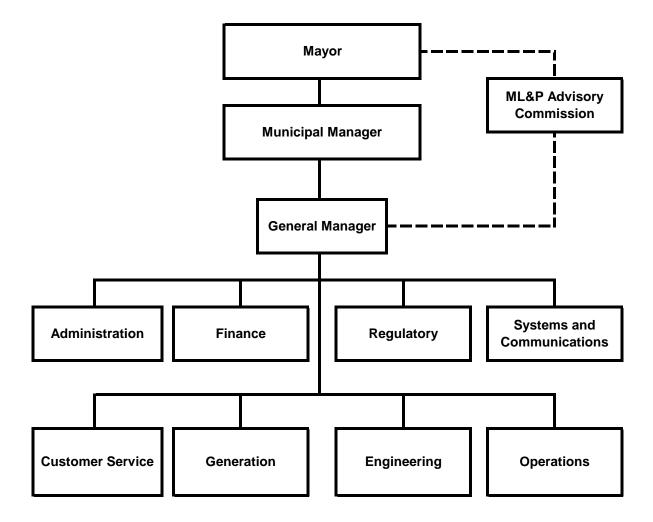
Municipal Light & Power



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.

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 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. There is also an economic advantage to purchasing parts that have a long lead time; a 25% savings on parts (which can cost several million dollars) can be realized by doing this.

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.

Additionally 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.

The Transmission/Distribution Line Design and Customer Engineering sections are responsible for the design of major system improvements, relocations, undergrounding, and line extensions of the transmission and distribution systems. These sections also provides engineering services to new customers, including new service line extension design, minor customer service, and non-ML&P construction project reviews. They perform 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.

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 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, SWS, and Port of Anchorage).

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 is responsible for collection and submission of employee time sheets for accurate payroll processing and preparation of monthly health, welfare, pension and benefits reporting in compliance with collective bargaining agreements.

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 LAN (local area network) 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 PCs.

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 PCs, 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.

The **Document Control and Records Management Section** is responsible for establishing and maintaining

Municipal Light & Power Business Plan

Mission

Provide energy at competitive rates that is safe and reliable.

Services

Municipal Light and 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 Municipal's economic drivers including: commercial, industrial (Ship Creek area and the Port of Anchorage), Universities, Major Medical Campuses, and the Downtown and Midtown business districts. ML&P also serves Joint Base Elmendorf-Richardson 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
 - Support and assistance to the military bases
 - Support and assistance to wholesale power customers
- Maintain equity and earn net income at a level sufficient 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 school children and 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
- Replace old generation with more efficient, state-of-the-art fuel efficient generation
- 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 and commercial 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
- 10. Manage workers' compensation claims

Municipal Light & Power

Anchorage: Performance. Value. Results.

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:

<u>Measure #1:</u> Maintain competitive residential service rates as measured in cents per kilowatt hour

	2014	2015	2016	2017	2Q - 2018
Municipal Light & Power	15.69	16.55	16.93	18.48	19.40
Chugach Elec. Assoc.	15.94	17.47	17.95	20.05	20.12
Matanuska Elec. Assoc.	16.90	19.88	19.68	21.82	21.63
Homer Elec. Assoc.	23.26	24.84	23.89	25.67	25.87
Golden Valley Electric Assoc.	22.60	21.77	21.76	24.37	25.98

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 4/1/18 is 1.024 cents/kWh. The Regulatory Charge is adjusted annually by RCA, and is currently .0899 cents/kWh.

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

2014	2015	2016	2017	2Q - 2018
1.41	6.32	3.94	3.13	4.36

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

	2014	2015	2016	2017	2Q - 2018
1	.47	2.26	3.07	2.69	2.62

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

2014	2015	2016	2017	2Q - 2018
84%	83%	86%	85%	88%

Measure #5: Maintain positive Net Income

2014	2015	2016	Prelim - 2017	2Q - 2018	
\$13,450,177	\$9,608,914	\$5,793,592	\$16,060,679	unavailable	

Note: Cumulative Net Income

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

Standard & Poor's Rating Services								
2014 2015 2016 2017 2018								
A+	A+	A+	A+	A+				

Fitch Ratings									
2014 2015 2016 2017 2018									
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 insures 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:

<u>Measure #7:</u> Maintain Customer Average Interruption Duration Index (CAIDI) below industry average

2014	2015	2016	2017	2Q-2018	
1.98	1.502	.603	.56	.619	

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

<u>Measure #8:</u> Maintain System Average Interruption Duration Index (SAIDI) below industry average

2014	2015	2016	2017	2Q-2018
1.377	1.563	.605	.589	.085

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

<u>Measure #9:</u> Maintain System Average Interruption Frequency Index (SAIFI) below industry average

2014	2014 2015		2017	2Q-2018
.695	1.04	1.004	1.061	.137

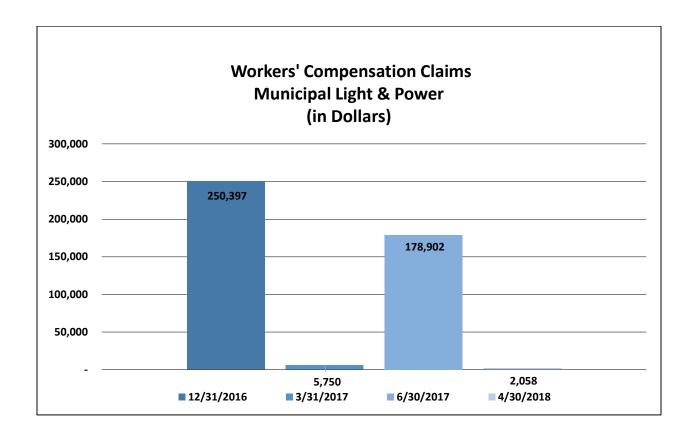
Note: Data compiled from 2015 data collected by EIA indicates an average SAIFI of 1.17 interruptions per customer.

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 a life cycle generation asset replacement in November 2016 with the commissioning of Plant 2A. ML&P invested approximately \$306 million constructing Plant 2A. 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 NOX and CO emissions. The Plant will use low value "waste" heat to heat AWWU's city drinking water (15 degrees average).

LED Street Light Conversion

ML&P owned and maintained approximately 4,000 high pressure sodium (HPS) street and trail lights in its service area, including downtown, parts of midtown and East Anchorage. In 2017, ML&P converted over 3,700 of its street lights to networked light emitting diode (LED) fixtures. The remaining lights are ornamental and will be converted in the near future.

LED fixtures use about half the power to produce the same amount of light as conventional 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 working with a consultant to create a Pilot Program to investigate the replacement of Automatic Meter Reading (AMR) meters with AMI meters. The pilot was designed to replace approximately 150 meters and gather data to determine the feasibility of a system wide replacement program. In July Operations installed communications equipment and eleven meters to test connectivity.

Based on the success of Pilot results, management decided to proceed with system-wide AMI replacement. The replacement of all system meters will take approximately five years, however ML&P will be able to read all system meters by November 2018 with the installation of approximately 6,500 meters.

Rate Relief

On December 30, 2016, ML&P filed TA357-121 requesting approval for an increase to current base rates on both an interim and a permanent basis. The filing was based on a December 31, 2015 test year. In Order U-17-008(13), dated March 23, 2018, the RCA made permanent the Interim and Refundable rates previously approved. In Order U-17-008(14), dated May 25, 2018, the RCA determined no customer refunds were needed and released the funds escrowed by ML&P.

Potential Sale of ML&P

In 2017, the Assembly, via AR 2017-235 urged the Municipality of Anchorage, Municipal Light & Power (ML&P) and Chugach Electric Association, Inc. (CEA) to explore opportunities for merger of the ML&P and CEA utilities in the interest of eliminating duplicative investment in power generation and the local grid and reducing per capita costs of services. Following that Assembly action, the Municipality, ML&P, and CEA engaged in the recommended discussions and determined that a merger is not possible, but that a sale of ML&P to CEA could be feasible. At such time, the Municipality commissioned an independent analysis to assess ML&P's strategic position and potential market value in a possible sale transaction. The Municipality received and reviewed multiple expressions of interest from parties interested in a purchase of

ML&P. CEA was one of the interested parties and proposed a competitive price for purchase of ML&P, consistent with the range of values for ML&P as determined by independent analysis.

The Assembly determined that based on the work in 2017, the purchase of ML&P by CEA is in the public interest. The Assembly approved a subsequent ordinance 2018-1(S) for the purpose to submit to the voters of the Municipality, permitting the sale of ML&P with guidance on how the proceeds of the sale would be applied. Following the approval of AO2018-1(s) in January 2018, the Municipality, ML&P and CEA carried out an extensive education and information effort across the community anticipation and preparation of the April election. On April 3, 2018, the voters approved the process of the sale of ML&P to move forward and since that time the Municipality and CEA have been working diligently to prepare the terms of a proposed sale for Assembly consideration and approval. The April ballot stated that Assembly action on the sale shall take place by December 31 2018. The Administration presented the terms of the sale to the Assembly on September 28th 2018, for Assembly initial consideration on October 9th 2018. If the Assembly approves the terms, the process will then proceed to final negotiation and then presented to the Regulatory Commission of Alaska for final approval in 2019.

Municipal Light & Power External Impacts

On April 21, 2016 the 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 Chugach. The total purchase price was \$152 million. The utility now owns 56.67 percent of the field.

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 ARO surcharge is budgeted to increase from \$2.52/MCF in 2018 to \$3.07/MCF in 2019. 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	2017	2018	2019	2020	2021	2022	2023	2024
Administration	12	13	13	13	13	13	13	13
Customer Service	25	25	25	25	25	25	25	25
Engineering	31	32	32	32	32	32	32	32
Finance	21	20	20	20	20	20	20	20
Generation	66	64	68	68	68	68	68	68
Operations	62	65	63	63	63	63	63	63
Power Management	16	12	12	12	12	12	12	12
Regulatory *	5	7	7	7	7	7	7	7
Systems & Communications	24	25	25	25	25	25	25	25
Total Full Time	262	263	265	265	265	265	265	265
Part-Time/Temporary	19**	20	18	18	18	18	18	18
Total Positions	281	283	283	283	283	283	283	283
Total FTE	272.0	273.0	274.0	274.0	274.0	274.0	274.0	274.0

^{** 2017} Power Management moved from Generation to Operations.

Municipal Light & Power 8 Year Summary

(\$ in thousands)

Financial Quantian	2017	2018	2019	2020	2021	2022	2023	2024
Financial Overview	Actuals*	Proforma *	Proposed *	450.045	454.050	Forecast*	457.000	450.050
Revenues	187,842	180,215	176,303	158,315	154,953	154,773	157,008	159,358
Expenses	168,623	184,315	172,101	139,769	142,823	144,348	143,713	144,084
Net Income (Loss) - Regulatory	19,219	(4,100)	4,202	18,546	12,130	10,425	13,295	15,274
Budgeted Positions	281	283	283	283	283	283	283	283
Capital Improvement Program	22,916	28,372	42,020	44,250	41,678	42,110	35,290	39,535
Bond Sales/ Commercial Paper	10,900	-	-	-	-	-	-	-
Net Non-Contributed Plant (12/31) (REG)	709,198	702,703	701,949	703,090	700,833	708,746	709,254	713,213
Net Contributed Plant (12/31)	180,609	177,662	183,079	189,849	195,295	190,939	186,905	183,246
Net Plant (12/31) (GAAP)	889,807	880,365	885,027	892,940	896,128	899,684	896,159	896,459
Retained Earnings (12/31)	270,863	285,220	290,486	309,032	321,162	331,587	344,882	360,156
General and Restricted Cash	74,430	104,840	97,727	98,750	96,045	91,960	96,446	97,540
Bond Construction Cash	-	_	_	_	-	-	-	-
Bond Redemption Investment	23,581	28,573	22,230	22,228	22,221	22,223	22,216	22,176
Debt Service Account	2,099	2,254	2,233	2,084	2,068	2,067	2,068	2,067
Operating Fund Investment & Customer Deposits	41,636	16,986	16,786	13,386	13,286	13,386	13,486	13,686
Total Cash & Investments (12/31)	141,746	152,653	138,976	136,448	133,619	129,636	134,216	135,469
IGCs - General Government	4,005	4,874	4,544	4,849	4,918	4,936	4,941	4,950
MUSA	9,332	9,410	9,314	9,234	9,292	9,306	9,314	9,232
	•	,	307,775	,	,	,	,	,
Total Outstanding Debt Total Annual Debt Service	323,370 21,733	315,505 24,627	24,231	299,700 22,230	291,290 22,228	282,530 22,221	273,330 22,223	263,695 22,216
Debt Service Coverage	3.08	2.46	2.12	2.82	2.53	2.46	2.59	2.69
LT Debt/Equity Ratio	65/35	64/36	63/37	61/39	60/40	59/41	57/43	56/44
Rate Change Percent	34.97%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Statistical/Performance Trends:								
Residential Customer (500 kWh)	\$99.52	\$94.96	\$110.79	\$105.02	\$103.31	\$103.17	\$104.39	\$105.58
Total Residential Sales (kWh)	127,375	125,647	124,705	124,691	124,681	124,671	124,660	124,651
Commercial & Industrial Sales (kWh)	688,716	692,871	687,674	688,196	688,712	689,229	689,766	690,304
Total Residential, Commercial and Industrial kWh Sales	816,091	818,518	812,379	812,887	813,393	813,899	814,427	814,956
Total Retail Sales Revenue	\$160,301	\$136,720	\$157,535	\$146,257	142,922	\$142,674	\$145,077	\$147,437

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.

Municipal Light & Power Statement of Revenues and Expenses - Electric

	2017 Actuals *	2018 Proforma *	2018 Revised *	19 v 18 \$ Change	2019 Proposed *	19 v 18 % Change
Operating Revenue						
Residential	26,125,849	23,864,000	28,439,000	(806,000)	27,633,000	-2.8%
Commercial	120,544,140	96,541,000	132,041,000	(22,638,000)	109,403,000	-17.1%
Military	17,452,871	14,250,000	19,315,000	(1,159,000)	18,156,000	-6.0%
Sales for Resale	23,344,433	39,781,000	-	14,660,000	14,660,000	n/a
Other	(3,042,881)	2,778,000	9,977,000	(6,911,000)	3,066,000	-69.3%
Total Operating Revenue	184,424,413	177,214,000	189,772,000	(16,854,000)	172,918,000	-8.9%
Non Operating Revenue						
Interest Income	-	580,000	862,000	102,000	964,000	11.8%
Other	3,417,968	2,421,000	2,421,000	-	2,421,000	0.0%
Total Non Operating Revenue	3,417,968	3,001,000	3,283,000	102,000	3,385,000	3.1%
Total Revenue	187,842,381	180,215,000	193,055,000	(16,752,000)	176,303,000	-8.7%
Operating Expense						
Labor:						
Labor and Benefits	31,472,609	33,162,000	33,162,000	2,955,000	36,117,000	8.9%
Overtime	2,673,426	2,174,000	2,174,000	(148,000)	2,026,000	-6.8%
Total Labor	34,146,035	35,336,000	35,336,000	2,807,000	38,143,000	7.9%
	01,110,000	00,000,000	00,000,000	2,007,000	00,110,000	1.070
Non Labor:						
Material & Supplies	11,332,211	14,480,751	14,548,999	984,001	15,533,000	6.8%
Travel	95,824	150,000	150,000	-	150,000	0.0%
Natural Gas Purchases & Transportation	60,602,524	53,338,000	53,338,000	(5,295,000)	48,043,000	-9.9%
Gas Production Expense	-	-	-	-	-	n/a
Southcentral Power Project	3,560,821	3,600,000	3,600,000	700,000	4,300,000	19.4%
Purchased Power & Wheeling	5,547,215	6,000,000	6,000,000	56,000	6,056,000	0.9%
Regulatory Debit/Credit	-	-	-	-	-	n/a
Depreciation, Depletion & Amortization	29,140,922	28,835,000	29,791,000	(546,000)	29,245,000	-1.8%
Transfers (MUSA)	9,331,662	9,410,000	9,429,739	(115,739)	9,314,000	-1.2%
Transfer Equity to/from Other Funds	(10,000,000)	10,000,000	-	-	_	n/a
Total Non Labor	109,611,179	125,813,751	116,857,738	(4,216,738)	112,641,000	-3.6%
Total Direct Costs	143,757,214	161,149,751	152,193,738	(1,409,738)	150,784,000	-0.9%
Intragovernmental Charges (IGCs)	4,005,091	4,874,249	4,828,201	(283,938)	4,544,263	-5.9%
Intradepartmental Overheads	,,	,- , -	,, -	(1,525,000)	(1,525,000)	n/a
Total Operating Expense	147,762,305	166,024,000	157,021,939	(3,218,676)	153,803,263	-2.0%
Non Operating Expense						
Interest on Bonded Debt	17,104,892	18,926,000	26,626,000	(7,704,000)	18,922,000	-28.9%
Other Interest Expense	3,040,452	663,000	663,000	(61,000)	602,000	-9.2%
Allowance for Funds Used During Construction	(525,306)	(461,000)	(461,000)	137,000	(324,000)	-29.7%
Amortization of Debt Expense	(1,025,163)	(956,000)	(956,000)	(65,000)	(1,021,000)	6.8%
Loss on Disposal of Property	1,732,304	(930,000)	(930,000)	(03,000)	(1,021,000)	n/a
Other		110,000	119,000	-	119,000	
	534,144	119,000			-	0.0%
Total Non Operating Expense Total Expenses (Function Cost)	20,861,324 168,623,629	18,291,000 184,315,000	25,991,000 183,012,939	(7,693,000) (10,911,676)	18,298,000 172,101,263	-29.6% -6.0%
Net Income			10,042,061	(5,840,324)	4,201,737	
	19,218,751	(4,100,000)	10,042,061	(5,640,324)	4,201,737	-58.2%
Appropriation				// / /»		
Total Expenses			183,012,939	(10,911,676)	172,101,263	-6.0%
Less: Non Cash items						
Depreciation, Depletion & Amortization			29,791,000	(546,000)	29,245,000	-1.8%
Regulatory Debits/Credits			-	-	-	n/a
Allowance for Funds Used During Construction			(461,000)	137,000	(324,000)	-29.7%
Amortization of Bonds			(956,000)	(65,000)	(1,021,000)	6.8%
Loss on Disposal of Property		_	-	-	-	n/a
Total Non Cash		_	28,374,000	(474,000)	27,900,000	-1.7%
Amount to be Appropriated (Cash Expenses)		_	\$154,638,939	(10,437,676)	\$144,201,263	-6.7%

^{*}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 2018 Revised Budget to 2019 Proposed Budget

		P	ositions	
	Appropriation	FT	PT	7
2018 Revised Budget	183,012,939	263	1	19
Transfers (to)/from Other Agencies				
- Intragovernmental Charges	(283,938)	-	-	-
- MUSA	(115,739)	-	-	-
Debt Service Changes				
- Interest Expense	(7,765,000)	-	-	-
Changes in Existing Programs/Funding for 2019				
Depreciation, Depletion & Amortization	(546,000)	-	-	-
- Allowance for Funds Used During Construction	137,000	-	-	-
- Purchased Power & Wheeling	56,000	-	-	-
- Natural Gas Purchases and Transportation	(5,295,000)	-	-	-
- Amortization of Debt Expense	(65,000)	-	-	-
- Southcentral Power Project	700,000	-	-	-
2019 Continuation Level	169,835,262	263	1	19
2019 Proposed Budget Changes				
- Salary and Benefit Adjustment	2,807,000	2	-	(2)
- Material and Supplies	984,001			
- Intradepartmental Overheads	(1,525,000)	-	-	-
2019 Proposed Operating Budget	172,101,264	265	1	17
2019 Budget Adjustment for Accounting Transactions (Appropriation)				
- Depreciation, Depletion & Amortization	29,245,000	-	-	-
- Allowance for Funds Used During Construction	(324,000)	-	-	-
- Amortization of Bonds	(1,021,000)	-	-	
2019 Proposed Budget (Appropriation)	144,201,263	265	1	17

2019 Proposed Utility/Enterprise Activities Budgets

Municipal Light & Power Statement of Revenues and Expenses - Gas

	2017 Actuals *	2018 Proforma *	2018 Revised *	19 v 18 \$ Change	2019 Proposed *	19 v 18 % Change
Operating Revenue						
Residential	-	-	-	-	-	n/a
Commercial	-	-	-	-	-	n/a
Military	-	-	-	-	-	n/a
Sales for Resale	-	-	-	-	-	n/a
Other	20,696,916	16,168,000	14,716,000	822,000	15,538,000	5.6%
Total Operating Revenue	20,696,916	16,168,000	14,716,000	822,000	15,538,000	5.6%
Non Operating Revenue						
Interest Income	108,786	842,000	767,000	181,000	948,000	23.6%
Other	1,101,231	, -	-	· -	· -	n/a
Total Non Operating Revenue	1,210,018	842,000	767,000	181,000	948,000	23.6%
Total Revenue	21,906,934	17,010,000	15,483,000	1,003,000	16,486,000	6.5%
Operating Expense		,	-,,	,,.		
Labor:						
Labor and Benefits	147,341	158,000	158,000	2,000	160,000	1.3%
Overtime	399	=	-	-	-	n/a
Total Labor	147,740	158,000	158,000	2,000	160,000	1.3%
Non Labor:						
Material & Supplies	485,839	381,960	455,000	(16,000)	439,000	-3.5%
Travel	474	-	-	(.0,000)	.00,000	n/a
Natural Gas Purchases & Transportation	-	_	_	_		n/a
Gas Production Expense	13,817,094	14,324,000	14,085,000	250,000	14,335,000	1.8%
Southcentral Power Project	13,017,034	14,324,000	14,003,000	230,000	14,555,000	n/a
Purchased Power & Wheeling	-	-	-	-		n/a
· ·	(4.020.644)	(7.226.000)	(40,024,000)	10.000.000	F0 000	
Regulatory Debit/Credit	(4,028,641)	(7,336,000)	(10,021,000)	10,080,000	59,000	-100.6%
Depreciation, Depletion & Amortization	3,312,596	1,066,000	999,000	(108,000)	891,000	-10.8%
Transfers (MUSA)	-	-	-	-	-	n/a
Transfers to/from Other Funds	10,000,000	(10,000,000)		<u> </u>	-	n/a
Total Non Labor	23,587,362	(1,564,040)	5,518,000	10,206,000	15,724,000	185.0%
Total Direct Costs	23,735,102	(1,406,040)	5,676,000	10,208,000	15,884,000	179.8%
Charges from Other Departments	82,487	82,040	82,295	(295)	82,000	-0.4%
Total Operating Expense	23,817,589	(1,324,000)	5,758,295	10,207,705	15,966,000	177.3%
Non Operating Expense						
Interest on Bonded Debt	525,738	257,000	257,000	(257,000)	-	-100.0%
Other Interest Expense	241,898	-	-	-	-	n/a
Allowance for Funds Used During Construction	-	-	-	-	-	n/a
Amortization of Debt Expense	63,736	32,000	31,000	(31,000)	-	-100.0%
Loss on Disposal of Property	-	-	-	-	-	n/a
Other		=	-	-	-	n/a
Total Non Operating Expense	831,372	289,000	288,000	(288,000)	-	-100.0%
Total Expenses (Function Cost)	24,648,962	(1,035,000)	6,046,295	9,919,705	15,966,000	164.1%
Net Income	(2,742,028)	18,045,000	9,436,705	(8,916,705)	520,000	-94.5%
Appropriation						
Total Expenses			6,046,295	9,919,705	15,966,000	164.1%
Less: Non Cash items						
Depreciation, Depletion & Amortization			999,000	(108,000)	891,000	-10.8%
Regulatory Debits/Credits			(10,021,000)	10,080,000	59,000	-100.6%
Allowance for Funds Used During Construction			(10,021,000)	10,000,000	55,550	n/a
Amortization of Bonds			31 000	(31 000)	-	-100.0%
			31,000	(31,000)	-	
Loss on Disposal of Property		-	- (0.004.005)	-	050.000	n/a
Total Non Cash		-	(8,991,000)	9,941,000	950,000	-110.6%
Amount to be Appropriated (Cash Expenses)		=	\$15,037,295	(21,295)	\$15,016,000	-0.1%

*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 2018 Revised Budget to 2019 Proposed Budget

		P	ositions	
	Appropriation	FT	PT	1
2018 Approved Budget	6,046,295	-	-	-
Transfers (to)/from Other Agencies				
- Intragovernmental Charges	(295)	-	-	-
Debt Service Changes				
- Interest Expense	(257,000)	-	-	-
Changes in Existing Programs/Funding for 2019				
Depreciation, Depletion & Amortization	(108,000)	-	-	-
- Gas Production Expense	250,000	-	-	-
- Regulatory Debits/Credits	10,080,000	-	-	-
- Amortization of Debt Expense	(31,000)	-	-	-
2019 Continuation Level	15,980,000	-	-	-
2019 Proposed Budget Changes				
- Salary and benefit adjustment	2,000	-	-	-
- Material and Supplies	(16,000)	-	-	-
2019 Proposed Operating Budget	15,966,000	-	-	-
2019 Budget Adjustment for Accounting Transactions (Appropriation)				
- Depreciation, Depletion & Amortization	891,000	-	-	-
- Regulatory Debits/Credits	59,000	-	-	-
- Amortization of Bonds		-	-	-
2019 Proposed Budget (Appropriation)	15,016,000	-	-	-

Municipal Light & Power 2019 - 2024 Capital Improvement Program

(in thousands)

Project Category		2019	2020	2021	2022	2023	2024	Total
Beluga River Gas Field		9,600	9,600	10,200	10,800	10,800	10,800	61,800
Distribution		22,345	24,555	22,680	21,330	17,420	21,520	129,850
General Plant		2,790	3,225	3,335	2,740	3,080	3,175	18,345
Production		4,285	1,030	423	100	100	100	6,038
Transmission		3,000	5,840	5,040	7,140	3,890	3,940	28,850
	Total	42,020	44,250	41,678	42,110	35,290	39,535	244,883

Funding Source	2019	2020	2021	2022	2023	2024	Total
Equity/Operations	29,120	31,350	28,178	38,810	31,990	36,235	195,683
Revenue Bond/Commercial Paper	-	-	-	-	-	-	-
Contribution in Aid of Construction	3,300	3,300	3,300	3,300	3,300	3,300	19,800
Beluga Contributed	9,600	9,600	10,200	-	-	-	29,400
Total	42,020	44,250	41,678	42,110	35,290	39,535	244,883

Municipal Light & Power 2019 - 2024 Deferred & Reimbursable Projects Budget

(in thousands)

Project Category		2019	2020	2021	2022	2023	2024	Total
Electric		7,000	7,000	7,000	7,000	7,000	7,000	42,000
	Total	7,000	7,000	7,000	7,000	7,000	7,000	42,000

Funding Source		2019	2020	2021	2022	2023	2024	Total
Deferred/Reimbursable		7,000	7,000	7,000	7,000	7,000	7,000	42,000
	Total	7,000	7,000	7,000	7,000	7,000	7,000	42,000

Municipal Light & Power 2019 Capital Improvement Budget (in thousands)

	=	Revenue Bond/		Dalama	
B. 1. 4 B.4	Equity/	Commercial	in Aid of	Beluga	
Project Title	Operations	Paper	Construction	Contributed	Total
Beluga River Gas Field	-	-	-	9,600	9,600
Communications	1,280	-	-	-	1,280
Distribution Equipment	4,135	-	-	-	4,135
Eklutna Power Plant	2,610	-	-	-	2,610
Land & Land Rights-Transmission & Distribution	80		=	-	80
Meters	750	-	-	-	750
Overhead Lines	2,210	-	-	-	2,210
Stores/Tools/Lab	310	-	-	-	310
Street Lighting	300	-	-	-	300
Structures & Improvements - General Plant	200	-	-	-	200
Structures & Improvements - Plant 1/Plant 2	-	-	-	-	-
Transformer Services	3,900	-	-	-	3,900
Transmission Lines	100	-	=	-	100
Transmission Stations	2,900	-	=	-	2,900
Transportation	1,000	-	-	-	1,000
Turbines & Generators	1,675	-	-	-	1,675
Underground Lines	7,670	-	3,300	-	10,970
ML&P TOTAL	\$ 29,120	\$ -	\$ 3,300	\$ 9,600	\$ 42,020

Municipal Light & Power 2019 Deferred & Reimbursable Projects Budget (in thousands)

	De	ferred/				
Project Title	Reim	bursable			٦	Total
Electric		7,000				7,000
	ML&P TOTAL \$	7,000 \$	- \$	- \$	- \$	7,000

Municipal Light & Power Statement of Cash Sources and Uses

	2017	2018	2019
	Actual*	Proforma *	Proposed *
Sources of Cash Funds			
Net Income	16,297,275	6,249,000	4,383,000
Depreciation/Depletion/Amortization	32,453,518	29,901,000	30,136,000
Amortization of Bonds	(961,427)	(924,000)	(1,021,000)
Bond Proceeds / Commercial Paper	10,900,000	-	-
Deferred Charges and Other Assets	(680,609)	8,393,824	(2,566,605)
Contribution in Aid of Construction	3,287,701	(2,946,990)	5,416,640
Changes in Assets and Liabilities	(7,003,536)	(1,703,286)	(8,059,982)
Total Sources of Cash Funds	54,292,922	38,969,548	28,288,053
Uses of Cash Funds			
Additions to Plant	27,132,853	20,197,867	34,474,861
Debt Principal Payment	7,520,000	7,865,000	7,730,000
Total Uses of Cash Funds	34,652,853	28,062,867	42,204,861
Net Increase (Decrease) in Cash Funds	19,640,069	10,906,681	(13,916,808)
Cash Balance, January 1	122,106,099	141,746,168	152,652,849
Cash Balance, December 31	141,746,168	152,652,849	138,736,041
Detail of Cash and Investment Funds			
General Cash Less Customer Deposits	33,863,491	61,281,192	59,751,621
Bond Cash	-	-	-
BRU Reg Liability, Future Gas Purchases & ARO	40,567,003	43,558,374	37,636,136
Bond Investment	23,580,680	28,572,922	22,229,544
Debt Service	2,098,515	2,254,135	2,232,514
Operating Fund Invest, Interim Rev. Escrow, Cust Dep	41,636,479	16,986,226	16,886,226
Cash Balance, December 31	141,746,168	152,652,849	138,736,041

^{*}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, 2017, ML&P had 248 employees and total labor and benefit costs of approximately \$39 million, which includes operating and capital labor expenditures. Of these 248 employees, 181 were covered by a labor agreement with the IBEW and 67 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 and Matanuska Electric Association purchased the Eklutna Hydroelectric Project from the federal government.

On August 28, 2008 ML&P entered into an agreement with Chugach Electric Association 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 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 Chugach. 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 & 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 2017, the average number of residential and commercial customers was 24,680 and 6,388 respectively. In 2017, electric retail sales totaled 980,808 MWh resulting in revenues of \$160,301,033. Total electric operating revenues including Miscellaneous Operating Revenue, Sales for Resale and Other Utility Operating Income were \$184,424,413. 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 Regulatory Commission of Alaska (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 2017	1,382,277 MWh	
	 ML&P Generated 	858,317 MWh	62.10%
	Southcentral Power Plant	372,998 MWh	26.98%
	Eklutna Hydroelectric Project	55,029 MWh	3.98%
	Purchased:		
	 Bradley Lake Project 	95,933 MWh	6.94%
•	Total Thermal Generation capacity in 2017	420.1 Megawatts (M)	N) at 30°F
	 Power Plant One (2 Turbines) 	66.5 MW	15.83%
	 Power Plant Two (2 Turbines) 	166.8 M\	<i>N</i> 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 2017
 371 Miles

Underground Cable
Overhead Line
253 Miles
118 Miles
31.81%

• 19 Substations

Total Electric Plant as of December 31, 2017 \$738,648,140
Total Gas Plant as of December 31, 2017 \$151,158,551

- 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.