AGENDA

FOR A ***SPECIAL MEETING OF RED DEER CITY COUNCIL***

TO BE HELD IN THE COUNCIL CHAMBERS, CITY HALL

MONDAY, JANUARY 11, 1999

COMMENCING AT ***4:30 P.M.***

Please Note:
The Next Regular Meeting of City Council
Will Be Held
Monday, January 18, 1999
at
4:30 p.m.

DATE: **January 6, 1999**

TO: **Council**

FROM: **City Clerk**

RE: ***Electric Industry Restructuring***

At the Council meeting of December 21, 1998, it was agreed that a special meeting of Council be held for the purpose of further discussing Electric Industry Restructuring and to allow Council members additional time to bring forward any questions or comments.

At the December 21st meeting, Council reviewed reports from PriceWaterhouseCoopers dated November 1998 and the Director of Development Services dated December 16, 1998 concerning this topic. Copies are attached. The recommendations in each report are as follows:

PriceWaterhouseCoopers:

> "Having considered the risks and changing environment in which E.L. & P. will be required to operate, it is PriceWaterhouseCoopers' recommendation that The City of Red Deer:
>
> 1. Determine that it will not engage in the Retailer segment of the electric distribution business, effective January 1, 2001;
>
> 2. Explore options for alternate delivery service arrangements with another entity to act as Wire Services Provider in the City of Red Deer's distribution service area, (such an arrangement could include the E.L. & P. Department continuing with the operation and maintenance responsibilities), and
>
> 3. Retain ownership of the electric distribution system and undertake the related responsibilities, but conduct ongoing monitoring studies to compare the financial impact on The City of (a) retaining ownership or, (b) divesting itself of the electric distribution system.

Director of Development Services:

In addition to adoption of the recommendations contained in the consultant's report, I would ask for Council's concurrence on four other issues that will have to be dealt with in the near to midterm future:

1. First, if Council elects to not become involved in the electric retail business, but to remain only in the business of wire service provider and electric distribution owner, then the issue of governance is simpler. I would recommend that the present E.L. & P. Department remain a City department. There is no requirement or benefit to be derived from formation of an independent arm's length company. We believe there will be a need to modify the administrative structure of the Department to react to the new demands and responsibilities. This can be accommodated within the framework of a City department.

2. Second, based on the present draft of the regulations, The City should move, in the near to midterm, to arrange for a contact with an electric energy marketer for provision of power to those parties who choose to remain with us through the "stable rate option period". This period extends from January 1, 2001 through to December 31, 2006. In simple terms, the stable rate option provides that those residential and very small commercial customers that do not want to purchase their power from any of the private energy retailers that may be present, have the option of requiring The City to provide their power through that period. We effectively become the provider of last resort.

3. Third, we must move in the short term to completely alter the method of accounting for costs and revenues in the E.L. & P. Department. Municipal financing practice is not appropriate and will not provide the information required for us to design and file our distribution tariff and receive the maximum appropriate rate of return on that activity. This will require the commissioning of appropriate outside accounting and utility experts. The information generated in the rate design process would also be of some assistance in the preparation of the documentation required if we are to consider selling the utility. There would be additional work required. As an example, book value and market value are probably not the same thing. We would investigate the possibility of having both processes undertaken by the same consultant.

4. Fourth, if we do not enter the energy retail business, we will not, as stated earlier, be required to set up a Board of Directors to operate an arms length company. Remaining in the wire business only will not, in our opinion, require any major governance changes from how we presently operate. There will be a need for increased staff within the Department, and perhaps in support departments such as Treasury Services, to carry out the changed and additional responsibilities. We would apply for recovery of those additional costs in our distribution tariff application.

Subsequent to reviewing these recommendations, Council passed the following resolution:

"RESOLVED that Council of The City of Red Deer, having considered reports from the Director of Development Services dated December 16, 1998 and Price Waterhouse Coopers, re: Electric Industry Restructuring, hereby agrees:

1. To establish an *Ad Hoc Electric Industry Restructuring Advisory Committee* to work with City Administration in advising Council on the implementation of recommendations #2 and #3 as outlined in the Price Waterhouse Coopers report;

2. The membership of said committee shall include two members of Council and up to eight volunteer citizens-at-large who have a vested stake in Red Deer and who have a skill set and understanding in the area of electric industry restructuring,

3. That the Mayor be authorized to make appointments to said committee."

The Mayor is currently considering the membership of the Advisory Committee which will be reviewing recommendations No. 2 and No. 3 from PriceWaterhouseCoopers. The issues not yet addressed by Council are:

1. The City's involvement in the Retailer segment of the electric distribution business.

2. Interim management of the electric distribution system while the Advisory Committee is reviewing recommendations No. 2 and No. 3 from PriceWaterhouseCoopers' report.

3. Provision of power to those parties who choose to remain with The City through the "stable rate option period".

4. Redesign of the accounting systems for costs and revenues in the E.L.& P. Department.

This is submitted for Council's information.

Kelly Kloss
City Clerk

/clr
attchs.

Mayor and City Manager's Comments:

1. That Council pass a resolution determining that The City will not engage in the Retailer segment of the electric distribution business, effective January 1, 2001.

2. That pending a recommendation from the Ad Hoc Electric Industry Restructuring Advisory Committee concerning recommendations No. 2 and No. 3 from PriceWaterhouseCoopers' report, the electric distribution system continue to be managed by the E.L. & P. Department.

3. That The City arrange for a contact with an electric energy marketer for provision of power to those parties who choose to remain with The City through the "stable rate option period".

4. That The City engage appropriate external accounting and utility experts to redesign the accounting for costs and revenues to facilitate the preparation of the distribution tariff.

"G. D. Surkan"
Mayor

"N. Van Wyk"
City Manager

DATE: December 16, 1998

TO: City Clerk

FROM: Director of Development Services

RE: ELECTRIC INDUSTRY RESTRUCTURING

Attached for Council's review and consideration is a report prepared by PricewaterhouseCoopers entitled "Risk Analysis Project". Mr. Keith Anderson of this Firm will be in attendance at Council to present the report, expand upon certain elements, and answer any questions Council may have.

The report provides some background with respect to the changes occurring in the Electric industry, and the legislative and regulatory impacts these changes could have on The City of Red Deer. The report indicates that three major functions or identities surface as a result of the changes. These three identities are:

- Owners of electric distribution utilities
- Wire Service Providers (WSP) - operators of the distribution system, and
- Retailers - companies involved in the provision and sale of energy.

The report goes on to outline the various risks or challenges in the new environment and how they might effect each of the three identities above.

The recommendation contained in the report states the following:

> "Having considered the risks and changing environment in which E. L. & P. will be required to operate, it is PricewaterhouseCoopers recommendation that The City of Red Deer:
>
> 1. Determine that it will not engage in the Retailer segment of the electric distribution business, effective January 1, 2001.
>
> 2. Explore options for alternate delivery service arrangements with another entity to act as Wire Services Provider in The City of Red Deer's distribution service area (such an arrangement could include the E. L. & P. Department continuing with the operation and maintenance responsibilities).
>
> 3. Retain ownership of the electric distribution system and undertake the related responsibilities, but conduct ongoing monitoring studies to compare the financial impact on The City of (a) retaining ownership or (b) divesting itself of the electric distribution system."

I have reviewed the report and its recommendations and would offer the following comments.

I would strongly endorse the first recommendation. The City is not properly equipped to enter the fiercely competitive and risky business of energy retailing. It is my belief that the necessary investment required to carry out this function effectively would be cost prohibitive. In this newly structured electric industry, I believe that this function, that of energy retailer, is a service that will be more appropriately provided by private enterprise.

I agree in principle with the second recommendation. The City of Red Deer always has evaluated various options available for service delivery, and if a contractor/consultant is appropriate, we would go that route. At the same time, we have acted (albeit in a regulated environment) as a wire service provider for a long time. We are confident that there are many elements of the business that would be entirely within our capabilities. We must also realize that contracting out the activities of the wire service provider would not relieve The City of any obligations of the owner of an electric distribution utility or the wire service provider.

Administration supports the third recommendation. First indications are, that in a regulated environment, The City could charge a distribution tariff that would provide a rate of return that would exceed the return derived from the proceeds that could be expected from the sale of the utility. The Consultant states "However, it seems probable that the regulatory return on the assets would nonetheless be in excess of the return The City would realize on the proceeds of a divestiture of the distribution system assets and reinvestment in low risk financial market instruments". We would also think that at this time of uncertainty, that the market value of the utility may not be as high as when the industry matures and all parties are more familiar and comfortable with the new environment. Sale of the entire asset, poles, wires, transformers, etc. is an issue that can be considered at any point in the future, if we consider it to be in our best interests. Preparation of a sale document would be a significant exercise and is discussed later. I would estimate that preparation of such a document would require outside consulting resources, a very rough estimate to carry out this exercise is $50,000 - $100,000. We have asked the consultant to try and provide us with a preliminary indication of cost. Certainly if we were approached by any organization demonstrating an interest in purchasing the asset we would review their proposal and bring the matter to Council.

In addition to adoption of the recommendations contained in the consultant's report, I would ask for Council's concurrence on four other issues that will have to be dealt with in the near to midterm future.

First, if Council elects to not become involved in the electric retail business, but to remain only in the business of wire service provider and electric distribution owner, then the issue of governance is simpler. I would recommend that the present E. L. & P. Department remain a City department. There is no requirement or benefit to be derived from formation of an independent arm's length company. We believe there will be a need to modify the administrative structure of the Department to react to the new demands and responsibilities. This can be accommodated within the framework of a City department.

City Clerk
Page 3
December 16, 1998

Second, based on the present draft of the regulations, The City should move, in the near to midterm, to arrange for a contract with an electric energy marketer for provision of power to those parties who choose to remain with us through the "stable rate option period". This period extends from January 1, 2001 through to December 31, 2006. In simple terms, the stable rate option provides that those residential and very small commercial customers that do not want to purchase their power from any of the private energy retailers that may be present, have the option of requiring The City to provide their power through that period. We effectively become the provider of last resort.

Third, we must move in the short term to completely alter the method of accounting for costs and revenues in the E. L. & P. Department. Municipal financing practice is not appropriate and will not provide the information required for us to design and file our distribution tariff and receive the maximum appropriate rate of return on that activity. This will require the commissioning of appropriate outside accounting and utility experts. The information generated in the rate design process would also be of some assistance in the preparation of the documentation required if we were to consider selling the utility. There would be additional work required. As an example, book value and market value are probably not the same thing. We would investigate the possibility of having both processes undertaken by the same consultant.

Fourth, if we do not enter the energy retail business, we will not, as stated earlier, be required to set up a Board of Directors to operate an arms length company. Remaining in the wires business only will not, in our opinion, require any major governance changes from how we presently operate. There will be a need for increased staff within the Department, and perhaps in support departments such as Treasury Services, to carry out the changed and additional responsibilities. We would apply for recovery of those additional costs in our distribution tariff application.

Submitted for the information and direction of Council.

Bryon C. Jeffers, P. Eng.
Director of Development Services

BCJ/emr
Att.
c. Director of Corporate Services
c. E. L. & P. Manager

PRICEWATERHOUSECOOPERS

City of Red Deer

Electric Light & Power

Risk Review Project

November, 1998

City of Red Deer

Electric Light & Power

Risk Review Project

Introduction

In early 1998 Coopers & Lybrand, a predecessor firm of PricewaterhouseCoopers (PwC) was contracted by the City of Red Deer to undertake a study to assist in determining the optimal governance option for the City's electric utility. That report discussed developments in the electric utility industry and their implications for the City of Red Deer and the Electric Light & Power (EL&P) department. The report also set forth a set of value expectations for EL&P, organizational design criteria, governance and organizational options, and related recommendations for the restructuring for EL&P. The summary recommendation of that report was that:

"The City of Red Deer establish a separate organization with a City Council appointed business oriented independent Board of Directors and a mandate to undertake responsibilities for governance and management of the City's Electric Light & Power department, and to monitor and make recommendations to Council with respect to the future prospects and opportunities for optimizing the value of EL & P for the City."

Following its review of the Governance Study, the City requested PwC to undertake a further review of the specific issues and risks facing the City and EL&P. This further review is to be in the context of the distribution business being "unbundled" into separate components or segments. The review is directed at assisting the City in making a decision with respect to which if any of the unbundled segments it should continue to operate in the soon to be restructured electric market in Alberta.

Background

In the spring of 1998, the Province of Alberta made extensive amendments to the Electric Utilities Act to enable the second phase of restructuring and deregulation of the electricity industry in Alberta. The amended act makes provision for a series of regulations to facilitate the implementation and application of the changes introduced in the legislation. The first of those, the Distribution Regulation, was filed September 1998. Additional regulations are expected over the next several months.

The new legislation and regulations require that the traditional functions of electric distribution utilities (such as Red Deer's EL&P) are to be segregated into three components, (1) "owners of electric distribution systems"., (2) "wire services providers", and (3) "retailers". The new rules set forth optional and mandatory functions for the three components effective at specified implementation dates and/or following a transition period. The rules include a requirement for a "stable rate option" to be available to customers during a transition period ending December 31, 2006. No definition has yet been established for the stable rate option.

The traditional regulated monopoly paradigm for the electric distribution business is being unbundled into segments which are likely to be highly competitive and exposed to a whole new set of risks. The amended act and related regulations are highly complex and result in fundamental and far reaching change to all aspects of the electric industry in Alberta. The next section outlines, in summary form, the requirements arising from the new legislation and regulations.

Outline of New Legislation and Regulations

The new rules impose choices to be made and/or requirements on the three newly unbundled segments of the electric distribution sector, (1) owners of an electric distribution system ("Owner") – the wires, (2) wire service provider ("WSP") and (3) retailers ("Retailer"). These segments and the related choices/requirements are outlined below. (Note: the following is based on the application of the Act as it is currently understood to apply. The act empowers the minister to make regulations which have the effect of modifying the Act. Additional regulations are expected to be published over the next few months dealing with many of the areas discussed below, including the Roles, Responsibilities and Relationships of Wire Owners, Wire Service Providers and Retailers)

Owners

The Owner (of an electric distribution system) has the choice:

- To undertake the function of being the WSP
- To appoint a wire service provider to act on behalf of the Owner
- To establish an affiliated Retailer to compete with other Retailers

Owners will be required:

- To make capital investment and related decisions to provide safe and reliable delivery of electric energy in their service area
- To ensure that the WSP complies with the Act and regulations

Wire Service Providers

The WSP will be required:

- To perform metering and information system functions
- To provide customer metering and consumption information to retailers (at a price)
- To operate and maintain the distribution system in a safe and reliable manner
- To undertake financial settlement with the Transmission Administrator for access service for customers in the service area
- To act as the retailer for stable rate customers during the stable rate period (to 2006)
- To maintain records as required by the regulations.

Retailers

The Act provides that Retailers may (optional):

- Provide electricity services
- Trade electric energy through the Power Pool
- Make financial settlements with the Power Pool for energy trades

Retailers will be required:

- To maintain customer records and accounts
- To make reasonable collection efforts before curtailing service to customers

Payment in Lieu of Income Tax

In addition to the forgoing there is a provision in the Act that a municipality (or subsidiary) which owns or is a Retailer (or holder of a Power Purchase Arrangement) must pay an amount into the "Balancing Pool" equivalent to the amount of income tax it would otherwise pay if it were subject to provincial and federal income taxes.

Distribution Tariffs

The new Distributions Regulation (September 1998) provides that an Owner that is a Municipality or subsidiary of the Municipality shall prepare a "Distribution Tariff". That distribution tariff is to recover the owners costs of providing distribution access service (i.e. the transportation service). The regulations go onto provide that the Municipality or subsidiary may apply to the Energy Utilities Board (Board) for approval of the tariff or alternatively to simply file the tariff with the Board. In the event that the Board receives a complaint with respect to a filed (Vs "approved" tariff), it is empowered to review and change the filed tariff. In other words, the distribution tariff of the Municipality is subject to the regulatory jurisdiction of the Energy Utilities Board.

Risk Identification and Discussion

The electric utility sector, consisting of generation, transmission and distribution functions, has traditionally been considered to be a relatively low risk industry. The industry has operated, in Alberta and across most of North America, in a highly regulated monopoly environment. With the advent of industry restructuring, de-regulation and the introduction of competition, the risk exposures of the traditional utility businesses functions has changed very dramatically, with a number of new elements being introduced. The following material is presented as a high level summary discussion of a number of the risks that are new or significantly changed in comparison to the traditional risks profile of electric distribution utilities in Alberta, including Red Deer's EL&P.

REGULATORY

Municipal distribution utilities in the Province of Alberta have traditionally been exempt from the regulatory jurisdiction of the Alberta Energy Utilities Board with respect to pricing and related tariff matters. Under the new rules, the municipal Owners (IEL&P) are required to elect to either obtain approval of or file a distribution tariff with the Energy Utilities Board (EUB). The distribution tariff is subject to review and variance by the EUB. The distribution tariff will be required to be designed to provide a regulatory rate of return, which may be significantly less than the self regulated return EL&P has been entitled to earn in the past.

In order for the City to determine an appropriate distribution tariff which will recover its fully allocated costs and comply with regulatory requirements, significant changes will be required to the City's costing processes. (We understood that the City does not currently allocate many of its central costs to operating departments, such as accounting, billing, credit collection and other general corporate service functions).

COMPETITION/MARKET SHARE

The City/EL&P will have the option of continuing to own and either operate or contract out the operation of its newly regulated wire system. However, with respect to the provision of energy services (including the supply of electric energy), EL&P will be exposed to open competition from other Retailers who may choose to enter the market. This will expose EL&P to significant pressures on its profit margins as competitors fight, likely on a price basis, for market share. Competition can likely be expected from large players in both the utility and other sectors, including telecom, financial, retail and service industry sectors.

CHANGE OF LAW

The introduction of restructuring and deregulation to the Alberta electric market has introduced an entirely new operating environment for EL&P. Based on experience to date in Alberta, and with reference to experience from other jurisdictions, it seems highly likely that there will be a continuing pattern of change of law and related regulations as the industry proceeds from its present state of flux through an evolutionary process which typically takes a number of years. EL&P will be subject to the direct and indirect costs of coping with and managing the impacts of ongoing changes of laws and regulations for the next number of years and this will have a significant negative impact of the profitability of the utility in an increasingly competitive market.

SCALE, SKILLS AND RESOURCES

Red Deer's electric requirements amount to between 1% and 2% of the provincial total. Competition in the retail market in particular can be expected from other large utility retailers in the province as well as other entrants which are highly likely to enter the Alberta market, including some of the world's largest energy and service organizations. It is highly likely that EL&P would have to make a very significant investment in acquiring the human and technological skills and resources which will be necessary to effectively compete in the new market place. The relatively small scale of Red Deer's electric market makes it seem likely that an affordable campaign may not be effective, while on the other hand, to mount an effective campaign in the face of fierce competition may be so expensive as to be not viable.

CREDIT, COUNTERPARTIES AND TRADING

The new competitive environment will result in the introduction of a number of new players and existing customers will take new roles as direct access customers. These changes will impose new administrative and management costs on EL&P in order to ensure that it has the appropriate business and risk control processes in place to manage and mitigate any losses which may arise from increased and/or changed credit, counter-party and trading requirements.

GOVERNANCE

In order to have a reasonable opportunity for success in the new environment, it will be necessary for the City to ensure that any ongoing utility operations are provided with an appropriate governance structure capable of operating effectively in a market driven, competitive and rapid changing business environment. The City will be challenged to acquire the appropriate resources to meet this challenge and additional costs will undoubtedly be incurred.

TAXATION

If the City remains in the retail business and/or acquires an interest in a Power Purchase Arrangement (the right to market generating capacity), it will be subjected to a new requirement to make a payment of lieu of income tax with respect to the retail and/or PPA revenues. In addition to the direct "taxation" costs, this requirement will impose an additional administrative cost on the City in order to ensure appropriate compliance.

POLITICAL AND REPUTATION

Prior to the restructuring of the electric sector in Alberta, the industry has been characterized as quite stable and mature. With the introduction of restructuring, the industry will be going through a period of turmoil, uncertainty and instability. The City will be losing a great deal of the control it has previously been able to exercise over its electric utility operations. This loss of control together with the need to compete in a market place that may be characterized by tele-marketing and door to door sales calls may expose the City to a degree of political and reputation risk that it does not wish to accept.

FINANCIAL

The risks and issues identified and discussed above are all factors in assessing what is perhaps the most compelling risk —that of significantly reduced financial returns that the City will realize from the operation of its electric utility. Based on the changes that have been introduced to-date, and are anticipated in the near future, it seems inevitable that the City will no longer be able to achieve the returns on its electric utility operation that it has enjoyed in the past. The issue then is whether the City should continue in all aspects of the utility operation, including ownership of the distribution system, provision of wire services and retail operations.

PricewaterhouseCoopers' assessment of the relative degree of risk of the three distribution utility segments is as follows:

1. Retail Operations – this is likely to be the most risky of the 3 segments, particularly in view of the exposure to credit, counter-party and trading risks and the related costs of managing and controlling those risks in the highly competitive environment which is anticipated for the retail component of the market.

   Appendix 1 provides illustrations of the potential impact of market price exposure in the new market place. The illustrations use a base price of electricity of $32 per megawatt hour, approximately the average price of electricity traded through the Power Pool of Alberta in 1998 to the end of October. The various scenarios indicate the amount potentially at risk using different prices for eight hours, with a demand of 90 megawatts, the approximate demand for the City of Red Deer. Prices of up to $1,000 have been experienced in Alberta this year. In the US mid west, prices during June 1998 escalated to about US$7,000. Similar price excursions have been experienced in the Australian electric market. As indicated in the appendix, price excursions to $500 or $1,000 per megawatt hour over eight hours could potentially expose EL&P to cost risks of $337 thousand or $697 thousand respectively.

2. Wire Services Provider – this function is viewed as having significantly lower competitive related risk factors (subject to the impact of regulations that are yet to be introduced). Nonetheless, the WSP business is still exposed to significant

financial return risks with respect to the administrative and regulatory burden that will be imposed on wire services providers. This will have particular impact on Red Deer in view of the relatively small scale of the City's operations. A number of the functions described as the responsibility of the WSP have already been contracted to ATCO Singlepoint to be provided by them on behalf of the City. The division of responsibilities between the WSP and the owner of the electric distribution system will have to be clarified, particularly with respect to the operation and maintenance of the system.

3. Ownership of the Electric Distribution System – this function seems to have the least degree of risk, and provides an opportunity to obtain a regulated rate of return on the investment in physical assets. However, there will be a continuing obligation and related risk with respect to the obligation to act as the regulator of the Wire Service Provider to ensure that the WSP fulfills its obligations under the act.

Appendix 2 compares the risks of the traditional and new electric distribution business structures. The overall risk of the traditional EL&P business is compared with the composite and component risks of the three new categories of the distribution business, Wire Owners, Wire Service Operators and Retailers. The illustration is not intended to convey scale differentials, but rather the *relative* position of risk of the different structures. As indicated in the appendix, the overall risk under the new structure is viewed as being higher than under the traditional model. Within the new structure, the relative risk is depicted as descending from higher to lower in the order of Retail, Wire Services and Wire Owner functions.

SUMMARY AND RECOMMENDATION

The following recommendations of PricewaterhouseCoopers are based on the underlying premise that municipal governments such as the City of Red Deer have a fiduciary responsibility to act in a prudent and cautious manner in order to protect the City's assets by avoiding and/or mitigating any undue or inappropriate risks to which it might be exposed.

It is the view of PricewaterhouseCoopers that to continue to operate as a retailer in the soon to be restructured electric distribution environment may expose the City to unnecessary and inappropriate risk. With respect to the provision of Wire Services, while the risk profile is less than that of the retailer, the economics of the scale of operations of the Red Deer utility are unlikely to result in an appropriate return. Retaining ownership of the electric distribution systems physical assets appears to have relatively little change in risk in comparison to the existing environment, apart from the likelihood of reduced financial return as a result of the imposition of regulatory oversight by the EUB. However, it seems probable that the regulatory return on the assets would nonetheless be in excess of the return the City would realize on the proceeds of a divestiture of the distribution system assets and reinvestment in low risk financial market instruments.

Having considered the risks and changing environment in which EL&P will be required to operate, it is PricewaterhouseCoopers' recommendation that the City of Red Deer:

1. Determine that it will not engage in the Retailer segment of the electric distribution business, effective January 1, 2001.

2. Explore options for alternate deliver service arrangements with another entity to act as Wire Services Provider in the City of Red Deer's distribution service area, (such an arrangement could include the EL&P department continuing with the operation and maintenance responsibilities) and

3. Retain ownership of the electric distribution system and undertake the related responsibilities, but conduct ongoing monitoring studies to compare the financial impact on the City of (a) retaining ownership or (b) divesting itself of the electric distribution system.

City of Red Deer **_Electric Light & Power - Risk Review Project_** **_Appendix 1_**

Example of market price exposure	Base Price	Market Price					
Price per Mwh	$ 32	$ 32	$ 50	$ 100	$ 500	$ 1,000	$ 10,000
Requirement (Mw)	90	90	90	90	90	90	90
Cost per hour	$ 2,854	$ 2,854	$ 4,500	$ 9,000	$ 45,000	$ 90,000	$ 900,000
Duration	8760	8	8	8	8	8	8
Total cost	$ 25,000,000	$ 22,831	$ 36,000	$ 72,000	$ 360,000	$ 720,000	$ 7,200,000
Exposure (Spot price - base price)			$ 13,169	$ 49,169	$ 337,169	$ 697,169	$ 7,177,169

City of Red Deer EL&P

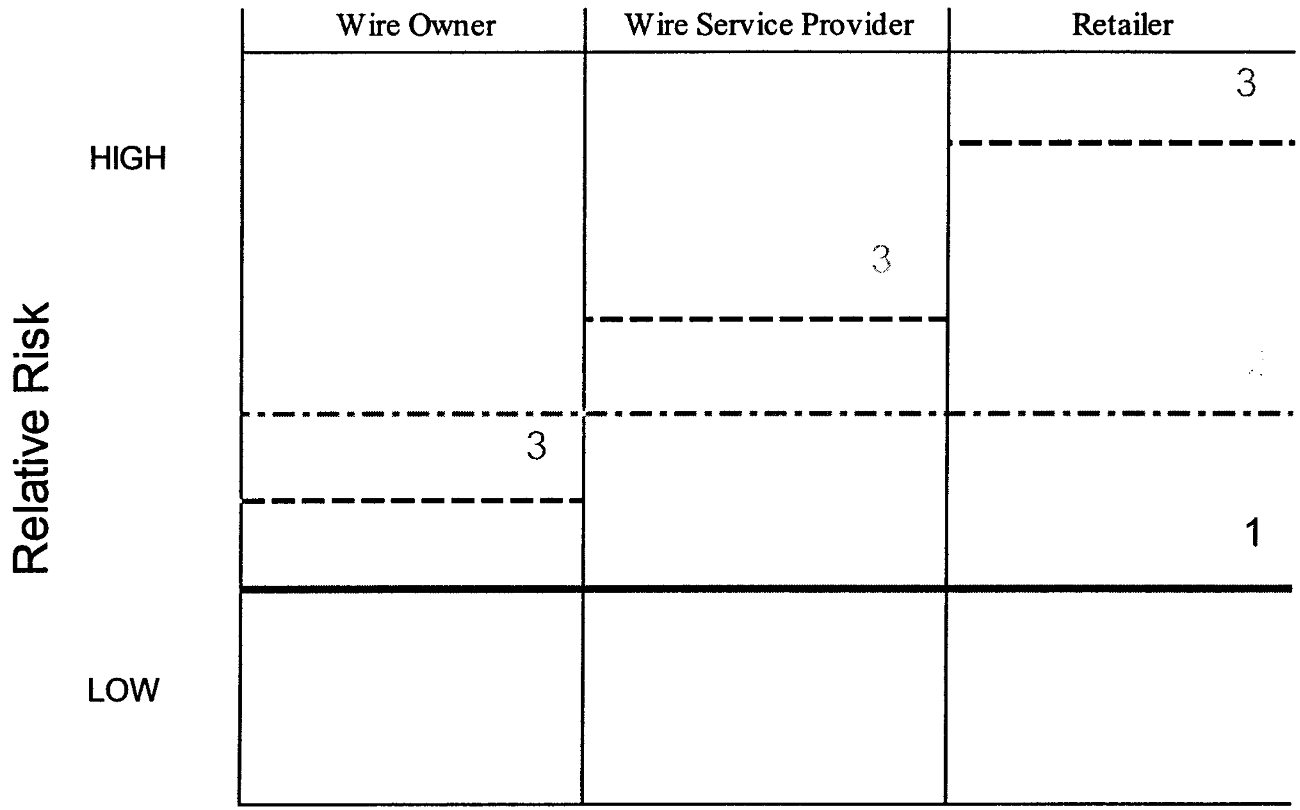
Electricity Cost Calculation Examples

Annual budget cost (rounded)	$25,000,000	$2,854 per hour			
Hours per year	8760				
Cost per hour	$2,854	$32 per MwH			
Units (Megawatts {Mw})	90				
Pool Price:	Hours	Average	Price Difference	Cost Difference	Annual
Jun-98	720	$42	$10	$666,805	$8,001,666
Oct-98	744	$48	$16	$1,090,792	$13,089,508

Notes:

1) During 1998, Pool prices have ranged up to $ 999.50, the notional price cap
2) During summer 1998, pool prices in the US mid-west ranged up to $7,000 US or approx $10,000 Cdn
3) To October 31, there were 27 days when the daily maaximum Alberta price was higher than $100
4) The 1998 average Alberta price is approximately $33 per Mwh

City of Red Deer
Electric Light and Power
Relative Risk Illustration



1. Overall risk, traditional structure

2. Overall risk, proposed new structure

3. "Unbundled" risk, proposed new structure

FILE

Council Decision - January 11, 1999 Special Meeting

DATE: January 12, 1999

TO: Director of Development Services

FROM: City Clerk

RE: ***Electric Industry Restructuring***

Reference Report:

Director of Development Services dated December 16, 1998; City Clerk dated January 6, 1999 and PriceWaterhouseCoopers dated November 1998

Resolution:

"RESOLVED that Council of The City of Red Deer, having considered reports from PriceWaterhouseCoopers dated November 1998, the Director of Development Services dated December 16, 1998 and the City Clerk dated January 6, 1999, re: Electric Industry Restructuring, hereby agrees as follows:

1. That The City will not engage in the Retailer segment of the electric distribution business, effective January 1, 2001;

2. That pending recommendations from the Ad Hoc Electric Industry Restructuring Advisory Committee concerning recommendations No. 2 and No. 3 from PriceWaterhouseCoopers' report, the electric distribution system continue to be managed by the E.L. & P. Department;

3. That The City arrange for a contract with an electric energy marketer for provision of power to those parties who choose to remain with The City through the 'stable rate option period';

4. That The City engage appropriate external accounting and utility experts to redesign the accounting for costs and revenues to facilitate the preparation of the distribution tariff."

Report Back to Council Required:

Yes, relative to recommendations from the Advisory Committee.

***Comments/Further Action*:**

I trust that once the Mayor has established the Committee, you will call a meeting to begin the process.

Kelly Kloss
City Clerk

/clr

c Director of Community Services
Director of Corporate Services
E. L. & P. Manager