MUNICIPAL LEAGUE OF KING COUNTY – SEATTLE ISSUES COMMITTEE

SEATTLE CITY LIGHT STUDY
Seattle City Light And The Storm
March 14, 2002

Introduction

The fundamental mission for a city-owned public utility like Seattle City Light is to provide a reliable supply of electricity to homes and businesses in its service territory at fair and reasonable rates and in a manner that reflects community values such as, for example, environmental protection, energy conservation and safe and decent working conditions for employees. Historically, Seattle City Light has achieved these objectives while ratepayers have enjoyed the benefits of the lowest rates in the region. This enviable record is attributable to the utility's early investment in large hydro generation facilities as well as its tax relief as a municipal utility

This changed dramatically in the last five years. Seattle City Light now has rates comparable to Puget Sound Energy, an investor-owned utility. Its rates, debt, and bond rating compare unfavorably to Tacoma Power's, a similar but somewhat smaller public utility. Seattle City Light's rates have increased by approximately 58% since December of 1999.

How did this happen? Was Seattle City Light prepared to handle changes in federal electricity regulation and in the western electricity market? How well did it navigate between possible stranded costs of long-term contracts and the volatility of the spot market?

The story of the events Seattle City Light describes as "A Perfect Storm" really begins in the mid-1990s with the growing prospect of energy deregulation. At that time, with wholesale market prices below the cost of power purchased from BPA, Seattle City Light made the first of a series of decisions that reduced its "preference" purchase of electricity from BPA, increased its reliance on wholesale energy market, greatly increased its market risk and limited its flexibility to respond to the crisis that overtook the electricity markets on the West Coast when unprecedented drought occurred simultaneously with regulatory indecision and dramatic price instability in California and elsewhere.

Evaluating the western electricity markets in this period, a Federal Regulatory Energy Commission ("FERC") Administrative Law Judge, Carmen Cintron, described the tools that might be used to manage risk as follows:

> Given the availability of many traders and trading points, purchasers in the [Pacific Northwest] have numerous options in developing a portfolio of power supply. Depending upon their perceived needs and tolerance for risk, load-serving entities can buy power for the next hour, the next day, the balance of the month, monthly, quarterly, or for a term of one or more years.[1]

FERC further warned against the perils of the spot market:

> We emphasize that, by design and definition, spot markets must be allowed to reflect the price swings which capture their temporal nature. In markets such as these, which are the closest to when demand must be met, sufficient supply often manifests itself by dramatic price drops while tight supply can produce dramatic price increases. This the nature of spot markets. *Those who remain in the spot market for buying their residual load or selling their residual supply should be there in full* recognition *of the effects on price of last minute sales and purchases*.[2]

In this report, the Municipal League of King County examines a number of choices City Light made since that time. The important questions to ask with respect to these decisions are:

- **Did Seattle City Light properly fully analyze and assess its alternatives and risks?**
- **Did Seattle City Light properly manage its risks?**

Clearly, we cannot turn back the clock and re-make these decisions with the benefit of hindsight. Sometimes, what appear to be "bad decisions" today were the best decisions that could have been made at the time given available information and experience. But looking hard at how and why decisions that turned out to be "bad decisions" were made might offer important lessons regarding, for example, allocation of staff resources or on the decision making process itself. These lessons might help the utility make better decisions for its ratepayers in the future.

For nearly 100 years, citizens of King County have depended upon the Municipal League to help them hold their government accountable. Our examination of City Light is intended to both inform citizens and to foster inquiry that can lead to better decision-making and greater government accountability. We believe the record we have examined raises important questions about how a lack of planning and analysis by City Light led to huge increases in rates and indebtedness. Residents, businesses and governments in City Light's service area will be paying for these decisions for many, many years. The Municipal League strongly urges that the City Council hire an outside firm to conduct an independent performance audit of Seattle City Light. We hope such a review will initiate changes in decision-making, strategic planning, and problem analysis that will prevent future situations from having similar damaging consequences for citizens and other ratepayers.

Seattle City Light's Decisions and the Questions Raised.

1. The 1996 Decision to Reduce the Amount of Electricity Purchased from BPA.

Seattle City Light is unique among Northwest utilities. It owns outright several substantial hydro-electric facilities. It has entered into long-term contracts to purchase power from others. These generating facilities usually produce more electricity than Seattle City Light needs in the summer and less than the amount required during the winter months. The dependence on water flow also exposes City Light to the vicissitudes of weather (*i.e.*, drought and resulting low-flow

conditions). Historically, Seattle City Light encounters a short water year in about one in four years, necessitating additional purchases from outside sources.

Prior to 1996, Seattle City Light met its load principally from a combination of owned generating facilities (including an 8% share in a coal-fired steam plant in Centralia) and long-term contracts, including its contract with the Bonneville Power Administration. As a "preference customer" of BPA, City Light was entitled by contract to purchase enough BPA-generated electricity to serve the difference between its firm loads and resources. In an average water year, City Light could supply about 70% of its load from its owned resources.

In 1996 the Bonneville Power Administration published a new rate schedule imposing an increase of 10% on the cost of City Light's purchases. As a result, Seattle City Light and the City Council decided to amend the contract with the BPA to reduce the city's annual purchases from 260 aMW (average megawatts) to 195 aMW. This amendment also eliminated BPA's obligation to provide to City Light all additional electricity necessary for Seattle to meet its "firm load." City Light paid a $2 million exit fee for this contract amendment. Since BPA's new rates would be higher than that available on the spot market, City Light believed it could save ratepayers about $3 million per year by purchasing power, when needed, on the wholesale market. City Light acknowledged at the time that this change in its resource portfolio involved an increased financial risk resulting from the volatility of spot market prices. A staff issue paper discussed a number of ways to hedge this risk, including establishment of a drought reserve fund. Apparently, though, no action was taken to hedge the price risk involved in substituting the risks of spot market purchases for the long-term contract.

As Seattle City Light increased its exposure to market risks by abandoning the BPA safe harbor, it is not clear that it increased its capacity to manage market risk, especially in the event of worst-case marketplace scenarios. The questions here are:

- **What steps did Seattle City Light take to avoid market risk when it increased its reliance on the wholesale electricity market by reducing its firm purchase from BPA in 1996?**
- **Were these steps comparable to those actions taken by similarly situated municipal utilities?**

2. The Decision to Sell Seattle City Light's Share of the Centralia Coal-Fired Plant.

On June 8, 1998, the Seattle City Council called on the utility to work with the co-owners of the Centralia Coal-Fired Steam Plant to sell the plant to a new owner who would commit to meeting air quality requirements and assume all liabilities associated with the project. In May 1999, Seattle City Light and its partners agreed to sell the plant, and the associated coal mine, to Transalta; the selling ownership group (which included City Light) proceeded with design and construction of sulfur dioxide scrubbers using funds offset by the proceeds of the sale. The plant had supplied 80 MWh (megawatt hours) per year to Seattle City Light at a price of approximately $20/MWh, though costs were certain to rise. The plant had been a very significant source of sulfur dioxide pollution and the agreed compliance cleanup would certainly increase its

costs. City Light expected at the time, though, that the plant would remain a low-cost source of electricity even after completion of compliance cleanup.

The investor owned utility partners in the plant sought the approval of the Washington Utilities and Transportation Commission ("WUTC") for the planned sale. In that WUTC proceeding, the Public Counsel opposed the sale, "mainly in light of rising West Coast market prices and tighter supplies".[3] WUTC staff noted that the sale "is, at best, a push, and (exposes) customers to the risk of paying higher energy cost in the future." The sale ultimately was completed in May 2000.

The sale of the Centralia resource increased the amount of electricity City Light would have to purchase from the market in an average water year from 5% of its load to 13% of its load. This was an increase in market exposure of approximately 160%. During the year that the sale was pending, City Light, in spite of many warning signs, does not appear to have done any strategic planning to replace the 80 aMW reduction in generating supply. During this period, spot market prices were often far in excess of the $20/MWh cost at Centralia, often at the $30/MWh level with spikes above $50/MWh. The market deterioration had been foretold by the BPA Administrator, who in early 1999 had predicted future energy deficits even under normal water conditions.[4] In an industry trade publication, *Clearing Up*, City Light Superintendent Gary Zarker had, in March 2000, indicated that he took the threat of shortages seriously and that the region should approach the challenge of obtaining reliable supplies "as if the crisis had already occurred."[5]

City Light failed to seek a long-term contract that was available from the new owner of the Centralia Plant, choosing instead, without apparent analysis, to rely on the increasingly volatile spot market. A long-term Centralia contract, which City Light did not explore, could have served as a bridge contract to protect City Light from volatile market prices in the spot market until a preferred provider would come on line. Seattle City Light announced that it would "buy power in the market to replace Centralia in the short term and study whether to acquire new generating sources for the long term."[6]

Since Seattle City Light had voluntarily relinquished its interest in the Centralia plant, it was not be able to include the replacement of this power under its statutory preference for its "net requirements" of electricity from BPA. In other words, BPA was not required to provide Seattle City Light the forgone electricity at its low "preference" rate.

Shortly after selling its interest in the Centralia plant, City Light bought "forward contracts" (agreements to deliver electricity at a fixed price in the future) to cover anticipated loads in the third and fourth quarters of 2000, but not for 2001. In early 2001, City Light ruefully estimated that, since giving up Centralia, it had spent $35 million more buying power on the open market through January than it would have if it had held onto its share of the steam-fired plant.[7]

In Fall 2000, Seattle contracted to replace its Centralia power with power from a natural gas burning Combustion Turbine farm in Klamath Falls, Oregon. The Klamath Falls electricity was priced above $50/MWh, well above the $20/MWh City Light had been paying for power from

Centralia. Further, power from Klamath Falls was not to be delivered until July of 2001, 14 months after City Light sold its interest in Centralia.

As with the decision to reduce its firm purchases from BPA, the decision to sell its share of Centralia further exposed Seattle City Light to the vicissitudes of the marketplace and much higher rates. The questions to ask about the effects of these two decisions are:

- **What did Seattle City Light do to plan for and lessen this market risk?**
- **What analysis or strategic resource plan was prepared regarding the wisdom of replacing the power given up in the sale of the Centralia plant?**
- **Did Seattle City Light review any assessment or engage in any negotiations about whether it should replace its purchase rights from Centralia with a new long-term contract with the new owners of the Centralia Steam Plant?**
- **Were pollutant emissions from the Centralia Plant significantly reduced after Seattle chose to buy from "greener" higher-priced sources?**

3. The Decision to Acquire Electricity from the Klamath Combustion Turbine and Add Mitigation Charges.

City Light's 2000 Strategic Resource Assessment recommended the addition of turbine capacity to enhance reliability of City Light's system and hedge against greater than average load growth. Doing so would also reduce the cost of meeting customer demand for electricity while such an investment, at the then current market prices, would make immediate economic sense. In Fall 2000, Seattle City Light entered into a five-year contract to acquire 100MW of capacity, commencing July 1, 2001, from the Klamath Falls Combustion Turbine at an average price of $53.56/MWh including the City's greenhouse gas emission mitigation charges. Seattle City Light planned to use power from the turbine to meet Seattle City Light load and to sell additional power on the market whenever the cost to run the turbine was less than the market price.[8] The full output of a combustion turbine was expected to be needed during six of the 12 months in very dry water conditions.[9] Even in the wettest year on record, the turbine capacity would be needed during four months. In the fall of 2000, the average price of Klamath electricity was about $50/MWh over the five years of the contract based on then current gas prices. The cost of "wheeling" or transmitting the electricity from Klamath Falls, Oregon to Seattle was also high.

- **Was the Klamath Falls Combustion Turbine Agreement the most cost-effective hedge available?**
- **Would the energy available with the new BPA contract and energy savings planned under the expanded conservation program have been sufficient to meet expected load growth, i.e., was Klamath Falls needed at all?**
- **What economic analysis justified selling the $20/MWh Centralia plant power and replacing it with $50/MWh electricity with high wheeling costs?**

Seattle City Light plans to pay to mitigate greenhouse gas impacts of the Klamath Falls Combustion Turbine produced electricity. These payments are apparently based on former Vice-President Gore's treaty negotiations at Kyoto, Japan. The Kyoto Protocols have not been ratified or adopted by the United States.

- **What are the costs of greenhouse gas mitigation for the Combustion Turbine project?**
- **Are the mitigation charges required by state or federal regulation or voluntarily incurred by City Light?**
- **To whom are the mitigation charges paid?**
- **Did anyone assess the costs to the ratepayers before adopting mitigation requirements?**

4. Seattle City Light's Planning Prior to the "Storm"

As noted above, Seattle City Light knew of a coming electricity shortage as early as the BPA warning in 1999, and Superintendent Zarker reiterated the warning of a crisis in March 2000. The question here is:

- **How well did Seattle City Light plan for a crisis resulting from a shortage of water for hydro-generation, and/or high prices in the electricity markets?**

Until approximately 1997, Seattle City Light had an Energy Resources Planning and Forecasting Division. This division included a team of forecasters (load and price), resource planners, and economists who worked with other divisions to prepare Integrated Resource Plans on a regular basis. Load forecasts were the basis for determining future need for investment in additional supply or conservation resources, and economic analyses were done to determine the cost-effectiveness (net present value) of the various resource choices. The Resource Planning group built and maintained sophisticated models including the ANN model (annual optimization model) to determine how well a potential resource acquisition fit with the operational characteristics of Seattle City Light's existing portfolio of resources. This planning group also was responsible for determining the range of uncertainty associated with its forecasts and alternative resource acquisition strategies and developing tools to minimize risk. Seattle City Light disbanded this division in 1997, and its staff were dispersed to other divisions. Some staff left the utility and the sophisticated models were no longer used. Subsequently, a Strategic Planning Division was created but this group has a business planning, not a resource planning, focus.

- **Why did City Light cut the staff of its Resource Planning Group just as it opened itself to greater market risks?**
- **Was any ANN modeling or a similar analysis prepared relating to City Light's risks from low water and volatile market prices?**
- **Was any ANN modeling or analysis done before the decision to enter into the three subsequent long-term contracts to obtain power from BPA, Klamath Falls and the Stateline Wind project?**
- **In the summer of 2000, did Seattle City Light have an established policy and plan in effect indicating appropriate steps to be taken to deal with a short or critical water forecast?**
- **Who on City Light staff was responsible for such contingency planning?**

It does not appear that City Light had a policy for managing the substantial risks posed by volatile prices in the power markets that it actively entered in 1996.

In an August 2000 Power Marketing Review prepared for Seattle City Light, consultant Deloitte & Touche made the following observations:

> The existing systems focus on operational activity rather than risk management efforts. …It is a strong system for power scheduling, but it is insufficient for risk management purposes.[10]

In 2001, five years after City Light increased its market risk, and 12 months after the commencement of the water shortage with volatile prices, a consultant made the following recommendation:

> SCL should have a policy for managing risk associated with fluctuating power supply costs. This is perhaps the biggest risk, other than water, that City Light faces going forward. Ensuring against changes in market prices is reasonable, prudent and part of sound financial management practices.[11]

- **During 2000, had Seattle City Light adopted emergency response plans to mitigate the volatility of the spot market including construction of an interim generating source or a strategy that should be employed in buying forward, or purchasing options or other derivatives?**

5. Seattle City Light's Response to the Crisis of High Electricity Prices and a Shortage of Water for Hydro Generation Encountered during the Fall and Winter of 2000-2001.

During the fall of 2000, a low water situation left City Light in a crisis. As discussed above, changes in source of supply resulted in substantial market exposure and the utility encountered the necessity of paying extraordinarily high wholesale market prices to meet its load. A City Light witness testified in the FERC hearings that Seattle City Light experienced significant shortfalls of expected precipitation during October, November, and December of 2000.[12] During the fourth quarter of 2000, the aggregate cost of the wholesale power purchased for the year to date had risen 519% over the prior year (to $212 million from $34 million) while the operating income for the year had fallen $93 million (from a gain of $55 million in 1999 to a loss of $38 million in 2000.) During December alone, wholesale power purchases had increased to $55.8 million over the prior year's $5.6 million.

The situation for City Light was even bleaker in the first quarter of 2001. Operating income fell by $228 million over the same quarter in the prior year, from income of $33 million to a loss of $195 million.

Tacoma addressed the crisis decisively by imposing a rate surcharge of 50% on December 20, 2000; later reduced to a permanent rate increase of 31% during October 2001. Seattle raised average system rates by 9.8% in January 2001, by another 18% in March, and by 9.3% in July.

The cumulative effect of these rate increases is equivalent to a 41.6% upward change between January and July of 2001.

- **Did Seattle City Light move as promptly as it could to conserve energy and improve revenues by raising rates when it became clear that it was dramatically short of water with extraordinarily high market prices in the fall of 2000 and winter of 2001?**

Forward purchase contracts were available to Seattle City Light to lock in needed electricity at fixed rates. "In September 2000, … Powerex offered forward contracts for delivery of power during the first quarter of 2001 at $75.50 and $81 per MW."[13]

- **Did Seattle City Light move appropriately to acquire "forward contracts" in the fall of 2000?**

A comparison with Tacoma City Light's approach is worth considering. That utility constructed a new diesel generator farm in time for it to commence operation on January 24, 2001. These generators produced 48 MWh at an average price of $150/MWh through May. During this same period, Seattle City Light was purchasing open-market power to meet the shortfall in its generating capacity at a substantially higher average cost.

- **Why didn't Seattle City Light have its own standby generating capacity to deal with the shortfall?**
- **Did City Light take prompt steps to cut operation and maintenance costs (especially those costs not related to power) and reduce its capital spending and proposed bond issue?**
- **When City Light found itself in an economic crisis in late 2000, was hiring frozen, overtime restricted or purchases deferred?**
- **Was capital spending or the proposed bond issue reduced?**

Over a year later, on March 6, 2002, the City Council was looking to cut City Light's operating and capital budgets by $50 million and would still have to find an additional $60 million to balance its books.[14]

6. Seattle's Decision to Adopt the 2000 Earth Day Resolution.

On March 27, 2000, the council adopted the Earth Day Resolution (Resolution #30144) committing Seattle City Light to meet all its load growth without increasing greenhouse gas emissions.

- **What strategic resource planning was done by the City before it enacted the Earth Day Resolution?**
- **Was the cost of implementing this policy assessed before it was adopted?**
- **Is this restriction on greenhouse gases required by the state or federal government?**

7. The Decision To Acquire Electricity From The State Line Wind Project.

FERC intervention in July 2001 dramatically reduced the wholesale price of electricity. City Light also negotiated a new BPA contract providing a greater portion of its needs. In spite of these developments, in September 2001, Seattle City Light entered into an agreement with PacificCorp to purchase electricity generated by the State Line Wind Project over a period of 20 years at total costs varying from $53 to $59/MWh. Under the contract, City Light was to take 50 MWh effective January 1, 2002, an additional 50 MWh effective August 1, 2002, another 25 MWh effective January 1, 2004, 25 MWh more effective July 1, 2004. This was clearly a renewable resource pursuant to the Earth Day Resolution but the decision to buy power from this source on these terms exacerbated the financial challenges that the utility was struggling to overcome.

- **What rationale supported Seattle City Light's purchase of high priced power that it did not need?**
- **Did City Light's load forecast show that this additional purchase of power was needed to serve expect customer loads?**
- **Did Seattle City Light have any economic analysis supporting the acquisition of high priced electricity from the State Line Wind Project?**

Mayor Schell's September 5, 2001 letter transmitting the ordinance to the City Council, to set in motion "the largest wind purchase by any utility in the United States", reinforces the fact that this is premium-priced electricity.

> The integration and storage agreements with Pacificorp is a 10 year agreement. When the two contracts are combined, Seattle would receive energy uniformly at the mid-Columbia trading hub beginning January 1, 2002 at a total price of roughly $48.50/MWh. This figure is greater than the current forward market price-inclusive of greenhouse gas mitigation of $39.50/MWh, but less than the projected 2002 cost of purchases from the Klamath Fall cogeneration of $53.69 per MWh inclusive of greenhouse gas mitigation.[15]

The Fiscal Note to the City Council supporting the ordinance states that because City Light has more resources (supply) than load (demand) in the near term, this contractual resource will result in sales of electricity in the wholesale market. With the then current forward market prices for 2000, City Light estimated it would generate an additional $9 million in revenues in 2002 at a cost of approximately $11 million excluding costs of shaping (timing delivery of the electricity to meet need) and transmission. Future purchase costs would rise to $23.8 million in 2004 and $25.8 million annually through 2021.

The losses from these purchases in excess of load have now grown. City Light presently estimates that it is obtaining approximately 150 aMW in excess of its load that it must sell in the market, the price of which has recently been as low as $19.63/ MWh (February 2002).[16] The utility expects to collect about $110 million less than anticipated this year, $34 million less next year, and $12 million less in 2004.

- **Was Seattle City Light's decision to make firm purchases in excess of load supported by a strategic resource analysis?**
- **What was the public policy objective of the contract?**
- **Was the City Council made aware that this was a major departure from the utility's past practice of acquiring resources sufficient only to serve firm load?**
- **Is there any past or present economic analysis supporting the decision to buy the wind power at the above market price?**
- **What was the projected net loss in revenues expected from the wind contract?**
- **What is the current projection of the losses from this contract?**

8. Seattle City Light's Decision to Issue Over $686 Million in Bonds and Revenue Anticipation Notes in March and April 2001 and hence to Increase Debt Substantially.

The electric utility industry is a capital-intensive business. Generation, transmission, and distribution of electricity require an expensive infrastructure that must be maintained in order to provide reliable service to customers. City Light is a vertically integrated utility; it owns a substantial portion of the generating assets required to serve its retail customers. City Light's historically low rates are due in large part to investments made decades ago in the Boundary and Skagit hydroelectric projects.

Typically, utilities debt-finance some portion of the capital required to build and maintain their physical plant (generation plants, transmission and distribution infrastructure, and substations). Utilities also may use debt financing to pay for office buildings, demand-side management programs, and large computer systems. In general, utilities that own generating facilities carry higher levels of debt than do those that purchase power from others.

City Light has two major sources of funding for capital projects: operating revenues (from rates and power sales) and the proceeds of bond issues. Financial policies adopted by the City Council guide how much funding is provided by each source. Greater reliance on operating revenue translates to higher customer rates in the short term but lower rates in the long term. Conversely, greater reliance on debt keeps rates lower in the short term, at the cost of higher rates in the future.

City Light's long-term debt has increased sharply from $489 million in 1990 to $1.597 billion in 2001. City Light issued $182.2 million in revenue anticipation notes in March 2001. These notes were used to finance 2001 operating expenses. These bonds mature in March 2003. Seattle City Light also now borrows $100 - $150 million annually from the City's general fund, which must be repaid, with interest. These amounts are up from previously common general fund loans of $10 million to $20 million. The City Council had established a financial guideline that required Seattle City Light to set rates at levels that, under normal water conditions, would provide 1.80 coverage of first-lien debt service. About ten years ago, this ratio was lowered from 2.0. This means that City Light currently must set its rates to ensure revenue sufficient to cover 1.8 times the projected payments of principal and interest on first-lien debt, after payment of all claims that are superior to that of first-lien debt-holders. This guideline is also a covenant set forth in the 2001 Revenue Bonds. The debt service coverage standard has not consistently been achieved.

City Light met the requirement in 1995, 1996, 1997, and 1999. The coverage ratios in 1994, 1998 and 2000 were 1.66, 1.50, and 1.21 respectively. Unaudited results from 2001 show total coverage ratio of 1.22. Moody's Investors Service noted in a presentation to Seattle City Light in November 2001 that, "The median debt service coverage for the Nation's largest 25 municipal electrical utilities is in excess of two times coverage."

- **What is the implication of repeated failure to comply with the debt service coverage covenant?**

In December 2001, the City Council adopted new financial policies for City Light. These policies provide that rates will be set such that, with a 95% confidence level, City Light will have cash available to help fund its Capital Improvement Program ("CIP"). The new policies also provide that City Light will establish a $25 million contingency reserve and a $30 million minimum operating reserve. [17] While the new financial policies may signal an attempt to reform past borrowing practices, their additional rigor is no guarantee of future improvements if compliance with new policies proves as erratic as compliance with previous policies.

- **Will Seattle City Light conform to the current, laxer financial policies, until the new policies come into effect in 2004 or 2005?**

Seattle City Light's long term debt rose about $1 billion from 1990 to 1999.[18] The March 2001 issuance of $503.7 million in Power Improvements and Refunding Revenue Bonds and the subsequent April 2001 issuance of an additional $182.2 Million in Revenue Anticipation Notes continued th**e** trend of growing indebtedness. In the Official Statement for the $503.7 million issue, it was noted "No further new money borrowing currently is anticipated for the 2001 - 2006 period."[19] However, according to the Council discussion of February 7, 2002, it is anticipated that Seattle City Light will issue new debt in 2003 and 2004.

This significant growth in debt has raised a number of questions relating to Seattle City Light's use of debt for both capital and operational expenses.

- **Why has Seattle City Light's debt load been allowed to increase to one billion dollars in the decade of the 90's?**
- **What specific items of the Capital Improvement Program required such a dramatic and historically anomalous increase in debt in advance of the "Perfect Storm"?**
- **Were the implications of this increase in debt fully understood and debated by Council?**
- **And were such debates, if they occurred, informed by solid analysis of the potential risks of this strategy?**

City Light's high debt service obligation severely compromises the utility's ability to fund its Captial Improvement Program on an ongoing basis with current revenues. The March 2001 bond issue provided $130 million to redeem other outstanding bonds. This left $375 million in bond proceeds for "Project Funds". Of the $375 million, $110 million went back into operating funds for capital projects previously funded from revenues, leaving just $265 million, barely

71% of the total $375 million in *new* money raised, to be used for new capital projects. Seattle City Light expected to fund the balance of its five year Capital Improvement Program from current revenues. From the Projected Operating Results shown on page 52 of the bond Official Statement, the total revenue available for purposes other than refunding the outstanding bonds and costs of issuance (including the CIP) is $705,569,000. Thus, 93.3% of all such revenues from 2001 through 2006 were to go to the CIP. These figures were based on the then-current financial policy of maintaining a ratio of 1.8 to 1 of revenue available for debt service,

By September 30, 2001, Seattle City Light's financial statements revealed that whereas the projected operating results for 2001 used in the March 2001 Bond Official Statement showed net revenue available for other purposes of $20,321,000, the actual figure through September 30, 2001, was a *loss* of $371,352,907. This difference translates into a reduction of $391,673,907 in funds available for City Light's capital needs.

It was quite obvious by September 2001 that the CIP as proposed in the March 2001 Bond Official Statement could not be funded. This change was due in large measure to a projection of high wholesale energy prices – prices that in the event were not realized – as well as projections of surplus energy available for sale at these optimistic prices. It turned out to be impossible to turn to marketing surplus power to provide revenues to support 1.8 to 1 debt coverage and fund the CIP. The expected rates to be charged residential and commercial customers were also based on these projections.

- **Is Seattle City Light legally or morally required to correct its revenue projections shown in the Bond Official Statement and/or publicize this to bondholders in a timely manner?**
- **Why has this information not been publically discussed earlier, as it was evident within a couple of months that the revenue projections would not be realized?**

At least in part due to this very difficult revenue situation, the Seattle City Council adopted the new financial policy discussed above. The bond covenants nonetheless still require 1.8 debt service coverage. Implementation of this new financial policy (planned for 2004 or 2005) will result in the rates shown below for all customers ("average system") and residential customers.

	2002	2003	2004	2005	2006
Average Rate					
$/MWh	$62.80	$58.73	$54.04	$56.38	$55.76
Residential Rate					
$/MWh	$70.33	$66.43	$61.43	$63.74	$63.29

For reference, the average system rate for 2000 was $40.85 and for 2001 was $56.43.

- **Given the large current shortfall in funds available to pay for the CIP set out in the March 1991 Bond Official Statement, and the prospect that Seattle City Light will continue to have negative net revenues from power sales, will Seattle City Light issue more debt, raise rates, or reduce the CIP?**

- **If the CIP is to be cut, what are the long-term consequences? What elements of the system – infrastructure, upgrades, new capacity, conservation – will be affected by lack of or delays in investments.**
- **Will Seattle City Light be able to retire the 2001 revenue anticipation notes from current revenues? If not, what does Seattle City Light intend to do?**

9. Seattle City Light's Power Trading Decisions

Seattle City Light had long participated in western electricity markets selling surplus energy in the summer and purchasing energy in the winter. The city established an independent power-marketing group in 1998 to work more professionally in the emerging deregulated energy market environment. Seattle's real-time and next day traders handled balance-of-month transactions while all other transactions were handled by a different set of traders.[20]

The power-marketing group's track record has been disappointing. In 1999, Seattle City Light purchased electricity at average cost of $24.53/MWh and sold electricity at average price of $19.58/MWh. The result was an overall profit of $18 Million due to the fact that energy sold was two times the amount of energy purchased. In 2000, Seattle City Light purchased electricity at average cost of $73.53/MWh and sold electricity at average price of $44.21/MWh. The result was a net loss of $108.5 Million. In 2001, Seattle City Light purchased electricity at average cost of $176.36/MWh and sold electricity made at average price of $ 69.85/MWh (through December 4.) The result was a net loss of $438.6 Million.

Seattle City Light's views of the desirability of relying on the power market for addressing load shortages and enhancing revenue changed significantly in a very short period of time. In its "Adopted Revenue Requirements Analysis 2000-2002", published in February 2000, in reference to replacement of Centralia power and related net expenses, the document states, "The Department anticipates that *expanded activity in the area of power marketing* (emphasis added) will allow it to mitigate these expenses by realizing an additional net benefit of about $2.0 million a year. This estimate is based on City Light's plans to use the flexibility afforded its own hydro-electric plant to seek out low risk opportunities for arbitrage in wholesale markets between different points of delivery and different hours of the day."[21]

By September 2000, though, in "Seattle City Light's Strategic Resource Assessment" we see "…City Light's strategy is to reduce its reliance on the market and to conserve, invest in, or contract for resources to meet its customers' base load over the next ten years with resources that reflect its commitment to reliability, cost containment and the environmental values of Seattle's ratepayers."[22] This altered view is understandable in light of circumstances, but questions remain:

- **What signs did Seattle City Light see before February 2000 that there would be problems with increasing reliance on the market?**
- **If Seattle City Light's strategy as of September 2000 was to reduce its reliance on the market, was there any corresponding reduction in costs of the power marketing function?**

- **If the goal was to meet customers' base load, why did Seattle City Light subsequently buy power so much in excess of that load and at the same time commit itself to an aggressive conservation program?**

In August 2000, Deloitte & Touche completed an audit of the power marketing function at City Light. In general the audit was not highly critical, and in some respects was complimentary. Much of the report offers suggestions for improvements in structure and in reporting practices which Seattle City Light could make to bring the power marketing division up to industry standards. However, there were several areas that came in for stronger criticism. The vast majority of these had to do with risk management policies and procedures.

The Deloitte & Touche document also made the observation that it was important for City Council members to "possess a working understanding of the market" because of the high degree of influence that the Council has on Seattle City Light operations. Some additional observations about the City Council's role include the following:

> An understanding of the risks and returns facing SCL as the market evolves and SCL's mandate adapts to this evolution would help the Council make better decisions and ask the right questions from SCL and the Energy Committee.
>
> Current City Council members depend heavily on the recommendations made by City Council Staff. These Staff Members have a good understanding of the business. It is important, however, for Council Members to make informed decisions based on these recommendations. City Council members could benefit from increased understanding of the energy market and the implications of its changing nature.
>
> To ensure an adequate policy (on Risk and Credit Management), Council members must understand the business environment and SCL's place in it.

In addition to those raised by the audit, other questions that should be asked about the power marketing function include:

- **Was it Seattle City Light's plan to make money in the power trading commodities market?**
- **What planning and analysis was done as Seattle City Light entered its new enterprise as a power trader and first became dependent on unregulated markets for a substantial portion of its supply?**
- **Since fluctuations in price were a potential risk of some magnitude, what expertise (on staff or from consultants) was obtained to manage the new risks?**
- **Was a Strategic Resource or Risk Management Plan prepared as part of the power trading enterprise?**

- **Has Seattle City Light evaluated whether the City is making or losing money as a power trader?**
- **As the magnitude of the trading losses became apparent, were any corrective actions proposed or taken?**

Conclusions

Several clear patterns and themes in Seattle City Light's behavior have emerged from our examination and this report. These include:

- Impatience with and unwillingness to utilize historically successful tools (integrated resource planning, short, medium and long range planning, worst case scenario analysis, and thorough risk-management analysis) because of the mistaken belief that such tools were irrelevant to the unfamiliar new operating environment of deregulation and competition.
- Abandonment of prudent business practices appropriate to a public utility in an effort to operate successfully in the new "open market" environment the characteristics and requirements of which were not fully understood. Taking on high debt loads is but one example of this.
- Increasing reliance on power marketing during a period of great price volatility.
- Entering belatedly into long term commitments to purchase power at high prices and well in excess of customer needs.
- Unwillingness to apply rigorous standards of cost effectiveness to policy and resource decisions which were seen as being friendly to the environment.
- A tendency to attribute its current major financial problems to outside forces (FERC's intransigence and the "Perfect Storm") without acknowledging the need to examine the utility's own management procedures and operating policies to identify significant contributions to the problems.

Despite our lengthy examination of Seattle City Light practices over the past several years, the Municipal League does not at this time have any specific recommendations as to whether or how to reform or improve the decision making process at City Light. We recognize that we still have much to learn about this exceedingly complex industry. For this reason, we urge the City Council to retain an outside utility expert to thoroughly review this record and identify problem areas in City Light's decision making process, especially given the challenges City Light now faces in light of its bleak financial condition. We welcome an opportunity to work with the city in any way we can in this review process. We do caution, however, against jumping too quickly to modify the governance of City Light. It is not clear to us at this point, for example, that creating a separate utility board, such as in place in Tacoma, will solve City Light's problems. Governance changes can be an appropriate solution to problems in public administration. The Municipal League strongly supported, for example, the merger of the Metro transit and water quality functions into King County government in the early 1990's. But governance changes are only appropriate when governance is the problem. The Municipal League hopes the city will look hard at the situation at City Light first and then work to reform its governance only after it has concluded that such changes are appropriate to the actual problems identified.

[1] *Federal Energy Regulatory Commission Opinion of Admin. Law Judge Carmen Cintron, Puget Sound Energy v. Parties to the Western Systems Power Pool Agreement, Dockets EL01-10-000 & EL01-10-001, dated September 24, 2001 (hereinafter "FERC Op.) at page 91.*
[2] *FERC Op. at page 103, citing San Diego Gas & Elec. Co.v. Sellers, et al, 95 FERC para. 61,115 at para. 61,352 (2001)* (emphasis by Court).
[3] *(12/27/99 Seattle City Light Centralia Status Report).*
[4] *FERC Op at p.95.*
[5] *FERC Op at p.95.*
[6] *Seattle P-I, May 11, 1999.*
[7] *Seattle Times March 20, 2001.*
[8] *p. 32 of Seattle City Light SRA September 2000.*
[9] *Seattle City Light SRA p.32.*
[10] *Executive Summary at p.2.*
[11] *October 25, 2001 Report to City Light by consultants Capital Advisors, LLC at P.3.*
[12] *FERC Op.at p.97.*
[13] *FERC Op. at p. 156.*
[14] *March 6, 2002 Post- Intelligencer.*
[15] *Mayor Paul Schell Letter, September 5, 2001*
[16] *March 6, 2002, Seattle Post-Intelligencer*
[17] *Tacoma Power's policy is to fund 50% of its capital program from current revenues.*
[18] (See Official Statement, Review of Financial Policies page 13).
[19] *(See page 46).*
[20] *FERC recommendations of September 24, 2002 at p.59.*
[21] *pg. 3.22*
[22] *pg. 1*