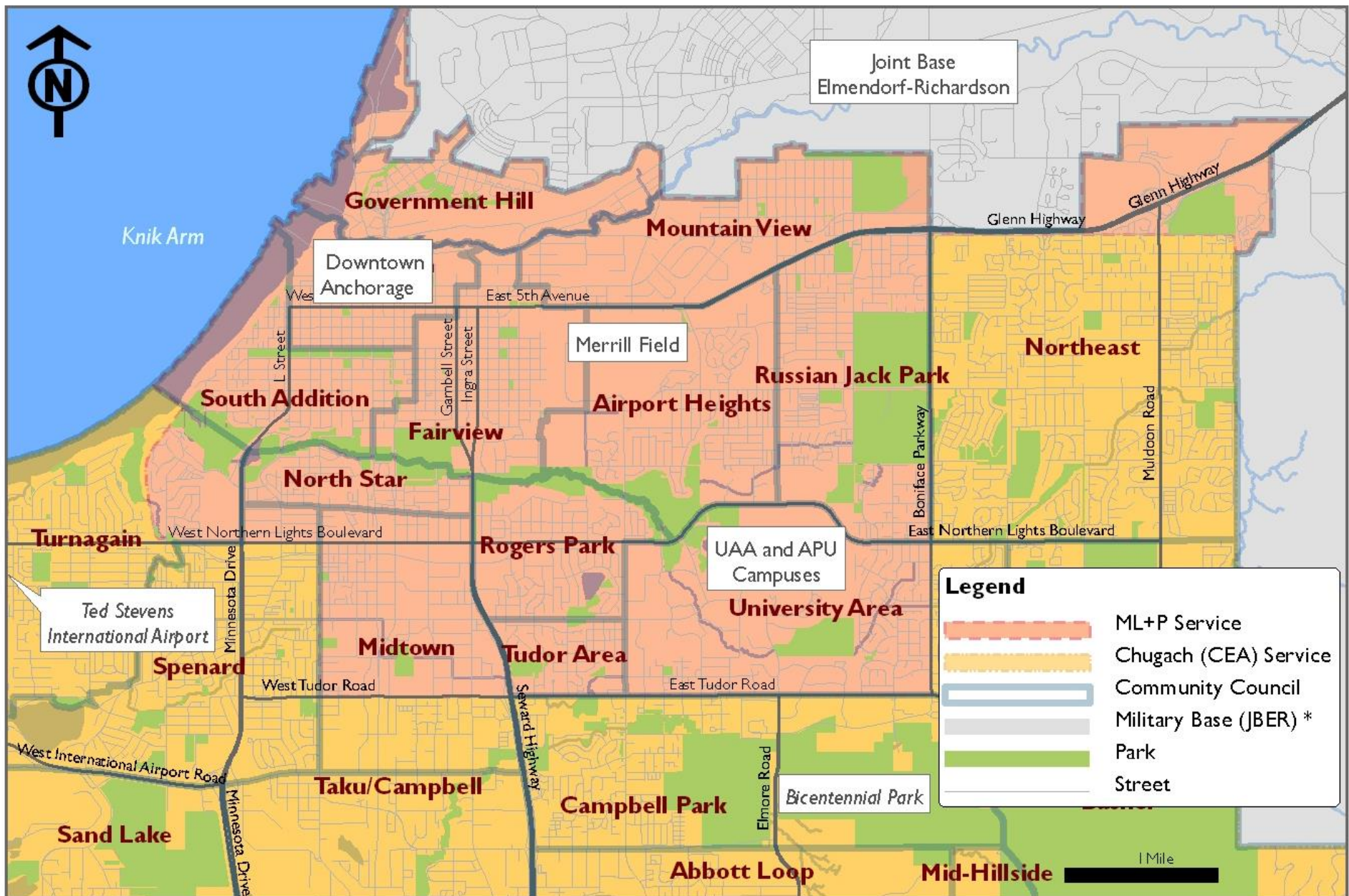
The **Programming Section** is responsible to ensure business practices and methodologies are applied through easy to use electronic products, applications, software, and/or hardware products for all employees of ML&P from their first day of employment forward. This applies to commercial off-the-shelf products, applications created in-house, and MOA applications.

The **Network Services Section** is responsible for 24/7 Business local area network (LAN) connectivity and support, server support, and telephone/voicemail services to all of ML&P. Network Services is also responsible to provide an efficient and reliable means for ML&P employees to communicate both internally and externally to ML&P customers, vendors, and other outside agencies. The section provides disaster recovery planning and implementation to assure the availability of critical data. The section is responsible for cyber security of the Business LAN and software update service for all desktop computers.

The **Energy Management System (EMS) Section** provides configuration, maintenance and technical support for the ML&P SCADA/EMS system infrastructure and user computer consoles used to manage and control power generation, transmission and distribution systems. The section is responsible for cyber security of the SCADA/EMS LAN.

The **IT Support Section** supports and administrates the desktop computers, printers and peripherals for all ML&P divisions. They provide help desk support for computer users, assist in the resolution of issues, and perform service requests. They also provide education and information to end users.





\* JBER is part of ML+P's service area but is displayed separately

## **Municipal Light & Power Business Plan**

### **Mission**

Provide energy that is safe and reliable at competitive rates.

### **Services**

Municipal Light & Power's (ML&P) service area is roughly 20-square-miles. ML&P has approximately 31,000 residential and commercial customers. The utility provides service to the Municipality's economic drivers including: commercial, industrial (Ship Creek area and Port of Alaska), universities and major medical campuses (U-MED District), and the downtown and midtown business districts. ML&P also serves Joint Base Elmendorf-Richardson (JBER) and sells electricity to other Railbelt utilities. The utility has a 56.67 percent working interest in the Beluga River Unit gas field, making it one of the only vertically integrated utilities on the West Coast. ML&P is subject to economic regulation by the Regulatory Commission of Alaska.

### **Business Goals**

- Provide electricity on demand to ML&P customers 24 hours a day, 365 days a year
- Meet the needs and expectations of our customers by providing:
  - Competitive rates and reliable service for all customer classes
  - Prompt, reliable, and courteous customer assistance
- Maintain equity and earn net income at a level sufficient to continue to ensure the long-term financial stability of the utility.
- Operate the electrical system with optimum economic efficiency and strict adherence to environmental standards.
- Provide for the safety of both the public and our employees in the operation of the electrical system.
- Recruit and retain a highly skilled, diverse workforce dedicated to serving the Anchorage community.
- Improve system reliability by incorporating new equipment and technology.
- Provide educational programs to the community on electrical safety. Communicate factual information to customers and the public at large on issues affecting ML&P and the utility industry.
- Foster teamwork and an integrated approach to decision-making within the utility.

### **Strategies to Achieve Goals**

- Attain the financial objectives established in the Equity Management Plan
- Implement industry best practices and streamline business processes to ensure the financial and operational integrity of the utility
- Cooperate with other Railbelt utilities to implement Economic Dispatch of generating resources
- Implement operational and financial procedures to maintain the highest bond rating
- Implement predictive maintenance program to reduce or eliminate outages and interruptions

### **Performance Measures to Track Progress in Achieving Goals**

1. Maintain competitive residential service rates as measured in cents per kilowatt-hour (kWh)
2. Maintain Total Recordable Incident Rates (TRIR) below industry average
3. Maintain Days Away Restricted Transferred (DART) rate below industry standard
4. Achieve 80% of bills that go out within 1 day of meter read date
5. Maintain positive Net Income



6. At a minimum, maintain an A bond rating
7. Maintain Customer Average Interruption Duration Index (CAIDI) below industry average
8. Maintain System Average Interruption Duration Index (SAIDI) below industry average
9. Maintain System Average Interruption Frequency Index (SAIFI) below industry average

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## Municipal Light & Power

*Anchorage: Performance. Value. Results.*

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**Mission**

Provide service with competitive, safe, reliable energy.

**Core Services**

- Energy distribution
- Energy generation
- Customer service

**Direct Services**

Direct services provided by divisions

- See: Customer Service, Finance, Regulatory and Systems & Communications
- See: Energy Production
- See: Engineering & Operations

**Accomplishment Goals**

- Affordable and competitive rates
- Safe work environment
- Safe service
- Reliable service

**Performance Measures**

Progress in achieving goals will be measured by:

**Measure #1: Maintain competitive residential service rates as measured in cents per kilowatt hour**

	2015	2016	2017	2018	2Q-2019
Municipal Light & Power	16.55	16.93	18.48	21.99	20.84
Chugach Elec. Assoc.	17.47	17.95	20.05	20.18	20.16
Matanuska Elec. Assoc.	19.88	19.68	21.82	20.64	21.21
Homer Elec. Assoc.	24.84	23.89	25.67	25.63	25.52
Golden Valley Electric Assoc.	21.77	21.76	24.37	23.90	25.05

Note: Customer charge is \$13.62/month and energy usage is 750 kWh/month. Energy Charge effective 4/20/18 is 15.274 cents/kWh. The Cost of Power Adjustment (COPA) effective 7/1/19 is 3.667 cents/kWh. The Regulatory Charge is adjusted annually by RCA, and is currently .0827 cents/kWh.

**Measure #2: Maintain Total Recordable Incident Rates (TRIR) below industry average**

2015	2016	2017	2018	2Q-2019
6.32	3.94	3.13	6.5	15.3

Note: Industry Average TRIR 2012 - 2015 6.8, 4.5, 2.4 and 6.2 respectively.

**Measure #3: Maintain Days Away Restricted Transferred (DART) rate below industry standard**

2015	2016	2017	2018	2Q-2019
2.26	3.07	2.69	3.4	3.8

Note: Industry Average DART 2012 – 2015 3.3, 3.8, 1.3 and 3.6 respectively.

## Municipal Light & Power Customer Service, Administration, Systems and Communications

*Anchorage: Performance. Value. Results.*

### Mission

Ensure Municipal Light and Power's (ML&P) business process requirements are efficiently and effectively conducted, while also meeting ML&P's stewardship obligations to the citizens of Anchorage.

### Core Services

- Energy distribution
- Energy generation
- Customer service

### Direct Services

- Financial services that maintain and protect the financial integrity of the utility
- Service all residential and commercial customer account needs
- Support utility wide communications and technical/business application needs of the utility

### Accomplishment Goals

- Accurate and timely reporting of financial data
- Maintain sound key financial ratios
- Maintain optional business systems uptime
- Accurate and timely meter reading and customer billing

### Performance Measures

Progress in achieving goals will be measured by:

#### **Measure #4: Achieve 80% percent of bills that go out within 1 day of meter read date**

2015	2016	2017	2018	2Q-2019
83%	86%	85%	84%	85%

#### **Measure #5: Maintain positive Net Income**

2015	2016	2017	2018	YTD March 2019
\$9,608,914	\$5,793,592	\$14,890,813	\$18,307,794	5,600,099

Note: Cumulative Net Income

**Measure #6: At a minimum, maintain an A bond rating**

Standard & Poor's Rating Services				
2015	2016	2017	2018	2019
A+	A+	A+	A+	A+

Fitch Ratings				
2015	2016	2017	2018	2019
A+	A+	A+	A+	A+

Note: Rates the level of risk involved in investing in ML&P bonds; "A+" indicates the least amount of risk and is in the highest rating category.



## Municipal Light & Power Engineering and Operations

*Anchorage: Performance. Value. Results.*

### Mission

Design, construct, operate and maintain generation, transmission and distribution facilities to serve anticipated electric power needs within ML&P's service area at the lowest reasonable cost.

### Core Services

- Energy generation
- Energy distribution
- Customer service

### Direct Services

- Design reliable and cost effective electrical systems
- Construct reliable and cost effective electrical systems in accordance with design standards
- Provide electrical system maintenance that ensures continuity of a vital utility
- Maintain the Continuing Property Records (CPR) system to record equipment type and location

### Accomplishment Goals

- Maintain voltages under normal conditions within plus or minus 5 percent (%) of nominal voltage
- Adhere to safety and construction standards
- Proactive preventative maintenance service
- Maintain an outage reporting database system in accordance with industry standards
- Restore power outage conditions in an expeditious and economical manner

### Performance Measures

Progress in achieving goals will be measured by:

**Measure #7: Maintain Customer Average Interruption Duration Index (CAIDI) below industry average**

2015	2016	2017	2018	2Q-2019
1.502	.603	.56	1.96	2.65

Note: Data compiled from 2015 data collected by EIA indicates an average CAIDI of 2.31 hours.

**Measure #8: Maintain System Average Interruption Duration Index (SAIDI) below industry average**

2015	2016	2017	2018	2Q-2019
1.563	.605	.589	.040	.055

Note: Data compiled from 2015 data collected by EIA indicates an average SAIDI of 3.0 hours.

**Measure #9: Maintain System Average Interruption Frequency Index (SAIFI) below industry average**

2015	2016	2017	2018	2Q-2019
1.04	1.004	1.061	.0207	.0207

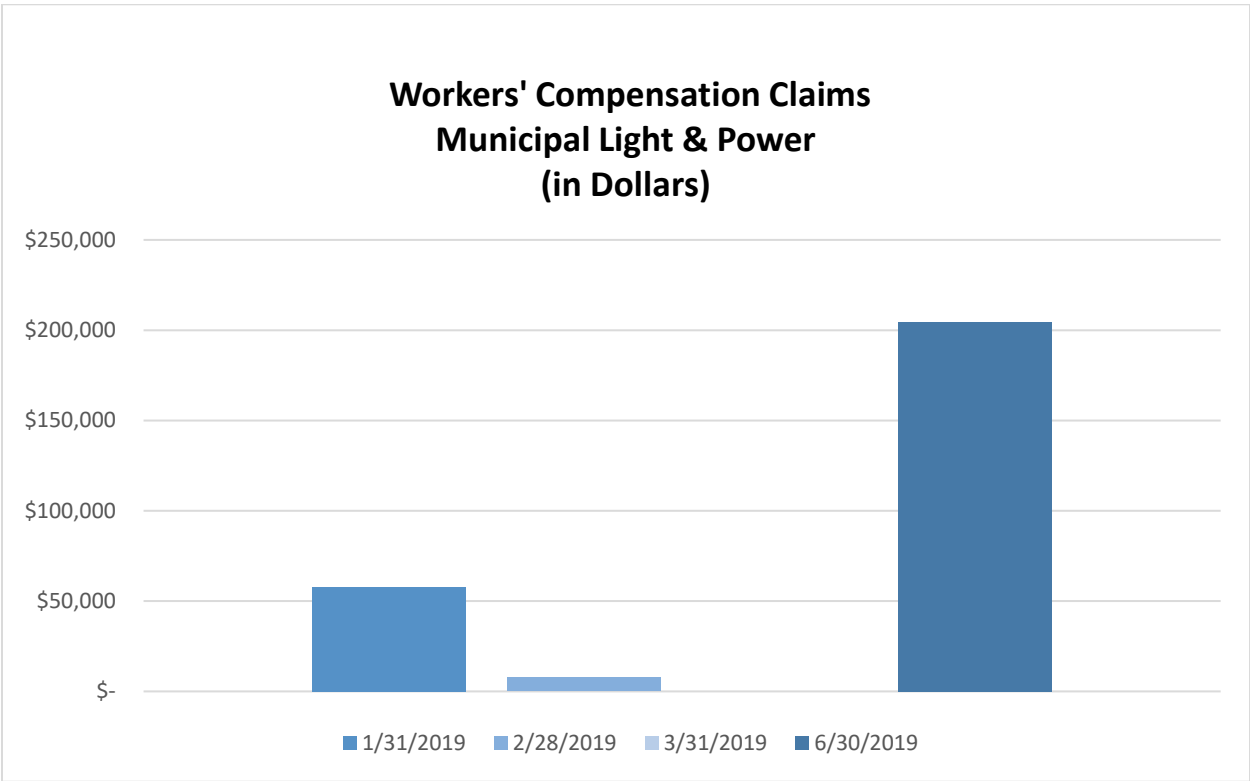
Note: Data compiled from 2015 data collected by EIA indicates an average SAIFI of 1.17 interruptions per customer.

*EIA is the U.S. Energy Information Administration*

**PVR Measure WC: Managing Workers' Compensation Claims**

Reducing job-related injuries is a priority for the Administration by ensuring safe work conditions and safe practices. By instilling safe work practices, we ensure not only the safety of our employees but reduce the potential for injuries and property damage to the public. The Municipality is self-insured and every injury poses a financial burden on the public and the injured worker's family. It just makes good sense to WORK SAFE.

Results are tracked by monitoring monthly reports issued by the Risk Management Division.



## **Municipal Light & Power Highlights and Future Events**

### **New Generation**

ML&P completed construction of Plant 2A in November 2016. The new generation units are much more efficient, allowing ML&P to deliver more energy for the same amount of fuel. The new plant produces over 90% less Nitrogen Oxide and Carbon Monoxide emissions than older generation plants. Some of those efficiencies are achieved through the Plant's collocation with AWWU's drinking water infrastructure. The collocation provides cooling to ML&P's infrastructure while simultaneously warming AWWU's infrastructure. The total cost of the plant is just over \$304.9 million.

### **LED Street Light Conversion**

In 2017 and 2018, ML&P has converted over 90% of its utility owned street lights to light emitting diode (LED) fixtures. It is expected that the remaining streetlights will be converted in the near future.

LED fixtures use about half the power to produce the same amount of light as conventional high pressure sodium (HPS) fixtures. LED lights also cost less to maintain than equivalent HPS lights, and they provide more reliable service, especially in cold weather. LED lights typically last four times as long as conventional HPS lights.

### **Conversion of system meters to Advanced Metering Infrastructure (AMI)**

In early 2017, ML&P began the replacement of Automatic Meter Reading (AMR) meters with AMI meters. The replacement of all system meters will take approximately five years, however the AMI technology already allows ML&P to read all AMR and AMI meters in its service territory. To date, ML&P has installed more than 13,000 meters, collectors and repeaters.

Unlike AMR meters, AMI meters enable two-way communication, which can provide the Utility with the ability to remotely connect and disconnect service, remotely measure electricity use, detect tampering, and identify and isolate outages, as well as provide customers with useful information about their own usage.

### **Potential Sale of ML&P**

On April 3, 2018, Anchorage voters approved an amendment to the Anchorage Municipal Charter authorizing the Municipality to sell ML&P to Chugach Electric Association, Inc. (CEA) by Municipal ordinance, to be approved no later than December 31, 2018. The Anchorage Assembly approved the sale on December 4, 2018. In April 2019, both the Municipality and CEA filed applications to the RCA to amend their Certificates of Public Convenience and Necessity and to approve the sale. The statutory timeline for these applications requires the Regulatory Commission of Alaska to issue a decision on November 19, 2019.

The Municipality and CEA are currently engaged in integration planning and due diligence activities.

## **Municipal Light & Power External Impacts**

The transfer price of gas from the Gas Division to the Electric Division is comprised of costs necessary to produce gas. The transfer price, including the Asset Retirement Organization (ARO) surcharge is budgeted to decrease from \$2.53/MCF in 2019 to \$2.15/MCF in 2020. Beginning in the summer of 2012 ML&P also incurs additional costs due to fees paid to Cook Inlet Natural Gas Storage Alaska, Inc. for seasonal gas storage.



## Municipal Light & Power Workforce Projections

Division	2018	2019	2020	2021	2022	2023	2024	2025
Administration	13	13	13	13	13	13	13	13
Customer Service	25	25	25	25	25	25	25	25
Engineering	32	32	31	31	31	31	31	31
Finance	20	20	20	20	20	20	20	20
Generation	64	68	66	66	66	66	66	66
Operations	65	63	63	63	63	63	63	63
Power Management	12	12	12	12	12	12	12	12
Regulatory	7	7	7	7	7	7	7	7
Systems & Communications	25	25	25	25	25	25	25	25
<b>Total Full Time</b>	<b>263</b>	<b>265</b>	<b>262</b>	<b>262</b>	<b>262</b>	<b>262</b>	<b>262</b>	<b>262</b>
Part-Time/Temporary	20	18	19	19	19	19	19	19
<b>Total Part Time</b>	<b>20</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>	<b>19</b>
<b>Total Positions</b>	<b>283</b>	<b>283</b>	<b>281</b>	<b>281</b>	<b>281</b>	<b>281</b>	<b>281</b>	<b>281</b>
<b>Total FTE</b>	<b>273.0</b>	<b>274.0</b>	<b>271.5</b>	<b>271.5</b>	<b>271.5</b>	<b>271.5</b>	<b>271.5</b>	<b>271.5</b>

**Municipal Light & Power**  
**8 Year Summary**  
(\$ in thousands)

Financial Overview	2018 Actuals*	2019 Proforma *	2020 Approved *	2021	2022	2023	2024	2025
				Forecast*				
Revenues	181,042	178,819	179,278	155,251	156,185	156,087	158,970	159,313
Expenses	183,871	174,614	177,462	148,709	151,916	152,315	153,899	155,515
<b>Net Income (Loss) - Regulatory</b>	<b>(2,829)</b>	<b>4,205</b>	<b>1,816</b>	<b>6,542</b>	<b>4,269</b>	<b>3,773</b>	<b>5,071</b>	<b>3,798</b>
Budgeted Positions	283	283	281	281	281	281	281	281
Capital Improvement Program	32,645	34,020	36,291	34,816	33,725	34,355	36,630	33,265
Bond Sales/ Commercial Paper	-	-	-	197,880	-	-	-	-
Net Non-Contributed Plant (12/31) (REG)	699,267	693,585	687,702	679,814	680,557	681,073	682,727	679,984
Net Contributed Plant (12/31)	177,824	180,973	186,121	187,893	182,291	176,656	171,109	165,569
Net Plant (12/31) (GAAP)	877,091	874,558	873,823	867,708	862,849	857,728	853,836	845,554
Retained Earnings (12/31)	287,247	291,955	293,995	300,537	304,805	308,578	313,649	317,447
General and Restricted Cash	91,594	94,665	82,379	77,648	69,204	60,165	50,709	43,662
Bond Redemption Investment	23,719	22,213	24,712	35,365	35,367	35,360	35,320	35,254
Debt Service Account	2,058	2,720	2,719	2,976	4,096	4,187	4,186	4,183
Operating Fund Investment & Customer Deposits	16,431	17,025	17,325	13,525	13,525	13,525	13,625	13,825
<b>Total Cash &amp; Investments (12/31)</b>	<b>133,802</b>	<b>136,624</b>	<b>127,135</b>	<b>129,515</b>	<b>122,192</b>	<b>113,238</b>	<b>103,841</b>	<b>96,923</b>
Charges by Other Departments	4,142	5,016	5,148	5,190	5,455	5,713	5,984	6,207
Transfers (MUSA)	9,566	9,596	9,568	9,545	9,488	9,406	9,331	9,284
Total Outstanding Debt	507,405	499,675	491,600	489,170	477,249	464,730	451,611	437,857
Total Annual Debt Service	21,824	22,215	22,213	24,712	35,365	35,367	35,360	35,320
Debt Service Coverage	2.99	2.35	2.26	2.24	1.60	1.60	1.64	1.61
LT Debt/Equity Ratio	64/36	63/37	63/37	62/38	61/39	60/40	59/41	58/42
Rate Change Percent	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%	0.00%
<b>Statistical/Performance Trends:</b>								
Residential Customer (500 kWh)	\$104.10	\$112.36	\$108.80	\$108.15	\$108.59	\$108.67	\$110.92	\$111.21
Total Residential Sales (kWh)	120,098	121,000	120,986	120,977	120,967	120,957	120,948	120,935
Commercial & Industrial Sales (kWh)	665,320	660,251	660,752	661,247	661,743	662,259	662,776	663,292
Total Residential, Commercial and Industrial kWh Sales	785,418	781,251	781,738	782,224	782,710	783,216	783,724	784,227
Total Retail Sales Revenue	\$148,862	\$144,774	\$146,426	\$145,207	146,057	\$146,235	\$149,334	\$149,908

The values presented combine the electric and gas utilities.

NOTE: Rate increases are shown in the out years for purposes of projections only and have not been approved for implementation. It is intended that they be reviewed closely each year in conjunction with establishing operating budgets. Utilities will continue to strive to find ways to avoid projected rate increases.

\*This budgetary presentation does not include the effects of implementing Governmental Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions* and thus the revenues and expenses presented in this schedule differ from ML&P's GAAP basis financial statements.

MUSA - Municipal Utility Service Assessment

**Municipal Light & Power - Electric**  
**Statement of Revenues and Expenses**

	2018 Actuals *	2019 Proforma *	2019 1Q Revised *	20 v 19 \$ Change	2020 Approved *	20 v 19 % Change
<b>Operating Revenue</b>						
Residential	24,180,864	27,191,000	27,633,000	(1,306,000)	26,327,000	-4.7%
Commercial	101,039,566	106,435,000	109,403,000	(7,700,000)	101,703,000	-7.0%
Military	15,021,531	17,062,000	18,156,000	(2,103,000)	16,053,000	-11.6%
Sales for Resale	28,266,428	29,776,000	14,660,000	11,035,000	25,695,000	75.3%
Other	9,209,629	(5,260,000)	3,066,000	2,765,000	5,831,000	90.2%
<b>Total Operating Revenue</b>	<b>177,718,018</b>	<b>175,204,000</b>	<b>172,918,000</b>	<b>2,691,000</b>	<b>175,609,000</b>	<b>1.6%</b>
<b>Non Operating Revenue</b>						
Interest Income	3,324,190	3,615,000	3,385,000	284,000	3,669,000	8.4%
<b>Total Non Operating Revenue</b>	<b>3,324,190</b>	<b>3,615,000</b>	<b>3,385,000</b>	<b>284,000</b>	<b>3,669,000</b>	<b>8.4%</b>
<b>Total Revenue</b>	<b>181,042,208</b>	<b>178,819,000</b>	<b>176,303,000</b>	<b>2,975,000</b>	<b>179,278,000</b>	<b>1.7%</b>
<b>Operating Expense</b>						
Labor:						
Labor and Benefits	33,061,753	36,207,792	36,207,792	300,208	36,508,000	0.8%
Overtime	2,798,656	2,026,000	2,026,000	365,000	2,391,000	18.0%
<b>Total Labor</b>	<b>35,860,409</b>	<b>38,233,792</b>	<b>38,233,792</b>	<b>665,208</b>	<b>38,899,000</b>	<b>1.7%</b>
Non Labor:						
Material & Supplies	11,947,847	16,002,492	15,533,000	3,209,000	18,742,000	20.7%
Travel	76,821	150,000	150,000	6,000	156,000	4.0%
Natural Gas Purchases & Transportation	52,033,901	48,634,000	48,043,000	124,000	48,167,000	0.3%
Southcentral Power Project	3,832,916	4,300,000	4,300,000	-	4,300,000	0.0%
Purchased Power & Wheeling	5,785,131	6,218,000	6,056,000	282,000	6,338,000	4.7%
Depreciation, Depletion & Amortization	27,823,696	28,086,000	29,245,000	(1,131,000)	28,114,000	-3.9%
Transfers (MUSA)	9,565,771	9,596,000	9,645,567	(77,567)	9,568,000	-0.8%
Transfer Equity to/from Other Funds	10,029,418	-	-	-	-	n/a
<b>Total Non Labor</b>	<b>121,095,502</b>	<b>112,986,492</b>	<b>112,972,567</b>	<b>2,412,433</b>	<b>115,385,000</b>	<b>2.1%</b>
<b>Total Direct Costs</b>	<b>156,955,911</b>	<b>151,220,284</b>	<b>151,206,359</b>	<b>3,077,641</b>	<b>154,284,000</b>	<b>2.0%</b>
Charges by Other Departments	4,067,465	4,933,716	4,933,716	131,966	5,065,682	2.7%
Intradepartmental Overheads	-	(2,275,000)	(1,525,000)	(1,497,000)	(3,022,000)	98.2%
<b>Total Operating Expense</b>	<b>161,023,375</b>	<b>153,879,000</b>	<b>154,615,075</b>	<b>1,712,607</b>	<b>156,327,682</b>	<b>1.1%</b>
<b>Non Operating Expense</b>						
Interest on Bonded Debt	17,025,851	16,922,000	18,922,000	(2,347,000)	16,575,000	-12.4%
Other Interest Expense	5,092,635	5,031,000	602,000	5,198,000	5,800,000	863.5%
Allowance for Funds Used During Construction	(638,303)	(264,000)	(324,000)	57,000	(267,000)	-17.6%
Amortization of Debt Expense	(1,024,969)	(1,123,000)	(1,021,000)	(72,000)	(1,093,000)	7.1%
Loss on Disposal of Property	2,337,536	-	-	-	-	n/a
Other	55,000	169,000	119,000	-	119,000	0.0%
<b>Total Non Operating Expense</b>	<b>22,847,750</b>	<b>20,735,000</b>	<b>18,298,000</b>	<b>2,836,000</b>	<b>21,134,000</b>	<b>15.5%</b>
<b>Total Expenses (Function Cost)</b>	<b>183,871,125</b>	<b>174,614,000</b>	<b>172,913,075</b>	<b>4,548,607</b>	<b>177,461,682</b>	<b>2.6%</b>
<b>Net Income</b>	<b>(2,828,917)</b>	<b>4,205,000</b>	<b>3,389,925</b>	<b>(1,573,607)</b>	<b>1,816,318</b>	<b>-46.4%</b>
<b>Appropriation</b>						
<b>Total Expenses</b>			<b>172,913,075</b>	<b>4,548,607</b>	<b>177,461,682</b>	<b>2.6%</b>
Less: Non Cash items						
Depreciation, Depletion & Amortization			29,245,000	(1,131,000)	28,114,000	-3.9%
Allowance for Funds Used During Construction			(324,000)	57,000	(267,000)	-17.6%
Amortization of Bonds			(1,021,000)	(72,000)	(1,093,000)	7.1%
Loss on Disposal of Property			-	-	-	n/a
<b>Total Non Cash</b>			<b>27,900,000</b>	<b>(1,146,000)</b>	<b>26,754,000</b>	<b>-4.1%</b>
<b>Amount to be Appropriated (Cash Expenses)</b>			<b>145,013,075</b>	<b>5,694,607</b>	<b>150,707,682</b>	<b>3.9%</b>

\*This Budgetary presentation does not include the effects of implementing Governmental Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions* and thus the revenues and expenses presented in this schedule differ from ML&P's GAAP basis financial statements.

**Municipal Light & Power - Electric**  
**Reconciliation from 2019 Revised Budget to 2020 Approved Budget**

		Positions		
	Appropriation	FT	PT	T
<b>2019 Revised Budget</b>	172,913,075	265	1	17
<b>Transfers by/to Other Departments</b>				
- Charges by Other Departments	131,966	-	-	-
- Municipal Utility Service Assessment (MUSA)	(77,567)	-	-	-
<b>Debt Service Changes</b>				
- Interest Expense	2,851,000	-	-	-
<b>Changes in Existing Programs/Funding for 2020</b>				
- Depreciation, Depletion & Amortization	(1,131,000)	-	-	-
- Allowance for Funds Used During Construction	57,000	-	-	-
- Purchased Power & Wheeling	282,000	-	-	-
- Natural Gas Purchases and Transportation	124,000	-	-	-
- Amortization of Debt Expense	(72,000)	-	-	-
- Travel	6,000	-	-	-
<b>2020 Continuation Level</b>	<b>175,084,474</b>	<b>265</b>	<b>1</b>	<b>17</b>
<b>2020 Approved Budget Changes</b>				
- Salaries and Benefits Adjustments	665,208	(3)	-	1
- Material and Supplies	3,209,000	-	-	-
- Intradepartmental Overheads	(1,497,000)	-	-	-
<b>2020 Approved Operating Budget</b>	<b>177,461,682</b>	<b>262</b>	<b>1</b>	<b>18</b>
<b>2020 Budget Adjustment for Accounting Transactions (Appropriation)</b>				
- Depreciation, Depletion & Amortization	28,114,000	-	-	-
- Allowance for Funds Used During Construction	(267,000)	-	-	-
- Amortization of Bonds	(1,093,000)	-	-	-
<b>2020 Approved Budget (Appropriation)</b>	<b>150,707,682</b>	<b>262</b>	<b>1</b>	<b>18</b>

**Municipal Light & Power - Gas**  
**Statement of Revenues and Expenses**

	2018 Actuals *	2019 Proforma *	2019 Revised *	20 v 19 \$ Change	2020 Approved *	20 v 19 % Change
<b>Operating Revenue</b>						
Other	15,215,866	12,582,000	15,538,000	(2,327,000)	13,211,000	-15.0%
<b>Total Operating Revenue</b>	<b>15,215,866</b>	<b>12,582,000</b>	<b>15,538,000</b>	<b>(2,327,000)</b>	<b>13,211,000</b>	<b>-15.0%</b>
<b>Non Operating Revenue</b>						
Interest Income	310,826	989,000	948,000	138,000	1,086,000	14.6%
<b>Total Non Operating Revenue</b>	<b>310,826</b>	<b>989,000</b>	<b>948,000</b>	<b>138,000</b>	<b>1,086,000</b>	<b>14.6%</b>
<b>Total Revenue</b>	<b>15,526,692</b>	<b>13,571,000</b>	<b>16,486,000</b>	<b>(2,189,000)</b>	<b>14,297,000</b>	<b>-13.3%</b>
<b>Operating Expense</b>						
Labor:						
Labor and Benefits	187,843	160,000	160,000	30,000	190,000	18.8%
Overtime	186	-	-	1,000	1,000	n/a
Total Labor	188,029	160,000	160,000	31,000	191,000	19.4%
Non Labor:						
Material & Supplies	406,707	404,066	439,000	66,000	505,000	15.0%
Gas Production Expense	11,693,402	11,309,000	14,335,000	(2,521,000)	11,814,000	-17.6%
Regulatory Debit/Credit	(8,026,635)	(5,000)	59,000	(59,000)	-	-100.0%
Depreciation, Depletion & Amortization	1,038,504	1,045,000	891,000	462,000	1,353,000	51.9%
Transfers to/from Other Funds	(10,000,000)	-	-	-	-	n/a
Total Non Labor	(4,888,022)	12,753,066	15,724,000	(2,052,000)	13,672,000	-13.1%
<b>Total Direct Costs</b>	<b>(4,699,993)</b>	<b>12,913,066</b>	<b>15,884,000</b>	<b>(2,021,000)</b>	<b>13,863,000</b>	<b>-12.7%</b>
Charges by Other Departments	74,457	81,934	81,934	-	81,934	0.0%
<b>Total Operating Expense</b>	<b>(4,625,536)</b>	<b>12,995,000</b>	<b>15,965,934</b>	<b>(2,021,000)</b>	<b>13,944,934</b>	<b>-12.7%</b>
<b>Non Operating Expense</b>						
Interest on Bonded Debt	257,051	-	-	-	-	n/a
Other Interest Expense	363	-	-	-	-	n/a
Amortization of Debt Expense	30,931	-	-	-	-	n/a
<b>Total Non Operating Expense</b>	<b>288,345</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>n/a</b>
<b>Total Expenses (Function Cost)</b>	<b>(4,337,190)</b>	<b>12,995,000</b>	<b>15,965,934</b>	<b>(2,021,000)</b>	<b>13,944,934</b>	<b>-12.7%</b>
<b>Net Income</b>	<b>19,863,882</b>	<b>576,000</b>	<b>520,066</b>	<b>(168,000)</b>	<b>352,066</b>	<b>-32.3%</b>
<b>Appropriation</b>						
<b>Total Expenses</b>			<b>15,965,934</b>	<b>(2,021,000)</b>	<b>13,944,934</b>	<b>-12.7%</b>
Less: Non Cash items						
Depreciation, Depletion & Amortization			891,000	462,000	1,353,000	51.9%
Regulatory Debits/Credits			59,000	(59,000)	-	-100.0%
Amortization of Bonds			-	-	-	n/a
Total Non Cash			<b>950,000</b>	<b>403,000</b>	<b>1,353,000</b>	<b>42.4%</b>
<b>Amount to be Appropriated (Cash Expenses)</b>			<b>15,015,934</b>	<b>(2,424,000)</b>	<b>12,591,934</b>	<b>-16.1%</b>

\*This Budgetary presentation does not include the effects of implementing Governmental Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions* and thus the revenues and expenses presented in this schedule differ from ML&P's GAAP basis financial statements.



**Municipal Light & Power - Gas**  
**Reconciliation from 2019 Revised Budget to 2020 Approved Budget**

		Positions		
	Appropriation	FT	PT	T
<b>2019 Revised Budget</b>	15,965,934	-	-	-
<b>Changes in Existing Programs/Funding for 2020</b>				
- Depreciation, Depletion & Amortization	462,000	-	-	-
- Gas Production Expense	(2,521,000)	-	-	-
- Regulatory Debits/Credits	(59,000)	-	-	-
<b>2020 Continuation Level</b>	<b>13,847,934</b>	-	-	-
<b>2020 Approved Budget Changes</b>				
- Salaries and Benefits adjustments	31,000	-	-	-
- Material and Supplies	66,000	-	-	-
<b>2020 Approved Operating Budget</b>	<b>13,944,934</b>	-	-	-
<b>2020 Budget Adjustment for Accounting Transactions (Appropriation)</b>				
- Depreciation, Depletion & Amortization	(1,353,000)	-	-	-
<b>2020 Approved Budget (Appropriation)</b>	<b>12,591,934</b>	-	-	-

**Municipal Light & Power**  
**2020 - 2025 Capital Improvement Program**  
(in thousands)

<b>Project Category</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Beluga River Gas Field	9,600	10,200	10,800	10,800	10,800	10,800	63,000
Distribution	19,540	17,990	18,280	19,870	19,420	18,410	113,510
General Plant	2,741	4,958	2,985	2,720	2,740	2,480	18,624
Production	3,380	373	50	50	800	50	4,703
Transmission	1,030	1,295	1,610	915	2,870	1,525	9,245
<b>Total</b>	<b>36,291</b>	<b>34,816</b>	<b>33,725</b>	<b>34,355</b>	<b>36,630</b>	<b>33,265</b>	<b>209,082</b>

<b>Funding Source</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Contribution in Aid of Construction	2,300	2,300	2,300	2,300	2,300	2,300	13,800
Beluga Contributed	9,600	10,200	-	-	-	-	19,800
Equity/Operations	24,391	22,316	31,425	32,055	34,330	30,965	175,482
<b>Total</b>	<b>36,291</b>	<b>34,816</b>	<b>33,725</b>	<b>34,355</b>	<b>36,630</b>	<b>33,265</b>	<b>209,082</b>

**Municipal Light & Power**  
**2020 - 2025 Deferred & Reimbursable Projects Budget**  
(in thousands)

<b>Project Category</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Electric	7,000	7,000	7,000	7,000	7,000	7,000	42,000
<b>Total</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>42,000</b>

<b>Funding Source</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>Total</b>
Deferred/Reimbursable	7,000	7,000	7,000	7,000	7,000	7,000	42,000
<b>Total</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>7,000</b>	<b>42,000</b>

**Municipal Light & Power**  
**2020 Capital Improvement Budget**  
(in thousands)

<b>Project Title</b>	<b>Equity/ Operations</b>	<b>Revenue Bonds/ Commercial Paper</b>	<b>Contribution in Aid of Construction</b>	<b>Beluga Contributed</b>	<b>Total</b>
Beluga River Gas Field	-	-	-	9,600	9,600
Communications	866	-	-	-	866
Distribution Equipment	6,550	-	-	-	6,550
Eklutna Power Plant	480	-	-	-	480
Land & Land Rights-Transmission & Distribution	90	-	-	-	90
Meters	2,000	-	-	-	2,000
Overhead Lines	1,530	-	-	-	1,530
Stores/Tools/Lab	175	-	-	-	175
Street Lighting	50	-	-	-	50
Structures & Improvements - General Plant	700	-	-	-	700
Structures & Improvements - Plant 1/Plant 2	550	-	-	-	550
Transformer Services	3,100	-	-	-	3,100
Transmission Lines	90	-	-	-	90
Transmission Stations	930	-	-	-	930
Transportation	1,000	-	-	-	1,000
Turbines & Generators	2,350	-	-	-	2,350
Underground Lines	3,930	-	2,300	-	6,230
<b>Total</b>	<b>24,391</b>	<b>-</b>	<b>2,300</b>	<b>9,600</b>	<b>36,291</b>

**Municipal Light & Power**  
**2020 Deferred & Reimbursable Projects Budget**  
(in thousands)

<b>Project Title</b>	<b>Reimbursabl</b>	<b>Total</b>
Electric	7,000	7,000
<b>Total</b>	<b>7,000</b>	<b>7,000</b>

## Municipal Light & Power Statement of Cash Sources and Uses

	2018 Actual*	2019 Proforma *	2020 Approved *
<b>Sources of Cash Funds</b>			
Net Income	16,550,765	4,708,000	2,040,384
Depreciation/Depletion/Amortization	28,862,200	29,131,000	29,467,000
Amortization of Bonds	(994,037)	(1,159,000)	(1,093,000)
Deferred Charges and Other Assets	(1,637,177)	6,899,996	-
Contribution in Aid of Construction	9,736,953	3,148,624	5,148,459
Changes in Assets and Liabilities	(21,645,133)	(5,843,683)	(8,511,211)
<b>Total Sources of Cash Funds</b>	<b>30,873,571</b>	<b>36,884,937</b>	<b>27,051,632</b>
<b>Uses of Cash Funds</b>			
Additions to Plant	30,624,813	26,333,627	28,465,154
Debt Principal Payment	7,865,000	7,730,000	8,075,000
<b>Total Uses of Cash Funds</b>	<b>38,489,813</b>	<b>34,063,627</b>	<b>36,540,154</b>
 Net Increase (Decrease) in Cash Funds	 (7,616,242)	 2,821,310	 (9,488,522)
 Cash Balance, January 1	 141,418,516	 133,802,274	 136,623,584
<b>Cash Balance, December 31</b>	<b>133,802,274</b>	<b>136,623,584</b>	<b>127,135,062</b>
<b>Detail of Cash and Investment Funds</b>			
General Cash Less Customer Deposits	63,913,262	71,479,012	65,679,541
BRU Reg Liability, Future Gas Purchases & ARO	27,680,543	23,185,940	16,699,291
Bond Investment	23,718,574	22,213,247	24,712,143
Debt Service	2,058,443	2,719,934	2,718,635
Operating Fund Invest, Interim Rev. Escrow, Cust Dep	16,431,452	17,025,452	17,325,452
<b>Cash Balance, December 31</b>	<b>133,802,274</b>	<b>136,623,584</b>	<b>127,135,062</b>

\*This Budgetary presentation does not include the effects of implementing Governmental Accounting Standards Board Statement No. 68, *Accounting and Financial Reporting for Pensions* and thus the revenues and expenses presented in this schedule differ from ML&P's GAAP basis financial statements.

## **About Municipal Light & Power**

### **Organization**

ML&P is functionally structured into seven operating divisions: Generation, Engineering, Operations, Finance, Customer Service, Administration, Regulatory Affairs, and Systems. Each division manager reports directly to the General Manager.

As of December 31, 2018, ML&P had 237 employees and total labor and benefit costs of approximately \$41 million, which includes operating and capital labor expenditures. Of these 237 employees, 176 were covered by a labor agreement with the IBEW and 61 were non-represented (covered by the Municipal Personnel Rules).

### **History**

The history of ML&P is closely linked with the history and development of Anchorage itself. ML&P has emerged to serve a city with approximately half the population of the state at rates which are among the lowest in Alaska and that compare favorably with those of many metropolitan areas in the Lower 48 states. ML&P has evolved into an acknowledged energy leader by being customer oriented, innovative, and responsive to customers' needs for safe, economical, and reliable electrical service.

When the Alaska Engineering Commission (AEC) initiated electrical service in Anchorage in 1916, Anchorage was just a small tent city in the wilderness. The City operated the electrical distribution system under a lease agreement, first with the AEC and later with the Alaska Railroad. This lease agreement continued until 1932 when the citizens of the young city bought the electrical distribution system for \$11,351.

A small steam plant and diesel power generators supplied Anchorage with electricity until 1929 when the private Anchorage Power & Light Company began supplying the community with electricity from a hydroelectric power plant on the Eklutna River, 40 miles northeast of Anchorage. The City acquired the Eklutna Plant from the Anchorage Power & Light Company in 1943. In 1955, the City contracted for 16,000 kilowatts (kW) of the generating capacity of a new Eklutna Hydroelectric power project of the U.S. Bureau of Reclamation and transferred "Little Eklutna" to that federal agency.

Between 1962 and 1984, ML&P installed seven turbine-generating units fired by natural gas and one heat recovery steam turbine generating unit. Unit 3, which was purchased in 1968 and remained in service for 36 years, was retired in 2004. Unit 3's replacement, which is the first new generating unit for ML&P in more than 20 years, began commercial operation August 16, 2007. The 30MW simple-cycle gas turbine is a GE LM2500+ and cost \$27.5 million to purchase and install. Two units have dual-fuel capability, which enhances ML&P's reliability in the event of a disruption of the natural gas supply. ML&P operates nineteen modern substations and is the south-end controller of the Alaska Intertie from Anchorage to Fairbanks.

In late 1996, the Municipality purchased a one-third working interest in the Beluga River Gas Field, which established a guaranteed fuel supply and serves as a means to stabilize fuel prices for years to come. In 1997, ML&P in association with Chugach Electric Association (CEA) and Matanuska Electric Association purchased the Eklutna Hydroelectric Project from the federal government.

On August 28, 2008 ML&P entered into an agreement with CEA for a dedicated 30% share of the output of the Southcentral Power Project (SPP) plant, varying in electrical output from 45 MW to 54 MW depending on season and temperature. It is a 3 X 1 LM6000 combined cycle project. The plant entered into commercial operation January 31, 2013.

On April 21, 2016 the Regulatory Commission of Alaska (RCA) approved the purchase of ConocoPhillips' one-third working interest in the Beluga River Unit natural gas field by ML&P and CEA. The final agreement transferred 70 percent ownership of the ConocoPhillips' interest to ML&P and 30 percent to CEA. The total purchase price was \$152 million. The utility now owns 56.67 percent of the field.

On November 7, 2016 Plant 2A was placed in service. The new combined cycle plant is adjacent to the existing Plant 2. Two (2) LM6000 combustion turbines (unit 9 and 10) and one steam turbine (unit 11) are housed in 2A. The 120 MW plant uses less natural gas and reduces Nox and CO emissions. Some of those efficiencies are achieved through the Plant's collocation with AWWU's drinking water infrastructure. The collocation provides cooling to ML&P's infrastructure while simultaneously warming AWWU's infrastructure. The total cost of the plant is just over \$304.9 million.

### Services

ML&P service area encompasses 19.9 contiguous square miles including a large portion of the commercial and high-density residential areas of the Municipality. In 2018, the average number of residential and commercial customers was 24,699 and 6,407 respectively. In 2018, electric retail sales totaled 940,572 MWh resulting in revenues of \$148,861,709. Total electric operating revenues including Miscellaneous Operating Revenue, Sales for Resale and Other Utility Operating Income were \$177,718,018. ML&P also has agreements to supply Fort Richardson Army Base and Elmendorf Air Force Base with firm electrical service.

### Regulation

ML&P is subject to economic regulation by the RCA, which is composed of five members appointed to six-year staggered terms by the Governor and confirmed by the State Legislature. RCA regulation encompasses service area definition, tariff rules and regulations, service quality criteria and establishment of recurring rates and miscellaneous fees and charges.

ML&P budgets are submitted to the Administration before submittal to the Municipal Assembly for approval.

### Electric and Gas Plant

ML&P generates, transmits, distributes, and purchases electric power and has a working interest in the Beluga River Unit Gas Field.

- Power Generated/Purchased in 2018 1,432,404 MWh
  - ML&P Generated 873,159 MWh 60.96%
    - Southcentral Power Plant 389,111 MWh 27.16%
    - Eklutna Hydroelectric Project 67,827 MWh 4.74%
  - Purchased:
    - Bradley Lake Project 102,307 MWh 7.14%
- Total Thermal Generation capacity in 2018 420.1 Megawatts (MW) at 30°F
  - Power Plant One (2 Turbines) 66.5 MW 15.83%
  - Power Plant Two (2 Turbines) 166.8 MW 39.70%
  - Power Plant Two A (3 Turbines) 126.7 MW 30.16%

- Southcentral Power Plant (4 Turbines) 60.1 MW (ML&P 30%) 14.31%
- Six Gas Fired Turbines (ML&P Plant 1, 2 & 2A)
- One Heat Recovery Turbine (ML&P Plant 2A)
- Two of the six gas fired turbines are equipped to use liquid fuel/diesel as an alternate fuel
- Southcentral Power Plant – Three Gas Fired Turbines and one Heat Recovery Turbine
- Distribution System in 2018 364 Miles
  - Underground Cable 250 Miles 68.68%
  - Overhead Line 114 Miles 31.32%
  - 19 Substations
- Total Electric Plant as of December 31, 2018 \$732,046,180
- Total Gas Plant as of December 31, 2018 \$145,044,953
- ML&P has a 53.33% ownership interest in the Eklutna Hydroelectric Project, which has 44.4 MW of installed capacity.
- ML&P is a 30% owner of the Southcentral Power Plant
- Pursuant to a Power Sales Agreement with the Alaska Energy Authority, ML&P is required to purchase 25.9% of the output of the Bradley Lake Project, which has 126 MW of installed capacity.