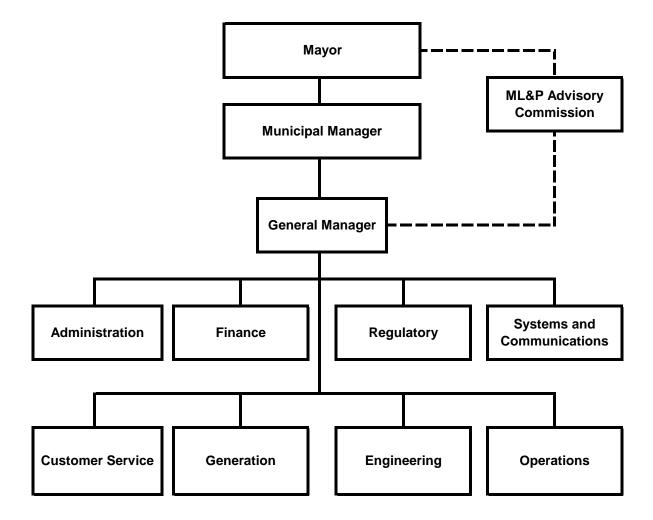
Municipal Light & Power



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 and Power Management, Engineering, Operations, Finance, Customer Service, Regulatory Affairs, and Systems and Communications. 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, labor relations, safety, security, public relations, environmental, telephone switchboard/receptionist duties, and courier/mailroom operations.

Generation and Power Management Division

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

This includes operation, maintenance, engineering, and installation of equipment used in conjunction with the two 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.

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.

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.

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 **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).

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 participation in all regulatory proceedings affecting ML&P's ability to perform its mission, maintenance of ML&P's tariff, special contracts, COPA filings, rate studies and oversight of ML&P's 56.67% interest in the Beluga River Unit (BRU). The BRU, a gas field located in the Kenai Peninsula Borough, produces gas used in ML&P turbines resulting in cost saving for ML&P customers.

Systems and Communication Division

The Systems and Communication 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 ensuring 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 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 **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 **IT Support Section** supports and administrates the desktop PCs for all ML&P divisions. They provide help desk support for ML&P computer users, provide disaster recovery planning and implementation to assure the availability of critical data, provide security and software update service for all desktop PCs.

The **Document Control and Records Management Section** is responsible for establishing and maintaining utility wide document management and retrieval technologies.

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, 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 continue to pay annual dividends to the Municipality of Anchorage
- 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 revenue per kilowatt-hour (kWh) sold
- 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 1day of meter read date
- 5. At a minimum, maintain an A bond rating
- 6. Maintain Customer Average Interruption Duration Index (CAIDI) below industry average
- 7. Maintain System Average Interruption Duration Index (SAIDI) below industry average
- 8. Maintain System Average Interruption Frequency Index (SAIFI) below industry average
- 9. 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

	2013	2014	2015	2016	2Q-2017
Municipal Light & Power	12.92	15.69	16.55	16.93	23.35
Chugach Elec. Assoc.	14.30	15.94	17.47	17.95	18.87
Matanuska Elec. Assoc.	15.29	16.90	19.88	19.68	19.88
Homer Elec. Assoc.	19.84	23.26	24.84	23.89	24.47
Golden Valley Electric Assoc.	22.54	22.60	21.77	21.76	24.89

Note: Customer charge is \$6.56/month and energy usage is 750 kWh/month. Energy Charge effective 2/15/17 is 14.738 cents/kWh. The Cost of Power Adjustment (COPA) effective 4/1/17 is 7.666 cents/kWh. The Regulatory Charge is adjusted annually by RCA, and is currently .0675 cents/kWh.

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

2013	2014	2015	2016	2Q- 2017
3.29	1.41	6.32	3.94	5.18

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

2013	3 2014	2015	2016	2Q- 2017
1.41	.47	2.26	3.07	4.32

Note:

Industry Average TRIR 2012 - 2015 6.8, 4.5, 2.4 and 6.2 respectively. Industry Average DART 2012 - 2015 3.3, 3.8, 1.3 and 3.6 respectively

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

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

2013	2014	2015	2016	2Q-2017
84%	84%	83%	86%	84.5%

Measure #5: Maintain positive Income Before Dividend

2013	2014	2015	2016	2Q-2017
\$5,820,381	\$13,450,177	\$9,608,914	\$11,806,466	\$9,516,027

Note: Cumulative Income Before Dividend

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

Standa	rd & Poo	r's Ratir	g Servic	es	Fitch Rati	ngs			
2013	2014	2015	2016	2017	2013 2014 2015 2016 201				2017
A+	A+	A+	A+	A+	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.

Engineering & Operations Municipal Light & Power

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

2013	2014	2015	2016	2Q- 2017
1.35	1.98	1.502	.603	.374

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

2013	2014	2015	2016	2Q- 2017
1.28	1.377	1.563	.605	.139

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

2013	2014	2015	2016	2Q- 2017
.953	.695	1.04	1.004	.371

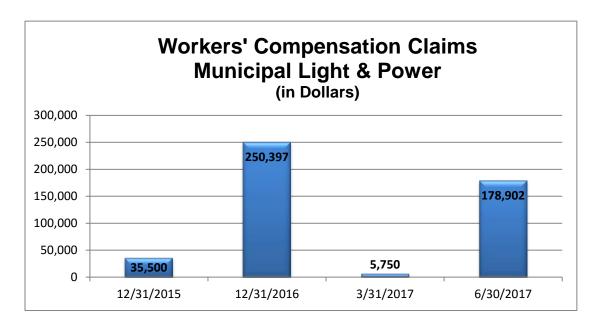
Note: Data compiled from 2015 data collected by EIA indicates an average SAIFI of 1.17 interruptions per customer.

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 began a life cycle generation asset replacement in 2013 with the commissioning of SPP and continued it with Plant 2A commissioning in 2016. These replacements required ML&P to make significant capital investments. ML&P invested approximately \$306 million with Plant 2A to replace aging generation infrastructure. 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. At peak construction there have been approximately 250 workers on site. The Plant will use low value "waste" heat to heat AWWU's city drinking water (15 degrees average). Plant 2A was placed in-service on November 7, 2016.

Acquisition of ConocoPhillips Alaska Incorporated's (CPAI) interest in the Beluga River Unit (BRU) gas field

In Order U-16-012(14), dated April 22, 2016, the RCA affirmed a bench ruling the day earlier granting a joint petition filed by the Utility and Chugach Electric Association (CEA) requesting approval of a purchase and sale agreement for the acquisition of CPAI's one-third interest in the BRU. Hearing was held on an expedited basis April 18 through 20, 2016. The total purchase price is \$152 million, with the Utility acquiring 70% of that interest for \$106.4 million and CEA the remaining 30% for \$45.6 million. The Utility funded its share of the acquisition with DRLGS and Future Natural Gas Purchases Account funds, cumulative underlift proceeds owed to it by CPAI, and unrestricted gas fund cash. This purchase gives the Utility a total 56.67% interest in the BRU, and it will seek Commission approval of accounting and ratemaking treatment for this interest.

ML&P filed TA350-121 on July 1, 2016, to change its gas fund revenue requirement through inclusion of depletion expense on new non-contributed, equity funded plant in the Gas Transfer Price (GTP). ML&P also proposed the use of a rate base/rate of return methodology after the retirement of BRU's current debt in 2018. The RCA suspended the TA into Docket U-16-060. The RCA approved on an interim and refundable basis a GTP on June 17, 2016 pending a final decision in U-16-060. The RCA then consolidated dockets U-16-060 and U-16-073. A final order will be issued no later than September 24, 2017.

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. ML&P also proposed a rate stabilization plan (RSP) that would defer to later years the recovery of a portion of \$12.9 million of ML&P's capital investment in Plant 2A. The RCA suspended TA357-121 into Docket U-17-008. ML&P requested a rate increase of 29.49% to current demand and energy charges if a RSP is approved. Alternatively, if the RSP is not approved, MLL&P requested a rate increase of 42.92%. The RCA approved an interim and refundable rate of 37.5%. The RCA also consolidated Docket U-16-094 (ML&P's depreciation filing) into Docket U-17-008.

In Order U-17-008(5) the RCA approved the intervention of Providence Health & Services, the Federal Executive Agencies, JL Properties, Enstar Natural Gas Company, and Alaska Native Tribal Health Consortium. The hearing is scheduled to begin on November 17, 2017 and continue through December 22, 2017. A final order will be issued no later than March 25, 2018.

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 \$3.47/MCF in 2017 to \$4.47/MCF in 2018. 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.

ML&P filed a request for rate relief with the Regulatory Commission of Alaska (RCA) in the fourth quarter 2016 (Docket U-17-008). The requests included rate increases using two different methodologies, traditional ratemaking and a rate stabilization plan (RSP). ML&P's request using traditional ratemaking would increase rates by 43.77%, under the RSP the rate increase would initially be 29.49%. The RCA suspended ML&P's request with a hearing scheduled for fourth quarter 2017. A decision is required by March 25, 2018.

Revenue reductions in 2019 thru 2021 that are caused by the maturity of the Beluga River Unit (BRU) bond debt in 2018. ML&P requested a change to the ratemaking methodology for the BRU in Docket U-16-060/U-16-073. The hearing took place the week of July 24, 2017. A decision on the ratemaking and accounting should be issued by the RCA in the next 90 days.

Municipal Light & Power Workforce Projections

Division	2016*	2017	2018	2019	2020	2021	2022	2023
Administration	13***	12	13	13	13	13	13	13
Customer Service	25	25	25	25	25	25	25	25
Engineering	31	31	32	32	32	32	32	32
Finance	21	21	20	20	20	20	20	20
Generation	62	66	64	64	64	64	64	64
Operations	61	62	65	65	65	65	65	65
Power Management	15	16	12	12	12	12	12	12
Regulatory *	5	5	7	7	7	7	7	7
Systems & Communications	22	24	25	25	25	25	25	25
Total Full Time	255	262	263	263	263	263	263	263
Part-Time/Temporary	22**	19	20	20	20	20	20	20
Total Positions	277	281	283	283	283	283	283	283
Total FTE	266.5	272	273	273	273	273	273	273

^{*} In March 2016 MOA administration approved an ML&P organizational change to form Regulatory Affairs Division with five Finance FTEs.

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

^{***} Per AO 2015-107 (S), Assemblymember Flynn amendment, PCN 6211 reduced to 0.5 FTE (PT).

Municipal Light & Power 8 Year Summary

(\$ in thousands)

Figure in Overview	2016 **	2017	2018	2019	2020	2021	2022	2023
Financial Overview	Actuals*	Proforma *	Approved*	040.054	044.044	Forecast*	400.005	100.105
Revenues	170,418	210,596	208,538	219,054	211,911	190,826	182,295	188,495
Expenses	162,023	194,119	188,847	201,225	182,298	180,301	179,676	181,302
Net Income (Loss) - Regulatory	8,395	16,477	19,691	17,829	29,613	10,525	2,619	7,193
Budgeted Positions	277	281	283	283	283	283	283	283
Capital Improvement Program	39,759	38,263	57,105	44,215	38,698	37,018	45,590	36,300
Bond Sales/ Commercial Paper	66,700	192,000	-	-	25,000	-	-	-
Net Non-Contributed Plant (12/31) (REG)	718,916	716,758	728,570	727,231	730,716	732,148	741,528	741,155
Net Contributed Plant (12/31)	177,321	169,749	176,886	187,093	185,904	182,099	178,644	175,496
Net Plant (12/31) (GAAP)	896,237	886,507	905,455	914,324	916,619	914,247	920,172	916,651
Retained Earnings (12/31)	254,566	270,826	290,926	309,272	339,555	350,490	353,682	361,710
General and Restricted Cash	79,968	88,760	76,812	84,861	125,901	128,004	116,792	117,726
Bond Construction Cash	2,526	-	-	-	-	-	-	-
Bond Redemption Investment	23,144	38,167	38,173	31,830	34,237	34,229	34,231	34,224
Debt Service Account	2,098	2,291	2,847	2,875	2,876	2,876	2,876	2,876
Operating Fund Investment & Customer Deposits	14,371	16,971	17,171	16,471	13,471	13,571	13,671	13,671
Total Cash & Investments (12/31)	122,106	146,189	135,003	136,036	176,485	178,680	167,570	168,497
IGCs - General Government	2,466	3,882	4,718	4,718	4,718	4,718	4,718	4,718
MUSA	5,984	9,332	9,410	9,617	9,653	9,612	9,552	9,600
Total Outstanding Debt	330,890	515,370	507,505	499,775	515,541	505,915	495,878	485,336
Total Annual Debt Service	23,027	23,540	32,327	31,831	34,238	34,237	34,229	34,231
Debt Service Coverage	2.19	2.94	2.31	2.30	2.53	1.97	1.75	1.89
LT Debt/Equity Ratio	67/33	66/34	64/36	62/38	60/40	59/41	58/42	57/43
Rate Change Percent	0.00%	32.64%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Statistical/Performance Trends:								
Residential Customer (500 kWh)	\$87.05	\$102.47	\$113.17	\$114.57	\$105.81	\$100.20	\$98.05	\$99.69
Total Residential Sales (kWh)	127,732	130,346	125,647	125,642	125,628	125,618	125,607	125,597
Commercial & Industrial Sales (kWh)	712,232	701,099	692,871	693,389	693,915	694,433	694,951	695,493
Total Residential, Commercial and Industrial kWh Sales	839,963	831,445	818,518	819,030	819,542	820,051	820,558	821,090
Total Retail Sales Revenue	\$150,938	\$164,943	\$182,025	\$184,822	167,600	\$156,579	\$152,381	\$155,648
	ψ.00,000	ψ.σ.,σ.ισ	ψ. 32,320	ψ.σ.,σ <u>=</u> 2	,	7.00,0.0	Ţ.0 2 ,001	2.00,070

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.

^{**}Prior to 2017, ML&P's budget was presented as consolidated, net of inter-fund revenues and expenses. Due to the implementation of SAP, total revenues and expenses are presented at gross amounts in 2017 and forward.

2018 Approved Utility/Enterprise Activities Budgets

Municipal Light & Power

Statement of Revenues and Expenses - Electric

Statement of	Revenues an	d Expenses	- Electric			
	2016 Actuals *	2017 Proforma *	2017 Revised *	18 v 17 \$ Change	2018 Approved *	18 v 17 % Change
Operating Revenue	7.0.0.0			+ +	7 dp 10 10 u	/0 G.I.u.i.gc
Residential	22,260,329	26,712,000	28,478,000	(39,000)	28,439,000	-0.1%
Commercial	106,258,841	119,244,000	132,613,000	(572,000)	132,041,000	-0.4%
Military	15,437,345	16,892,000	18,892,000	423,000	19,315,000	2.2%
Sales for Resale	15,343,153	22,500,000	-	-	-	n/a
Other	7,852,729	2,832,000	10,006,000	(29,000)	9,977,000	-0.3%
Total Operating Revenue	167,152,397	188,180,000	189,989,000	(217,000)	189,772,000	-0.1%
Non Operating Revenue	, ,	, ,		, , ,		
Interest Income	50,290	818,000	861,000	1,000	862,000	0.1%
Other	2,444,873	2,421,000	2,421,000	-	2,421,000	0.0%
Total Non Operating Revenue	2,495,163	3,239,000	3,282,000	1,000	3,283,000	0.0%
Total Revenue	169,647,560	191,419,000	193,271,000	(216,000)	193,055,000	-0.1%
Operating Expense				-		
Labor:						
Labor and Benefits	28,242,164	31,908,000	31,936,000	1,226,000	33,162,000	3.8%
Overtime	2,318,313	2,221,000	2,221,000	(47,000)	2,174,000	-2.1%
Total Labor	30,560,477	34,129,000	34,157,000	1,179,000	35,336,000	3.5%
	, ,	, ,,,,,,,	, , , , , , , , , , , , , , , , , , , ,	, .,	, ,	
Non Labor:						
Material & Supplies	10,852,600	12,054,000	11,671,000	2,877,999	14,548,999	24.7%
Travel	75,262	150,000	150,000	-	150,000	0.0%
Natural Gas Purchases & Transportation	68,683,139	59,160,000	60,985,000	(7,647,000)	53,338,000	-12.5%
Gas Production Expense	-	-	-	-	-	n/a
Southcentral Power Project	3,430,722	4,325,000	4,325,000	(725,000)	3,600,000	-16.8%
Purchased Power & Wheeling	5,361,433	6,125,000	6,098,000	(98,000)	6,000,000	-1.6%
Regulatory Debit/Credit	-	-	-	-	-	n/a
Depreciation, Depletion & Amortization	22,065,278	29,693,000	30,106,000	(315,000)	29,791,000	-1.0%
Transfers (MUSA)	5,983,574	9,332,000	9,338,552	71,448	9,410,000	0.8%
Transfers to Gen Gov't-SAP	8,456	-	-	-	-	n/a
Total Non Labor	116,460,464	120,839,000	122,673,552	(5,835,553)	116,837,999	-4.8%
Total Direct Costs	147,020,941	154,968,000	156,830,552	(4,656,553)	152,173,999	-3.0%
Charges from Other Departments	2,414,781	3,802,000	3,880,433	755,672	4,636,105	19.5%
Total Operating Expense	149,435,722	158,770,000	160,710,985	(3,900,881)	156,810,104	-2.4%
Non Operating Expense						
Interest on Bonded Debt	17,175,719	17,905,000	24,305,000	2,321,000	26,626,000	9.5%
Other Interest Expense	1,985,257	2,771,000	1,296,000	(633,000)	663,000	-48.8%
Allowance for Funds Used During Construction	(12,599,561)	(353,000)	(1,371,000)	910,000	(461,000)	-66.4%
Amortization of Debt Expense	(1,026,882)	(1,020,000)	(980,000)	24,000	(956,000)	-2.4%
Loss on Disposal of Property	8,978,130	1,500,000	-	-	-	n/a
Other	123,039	119,000	119,000	-	119,000	0.0%
Total Non Operating Expense	14,635,701	20,922,000	23,369,000	2,622,000	25,991,000	11.2%
Total Expenses (Function Cost)	164,071,424	179,692,000	184,079,985	(1,278,881)	182,801,104	-0.7%
Net Income	5,576,136	11,727,000	9,191,015	1,062,881	10,253,896	11.6%
Appropriation						
Total Expenses	164,071,424	179,692,000	184,079,985	(1,278,881)	182,801,104	-0.7%
Less: Non Cash items						
Depreciation, Depletion & Amortization	22,065,278	29,693,000	30,106,000	(315,000)	29,791,000	-1.0%
Regulatory Debits/Credits	-	-	-	-	-	n/a
Allowance for Funds Used During Construction	(12,599,561)	(353,000)	(1,371,000)	910,000	(461,000)	-66.4%
Amortization of Bonds	(1,026,882)	(1,020,000)	(980,000)	24,000	(956,000)	-2.4%
Loss on Disposal of Property	8,978,130	1,500,000	<u> </u>		<u> </u>	n/a
Total Non Cash	17,416,965	29,820,000	27,755,000	619,000	28,374,000	2.2%
Amount to be Appropriated (Cash Expenses)	\$146,654,459	\$149,872,000	156,324,985**	(1,897,881)	\$154,427,104	-1.2%

^{*}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.

^{**}In 2017 Revised supplemental budget of \$570,183 for MUSA was added per AR2017-242 approved on 7/11/17.

Municipal Light & Power Electric - Reconciliation from 2017 Revised Budget to 2018 Approved Budget

		P	ositions	
	Appropriation	FT	PT	7
2017 Revised Budget	184,079,985	262	1	18
Transfers (to)/from Other Agencies				
- Intragovernmental Charges	755,672	-	-	-
- MUSA	71,448	-	-	-
Debt Service Changes				
- Interest Expense	1,688,000	-	-	-
Changes in Existing Programs/Funding for 2018				
- Depreciation, Depletion & Amortization	(315,000)	-	-	-
- Allowance for Funds Used During Construction	910,000	-	-	-
- Purchased Power & Wheeling	(98,000)	-	-	-
- Natural Gas Purchases and Transportation	(7,647,000)	-	-	-
- Amortization of Debt Expense	24,000	-	-	-
- Southcentral Power Project	(725,000)	-	-	-
2018 Continuation Level	178,744,105	262	1	18
2018 Approved Budget Changes				
- Salary and benefit adjustment	1,179,000	1	-	1
- Material and Supplies	2,877,999	-	-	-
2018 Approved Operating Budget	182,801,104	263	1	19
2018 Budget Adjustment for Accounting Transactions (Appropriation) - Depreciation, Depletion & Amortization	29,791,000	-	-	-
- Allowance for Funds Used During Construction	(461,000)	-	-	_
- Amortization of Bonds	(956,000)	-	-	-
2018 Approved Budget (Appropriation)	154,427,104	263	1	19

2018 Approved Utility/Enterprise Activities Budgets

Municipal Light & Power

Statement of Revenues and Expenses - Gas

Statement of it		•	Cas				
	2016 Actuals *	2017 Proforma *	2017 Revised *	18 v 17 \$ Change	2018 Approved *	18 v 17 % Change	
Operating Revenue				<u> </u>			
Residential	-	-	-	-	-	n/a	
Commercial	-	_	-	-	_	n/a	
Military	-	_	-	-	_	n/a	
Sales for Resale	-	_	-	-	-	n/a	
Other	30,223,507	18,355,000	18,757,000	(4,041,000)	14,716,000	-21.5%	
Total Operating Revenue	30,223,507	18,355,000	18,757,000	(4,041,000)	14,716,000	-21.5%	
Non Operating Revenue	, -,	.,,	-, - ,	()))	, -,		
Interest Income	771,231	822,000	585,000	182,000	767,000	31.1%	
Other	-	-	-	- ,	-	n/a	
Total Non Operating Revenue	771,231	822,000	585,000	182,000	767,000	31.1%	
Total Revenue	30,994,738	19,177,000	19,342,000	(3,859,000)	15,483,000	-20.0%	
Operating Expense		,,	,	(0,000,000)	10,100,000		
Labor:							
Labor and Benefits	181,210	184,000	156,000	2,000	158,000	1.3%	
Overtime	101,210	184,000	130,000	2,000	138,000		
Total Labor	101 010	104.000	450,000	2.000	450,000	n/a	
Total Labor	181,210	184,000	156,000	2,000	158,000	1.3%	
Non Labor:							
Material & Supplies	529,698	553,000	697,000	(242,000)	455,000	-34.7%	
Travel	-	-	-	-	-	n/a	
Natural Gas Purchases & Transportation	-	-	-	-	-	n/a	
Gas Production Expense	11,776,928	14,061,000	22,585,000	(8,500,000)	14,085,000	-37.6%	
Southcentral Power Project	-	-	-	-	-	n/a	
Purchased Power & Wheeling	-	-	-	-	-	n/a	
Regulatory Debit/Credit	6,359,769	(5,113,000)	(14,587,000)	4,566,000	(10,021,000)	-31.3%	
Depreciation, Depletion & Amortization	9,569,361	4,063,000	3,359,000	(2,360,000)	999,000	-70.3%	
Transfers (MUSA)	-	-	-	-	-	n/a	
Transfers to Gen Gov't-SAP	-	-	-	-	_	n/a	
Total Non Labor	28,235,756	13,564,000	12,054,000	(6,536,000)	5,518,000	-54.2%	
Total Direct Costs	28,416,966	13,748,000	12,210,000	(6,534,000)	5,676,000	-53.5%	
Charges from Other Departments	51,109	80,000	2,040	80,000	82,040	3921.6%	
Total Operating Expense	28,468,075	13,828,000	12,212,040	(6,454,000)	5,758,040	-52.8%	
Non Operating Expense							
Interest on Bonded Debt	781,695	536,000	526,000	(269,000)	257,000	-51.1%	
Other Interest Expense	141	· -	-	-	-	n/a	
Allowance for Funds Used During Construction	_	_	-	-	_	n/a	
Amortization of Debt Expense	89,822	63,000	63,000	(32,000)	31,000	-50.8%	
Loss on Disposal of Property		<u>-</u>	-	-	- ,	n/a	
Other	_	_	_	_	_	n/a	
Total Non Operating Expense	871,657	599,000	589,000	(301,000)	288,000	-51.1%	
Total Expenses (Function Cost)	29,339,733	14,427,000	12,801,040	(6,755,000)	6,046,040	-52.8%	
Net Income	1,655,006	4,750,000	6,540,960	2,896,000	9,436,960	44.3%	
Appropriation	1,000,000	4,100,000	0,040,000	2,000,000	0,400,000	44.070	
Total Expenses	29,339,733	14,427,000	12,801,040	(6.755.000)	6,046,040	F2 90/	
	29,339,733	14,427,000	12,001,040	(6,755,000)	0,040,040	-52.8%	
Less: Non Cash items	0.500.001	4.000.000	2 250 202	(2.260.000)	000 000	70.001	
Depreciation, Depletion & Amortization	9,569,361	4,063,000	3,359,000	(2,360,000)	999,000	-70.3%	
Regulatory Debits/Credits	6,359,769	(5,113,000)	(14,587,000)	4,566,000	(10,021,000)	-31.3%	
Allowance for Funds Used During Construction	-		-	-	-	n/a	
Amortization of Bonds	89,822	63,000	63,000	(32,000)	31,000	-50.8%	
Loss on Disposal of Property		-	-	-	-	n/a	
Total Non Cash	16,018,952	(987,000)	(11,165,000)	2,174,000	(8,991,000)	-19.5%	
Amount to be Appropriated (Cash Expenses)	\$13,320,781	\$15,414,000	\$23,966,040	(8,929,000)	\$15,037,040	-37.3%	

^{*}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 2017 Revised Budget to 2018 Approved Budget

		P	ositions	
	Appropriation	FT	PT	7
2017 Revised Budget	12,801,040	-	-	-
Transfers (to)/from Other Agencies				
- Intragovernmental Charges	80,000	-	-	-
Debt Service Changes				
- Interest Expense	(269,000)	-	-	-
Changes in Existing Programs/Funding for 2018				
- Depreciation, Depletion & Amortization	(2,360,000)	-	-	-
- Gas Production Expense	(8,500,000)	-	-	-
- Regulatory Debits/Credits	4,566,000	-	-	-
- Amortization of Debt Expense	(32,000)	-	-	-
2018 Continuation Level	6,286,040	-	-	-
2018 Approved Budget Changes				
- Salary and benefit adjustment	2,000	-	-	-
- Material and Supplies	(242,000)	-	-	-
2018 Approved Operating Budget	6,046,040	-	-	-
2018 Budget Adjustment for Accounting Transactions (Appropriation)				
- Depreciation, Depletion & Amortization	999,000	-	-	-
- Regulatory Debits/Credits	(10,021,000)	-	-	-
- Amortization of Bonds	31,000	-	-	-
2018 Approved Budget (Appropriation)	15,037,040	-	-	-

Municipal Light & Power 2018 - 2023 Capital Improvement Program

(in thousands)

Project Category		2018	2019	2020	2021	2022	2023	Total
Beluga River Gas Field		11,000	10,800	10,800	10,800	10,800	10,800	65,000
Distribution		21,425	20,425	18,980	18,040	25,040	18,630	122,540
General Plant		3,810	3,840	2,180	2,915	3,310	3,230	19,285
Production		18,280	2,910	398	1,823	400	350	24,161
Transmission		2,590	6,240	6,340	3,440	6,040	3,290	27,940
	Total	57,105	44,215	38,698	37,018	45,590	36,300	258,926

Funding Source	2018	2019	2020	2021	2022	2023	Total
Equity/Operations	43,655	30,915	25,348	23,618	32,140	33,600	189,276
Revenue Bond/Commercial Paper	-	-	10,800	10,800	10,800	-	32,400
Contribution in Aid of Construction	2,450	2,500	2,550	2,600	2,650	2,700	15,450
Beluga Contributed	11,000	10,800	-	-	-	-	21,800
Total	57,105	44,215	38,698	37,018	45,590	36,300	258,926

Municipal Light & Power 2018 - 2023 Deferred & Reimbursable Projects Budget

(in thousands)

Project Category		2018	2019	2020	2021	2022	2023	Total
Beluga River Gas Field		300	-	-	-	-	-	300
Electric		7,000	7,000	7,000	7,000	7,000	7,000	42,000
	Total	7,300	7,000	7,000	7,000	7,000	7,000	42,300

Funding Source		2018	2019	2020	2021	2022	2023	Total
Deferred/Reimbursable		7,300	7,000	7,000	7,000	7,000	7,000	42,300
	Total	7,300	7,000	7,000	7,000	7,000	7,000	42,300

Municipal Light & Power 2018 Capital Improvement Budget (in thousands)

		Revenue Bond/			
	Equity/	Commercial	in Aid of	Beluga	
Project Title	Operations	Paper	Construction	Contributed	Total
Beluga River Gas Field	-	-	-	11,000	11,000
Communications	1,805	-	-	-	1,805
Distribution Equipment	3,655	-	-	-	3,655
Eklutna Power Plant	3,100	-	-	-	3,100
Land & Land Rights-Transmission & Distribution	60		-	-	60
Meters	750	-	-	-	750
Overhead Lines	2,310	-	-	-	2,310
Stores/Tools/Lab	155	-	-	-	155
Street Lighting	300	-	-	-	300
Structures & Improvements - General Plant	650	-	-	-	650
Structures & Improvements - Plant 1/Plant 2	3,875	-	-	-	3,875
Transformer Services	3,550	-	-	-	3,550
Transmission Lines	70	-	-	-	70
Transmission Stations	2,500	-	-	-	2,500
Transportation	1,200	-	=	-	1,200
Turbines & Generators	11,305	-	=	-	11,305
Underground Lines	8,370	-	2,450	-	10,820
ML&P TOTAL	\$ 43,655	\$ -	\$ 2,450	\$ 11,000	\$ 57,105

Municipal Light & Power 2018 Deferred & Reimbursable Projects Budget (in thousands)

	De	terred/				
Project Title	Reim	bursable			7	Γotal
Beluga River Gas Field		300				300
Electric		7,000				7,000
	ML&P TOTAL \$	7,300 \$	- \$	- \$	- \$	7,300

Municipal Light & Power Statement of Cash Sources and Uses

	2016	2017	2018
	Actual*	Proforma *	Approved *
Sources of Cash Funds			
Net Income	8,395,476	16,261,000	20,131,000
Depreciation/Depletion/Amortization	31,634,639	33,756,000	30,790,000
Amortization of Bonds	(937,060)	(957,000)	(925,000)
Bond Proceeds / Commercial Paper	66,700,000	192,000,000	-
Deferred Charges and Other Assets	(2,551,914)	(1,999,381)	7,533,210
Contribution in Aid of Construction	85,295,633	(7,572,433)	7,137,063
Changes in Assets and Liabilities	(53,168,795)	(174,712,207)	(18,709,825)
Total Sources of Cash Funds	135,367,979	56,775,979	45,956,448
Uses of Cash Funds			
Additions to Plant	167,187,153	25,173,067	49,277,380
Debt Principal Payment	7,465,000	7,520,000	7,865,000
Total Uses of Cash Funds	174,652,153	32,693,067	57,142,380
Net Increase (Decrease) in Cash Funds	(39,284,174)	24,082,912	(11,185,932)
Cash Balance, January 1	161,390,274	122,106,100	146,189,012
Cash Balance, December 31	122,106,100	146,189,012	135,003,080
Detail of Cash and Investment Funds			
General Cash Less Customer Deposits	47,336,491	40,928,400	35,889,378
Bond Cash	2,525,855	-	-
BRU Reg Liability, Future Gas Purchases & ARO	32,631,111	47,831,835	40,922,818
Bond Investment	23,143,622	38,166,554	38,172,922
Debt Service	2,098,292	2,291,495	2,847,238
Operating Fund Investment & Customer Deposits	14,370,729	16,970,729	17,170,729
Cash Balance, December 31	122,106,100	146,189,012	135,003,080

^{*}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, 2016, ML&P had 236 employees and total labor and benefit costs of approximately \$47.9 million, which includes operating and capital labor expenditures. Of these 236 employees, 176 were covered by a labor agreement with the IBEW and 60 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 2016, the average number of residential and commercial customers was 24,678 and 6,398 respectively. In 2016, electric retail sales totaled 1,006,572 MWh resulting in revenues of \$150,937,842. Total electric operating revenues including Miscellaneous Operating Revenue, Sales for Resale and Other Utility Operating Income were \$167,152,398. 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 2016	1,184,780 MWh	
	 ML&P Generated 	651,005 MWh	54.95%
	Southcentral Power Plant	373,982 MWh	31.56%
	Eklutna Hydroelectric Project	69,403 MWh	5.86%
	Purchased:		
	 Bradley Lake Project 	90,390 MWh	7.63%
•	Total Thermal Generation capacity in 2016	420.6 Megawatts (M	W) at 30°F
	 Power Plant One (2 Turbines) 	66.5 MW	16%
	 Power Plant Two (2 Turbines) 	166.8 M	W 40%

• Power Plant Two A (3 Turbines) 127.2 MW 30%

Southcentral Power Plant (4 Turbines)
 60.1 MW (ML&P 30%)
 14%

• 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 2016
 371 Miles

Underground Cable
Overhead Line
253 Miles
118 Miles
31.81%

19 Substations

Total Electric Plant as of December 31, 2016 \$733,981,055
 Total Gas Plant as of December 31, 2016 \$162,255,960

- 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.