



Proposed Sale by the Municipality of Anchorage of Municipal Light & Power to Chugach Electric Association

Executive Summary

23 January 2018

I. A Changing Industry

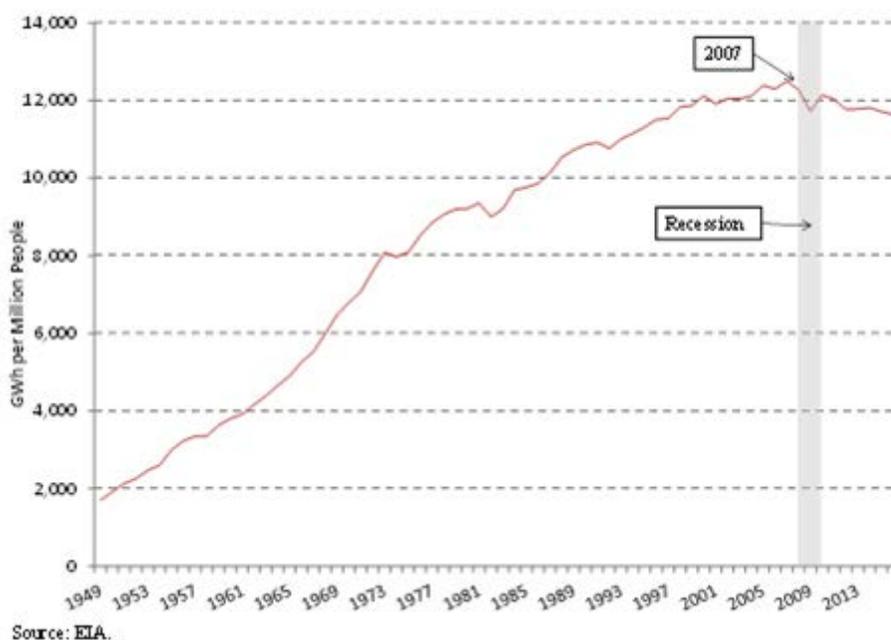
Utilities face new and unprecedented challenges in the 21st Century. Technological advances and demands from customers for more control of their energy consumption (and more options for obtaining that energy) provide increasing stress on the traditional utility business model.

Customers have more options than ever. Energy efficiency investments empower customers to reduce their consumption, often with short payback periods. Customers large and small continue to build rooftop solar and other sources of behind-the-meter generation, benefitting from favorable economics and tax policy. As battery costs continue to decline, customer options to manage demand and reduce reliance on the utility grid will increase. Yet even as customers act to take greater control of their energy consumption, they also demand more reliable service from their utilities. Additionally, in the lower 48, and also potentially in Alaska, the prospect of widespread electric vehicle adoption presents opportunities, but also creates risks and costs for utilities.

Adding to the challenges, many utilities face aging infrastructure. Some utilities have proceeded to upgrade and modernize their infrastructure to accommodate the changing utility-customer relationship, including widespread installation of advanced metering infrastructure (AMI), commonly known as smart meters. Further, declining costs for utility-scale batteries and renewable generation assets could render obsolete prior investments, while at the same time necessitating new investments by the utility to integrate those technologies.

Utilities face these challenges in an environment of flat or declining sales. Figure 1 illustrates the trend in declining *per capita* electricity consumption.

Figure 1: US Annual *Per Capita* Retail Electricity Consumption



For many utilities, the cost of serving customers has increased; yet with stagnant or falling sales volumes, they face pressure to increase rates. As a result of these challenges, many utilities have sought to grow through acquisition to position themselves to be more resilient as a result of scale and diversification. A wave of utility mergers has swept the lower 48 states, reflecting greater efficiencies and better strategic positioning through consolidation.

II. The Alaskan Railbelt

The electric utility sector in the Alaskan Railbelt is fragmented, operated by a set of municipal and co-operative certificated vertically-integrated utilities with dedicated service territories. Chugach Electric Association (Chugach) has long played a central role in the operation of the power grid in the Railbelt, having for many years served the power requirements of Matanuska Electric Association, Inc. (MEA), Homer Electric Association, Inc. (HEA) and the City of Seward. With the departure of MEA and HEA, however, the grid has become less centralized, causing inefficiencies and raising costs for customers. The largely independent actions of each of the six Railbelt utilities, despite attempts to coordinate planning and operations, cannot deliver the best solution for consumers as a whole. Increased coordination and centralization are needed to enhance the service offerings for customers and improve the overall competitiveness of the power system.

The recession in Alaska, and its resulting drag on electric energy demand, only exasperates the pressure on Alaskan electric utilities, increasing the need for action to address these broader industry challenges.

In the lower 48, recent utility mergers and acquisitions are often between utilities with little or no geographic overlap, where the acquiring company may be several states away from the acquired utility. While those transactions may nonetheless lead to an increased ability to manage the changing utility environment, the benefits are split across jurisdictions. In contrast, the proposed acquisition of Municipal Light & Power (ML&P) by Chugach leaves all the benefits of consolidation in the same state and same metropolitan area. Further, the cost of acquisition, as discussed below, will be paid by Chugach to the Municipality of Anchorage (MOA), thereby staying in state and in Anchorage.

III. Duplication in the Anchorage Bowl

Chugach and ML&P have operated parallel systems within Anchorage for well over half a century to meet the needs of its citizens. However, the city's power grid has changed in important ways since Chugach was established in 1948 and since the MOA purchased the ML&P distribution system from privately-held Anchorage Power & Light Company in 1932. The city has grown dramatically and must now meet high expectations for a modern and reliable power grid.

Chugach and ML&P face the same challenges as comparable utilities in the lower 48. Current load growth for both utilities is flat on a forecast basis. And increases in cost have pushed rates higher.

Having two separate utilities serve Anchorage leads to redundancies and inefficiencies in the provision of service to customers. The two utilities have taken steps to work together to minimize the inefficiencies—making joint investments, crafting rules for joint-dispatch and coordinating planning—but the savings these steps can offer only goes so far. Combining the utilities is the only way to tap the maximum amount of efficiencies for the benefit of the community.

It is within this broader industry, regional and local context that Chugach made its offer to the MOA to acquire ML&P and combine the operations of both utilities under Chugach’s co-operative business model.

IV. Savings from Acquisition by Chugach

The potential for long-term savings drives Chugach’s purchase of ML&P. The combined entity will realize substantial savings versus the *status quo* of separate utilities. Chugach and ML&P will combine functions on a company-wide basis, eliminating duplication and yielding more efficient operations, not always immediately, but increasing through time. Efficiencies will include the following:

- a single headquarters building/complex;
- management and oversight of a) the Bradley Lake and Eklutna hydroelectric facilities and the Southcentral Power Project, b) generation reserves, and c) trading with neighboring utilities;
- contract administration (fuels, purchased power, gas storage);
- management of the Beluga River Unit;
- regulatory, legal and environmental departments, including coordination with the Regulatory Commission of Alaska (RCA), Alaska Energy Authority, and Department of Natural Resources;
- accounting, billing and other back-office functions (including staff training);
- operations and maintenance activities;
- generation engineering and project management;
- a unified effort at grid modernization and technological adoption, including AMI; and
- insurance needs.

Over time, Chugach will pass the savings onto customers in the form of lower rates. Importantly, no Chugach or ML&P employees will be laid off as a result of the transaction. Any reduction in jobs made possible by combining the utilities will occur through natural attrition. Natural attrition is about 4 to 5 percent annually, and some positions will be refilled.

The savings from financing, A&G and operational consolidations/efficiencies make the acquisition attractive for Anchorage on their own, without considering any potential savings from reduced fuel cost or purchased power costs. Nonetheless, the combined utility may realize fuel and purchased power savings as follows:

- a more efficient (cost-minimizing) dispatch of the combined utility than the two utilities separately, as well as the potential for avoiding future generation investments; this stems from control of a larger set of generation resources and the diversified load peak from the combination of Chugach and ML&P load;
- increased scale (and potentially more bargaining power) in fuel and power purchases, lowering costs; and
- better hydro-wind coordination, leading to cheaper integration (and the potential for more integration) of renewables: the combined entity would have direct control of a larger portion of the flexible generation in the Railbelt—e.g., combined control of more of the Bradley and Eklutna hydroelectric generation.

The savings from merging electric utilities typically falls in the 8% to 12% range, and for individual mergers savings higher than 20% have been announced.¹ Factors particular to the merger of ML&P and Chugach should lead to savings on the higher end, even above the 8% to 12% range. Those factors include:

- Chugach and ML&P are relatively small utilities. The benefits of economies of scale tend to decrease the larger the utilities involved. Most mergers in recent years were of utilities orders of magnitude larger than Chugach and ML&P.
- Chugach and ML&P are roughly the same size. This maximizes the savings potential: from the perspective of either utility, the acquisition reflects savings economies from the approximate doubling of scale (compared to other mergers where the acquiring utility may be a multiple of the size of the acquired utility).
- Chugach and ML&P are very close neighbors (in the same metro area), leading to easy sharing of resources and combining of corporate offices and services, as well as operation and maintenance services.

Additionally, we understand that the utilities have faced recruiting challenges in recent years, as the baby boomer generation has begun to retire. When Chugach and ML&P compete for resources—attempting to fill jobs for two utilities instead of one—in the midst of a retiring generation, these challenges are exacerbated. The average age of the workforce of both Chugach and ML&P further necessitates the need to combine operations. Again, we understand Chugach is committed to no layoffs as a result of the transaction.

V. Terms of the Offer

Chugach's offer provides three sources of revenue to the MOA:

- **Payment at closing.** Chugach will pay to the MOA a sum equal to \$712 million at closing. This amount (1) covers the costs of defeasing ML&P's debt (\$524 million in outstanding

¹ Kemp, Bill, "Economies of Scale and Scope in Electric Utility Mergers," Black & Veatch, October 10, 2011.

debt plus \$18 million in defeasance costs) and (2) pays the MOA \$170 million for the equity on its balance sheet.

- **Annual Acquisition Payments.** Chugach will pay to the MOA Annual Acquisition Payments for thirty years following closing. The initial annual payment will be approximately \$8 million. Subsequent annual payments will equal the initial annual payment adjusted for inflation based on the prior year change in Anchorage Consumer Price Index.
- **Payments in Lieu of Taxes.** Chugach will pay to the MOA ongoing Payments in Lieu of Taxes for 30 years. Chugach estimates that the annual Payment in Lieu of Taxes will be approximately \$9 million based on ML&P's current rate case. The Payments in Lieu of Taxes will compensate the MOA for the loss of revenue under the Municipal Utility Service Assessment (MUSA). The cost of MUSA is already embedded in rates and borne by ML&P's customers.

Chugach's offer is contingent on regulatory approval of the transaction by the Regulatory Commission of Alaska.

VI. Paying for ML&P

The deal to purchase ML&P is designed to deliver a fair price to the MOA for ML&P and to flow through a portion of the long-term savings resulting from efficiencies to customers. It is also designed to ensure Chugach's financial health throughout the process.

The financing of the acquisition, subject to continuing due diligence and review by the relevant stakeholders—including the citizens of Anchorage—is as follows:

Table 1: Transaction Structure

Description	Payment at Closing	Annual Payments (NPV)	Total before Payment in Lieu of Taxes	Payment in Lieu of Taxes (NPV)	Total
	[A]	[B]	[C]	[D]	[E]
			[A] + [B]		[C] + [D]
Purchase of Equity ²	170	-	170	-	170
Debt Defeasance	542	-	542	-	542
Annual Payments	-	170	170	142	312
Total	712	170	882	142	1,024

² Reflects the purchase of equity in rate base, according to ML&P's 2016 rate case filing.

The initial payment (\$170 million for equity plus \$524 million to defease ML&P's estimated debt) will have an impact on Chugach's balance sheet. Chugach's equity ratio, a measure of its financial leverage, will experience a temporary reduction. However, Chugach will rebuild its equity to become a stronger utility than before, benefiting from scale in its balance sheet.

In addition to the operational savings, Chugach can also deliver financing savings to customers. This is because the amount that Chugach collects in rates as financing charges is lower than that of ML&P. Chugach intends, subject to regulatory approval, to flow through any financing savings to customers.

In the current economic environment, Chugach enjoys a unique window of opportunity to complete the acquisition of ML&P and forge a more stable and efficient utility for decades into the future. The prevailing low interest rate environment enables Chugach to borrow at low, attractive rates to finance the payment at closing. In addition, the scale achieved by combining with ML&P will permit it to accept a more modest percentage margin on its operations. These factors promote the financing savings available that can be flowed through to customers. If interest rates were to rise significantly, however, the window of opportunity would tighten. Although rising interest rates would reduce or eliminate the short-term financing savings, it would not eliminate the long-term benefit of the transaction for the Anchorage community.

VII. Benchmarking of the Price Paid by Chugach

Chugach has proposed to pay 2x the value of equity in ML&P's rate base. Under RCA regulation, the earnings that the MOA can accrue over time from retaining its ownership of the utility will tend to deliver a value that is closer to 1x the equity in rate base. Hence, Chugach is offering a premium to the 1x book value benchmark logically emerging from the regulatory process.

Why did Chugach offer a premium? Utility assets throughout the country have fetched higher prices as a wave of consolidation has rippled across the sector. Low interest rates have contributed to the higher valuations because acquirers can accommodate more debt because of lower overall costs of debt, enabling them to pay more. The MOA conveyed to Chugach that it was conducting a competitive process and Chugach responded by offering a premium, commensurate with the prevailing prices currently being paid for utility assets and the value the transaction can bring to Anchorage citizens. In addition, as further described below, Chugach can reasonably offer a premium and still deliver long-term rate savings to Anchorage customers. It can do so because, as an adjacent utility, it will be able to reap the benefits of scale economies and reduce inefficiencies created by duplication.

Is the resulting price fair? NERA benchmarked this purchase price to valuation indicators used within the industry. We note, as a first measure, that the equity of utilities that are publicly

traded on stock exchanges trades at an average of 2.15x book value³, a figure consistent with the valuation implicit in Chugach’s offer. In addition, NERA benchmarked the proposal against a variety of recent acquisitions in the lower 48, as shown in Table 2 below.

Table 2: Examples of Recent Acquisitions in the Lower 48⁴

Date	Acquirer	Target	Price/Book	Type
July 19, 2017	Hydro One	Avista Corp.	2.1x	IOU
July 10, 2017	Great Plains Energy	Westar Energy	1.6x	IOU
February 9, 2016	Algonquin Power & Utilities	Empire District Electric	1.9x	IOU
September 3, 2015	Emera	TECO Energy	2.5x	IOU
April 30, 2014	Exelon Corp	PEPCO Holdings	1.5x	IOU

In recent years, the MOA’s earnings from the utility have fallen far short of meeting the fair return that an owner of the utility would expect to accrue from an investment of its size. In 2016, for instance, ML&P reduced MUSA from \$7.5 million to \$6.0 million and cut its dividend entirely from \$7.0 million to \$0, as shown in Table 3 below.

Table 3: ML&P Recent Financial Performance (millions)

Date	2012	2013	2014	2015	2016
MUSA	5.5	5.5	7.4	7.5	6.0
Dividend	6.8	6.0	5.8	7.0	0.0
Retained Earnings	8.5	(0.2)	7.6	1.0	5.8
Total	20.8	11.4	20.8	15.6	11.8

In its recent rate case filing, spurred by increases in its asset base, ML&P identified a revenue deficiency of 43.77% of ML&P’s adjusted test year revenue from demand and energy charges, and its revenue requirement study (RRS) indicated that a corresponding “43.77 percent increase... is needed under traditional depreciated original cost rate making principles.” While Chugach’s acquisition will not eliminate the need for the rate increase currently pending before the RCA—this increase is needed to pay for ML&P’s new efficient power plant 2A—it will produce savings that can be used to lower rates in the future relative to what they would otherwise be.

³ Damodaran, Aswath. “Market value (equity and enterprise value) as multiple of book value (equity and invested capital)” data, January 5, 2018.

⁴ Value Line.

The ability to sell the utility and monetize the equity invested removes the regulatory risk for the MOA of future returns that could undercompensate the MOA for its equity ownership, as have been experienced in recent years.

Qualifications, assumptions and limiting conditions

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