

## TRANSMITTAL MEMORANDUM

**KETCHIKAN PUBLIC UTILITIES**  
OFFICE OF THE GENERAL MANAGER  
Karl R. Amylon, General Manager  
Jim Voetberg, Assistant General Manager  
Rebecca Brown, Administrative Assistant

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**TO:** The Honorable Mayor and City Council

**FROM:** Karl R. Amylon, General Manager

**DATE:** February 2, 2004

**Re:** **KPU Reserve Policy**

At its meeting of December 18, 2004 the City Council adopted a motion deferring consideration of a policy to limit KPU reserves to fifteen percent (15%) of the total budget. This issue was scheduled for consideration at the City Council meeting of January 15, 2004. Due to other priorities and time constraints, staff was not able to undertake an analysis prior to the date of this report.

Attached for City Council review is a memorandum from the Finance Director, Bob Newell, regarding this matter. I concur with Mr. Newell's assessment. Given increased competition in the telecommunications field, I am particularly concerned with preserving KPU's access to working capital to respond in a timely manner to the forces of the market place.

Should the City Council wish to endorse the proposed policy, staff can prepare a resolution and/or ordinance for formal consideration.

**MEMORANDUM**  
**CITY OF KETCHIKAN, ALASKA**  
**Finance Department**  
*Office of the Finance Director*

*Bob Newell, Finance Director*  
*Camille Nelson, Administrative Assistant*  
*Phone: (907) 225-3111, Extension 313*  
*Facsimile: (907) 228-5617*

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TO: Karl R. Amylon, City Manager/KPU General Manager

FROM: Bob Newell, Finance Director

DATE: January 30, 2004

**SUBJECT: KPU Reserves**

At its meeting of December 18, 2003, the City Council deferred adopting a policy that would cap KPU reserves at 15% of the total budget. Since the amount of the total budget can vary from year to year because of grants and bond financing, I briefly met with Councilmember Freeman, the originator of December 18 motion, to determine how best to accomplish the intentions of his motion. Mr. Freeman indicated that he wanted the policy based on the total budget adjusted for unusual or infrequent items such as grants and expenditures to be funded from revenue bond proceeds. He also said that he wanted to end up with an amount for reserves that was not encumbered or designated for some other purpose.

Applying the concept put forth by Councilmember Freeman to the 2004 KPU Budget that was adopted by the City Council on December 18, 2003, reserves should be set at \$4,840,209 ( $\$32,400,058 - \$132,000$  (grants) =  $\$32,268,058 * 15\%$ ). Staff is currently projecting that KPU will end 2004 with reserves of \$7,810,430. Included in this balance is \$2 million from the reserve accounts of the Series R and Q Bonds, which matured in December 2002 and were transferred to reserves in 2003. The exact balance in reserves on December 31, 2004 won't be known until the City's books are closed in 2005.

Attached is a schedule that provides a brief history of KPU reserves since 1989. As the schedule illustrates, reserves at the end of 1989 totaled \$9,136,025. The schedule goes on to show the amount that was available in reserves for the years 1990 through 2002 and provides a brief explanation for the years in which there were significant variations.

As my memorandum of December 2, 2003 noted, the climate KPU operated in during the 1980s and the early 1990s is much different than today's environment. Based on information that has been shared with me by various staff members, 1989 – 1991 were particularly difficult years for KPU and the Finance Department. Both KPU and the Finance Department were experiencing changes in upper management during this period. These changes had an impact on the operations and finances of KPU. Towards the end of the 1980s, the KPU budget process did not include a capital budget or a five-year capital improvement plan. My office discovered in 1992 that during 1990 and 1991, KPU expensed \$1,250,726 of capital expenditures as operations and maintenance because it did not have a capital budget. I believe that the lack of any meaningful capital improvement plan led to the buildup of significant reserves towards the end of 1980s. By contrast, the late 1980's and the early 1990s were a period of stability for the local economy. Louisiana Pacific was still operating the Ketchikan Pulp Company, and was able to provide the community with back up generation. None of KPU's utilities were facing competition. In 1989, the year prior to the adoption of Resolution No. 90-1645, KPU earned \$2.3 million on gross revenues of \$18 million. The operating results for 1988 were even better as KPU reported net

income of \$2.4 million and all of its utilities, including water, were profitable. It's no wonder that the City Council found it necessary to adopt Resolution No. 90-1645 in order to establish certain financial guidelines. It appeared as if KPU was building up huge reserves for no reason. Without a plan, it was hard to reach any other conclusion.

I believe that things have changed within the management of KPU and the community as a whole since 1989. It is my belief that these changes have also affected the level of reserves required by KPU. The City Council now requires KPU to submit annually a capital budget and a five-year capital improvement plan so that the City Council can determine in advance what capital projects are important to the community and the best way to finance those projects. Louisiana Pacific has left the community and took with it KPU's only independent source of back up generation. KPU has had to assume all of the risk of producing electricity for the community. The departure of Louisiana Pacific has also significantly affected the local economy and the finances of KPU. Two of KPU's three utilities are no longer profitable. KPU, as a whole, lost \$1.35 million in 2002, earned \$573,000 in 2001 and lost \$117,000 in 2000. In recent years, KPU has faced competition from other electric and telecommunications providers. The most serious has come from the telecommunications industry. After the voters decided in 1996 to retain the telecommunications utility, the City Council made a decision to "operate the utility like a business". In order to accomplish this objective, the telecommunications utility, among other things, must have easy access to "capital" in order to finance the investment in plant required to remain competitive. As you know, the speed at which technology changes and competitors bring new telecommunications services to the market is very rapid. Since KPU cannot issue debt without first securing the approval of the voters, this may affect KPU Telecommunications ability to compete efficiently and effectively and the City Council's ability to operate the telecommunications utility like a business. A perfect example is the recent announcement by GCI of its new Lite DSL service. KPU Telecommunications needs to develop a strategy to address this new form of competition. If new equipment is needed to implement this strategy, waiting for the next election for a bond issue may prove to be detrimental.

What is a reasonable minimum balance for reserves? I don't think it should be the \$9,136,025 that was on hand at the end of 1989. If this amount were restated in 2003 dollars, it would amount to a balance of \$13,556,682. It is my belief that KPU should maintain minimum reserves of approximately \$5.7 million for the reasons noted in my memorandum dated December 2, 2003. The methodology I used to arrive at this amount is also discussed in the same memorandum. As noted earlier, KPU is projected to have \$7.8 million on hand by December 31, 2004. This amount includes \$2 million that was transferred from the Series R and Q Bond Reserve Accounts.

This opinion is based on my belief that the Council desires to keep rates stable and that the community shares that desire. I also believe the City Council is better served by determining on annual basis what is reasonable for the community and for KPU based on the issues facing the City Council at that particular moment in time. As you are aware, whatever the ratepayers pay into the KPU Enterprise Fund is eventually used for the benefit of those ratepayers. In other words, the amount in reserves fluctuates from year to year, as the attached schedule demonstrates. Any excess reserves are eventually used for the benefit of the ratepayers in accordance with the annual budgets adopted by the City Council. In situations where the City Council is contemplating an aggressive capital improvement plan, the telecommunications utility

Karl R. Amylon  
January 30, 2004  
Page 3

has a need to use reserves for capital projects in order to remain competitive, or circumstance in the community change, the City Council should consider adjusting the minimum reserve requirements according.

Despite my preference not to set the reserve policy at 15% of the total budget as adjusted in the manner described above, **I want to note that the policy can work for KPU.** The City Council would need to take a more aggressive position towards adjusting rates to compensate for the fluctuations in reserves and the need to issue bonds would become more frequent. As noted in the attached schedule, reserves dropped to \$2.02 million in 1993. At the urging of its underwriters, KPU was encouraged to raise its rates in 1994 in order to sell its 1994 Series S Bonds. At the time KPU was preparing for the bond issue, the consulting engineer had recommended 10%. As for issuing debt, KPU would need to watch its debt service coverage requirements very carefully. Until this year, KPU was required to raise \$1.40 of revenue for every \$1 of debt service. This requirement was recently lowered to \$1.25 as a result of the refinancing of Series S. Issuing too much debt can result in having to raise rates just to maintain the debt service coverage. This could be a problem for KPU because most of its debt is issued to finance improvements that do not expand its customer base or bring in new revenues. I believe that as long as rates can be adjusted in a timely manner to compensate for setting reserves at the lower level and is more active in the bond market this policy can be effective. It will, however, make it more difficult for the telecommunications utility to compete effectively if the reserves are not there to finance its immediate capital needs.


**Ketchikan Public Utilities**  
 Review of Appropriated Reserves

Year	Appropriated Reserves December 31	Notes
1989	9,136,025	
1990	5,555,604	New general manager initiates aggressive capital improvement program.
1991	2,448,219	Aggressive capital improvement program continues.
1992	4,466,556	Series R Bonds issued.
1993	2,023,103	
1994	6,226,586	10% rate increase approved in order to sell 1994 Series S Bonds
1995	7,930,076	Capital spending declines from \$9.2 million to \$6.6 million.
1996	6,003,911	
1997	6,780,633	
1998	7,654,045	Cash provided by operations increased by \$1.7
1999	9,797,585	Capital spending declines from \$13.3 million to \$7.5 million.
2000	9,447,330	
2001	9,123,278	
2002	8,743,738	

**MEMORANDUM**  
**CITY OF KETCHIKAN, ALASKA**  
**Finance Department**  
**Office of the Finance Director**

*Bob Newell, Finance Director*  
*Camille Nelson, Administrative Assistant*  
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*Facsimile: (907) 228-5617*

TO: Karl R. Amylon, City Manager/KPU General Manager

FROM: Bob Newell, Finance Director 

DATE: December 2, 2003

SUBJECT: **2004 Ketchikan Public Utilities Budget Update No. 2: Reserves and Debt Service Coverage**

During its meeting of November 25, 2003, the City Council made several observations regarding the reserves and debt service coverage of Ketchikan Public Utilities. I would like to provide additional information that may serve to explain what appears to be an inconsistency between the healthy reserves, excellent debt service coverage and staff's recommendation to raise rates.

**Reserves:** The reserves of the KPU Enterprise Fund as of December 31, 2004 have been projected to be \$8,409,830 (Proposed 2004 KPU Budget, page C-1). There are two primary reasons for the significant increase in reserves. First, the maturity of the Series Q and Series R municipal utility revenue bonds added \$2,004,418 to reserves when funds from the bond reserve accounts were transferred to KPU general reserves. Second, the portion of the proposed capital spending plan for 2004 to be funded from the revenues and the general reserves of the KPU Enterprise Fund total \$3,875,635 (Proposed 2004 KPU Budget, page C-5), a significant decrease from prior years. The average amount programmed for the past four years has been \$5,454,626 (2000 – 2003). The amount proposed for capital spending from revenues and reserves is \$1,578,991 less than the four-year average. It is also significantly less than the \$6 million that KPU reports for depreciation in its annual financial statements. If these items were taken into account, the adjusted reserves of the KPU Enterprise Fund would be as follows:

Projected reserves 12-31-04	\$8,409,830
Funds transferred from bond reserve funds	(2,004,418)
Reduction in capital spending from four-year average	(1,578,991)
Adjusted reserves 12-31-04	<u>\$4,826,421</u>

Using adjusted reserves, the calculation for the reserve requirements as noted on page C-4 of the proposed 2004 KPU Budget will generate different results. Excess reserves will amount to \$2,127,720 instead of \$5,711,129. Total reserves will amount to 21.1% of total operating expenses instead of 37.4%. These figures are predicated on the approval of the 5 percent rate increase. In any event, the adjusted figure for reserves is still higher than the policy established by Resolution No. 90-1645.

Is the revised amount still too high? The general rule of thumb is anywhere from 5 percent to 12 percent. Care must be taken, however, to avoid applying such rules of thumb mechanically. It is important to look at the reliability of revenues, conditions in the local economy, contingencies, and the unique operating environment of the Utility. Perhaps the most important factor to consider is the operating environment of KPU. KPU operates three distinct utilities in a remote, isolated community. The community depends on KPU to provide all of its electric services, all of its

wireline communication services and a good portion of its water services. As a result, the City of Ketchikan is assuming a significant risk because any number of factors could impair KPU's ability to provide these vital services. For example, KPU generates and distributes its own electricity. It does not have the option of purchasing power from a large regional power provider such as Bonneville. Therefore, it must have contingency funds available to meet any unexpected loss of generation capacity. Another example involves the telecommunication industry. As you are aware, the telecommunications industry is very competitive and the dynamics are constantly changing. Most telecommunications companies have the ability to quickly raise capital or issue debt to finance the investments needed to remain competitive. KPU Telecommunications does not have this advantage so it must rely on KPU reserves to finance projects that cannot be brought to the voters in a timely manner.

What would be a reasonable level of reserves for KPU? I believe the best way to address this is to approach it from three angles: liquidity, contingencies and rate stabilization. In other words, I believe that these three elements should be identified and quantified in determining an appropriate level of reserves for KPU.

- Liquidity – the reserves should contain at least an amount equal to one month's of operating expenditures in order to account for the timing of cash inflows and outflow. One month equates to 8.3% of annual operating expenses. Using the annual operating expenditures reported on page C-4 of the proposed 2004 KPU Budget, the liquidity component of reserves would amount to \$1,866,600 (\$22,489,172 times .083).
- Contingencies – this component is very subjective. It is based on risk assessment and will vary depending on how much risk an entity is willing to take. The amount of risk KPU is willing to assume is a policy decision that must be determined by the City Council. For the purpose of this memorandum, I asked the managers of the three utilities to provide me with a hypothetical catastrophic event for their respective utilities that would require immediate action in order to protect the health and safety of KPU ratepayers.
  - Electric Utility – the crankshaft on one of the Worthington diesel cracks in middle of a dry, cold winter. The damaged crankshaft must be replaced with a custom made crankshaft because Worthington no longer stocks parts for the model that KPU currently operates. The estimated cost of replacing the crankshaft is between \$1 and \$1.5 million. Emergency generators will be required to meet the demands for power at a cost of \$51,000 per month. It is also possible that the diesel generator would have to be replaced because it is so old. Replacing the generator could cost as much as \$2 million and take as long as 18 months install. Leasing emergency generators during this period would ultimately cost \$918,000. Another possible event is the failure of a hydro generation unit, which could easily cost over \$1 million to replace (this actually happened in 1951).
  - Water Utility – the concrete plugs in the tunnel between Fawn Lake and the Ketchikan Hydroelectric plant fail, shutting down Ketchikan's primary source of water. If this were to occur, it would be necessary to construct an emergency line

from Fawn Lake to the Ketchikan Hydroelectric Plant. The estimated cost of the emergency line is \$2 million.

- Telephone - no contingency would be required for the telecommunication utility. The real question here is how much needs to be available in reserves to finance projects that cannot be brought to the voters in a timely manner. In recent years, the City Council took \$2.5 out of reserves for a new switch and \$1 million has been appropriated for the purchase of the Alascom Building.

Obviously, the probability of these events occurring simultaneously is remote. The purpose of this exercise was to gain some idea of the type and magnitude of the expenditures that the City Council could be called upon to finance from reserves. It is my belief that \$2.5 million would be adequate. This amount should be sufficient to address the any of the contingencies noted above without having to resort to immediately raising rates to replenish reserves.

- Rate Stabilization – the amount put aside for rate stabilization depends on how quickly the City Council wants to respond to unexpected changes in revenues or expenditures before it needs to implement a rate adjustment. The more that is put aside for rate stabilization, the less the need there is to move quickly on adjusting rates. I recommend 5% of total operating revenues. In 2002, KPU earned \$25,843,758 from the sale of utility services. Five percent would amount to \$1,292,188.

An appropriate level of reserves for KPU based on the concepts described is as follows:

Liquidity	\$1,867,000
Contingencies	2,500,000
Rate Stabilization	<u>1,292,000</u>
Total	<u>\$5,659,000</u>

The level of reserves using these concepts has resulted in an amount that is significantly different from the level established by Resolution No. 90-1645. Does this mean that Resolution No. 90-1645 was a bad policy? No! Resolution No. 90-1645 was adopted to address various issues that had arisen during the 1980s. It was period when the local economy was stable and competition was minimal. It was a period when reserves were being accumulated for no apparent reason, there was no long-range capital planning, and no revenue bonds were being issued to finance projects. In fact, KPU went 10 years before it issued new revenue bonds. But all this has changed. The economy is uncertain, the community has lost its largest employer, and the telecommunications utility is facing fierce competition. The City Council now requires the inclusion of a formal five-year capital improvement plan as part of the annual budget process. Since 1992, KPU has issued three new revenue bonds totaling \$26.3 million. Reserves are not being accumulated without a purpose. Part of the recent increase is due to funds flowing through from the bond reserve accounts and part is due to the deferral of capital projects pending the development of a final financing plan and the coordination of projects with the State and General Government.

**Debt Service Coverage:** Resolution No. 90-1645 requires that KPU maintain a debt service coverage ratio between 1.5 and 2.0 times annual debt service. The annual debt service coverage ratio for the KPU Enterprise Fund as of December 31, 2004 has been projected to be 2.14 (Proposed 2004 KPU Budget, page D-2). Since 2000, the estimated debt service coverage ratio (the figure used in the proposed budgets) has averaged 1.99 and the actual debt service coverage has averaged 2.1. The projected improvement in the debt service coverage ratio is due to the decrease in annual debt service because three bond issues either matured or were refunded. Since 2000, annual debt service has averaged \$3,674,564. The amount programmed for 2004 is \$3,334,693. If the debt service coverage ratio on page D-2 were revised to reflect the average annual debt service, the ratio would drop to 1.94. If the proposed 5 percent rate increase were eliminated, the ratio would drop to 1.75 using the amount of debt service programmed for 2004.

Resolution No. 90-1645 also requires that KPU maintain a debt to equity ratio of 40%/60%. The current debt to equity ratio, which is based on 2002 annual financial statements, adjusted for the Swan Lake-Lake Tyee Intertie Project is 28%/72%. In 2000, it was 33%/67%. The reason for the change is the final maturity of Series Q as well as scheduled payments made on other bonds. In order to restore the debt to equity ratio to 49%/60%, it will be necessary to issue at least \$18 million of revenue bonds. It is for this reason that staff sought direction from the City Council during the 2003 budget deliberations regarding priorities for KPU capital projects. Staff is currently in the process of developing a program of capital improvements that can be coordinated with the efforts of the State and General Government.

The current policy of maintaining a debt to equity ratio is basically sound with one caveat, which will be explained below. As you are aware, there are costs associated with issuing debt. In addition to the customary bond issuance costs and underwriter fees, there is also the need to maintain a certain debt service coverage ratio in order to comply with bond covenants. The current ratio is 1.40. This means that the net revenues (operating revenues less all operating expenses except for depreciation and taxes) of the utility must at least be equal to 1.4 times annual debt service. For example, if annual debt service is \$3 million, net annual revenues must equal \$4.2 million. With the issuance of Series T, KPU was successful in lowering the coverage ratio to 1.25 without compromising its bond ratings. This change will become effective in January 2004. Using the earlier example, the net annual revenues required to satisfy the new coverage ratio is \$3,750,000, a decrease of \$450,000. In essence this reduces the amount KPU needs to collect from its ratepayers to satisfy its bond covenants.

Why is lowering the debt service coverage ratio important to the KPU and its ratepayers? It gives KPU the flexibility to use debt more often without automatically having to raise rates. Unfortunately, many of the projects that KPU issues revenue bonds for are for the repair and replacement of existing plant. These projects normally don't bring in additional sources of revenues. This means the same ratepayers have to pay for the debt service on the new bonds plus a "premium" to satisfy the debt service coverage requirements. For example, if KPU were to issue a \$10 million revenue bond, the amount "saved" by lowering the coverage ratio to 1.25 would amount to approximately \$131,000 per year, or \$2.6 million over the 20-year life of the bonds.

I believe if the City Council moves forward with its plans to issue revenue bonds in the neighborhood of \$10 million, both the debt service coverage ratio and the debt to equity ratio will move closer to the policies established by Resolution No. 90-1645. An issue of this size will lower the debt service coverage ratio to 1.70 and increase the debt to equity ratio to 35%/65%. If the programmed rate increases are not approved, the debt service coverage ratio would be lowered even further to 1.53. I would also suggest that the Council not attempt to achieve a ratio of 40%/60% unless new revenue sources can be identified. Issuing the full \$18 million dollars would raise KPU's annual debt service from \$3.3 million to \$4.9 million and require a rate increase of 6.8% in order to achieve the minimum debt service coverage ratio of 1.5 permitted by Resolution No. 90-1645.

**Staff's Recommendation to Raise Rates:** The recommendation to raise rates did not come easily, especially in light of the uncertainties facing the local economy of Ketchikan. The topic has been discussed as early as November 2001 when the 2002 KPU Budget was presented to the City Council. It was mentioned again during the deliberations for the 2003 Budget. As discussed above, we believe that the increase in reserves is temporary and the debt service coverage ratio/debt to equity ratio will become more in line with the guidelines established by Resolution No. 90-1645 once new debt is issued. The improvements in the reserves and the debt service coverage have not improved the financial situation for the water and electric utilities. Both these utilities are incurring significant losses because the current rates are not sufficient to cover operating expenses, capital improvements and debt service. The rationale for the recommendation to increase rates is as follows:

- KPU has not increased its electric and water rates since May 1994. The cost of doing business over the same period has increased. The pressure is building for either rate increases or substantial cuts in service. The longer the rate increase is deferred, the higher the probability that the rate increase will be greater than 5 percent.
- KPU is having difficulties attracting qualified candidates to fill certain key vacant positions. From all indications, KPU's compensation plan is not competitive.
- The water utility continues to lose money. The City Council has informally made it a policy to subsidize the water utility. The annual subsidy is roughly \$800,000. The cost of providing water service is increasing because of federal and state regulations. Approximately 50% of the proceeds from the bonds issued since 1992 have gone towards improvements for the water utility. New regulations may mandate additional investments to the water utility's plant. Additional debt to finance these projects would only increase the water utility's deficit.
- The electric utility has reported losses totaling \$3.2 million for the past three years (2000 – 2002). The electric utility is expected to report a loss in excess of \$1 million in 2003. The negative results are primarily due to the loss of a major industrial customer and lower demands for energy. The risk of deferring maintenance will increase over time if the losses are not brought under control.

- Current rates are not sufficient to finance KPU's capital spending plan. Currently, \$2.6 million is generated from operations for capital improvements. KPU is currently depreciating its investment in plant at the rate of \$6 million annually. Theoretically, capital spending should equal annual depreciation over time in order to avoid incurring the cost of deferred maintenance. The difference of \$3.4 million needs to be made up through a combination of debt, rate adjustments, or cost cutting measures.

**Recommendations:** In conclusion, I would like to offer the following recommendations:

1. Designate \$2 million of reserves to fund future bond reserve accounts. This will save KPU the cost of issuing debt to cover the reserve account requirements of future bond issues and the related interest cost arising from the annual debt service.
2. Issue \$10 million of debt in 2004 to finance some of the projects included in KPU's five-year capital improvement plan.
3. Implement the 5 percent rate increase. If Council continues to have concerns about raising rates, spread the proposed increase over two years. This is not the most desirable course of action, but **KPU needs to be able to explain to the rating agencies what measures are being taken to address the operating deficits of the electric and water utilities.** It is my belief that no action would affect KPU's ability to secure the best possible bond ratings and interest rates.
4. Consider the needs of the telecommunication utility when setting the level for reserves. In order for the telecommunications utility to operate like a business and compete effectively, it must be able to tap into financial resources that are readily accessible. There may be situations where the time it takes to obtain voter approval for a revenue bond issue to finance a telecommunications project could be detrimental to the telecommunications utility.