

## **1.0 INTRODUCTION**

The West Kootenay Power Ltd. ("the Applicant", "WKP", "the Company") system serves some 116,000 customers. Approximately 40 percent are served indirectly through the sale of power to municipal distribution utilities in Grand Forks, Nelson, Kelowna, Penticton, Summerland and through Princeton Light and Power Company, Limited ("PLP"), a private company serving Princeton and vicinity.

Power is supplied from WKP's own four plants on the Kootenay River, purchases from Cominco Ltd. ("Cominco") and purchases from the British Columbia Hydro and Power Authority ("B.C. Hydro"). WKP is a wholly-owned subsidiary of UtiliCorp British Columbia Ltd. ("UtiliCorp B.C."), which in turn is a subsidiary of UtiliCorp Inc. ("UtiliCorp") of Kansas City, Missouri.

### **1.1 Power Supply**

In 1992 WKP had a peak load of approximately 600 MW. The four WKP plants on the Kootenay River, with a total installed capacity of 190 MW, supplied only 32 percent of WKP's capacity requirements. Purchases from Cominco supplied a further 42 percent and purchases from B.C. Hydro 26 percent (WKP 1992 Annual Report).

Energy sales of 2,480 gigawatt hours ("GW.h") were supplied 55 percent from WKP's own generation facilities. Thirty-five percent was purchased from Cominco, and the remaining 10 percent from B.C. Hydro.

WKP purchases power from Cominco under two power supply agreements. The Long-Term Firm Power Supply Agreement provides for the purchase by WKP of 75 annual average megawatts ("aaMW") on a take-or-pay basis, until September 30, 2005. The 1999 Firm Power Supply Agreement, provides for the purchase by WKP of a further 38 aaMW, on a firm take-or-pay basis, until December 31, 1999. WKP is entitled to utilize, on an hourly basis, any unused Cominco capacity at no cost.

Purchases of power by WKP from B.C. Hydro have been largely for seasonal peaking purposes and vary from maximum levels in the winter to at or near zero in the summer. The power purchases have been made according to the Power Purchase Agreement ("PPA") which provides for energy and capacity under B.C. Hydro Rate Schedule 3807 ("Rate 3807"). In accordance

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with a British Columbia Utilities Commission ("the Commission") Decision, and Order No. G-27-93 issued April 22, 1993, Rate 3807 will terminate on October 1, 1993. It will be replaced on that same date by Rate Schedule 3808 ("Rate 3808") and an amended PPA.

The area served by WKP is expected to have an increasing need for electricity due mostly to the growing population. The major growth area is centred in the Okanagan. Increasingly, electricity to serve this area must be moved long distances from the generating sources on the Kootenay River, or be purchased from B.C. Hydro.

## **1.2 The Application**

WKP applied on November 28, 1991, for an interim refundable increase of 4.2 percent to be effective January 1, 1992, and a further increase of 5.8 percent effective January 1, 1993. The Applicant stated that the increases were necessary to provide adequate revenue to generate a fair return on the increased investment in plant and equipment, and to offset higher forecast costs for power purchases and wheeling. The interim increase for 1992 was approved, subject to refund with interest, by Commission Order No. G-120-91, dated December 20, 1991.

Commission Order No. G-6-92 dated January 6, 1992, increased the interim rate increase, effective January 1, 1992, to 8.7 percent to include the additional cost of power purchased under the two new Power Supply Agreements with Cominco authorized by the Commission Decision of December 18, 1991.

On May 29, 1992, WKP requested approval of the Aesthetic Environment Projects section of its Application for amendments to Rate Schedule 73 - Extensions.

On November 30, 1992, WKP filed an Application to amend the 5.8 percent increase for which it had previously applied to 4.8 percent effective January 1, 1993. In addition, the Company also applied to increase its standard charges applicable to distribution line extensions and to flatten the residential and general service rate structures.

The Application and its amendments, pursuant to Commission Order No. G-123-92, dated December 23, 1992, were set down for hearing on March 8, 1993, in Penticton, B.C.

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On March 5, 1993, WKP filed an Application to further amend the Application filed on November 28, 1991 with respect to the January 1, 1993 rate increase. Specifically, WKP applied to amend the previously applied for increase of 4.8 percent to 5.3 percent effective January 1, 1993. The Applicant stated that this amendment was required to comply with the Commission letter of February 26, 1993, regarding the Decision on WKP power purchase costs from B.C. Hydro.

A portion of the interim rates have been outstanding since January 1, 1992. This is a much longer time than normal and represents an unusual situation and one that the Commission seeks to avoid. However, the extensive and significant changes with regard to WKP's cost of purchased power which entailed lengthy and involved negotiations between WKP and B.C. Hydro necessitated the delay. A revenue requirements hearing during the early part of 1992 would have been neither effective nor efficient when the largest single cost component remained unresolved. The hearing would have incurred unjustified costs to WKP's customers.

The hearing in Penticton commenced on March 8 and was completed with final argument on March 17, 1993.

An intervenor, Mr. Herchak, made a submission (Exhibit 15) wherein he referred to a May 29, 1992 petition to the Commission containing some 1,100 signatures, demanding that *"the British Columbia Utilities Commission request the Government of British Columbia to legislate changes to the B.C. Utilities Act that no interim rate increase be allowed until after a public hearing, or limit rate increase applications to one every three years..."*

The Policy of the Commission, as stated in its May 6, 1993 letter on this subject is:

*"A request for interim rate relief should respond to the legislation by identifying the 'special circumstance' that leads to the public interest being served by the issuance of an Interim Order. The Commission will consider cost increases and expected sales changes as matters eligible for interim relief, but the Commission will not accept proposed policy changes or other changes to rates or terms and conditions of service that do not have a special circumstance requiring interim relief."*

Many legitimate factors can delay a hearing or the issuance of a Decision after a hearing. If interim rate increases (or decreases) were not granted, the utility's retroactive attempts to recover revenue from customers may lead to some misallocation of costs. Also, the amount to be recovered may be large, depending on delays, and this could cause undue budgetary hardships on some customers. In any event, when interim rate increases are denied in the subsequent Decision, the overpayment is returned to the customer with interest.

## **2.0 INTEGRATED RESOURCE PLANNING**

### **2.1 Past Resource Planning Uncertainty**

In recent years, WKP has faced significant uncertainty with respect to resource planning, due primarily to questions regarding its relationship to B.C. Hydro. Although the Commission had urged the utility to take responsibility for prudent resource planning to meet its customers' long-term energy needs (see Decision of December 20, 1990), purchases from B.C. Hydro under Rate 3807 remained the lowest cost incremental supply-side resource for WKP. Growing reliance on B.C. Hydro was thus a legitimate outcome of prudent resource planning.

The major effort by WKP to develop its own resources, a proposed gas turbine, failed to receive government approval after a contentious regulatory review. In the opinion of WKP management, a gas turbine installation may still be a viable option.

Alberta utilities, Bonneville Power Authority ("BPA") and Independent Power Producers ("IPP's") are all potential non-B.C. Hydro suppliers for WKP. However, without a finalized provincial wheeling policy, WKP was hindered from pursuing contracts with these suppliers.

The replacement of Rate 3807 with Rate 3808, as determined in the April 22, 1993 Commission Decision, provides WKP with long-run information on the price and conditions under which it may purchase electricity from B.C. Hydro. The cost of any purchases from B.C. Hydro in excess of the Customer Demand Limit specified in Rate 3808 will be negotiated by the two parties, with the Commission ensuring that the outcome reflects fair arrangements. It is expected that the price at which electricity in excess of the Customer Demand Limit will be offered by B.C. Hydro will reflect B.C. Hydro's opportunity costs, notably the incremental value of energy and capacity. WKP will be able to use these as one indicator of its own avoided cost.

In addition, the Commission is committed to ensuring wheeling access for WKP on B.C. Hydro's transmission system. This will provide WKP with access to competitive alternatives to B.C. Hydro supply, another indicator of WKP's avoided cost.

## 2.2 WKP's Integrated Resource Plan ("IRP") Efforts

WKP presented an interim IRP in the course of the B.C. Hydro Rate 3808 hearing. After the Commission's letter of February 26, 1993, which provided the key elements of the Commission's decision on B.C. Hydro's Rate 3808 Application, WKP prepared a revised IRP for the public hearing (Exhibit 11). The revised interim IRP relies on a load following, combustion gas turbine as the avoided cost, against which all other resource options are compared. WKP identifies the cost of this resource as \$103/kW per year for capacity and 2.62 cents/kW.h for energy.

In February, the Commission issued IRP Guidelines (Exhibit 21). While the Guidelines are not detailed, and thereby confer broad discretion upon utility management, they nonetheless decrease WKP's regulatory uncertainty by outlining the Commission's general methodological preferences with respect to IRP.

**WKP has recently devoted considerable effort to IRP. In the rate hearing, company witnesses recognized that this effort must be even greater in the future (T. 893), and the Commission is in agreement. The Commission will withhold its assessment of WKP's IRP efforts until the utility has had the opportunity to prepare a detailed IRP that responds to the recent dramatic changes in its resource planning environment. That IRP, which is expected later this year, is required to set the planning context for evaluating and approving WKP resource initiatives, be they on the supply or demand side. However, although it is not possible at this time to fully evaluate WKP's IRP efforts, it is possible to provide preliminary feedback by comparing the general approach of WKP's interim IRP with the Commission's IRP Guidelines. This feedback is presented below.**

Guideline #2 emphasizes the importance of demand forecasting methods that allow the utility to distinguish those elements of demand that can be influenced by demand-side management ("DSM") actions. Generally, this implies end-use detail in demand forecasts, since DSM programs usually correspond to specific end-uses. WKP has been moving toward this type of end-use forecasting (T. 883, 1001).

Guidelines #3, #4 and #5 call for identification and measurement of all feasible supply and demand resources, and their combination into resource portfolios. WKP has made progress in characterizing its demand and supply resource options, as witnessed by its interim IRP. However,

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the Commission is looking for further progress in the development of a transparent method for characterizing the financial characteristics of each resource option. The exact methodology used in preparing the interim IRP, or in evaluating DSM program options (Exhibit 87), was not readily apparent from the documentation that was provided.

Of particular interest, given the Commission's Decision on Rate 3808, will be the means by which WKP is able to evaluate alternative demand and supply (including purchase) options for meeting its winter peak demand. Intervenors and the Commission have pointed out that the particular situation facing WKP may favour resource options that are relatively unique. These options, some of which require little or no investment, need to be examined in greater detail. On the supply-side, the utility should assess in depth its prospective B.C. Hydro and non-B.C. Hydro energy and capacity purchase options. These may prove to be less costly than development of WKP supply resources. One unique supply resource might be an agreement by Cominco to interrupt its own demand in order to contribute to WKP's winter peak capacity requirement. On the demand-side, the utility should thoroughly explore all feasible means of reducing its winter peak. Some options are technological mechanisms for load shifting; for example, the utility is advancing a water heater control that would shift water heating to off-peak periods. Other options attempt to change behaviour, for example, by increasing public awareness of the cost of peak electricity use or by charging time-of-use prices. Some options focus on demand that is potentially interruptible, whether by technological or behavioural actions. For example, there may be residential customers who use electricity for space heating yet also have adequate alternate heat sources. In industry, there may be various opportunities for firms to benefit from interruptible contracts that charge a lower price of electricity provided that the utility has the right of interruption for a certain amount of time during peak demand periods. In summary, each DSM program should be evaluated and credited for its ability to contribute to reduction of the peak demand. Guidelines #6 and #7 refer to the production of resource portfolios and an action plan. While WKP's interim IRP is understandably short on details, it nonetheless provides an informative summary of the major resource options as seen by WKP's management. Greater detail is anticipated in the future.

Guideline #8 calls for extensive public involvement in the analysis and selection of resource portfolios, preferably through a process that involves major stakeholders. In recent years, WKP management has established customer advisory panels to provide feedback on various management decisions. But WKP witnesses recognized that the advisory panels are insufficient to provide the

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extent of public involvement envisioned by the IRP Guidelines and noted in the hearing their intention to extend the public involvement process (T. 1045).

### **2.3 Demand-Side Management ("DSM") Programs**

Under its *Rate Schedule 90 - Energy Management Service*, WKP applied for the updating of its existing slate of five DSM programs and an expansion into six new programs. Mr. Ash, Senior Vice-President and Chief Operating Officer of WKP, explained WKP's DSM initiatives in his opening remarks.

*"We have the people and the desire and the urgent need to implement demand-side management. And I would simply add that given the price of power paid to B.C. Hydro compared with the revenue which results from selling that power, there is an almost unique built-in incentive to achieve DSM savings." (T. 60)*

New programs are forecast to account for 30 percent of the total DSM expenditure in 1993 (Exhibit 6). Four of the new programs are modified versions of B.C. Hydro programs while the fifth is a unique residential program fostering limited applications of ground source heat pumps.

WKP's DSM programs, categorized on a generic basis, are as follows:

#### Existing DSM Programs:

- (i) Home guard
- (ii) Energy Efficient Refrigerators (to February 28, 1993)
- (iii) Lighting
- (iv) Efficient Motors
- (v) WKP Internal

#### New DSM Programs:

- (i) R2000 Construction ( replaces Quality Plus Homes)
- (ii) Second Source Heat Pump
- (iii) New Building and Process Design
- (iv) Building and Process Improvements
- (v) Efficient Pumps and Fans
- (vi) Efficient Compressors



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In Exhibits 6, 38 and 87 WKP provided total resource unit costs of each program along with benefit/cost ratios relative to purchases from B.C. Hydro under Rate 3807. This analysis suggests that each program is economically justifiable, even without an effort at full social cost accounting, which tends to favour DSM over supply options.

As noted in the previous section in the discussion of IRP, the Commission is not yet satisfied with the information and analysis provided in support of WKP's DSM programs. First, the Commission expects WKP to provide a more complete explanation of the method it follows in estimating and evaluating DSM program costs and penetration rates. Use of a single technology as the sole indicator of avoided cost is but one mechanism for comparing supply and demand resources, and it is not necessarily the most useful in a dynamic resource planning context. Second, the Commission expects WKP to provide a more complete hindsight evaluation of the results of its DSM programs. This includes the important step of designing programs so that their operation provides feedback information to check against initial estimates of costs and penetration rates. Third, this information should be more effectively integrated into the resource planning framework, so that the Commission and the interested public can better assess the contribution of each resource to the capacity and energy needs of WKP.

**Although the Commission will require additional information in the future to justify WKP's DSM programs, the Commission is satisfied that the currently proposed programs are all economically justifiable. The Commission approves the changes to Rate Schedule 90 up to December 31, 1993, as applied for by WKP.**

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### **3.0 UTILITY EXPENSES**

#### **3.1 Power Purchases**

WKP states in its application that the driving force behind the continuing need for rate increases is the requirement for greater quantities of purchased power to meet growing loads (Exhibit 5, Tab 1).

In his summary, Mr. McIntosh (Counsel for WKP) said:

*"power purchase costs...reflect 60 percent of the increase in revenue requirements in both years." (T. 1456)*

The Application shows actual power purchase costs of \$27.8 million in 1992 and forecasted expenditures of \$32.4 million in 1993. These amounts contrast with actual 1991 expenses of \$20.4 million. In 1992, 42 percent of the power purchase costs were paid to B.C. Hydro and in 1993 it is forecast that proportion will increase to 48.2 percent. Purchases from Cominco made up the bulk of the remaining power acquisitions.

The final calculations of the cost of B.C. Hydro power are based upon Rate 3807 until September 30, 1993 and Rate 3808 from October 1, 1993, in accordance with the Commission determination contained in its letter of February 26, 1993 concerning the B.C. Hydro Rate 3808 hearing. The Application also took into account the interim increase of 3.9 percent in B.C. Hydro rates as of April 1, 1993 approved by the Commission.

The costs of Cominco power are governed by two new power purchase agreements which became effective on January 1, 1992. The contracts were approved by the Commission after a public hearing in 1991 and provide for a firm source of power until at least December 31, 1999, with the longer of the two agreements expiring September 30, 2005.

The previous Commission Rate Decision of December 20, 1990 pointed out that WKP had not aggressively investigated possible out of province power sources or storage opportunities and this was raised during the hearing. When questioned on this point Mr. Ash stated that WKP has purchased power from the BPA and will investigate possible storage with B.C. Hydro in the future (T. 106).

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Mr. Ash and later Mr. Siddall (Manager, Resources and Systems Operations for WKP) went on to explain that the BPA rates were not competitive with B.C. Hydro's Rate 3807, but that during peak winter months the power was available at a lower cost from the U.S. source.

WKP testified that they had also pursued purchases from Alberta utilities but that there were difficulties in wheeling the power into their service territory. In light of the recent B.C. Hydro Rate 3808 hearing and the Commission's stated desire that B.C. Hydro provide wheeling service to WKP, Mr. Ash anticipated that the company:

*"would therefore be in discussions with the utilities in Alberta as another option in terms of the alternatives we look to..." (T. 108)*

Several intervenors raised the issue of power purchase costs driving the rate increases and whether or not this was fair to the ratepayers in those parts of WKP's service areas which are not responsible for the large growth in power requirements. As discussed in Section 8.0, the Commission declined to examine this issue in this hearing.

The relationship of the forecasted 1993 power purchase expenses and the budgeted savings through DSM was raised in argument by Mr. Weafer, counsel for the Consumers Association of Canada (B.C. Branch) et al ("CAC et al"). They were concerned that the utility may have a low estimate of DSM potential and this would lead to an over estimation of power purchase costs. The Commission is aware of this concern and will review the results and forecasts in future hearings to ensure that WKP is prudent in their analysis.

### 3.1.1 Power Purchase Billing Disputes

On September 4, 1992 WKP applied to the Commission for relief from the take-or-pay provisions of the 1986 PPA for the 1991/92 test year. The disputed amount of \$3 million relating to energy billed by B.C. Hydro has not been recorded by the Company. On October 14, 1992, WKP made an application pursuant to Section 97 of the Act for the Commission to conduct an inquiry to determine the demand charges applicable to WKP for 1992. The Company has recorded the disputed amount of \$2.4 million as a Deferred Charge in 1992 and assumes recovery in 1993 (Exhibit 3, Tab 3, p. 13). By Commission Order No. G-119-92, both matters were referred to the B.C. Hydro Rate 3808 hearing.

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In its April 22, 1993 Decision, the Commission determined that it did not have jurisdiction to decide what contractual terms were in place at the time of the disputes.

In response to questions of the CAC et al's counsel, WKP's counsel noted that WKP was seeking legal advice as to its next step and suggested that any inquiry into the Company's liability was premature (T. 71).

Mr. Bursey, counsel for the Wholesale Customers, said that his clients would like an opportunity to comment on the disposition of the costs if they show up in rates and that it is inappropriate that the matter be deferred indefinitely and at cost to the customers (T. 1523).

**The Commission accepts that the amount of \$2.424 million paid in the demand billing dispute should stay in a deferred account outside of rate base at this time. Disposition of this account will be determined by the Commission at such time as both billing disputes with B.C. Hydro are resolved through negotiation or as the result of a court decision.**

### **3.2 Operation and Maintenance**

In the three-year period from 1990 to forecast 1993, total Operation and Maintenance ("O&M") costs have risen significantly. By far the largest contributor to this escalation has been an increase in labour costs. During this same period material costs have remained substantially unchanged (Exhibit 3, Tab 9, p. 1).

The labour wage rates for both management and union employees were reviewed and the evidence was that utility wage rates were higher than typical wages in the communities being served (T. 318) but lower than B.C. Hydro (T. 56) and some industry norms (T. 611, 1463, Exhibit 77).

There was testimony that maintenance projects suspended during the strike included activities which were cancelled and projects which were deferred, which would be caught up over a period of time with no need for extraordinary expenditures (Exhibit 71). However, there was also testimony which indicated that some programs which were already backlogged could be vulnerable to breakdowns and would require a more aggressive program to catch up, perhaps at the expense of other routine maintenance work (T. 543, 545).

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The Wholesale Customers expressed concern about the increase of 20 percent in total O&M costs in just a two-year period (T. 115). Other intervenors questioned labour costs, the expenditures incurred in supervisor bonuses during the 1992 strike and the executive incentive bonus package. The Electrical Contractors Association of B.C. questioned the efficiency of using in-house personnel and equipment for virtually all field work, including the majority of capital projects.

**The Commission is alarmed about the rapid escalation in O&M costs. There is a pressing need for management to constrain controllable costs in these difficult economic times. WKP management needs to re-examine more carefully those areas in which reductions in controllable expenses might be achieved. The Commission expects the utility to present sufficient evidence in its next revenue requirement hearing to justify O & M expenses, and any application will only be considered on this basis.**

### **3.3 Property Taxes**

Property taxes paid in 1992 increased by 18.7 percent over 1991 primarily due to the addition of substation equipment to the tax base. This has been partially offset by the creation in 1991 of a deferral account for this purpose, approved in the last Commission Decision. The offset will also apply to 1993 property taxes but, even so, they are forecast to increase by 8.8 percent due to plant additions and estimated mill rate increases.

WKP has expressed its concern to the government and the B.C. Assessment Authority that property tax levels are excessive. However, WKP expects that its revised assessments will include additional generating plant and substation equipment in the Company's 1993 tax base. Unless the mill rate is adjusted downwards to compensate, the impact could be a \$2-3 million increase in expenses (Exhibit 5, Tab 1, p. 6). The Company has assumed a 26.5 percent decrease over the 1992 mill rate in order not to reflect this impact in the Rate Application numbers (Exhibit 6, BCUC Information Request, Question 48, p. 117). The Company proposes that any property tax increase would be the subject of a separate pass-through Application. More current assessments from the B.C. Assessment Authority show the impact could increase rates later in 1993 by 4 percent (T. 136).

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Late in the hearing, Mr. Isherwood (Rates and Regulations Manager for WKP) suggested that such increases could be deferred and amortized to avoid any rate impact in 1993 (T. 656).

**The Commission is aware that actual numbers for the anticipated increase in property taxes for 1993 are not yet available. For this reason, WKP has assumed a reduction in mill rate to offset increased assessments to produce a zero impact on 1993 expenses. When the actual property tax numbers are available, any Application by WKP for a pass-through of increased tax expense will be given consideration. A decision on whether the full amount of any property tax increase will be charged to 1993 expenses or amortized over a longer period will be made following that consideration.**

### **3.4 Hearing Costs**

WKP included an estimate of \$300,000 for its cost on the B.C. Hydro Rate 3808 hearing, to be amortized over five years, and \$210,000 for the current WKP rate hearing, amortized in 1992 and 1993. Actual costs incurred were \$178,000 and \$204,000 respectively.

WKP anticipated that a Rate Design hearing would take place in late 1992 or early 1993 and included an amount of \$382,000 in 1993 Deferred Charges, to be amortized over three years (Exhibit 3, Tab 3, p. 12). This hearing is not now likely to take place until late 1993 or 1994. During questioning by Mr. Bursey, counsel for the Wholesale Customers, Mr. Ash acknowledged that those costs are more appropriate for 1994 rather than 1993 (T. 155).

**The Commission directs that the costs incurred by WKP in the B.C. Hydro Rate 3808 hearing be amortized over five years commencing in 1993. The costs for the WKP 1992/93 Rate hearing are to be recovered in the 1992 and 1993 fiscal years. The Commission agrees that recovery of costs incurred in the upcoming Rate Design hearing be deferred for consideration in 1994 revenue requirements.**

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## **4.0 RATE BASE**

### **4.1 Capital Programs**

#### **4.1.1 System Expansion and Upgrading**

In its 1989 Rate Decision, the Commission expressed concern for WKP's apparent lack of planning and directed WKP to file a ten-year system development plan with annual updates to that plan. In the 1990 WKP Rate hearing, WKP produced a "*1990 Transmission System Plan*" Volume 1, Subtransmission System, and Volume 2, Bulk Transmission System. These documents identified the expected system upgrading requirements and formed the basis for the development of WKP's capital plans and future development studies such as the South Okanagan Substation ("SOK"). WKP also produced a ten-year capital plan and five-year financial plan. These plans were updated in the 1993 rate hearing.

The Commission has not received updates to WKP's Transmission System planning reports of 1990 or yearly updates of WKP's ten-year capital plans. It is the Commission's impression that WKP's planning and capital improvement programs are suffering from a lack of consistent planning and documented justification. An example of confusion arising out of this lack of documentation is the so-called rebuild of line 43. This line had not been included in any capital plan until the 1992 plan (Exhibit 6, p. 85) but was discussed in the 1990 System Plan and the rebuild was rejected at that time. Testimony of Mr. Dube indicated that this line was still planned for upgrading to 138 kV (T. 695) and that parts had already been completed and had been undergoing various rebuilds to 138 kV standards since 1983 (T. 684). Mr. Loo indicated that WKP had no actual plans to energize this line at 138 kV but planned to review this project (T. 990). Further examples of confusion with respect to WKP's capital projects evolves from the vague use of the term "general upgrading" and "phases 1, 2 and 3" with no supporting documentation of what work is actually being done.

Generation programs such as the Dam Stabilization program appear to be well documented with respect to the overall requirements (i.e. Dam Safety Evaluation Reports by Monenco Engineering and Exhibit 6, p. 85); however, the proposed turbine upgrade projects (Exhibit 6, p. 85) lack justification documentation.

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WKP juggles its personnel between capital and maintenance projects to maintain a stable work force (T. 543, 561, 1462). The submission of the Electrical Contractors Association was that WKP is incurring inefficiencies by this practice when it could be taking advantage of lower costs through a competitive bidding process (T. 380). WKP responded by suggesting their collective agreement was a limiting factor in the "contracting out" of work by the Company (T. 510).

**In the Commission's view, the planning and execution functions of WKP's long-range capital programs need substantial improvement. A revised and improved IRP, based on realizable objectives, would be of considerable assistance in directing the Annual Capital Budget programs.**

#### 4.1.2 Quality of Service and Reliability

WKP measures distribution customer reliability according to Canadian Electrical Association ("CEA") formats for numbers of outages experienced per customer and duration of outages per customer. WKP's statistics compare favourably with CEA statistics (Exhibit 25, T.502) as compiled for Canadian utilities. Generation forced outages and generation maintenance outages also compare very favourably with statistics generated by the CEA and the National Electric Reliability Council (of which WKP is a member) (Exhibit 23, 24, T. 500). It is also apparent that WKP is collecting sufficient data to adequately assess its system reliability and is performing sufficient analysis to determine what corrective action would be appropriate if needed.

Having noted the above, the Commission also recognizes the evidence in respect of outages and power quality affecting line #43 and complaints from Princeton Light and Power Company, Limited and Apex Alpine Ski Lodge regarding the quality of service and supply from this line. Although WKP appears to have investigated complaints with this line, there does not seem to be adequate follow-up to resolve problems (T. 688). The present situation with PLP being supplied through B.C. Hydro line 1L251 and #43 open at Princeton appears to be a satisfactory temporary solution.

**The Commission directs WKP to review the line #43 upgrade program and advise the Commission on the measures taken to ensure a more reliable supply before WKP restores service to PLP through this line.**



#### 4.1.3 Head Office

WKP is completing construction of a new head office in downtown Trail at a cost of approximately \$6 million. The Commission was first made aware of the new building in the summer of 1991 when the utility requested and received confirmation that a Certificate of Public Convenience and Necessity ("CPCN") would not be necessary. WKP was advised that the costs incurred in the construction (estimated at that time to be approximately \$4.5 million) would be examined at the next revenue requirements hearing.

The Company maintained that the new headquarters were necessary as the existing facilities were no longer adequate. As stated by Mr. Ash:

*"We looked to alternatives, and the first alternative was to consider expanding where we are. It is a shopping mall. We're on the top floor, but we approached the owners of the shopping mall to see if the space could be expanded. They came back with some very high capital cost to added (sic) very small amounts of space. So we were in the order of \$1.5 million just to add, I think it was 3,000 square feet." (T. 249)*

The new facilities will increase office working space by 6,100 square feet. The \$6 million cost will not be reflected in the rate base, as WKP plans to sell the building and lease it back. The lease costs will be charged to operations at a levelized rate over a 20 year period. The Company calculates that the new lease will not affect customers rates in 1993, but will increase rates by approximately 0.25 percent in 1994, by 0.16 percent in 1995, and will reduce the impact each year after that.

By charging the lease to operations at a levelized amount, WKP is following Generally Accepted Accounting Principles ("GAAP"). A special accounting order from the Commission would be required in order to charge only the actual amounts of the lease paid in each year. As pointed out by the Company, however, accounting for the lease in this way would result in larger charges to operations to be recovered in rates in future years, rather than having the recovery take place at an even pace over the period of the lease.

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One of the main concerns of those intervenors who questioned the project was the likelihood of finding a purchaser for the building and the effect on customer rates if WKP had to finance the construction itself. The Company is confident that this is not a scenario that would develop. The investment firm of Burns Fry has been engaged to complete the sale/leaseback transaction and a letter was provided by them providing support for WKP's position (Exhibit 69).

**The Commission accepts the position taken by WKP and their method of recognizing the lease payments. In the event that the building is not sold and leased back, the costs involved in the project would be reviewed.**

#### 4.1.4 Deferred Short-Term Loan Interest

Pursuant to previous Commission Decisions, WKP forecasts its interest rate on short-term loans for regulatory purposes and any difference from actual is deferred and amortized over future years. In 1992, WKP forecast a short-term bank rate of 10.5 percent (Exhibit 3, Tab 2, p. 8). Actual short-term rates were lower, creating a credit of \$103,000 to the Deferred Charges Account. This was partially offset by a previous debit of \$75,000 and left a balance of \$36,000 available to reduce 1993 expenses (Exhibit 8, Wholesale Customers Information Request, p. 2). Counsel for the Wholesale Customers argued that, since the actual costs for 1992 are now known, the credit should be adjusted in the year it occurred (T. 1502). Short-term interest rates are not as volatile as they were when the deferred account was first set up. However, at the present time, a change in treatment would not benefit the customers.

**The Commission concurs with WKP that it should continue the practice of forecasting its short-term interest rate and deferring any differences from actual rates for amortization over future years.**

#### 4.1.5 Demand-Side Energy Management Costs

The Commission's December 20, 1990 Decision directed WKP to amortize certain DSM costs over a 20 year period commencing in 1991, which it has done in this Application (Exhibit 3, Tab 3, p. 12). In light of the new mix of programs, WKP proposes that the amortization period be reduced to ten years, effective January 1, 1994.

**For 1992 and 1993, the period shall remain at 20 years. The Commission is not prepared to accept at this time that the amortization of all DSM programs should be reduced to ten years. WKP is directed to group projects with similar life expectancies so that consideration can be given, in the future, to more than one amortization period. This will be reviewed at the next revenue requirements hearing.**

#### 4.1.5 Working Capital

Working capital is the amount of money required to cover deposits, inventory on hand and accounts receivable, less funds on hand such as employee withholdings. The final allowance for working capital presented by WKP increased from \$5.4 million in 1991 to \$8.2 million in 1992 and \$6.8 million in 1993 (Exhibit 53).

The Applicant, in response to an information request (Exhibit 8, p. 12), indicated that the forecast increase in the working capital was due to the result of a larger lead/lag study which justified a larger allowance, increased power purchase expenses, increased inventory levels and a reduction in reserves (since WKP is no longer self insuring for Workers' Compensation claims).

One large component of the working capital allowance is inventory. Average inventory levels of \$5.4 million were thought by one intervenor to be unduly high in comparison to the normal withdrawals from supply of approximately \$650,000 in each year. The Company maintained that there was a requirement to keep on hand expensive components, such as transformers, which in an emergency would be required immediately (T. 593).

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The lead/lag study is another major item making up the working capital allowance. One intervenor was concerned that WKP had not completed a review of new billing procedures which would impact the lag study, as directed by the Commission in the 1990 Decision. The Company indicated that the review was now underway, delayed as a result of staff turnover and the 1992 strike.

Commission staff scrutinized the calculation of the allowance and noted that some of the values used had not been updated. The amount representing withholdings from employees was unchanged from the 1990 hearing (Exhibit 53), although employee wages have increased. Also, the "*GST working capital impact*" had not been updated to 1992 or 1993.

In response to an information request WKP stated that the average Goods and Services Tax remittance for 1992 was \$317,000 (Exhibit 6, p. 63), while the calculation of the allowance was based on an amount of \$280,000. If this reduction of \$37,000 in the 1993 calculation of the updated amount is used, there would be a reduction of \$100,000 in the total working capital, after rounding.

**The Commission is concerned that the two issues raised regarding the working capital allowance may indicate that WKP should devote more care to ensuring that the amounts used in calculating the allowance reflect current conditions. The Commission directs that the 1993 working capital allowance be reduced by \$100,000 to a rounded amount of \$6.7 million.**

## **4.2 Major Projects**

### **4.2.1 South Okanagan Substation**

The SOK was proposed in the mid 1980's as a solution to the bulk supply for the Okanagan Valley. In 1986, B.C. Hydro committed to a joint study with WKP to determine economic and technical feasibility of the project. At that time, terms of a Power Purchase Agreement between the two companies were unresolved, as were interconnection and operating agreements (including cost sharing arrangements). In 1988 WKP purchased the land for the substation. The Commission allowed WKP to put these costs in construction work in progress ("CWIP") collecting AFUDC.

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Volume 2 of the WKP 1990 Transmission System plan examined the technical justification and, to some extent, the economic justification for the substation.

In April, 1992, B.C. Hydro and WKP completed the Joint Technical Study "*Long-Term Supply to the Okanagan Valley*" which explored the technical and economic feasibility of a number of supply options based on power purchases. This study concluded that the SOK was the best choice from an economic standpoint. Subsequently, negotiations for a revised PPA failed and pursuant to an Application from B.C. Hydro in December, 1992, the Commission issued its Decision on April 22, 1993 which defined the costs for WKP's power purchases from B.C. Hydro. About the same time WKP made an application to the Ministry of Energy, Mines and Petroleum Resources ("MEMPR") for an Energy Project Certificate for this project.

B.C. Hydro's response to an information request by Mrs. Slack suggested that the Authority no longer endorses the conclusions of the Joint Study, citing among other problems: unknowns introduced by the breakdown of negotiations of the revised PPA, the unknown extent to which WKP would rely on B.C. Hydro for its resource acquisitions, and the unresolved operating agreements which would justify system loss savings.

In this Application, WKP has projected substantial costs for Engineering and Design work and material acquisition for 1992 and 1993 for the SOK project (Exhibit 3, Tab 3, p. 7 and Exhibit 6, p. 86).

**The Commission notes that the construction of this substation may not be supported by B.C. Hydro at this time, that there are still some public issues outstanding and that no approval has yet been received from the MEMPR. Purchase of the land was placed in the Construction Work In Progress account with approval of the Commission. The Commission now directs that future expenditures are to be placed in a deferral account, outside of rate base, pending a decision on the Energy Project Certificate Application.**

#### 4.2.2 Gas Turbine

Following the 1987 decision of the Provincial Government with respect to the Company's application for an Energy Project Certificate for its proposed gas turbine, WKP carried out further studies to locate a suitable site. Commission Order No. G-4-90 had previously approved that the initial Energy Removal Certificate Application and hearing costs of \$1,516,000, including AFUDC, be allowed in Rate Base, awaiting final disposition of the project. WKP placed the additional study costs of \$502,000, incurred in 1991, into the deferral account pending review at this hearing (Exhibit 3, Tab 3, p. 12). WKP suggested amortization of the account over five years.

As the original costs had only been approved after WKP provided the Commission with a detailed justification of their prudence, Commission counsel suggested WKP provide similar details of the additional costs (T. 400). WKP responded by filing Exhibit 37 and further detailed support.

Counsel for the Wholesale Customers, and Mr. and Mrs. Slack argued for denial of the additional costs (T. 1521, 1635), although Mr. Slack suggested the original costs be amortized over five or ten years (T. 1644). Mr. Scarlett, representing the Electric Consumers Association ("ECA"), proposed that all turbine costs, including investment costs already paid by the rate payers, go into a deferred account. He further suggested that these costs not be recovered from customers but accumulated, and that the disposition of those monies be determined at the time of an Energy Project Certificate hearing into a gas turbine project. At that time all component costs would be subject to disallowance from rate base.

**Commission Order No. G-4-90 accepted the original costs of the gas turbine application and hearing in the amount of \$1,516,000 for inclusion in rate base. The Commission now directs that this amount be amortized over five years commencing in 1992. The additional costs of \$502,000 incurred subsequent to that hearing are to be retained in a deferral account, outside of rate base, until the relevance of a gas turbine project in the South Okanagan has been determined in a revised IRP which has yet to be filed and accepted by the Commission.**

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## 5.0 CAPITAL STRUCTURE

### 5.1 Introduction

WKP has applied for a 11.32 percent rate of return on rate base for 1992 and a 10.915 percent rate of return on rate base for 1993. These returns reflect the actual capital structure, including equity components of 47.41 percent and 47.31 percent for 1992 and 1993 respectively, and the actual costs of debt and preferred share capital for each of the two years, as well as an estimated cost of common equity capital. Specifically, WKP, supported by the evidence of Dr. R. Evans, has applied for the following:

#### Capital Structure and Cost of Capital - WKP Application

	1992		1993	
	Proportion	Cost	Proportion	Cost
Long-Term Debt	36.78	12.67	36.81	11.85
Bank Loans	2.25	10.50	3.69	7.00
Deferred Taxes	6.21	0.00	5.84	0.00
Preferred Shares	7.34	7.87	6.35	7.87
Common Equity	47.41	12.33	47.31	12.25
Total	100.00	11.32	100.00	10.915

(Exhibit 3, Tab 2, p. 8 as updated by Exhibit 53, Tab 2, p. 8)

In contrast, Dr. W.R. Waters, appearing for the Wholesale Customers, put forward evidence suggesting that WKP's actual capital structure contained an excessive equity component. As a result, he suggested that the Commission allow a 35 percent common equity component in WKP's capital structure and treat the remaining actual common equity as if it were preferred share equity. This results in a capital structure and cost of capital for WKP as follows:

### Capital Structure and Cost of Capital - Position of Wholesale Customers

	1992		1993	
	Proportion	Cost	Proportion	Cost
Long-Term Debt	36.78	12.67	36.81	11.85
Bank Loans	2.25	10.50	3.69	7.00
Deferred Taxes	6.21	0.00	5.84	0.00
Preferred Shares	7.34	7.87	6.35	7.87
Deemed Pref. Sh.	12.41	7.50	12.31	7.50
Common Equity	35.00	11.25	35.00	11.25
Total	100.00	10.56	100.00	9.98

(Exhibit 59, p. 1, 2, and 3)

## 5.2 Position of Applicant

Dr. Evans, appearing on behalf of the Applicant, testified that the appropriate common share equity component for WKP's capital structure was 40 to 45 percent for both 1992 and 1993. This assessment was based on a comparison of WKP's business, financial and investment risks with those of other companies with which the utility competes for capital.

Dr. Evans defined business risk as *"all of the physical, economic, political, competitive and regulatory risks to which the income-earning potential of the business assets are exposed"* (Exhibit 4, p. 5). Sources of business risk identified for the Company included risks associated with power supply, the customer base, construction and financing plans, competition, general economic circumstances in the Company's service area and regulatory risk (Exhibit 4, p. 7). In particular, Dr. Evans testified that approximately 65 percent of revenues from industrial sales are forecast to come from companies in the traditionally cyclical lumber and pulp businesses. He stated that another principal industry in the service area, mineral processing, which is expected to contribute approximately 19 percent of WKP's industrial sales in 1992/93, was also cyclical. Dr. Evans stated that the current level of the Canadian dollar and the persistent recession in the U.S. do not auger well for these industries (Exhibit 4, p. 10).



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Dr. Evans stated that financial risk is associated with the way in which the assets of a corporation are financed. The greater the proportion of debt to total capital and the lesser the proportion of common equity, the greater are the financial risks. To assess WKP's financial risk, Dr. Evans compared its capital structure to that of four other Canadian electrical utilities; namely, TransAlta Utilities ("TransAlta"), Canadian Utilities ("CU"), Maritime Electric and Fortis. His examination of WKP's capital structure showed that the Company's prospective common equity ratios exceeded those of the other electric utilities, indicating lesser financial risk on the part of WKP. Dr. Evans testified that the capital structure of each of the other utilities contained a higher proportion of preferred shares and a lower proportion of debt than did WKP's capital structure. Dr. Evans indicated that these two factors suggested the comparison utilities enjoyed lesser financial risk than did WKP, so that, on balance, WKP's financial risk was not substantially different from that of the comparison utilities.

Dr. Evans also examined alternative measures of financial risk, such as pre-tax interest and fixed charge coverage ratios for WKP and for each of the comparison utilities. On the basis of interest coverage ratios, WKP was seen to be of lower risk than three of the other four electrical utilities even though the high proportion of preferred shares in the capital structure of the other utilities improved interest coverage ratios (T. 1092). The fixed charge coverage ratio, which measures the ability of the utility to meet all of its fixed obligations including preferred share dividends, indicated WKP was of lesser risk than all four comparison utilities (Exhibit 4, p. 13).

Dr. Evans defined investment risk as the combination of business and financial risk which is appraised by investors in securities markets (Exhibit 4, p. 6). An evaluation of WKP's bond ratings indicated that it is a lesser rated utility than three of the four comparison utilities. However, Dr. Evans stated that given the size of WKP and the size of its bond issues that it was not realistic to assume that it would be able to improve its bond rating, even if its interest coverages were substantially improved (T. 1268). Similarly, Dr. Evans stated that he could "*conceive of no circumstances*" under which the shares of WKP would achieve the same ratings as those of Canadian Utilities or TransAlta because of the size of the utility (Exhibit 6, p. 155, T. 1278).

On the basis of his analysis, Dr. Evans found that the appropriate common equity component for WKP is 40 to 45 percent although the actual equity component for each of the two years is

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approximately 47 percent. To compensate for the excess equity, Dr. Evans testified that he adjusted the otherwise appropriate rate of return on equity downward by 25 basis points.

Dr. Evans argued against suggestions that the Commission disallow the extra equity and deem a capital structure. He stated that it was very rare for a Commission to deem a capital structure when the operation of the utility is the company's only business (T. 1098, 1099). If the Commission found that WKP had excess equity, Dr. Evans suggested it should allow the actual capital structure to stand but reduce the rate of return on equity which it would otherwise allow, as he had done (T. 1056). However, Dr. Evans stated that if the Commission were to deem a common equity component which was different from the actual equity component, then the Company should be allowed to recapitalize itself to reflect the deemed capital structure (T. 1057, 1058).

In addition, Dr. Evans stated that he was not concerned about an overly thick equity component since WKP was considering the construction of additional generating facilities and such a construction program would lead to a reduction in the Company's common equity ratio (Exhibit 4, p. 3). This was borne out by the Applicant's Five Year Financial and Capital Plans which indicated that the Company anticipated spending approximately \$26 million on construction in 1993, \$38 million in 1994 and \$91 million over the course of the following three years. As a result, the common equity component of the capital structure was expected to decline to 45.6 percent by year-end 1993, 41.8 percent by year-end 1994 and 39.0 percent by year-end 1997 (Exhibit 54). He suggested that, given the possibility of a substantial construction program, deeming a capital structure for WKP should be approached with some caution (T. 1058).

Dr. Evans stated that he was confident that UtiliCorp would take seriously the commitment it had made when acquiring WKP to provide required equity funds on three months notice but that "*the future is uncertain*" (T. 1059). Dr. Evans testified that deeming a lower common equity component:

*"would increase the uncertainty associated with the availability of common equity in the future, an uncertainty which this Commission actively sought to avoid when West Kootenay was originally acquired by UtiliCorp."* (T. 1059)

In response to the suggestion that WKP's common equity component be reduced to 35 percent of its capital structure and the excess equity be treated as preferred share equity, Dr. Evans suggested

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that such a reduction could cause coverage ratios to decline and if this were to occur WKP's bond rating would likely decline from A(low) to BBB. Were that to happen, Dr. Evans indicated that WKP's access to debt markets would be considerably lessened since many institutional investors have rules against holding paper which is rated below A(low) (T. 1068).

### **5.3 Position of Intervenor**

Dr. Waters, testifying on behalf of the Wholesale Customers, also examined the business and financial risks facing WKP to determine the appropriate common equity component for the Company's capital structure. Dr. Waters concluded that the appropriate common equity component for WKP was 35 percent for both 1992 and 1993. He recommended that the excess common equity, approximately 12 percent of the capital structure, be treated as preferred share equity, a treatment which *"recognizes the fact that the excess of common equity over the optimal level does, in fact, represent equity financing"* and also provides for a reasonable after-tax return to shareholders on the extra equity (Exhibit 59, p. 2).

Dr. Waters identified three categories into which the business risks faced by WKP can be assigned.

- (i) The risk that the rates will not be set at a level sufficient to provide a fair rate of return on total capital invested.
- (ii) The risk that a particular period's operating and/or financing costs will exceed those utilized in setting the rates, or that the revenues will fall short of those projected.
- (iii) The risk that at some point, WKP will be unable to set rates which are sufficiently high to enable it to recover fully its fixed costs, including those related to financing. The result would be impairment of WKP's ability to service its debt, repay its debt, or both (Exhibit 59, p. 20).

With respect to the first risk, Dr. Waters testified that investors anticipate that the Commission will continue to treat the utilities under its jurisdiction fairly and with respect to the third risk, he stated that there were no developments indicating that WKP faces substantial uncertainties regarding its

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ability to achieve its allowed rate of return (Exhibit 59, p. 21). Further, Dr. Waters stated that WKP's exposure to the second category of risk was minimal, since:

*"given the nature of the product, the absence of competition from other suppliers of the product, and the limitations on the substitution of other types of energy for electricity, the demand forecasting task facing WKP is at the low end of the spectrum of difficulty and potential for error for individual corporations. Similarly, the fact that the preponderance of WKP's costs are fixed in advance or subject to only small quantity variations place it at the low end of the range of potential error." (Exhibit 59, p. 21)*

In addition, Dr. Waters indicated that WKP has some discretion with respect to what expenses it incurs in any given period. However, he agreed that there were some circumstances such as weather and general economic conditions which the utility could not control (T. 1355). In support of his view that WKP faced minimal business risk, Dr. Waters stated that WKP has consistently demonstrated an ability to achieve a net income close to its allowed rate of return with little year-to-year variability (Exhibit 59, p. 22).

Dr. Waters agreed that the possibility of erosion of WKP's service area had become recently more apparent (T. 1327). Further, he agreed that he had not considered the effect of the Commission's February 26, 1993 determination with respect to B.C. Hydro's Rate 3808 application on WKP's business risk when preparing his evidence (T. 1328), nor had he considered the impact of the determination on WKP's construction plans (T. 1347). However, Dr. Waters rejected the notion that these issues would necessarily be seen by investors as increasing the business risk of WKP (T. 1330, 1333, 1358).

With respect to WKP's construction plans, Dr. Waters stated that he did not expect the Company's external financing requirements to be either so large or so time critical as to warrant the additional cost of financing flexibility inherent in an overly thick capital structure (Exhibit 59, p. 22).

With respect to the financial implications of his proposal, Dr. Waters testified that his recommendation would result in WKP enjoying a 2.9 times before tax interest coverage ratio and a 1.9 times before tax fixed charge coverage ratio (Exhibit 59, p. 24). This interest coverage ratio fell within the range of interest coverage ratios for utilities rated A by the Dominion Bond Rating

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Service for the period 1982 to 1991 and well above the identified range for utilities rated BBB (Exhibit 59, Table 12B).

Dr. Waters agreed that one of the reasons for the current high equity component in WKP's capital structure was the restriction that was placed on the utility as a result of the 1987 UtiliCorp hearing, namely that the dividend payout rate not exceed 44 percent (T. 1343). However, he indicated that the restriction had ended in September of 1992 and, assuming no tax implications, he foresaw no difficulties in UtiliCorp replacing the excess equity with debt capital (T. 1344, 1345, 1346). Dr. Waters stated that his recommendation to treat the excess common equity as preferred equity allowed UtiliCorp time to respond to the deemed structure (T. 1349).

The position of the Wholesale Customers with respect to WKP's capital structure was supported by the CAC et al (T. 1535).

The ECA disputed the idea that Utilicorp B.C. might be unable to provide equity capital at some time in the future, stating that "*Utilicorp B.C. has some \$20 million earmarked, we're told, for utility investment, sitting in investments here in Canada.*" (T. 1612).

#### **5.4 Commission Determinations**

On the basis of the evidence presented to it during the course of this hearing, the Commission continues to hold the opinion expressed in the 1990 Decision, namely that the recommended common equity component of 40 to 45 percent is not justified by the risks faced by WKP. Indeed, given the risks identified, the Commission agrees with Dr. Waters that the appropriate maximum common equity component is in the order of 35 percent.

Nonetheless, the Commission believes it would be inappropriate to deem a 35 percent capital structure for WKP for the 1992 and 1993 test years for the following reasons. First, the Commission recognizes that the current thick equity structure enjoyed by WKP reflects the 1987 Commission Decision with respect to the purchase of WKP by UtiliCorp United Inc. As part of the conditions for approval of the purchase, UtiliCorp agreed to the following terms:

- "4. *UtiliCorp United and UtiliCorp B.C. will provide WKPL with whatever form of financial support is necessary to allow WKPL to obtain the full*

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*benefit of UtiliCorp B.C. and UtiliCorp United's financing ability, including without limitation, guaranteeing the indebtedness of WKPL and providing the full faith and credit of UtiliCorp and UtiliCorp B.C.*

6. *WKPL will reduce its dividend payouts to 44 percent of its earnings for the next five years.*
8. *UtiliCorp United and UtiliCorp B.C. will cause WKPL to maintain an efficient capital structure satisfactory to the Commission and UtiliCorp United or UtiliCorp B.C. will contribute equity within three months of any request by the Commission to achieve or maintain the required capital structure. If UtiliCorp United or UtiliCorp B.C. are unable or unwilling to contribute the required equity themselves, they will, without delay, cause WKPL, and WKPL will use its best efforts, to make an offering of and to issue, equity securities to Canadian investors." (Commission Order No. G-31-87)*

**Although the restriction on dividend payout rates ceased to have effect in September 1992, the Commission believes that it is unrealistic to expect the Company to have restructured its capital to achieve a 35 percent common equity ratio for 1992. The Commission agrees with Dr. Evans that the utility should be allowed to recapitalize to reflect any deemed capital structure (T. 1057, 1058) and believes that such an adjustment should not be required retroactively. Therefore, the Commission accepts the actual equity component of 47.41 percent for test year 1992. The reduction in risk enjoyed by the utility as a result of the thick equity component will be reflected in the allowed rate of return on equity.**

In contrast to 1992, the Commission believes that there is sufficient time for the utility to reorganize its 1993 capital structure to reflect a more efficient level of common equity. Further, the Commission does not believe that the evidence presented at the hearing allows it to accept the argument that the Company's future construction activity will cause the utility's common equity component to decrease to prudent levels of its own accord. The Commission is firmly of the mind that all utility resource acquisitions must be justified within the context of the Company's IRP. Although WKP presented an interim IRP as part of its evidence in this hearing (Exhibit 11), the Commission believes that the issue of Commission Order No. G-27-93, which sets out the major terms under which WKP may purchase power from B.C. Hydro up to the 200 MW Customer Demand Limit, means that a new IRP is required before any resource additions can be approved.

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Therefore, the Commission finds that WKP should move to reduce, over time, the common equity component of its capital structure to approximately 35 percent from the current level of approximately 47 percent. In order to ensure that such a reduction takes place, the Commission deems a common equity component of 44.20 percent for the 1993 test year. This level reflects an assumed common equity component of 40 percent by year end. Further, the Commission directs WKP to undertake the necessary steps to achieve a common equity component of approximately 38 percent by year-end 1994 and approximately 35 percent by year-end 1995. For the purposes of establishing rates for the 1993 test year, the excess equity of 3.11 percentage points will be treated as debt and assigned a cost of 9.5 percent as a proxy for the cost of long-term debt. In making this determination as to the treatment of the excess equity, the Commission notes that WKP is acting to eliminate the preferred equity in its capital structure. As done for the 1992 test year, the reduction in risk enjoyed by the utility as a result of the thick equity component will be reflected in a lower rate of return on equity than the Commission would otherwise award. However, as the equity component has decreased over the two years, the gap in the allowed rate of return between the two years is not as large as it would otherwise be.

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## **6.0 RETURN ON EQUITY**

### **6.1 Position of Applicant**

Dr. Evans used three different methods to determine the appropriate rate of return on common equity for WKP. These were:

- The Comparable Earnings test, which estimates the investors required rate of return by measuring the return on book equity achieved by a group of unregulated industrial companies, with the same risk characteristics as the subject utility, over a selected time period;
- Discounted Cash Flow ("DCF") tests which estimate the prospective rate of return on market valued common equity for similar risk companies using a dividend yield plus growth model; and
- Risk Premium tests which estimate the necessary premium over and above the risk free interest rate, as measured by long-term government bonds, that must be paid by the utility to attract investors.

The first two methods calculate the Return on Equity ("ROE") by reference to a selected group of non-regulated companies of similar risk to the utility or for whom the difference in risk from the utility can be estimated, while the third relies on a direct comparison of utility risk to that of the equity market as a whole.

Using data reported by the Financial Post Investment Databank, Dr. Evans selected 54 companies which met specific data criteria and ranked them from lowest to highest risk based on five selected risk measures, three of which related to statistical measures of risk and two to stock rankings. The first 14 non-regulated companies comprised his primary reference group. In addition, Dr. Evans estimated the cost of capital for an alternate reference group comprised of the first 11 non-regulated companies, excluding resource companies.



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Using the comparable earnings test, Dr. Evans found that the indicated rate of return on book value for the highest quality, lowest risk unregulated companies, as represented by his sample, was 12.75 to 13.25 percent. Applying the DCF test to the same group of companies, Dr. Evans found that the investor's required rate of return was 12.0 to 12.25 percent based on market value. However, as utilities are regulated on book value, Dr. Evans stated that it was necessary to adjust this "bare-bones" return upwards to allow the utility to maintain a market to book ratio of 110 to 120 percent. Without such an adjustment, new common equity financing could not be undertaken without the risk of dilution of existing book value. This would normally result in an investors' required rate of return of 12.75 to 13.75 percent; however, as WKP is allowed to recover its out-of-pocket financing costs through its costs of service, Dr. Evans reduced the DCF estimates by 40 basis points to 12.35 to 13.35 percent.

To the results of both the comparable earnings and DCF tests, Dr. Evans made two offsetting adjustments: a 25 basis point increase to reflect the extra risk associated with WKP versus the group of reference companies and a 25 basis point decrease to reflect the reduction in risk associated with the excess equity in WKP's capital structure. However, in response to questioning as to WKP's relative risk ranking vis a vis the group of 54 companies from which he drew his reference group, Dr. Evans indicated that WKP would rank between the tenth and the eleventh company on this list, measured from least risky to most risky, based on the three statistical measures of risk used to rank the companies (T. 1194). Stock ratings are not available for WKP.

Dr. Evans also estimated the investors' required rate of return using the risk premium test. To estimate the amount of premium the equity market requires above the yield of long-term government bonds, Dr. Evans examined three studies:

- (i) The Task Force on Retirement Income Policy study which suggested a market risk premium in the 3.25 to 3.75 percent range;
- (ii) A Scotia McLeod study which suggested a risk premium of 1.25 to 2.5 percent above the yield on long corporate bonds which themselves incorporate a risk premium of 25 to 75 basis points above long term Government of Canada bonds; and

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- (iii) A study by Professors Hatch and White which suggested a risk premium of 5.0 to 5.75 percent.

On the basis of these three studies and after adjusting for factors such as changes in taxation policy over time, Dr. Evans concluded that the appropriate risk premium for low risk, high quality utilities is 3.5 to 4.0 percent. Assuming a Government of Canada long-term bond rate of 8.0 to 8.5 percent for 1993, and the mid-point of his risk premium range, the investors required rate of return is approximately 12.0 percent. However, as this value reflects the return on market value as opposed to book value, Dr. Evans adjusted this result upwards to permit new common share financing, as explained with reference to the DCF test. This result was further adjusted to reflect the difference in risk between high quality utilities (which were assumed to be of the same risk as the sample group of non-regulated companies) and WKP, the impact of the excess equity, and the recovery of out-of-pocket financing costs through the cost of service. As a result, Dr. Evans estimated the cost of new common equity for WKP as indicated by the risk premium test to be 12.35 to 13.1 percent.

Dr. Evans agreed that the risk premium he estimated for high quality low risk utilities of 3.5 to 4.0 percent was higher than the risk premium for the market as a whole as estimated by two of the studies to which he referred and that, generally, utilities were considered less risky than the market as a whole (T. 1287). However, Dr. Evans stated that he did not accept the two lower estimates of the market risk premium as reasonable because of factors such as changes in taxation rules (T. 1287).

Dr. Evans rejected suggestions that the wholly owned subsidiary status of WKP by UtiliCorp negated the need to set the ROE at a level sufficient to attract capital in the market (T. 1207, 1208). Instead, he stated that the utility and its capital needs should be assessed on a stand-alone basis. He suggested that :

*"... once you start down the path of looking upstream to who owns the company, you are then led into the position of saying that the fair return depends on the happenstance of ownership rather than the underlying risks of the assets providing the service, and that concept I reject, because that would be to say that if West Kootenay were owned by O&Y that this Commission should award a higher rate of return to West Kootenay and its customers should pay more simply because the shares happen to be owned by Olympia and York, which is very risk, as opposed to the shares being owned by say Bell Canada, which is less risky." (T. 1101)*

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Based on the above three studies, Dr. Evans concluded that the appropriate rate of return on common equity for the 1993 test year was 12.5 to 13.0 percent. Given that the yield on long-term Government of Canada bonds is expected to be approximately 50 basis points higher than the assumed bond yield for 1993, Dr. Evans concluded that the appropriate rate of return for 1992 would also be greater than for 1993. He recommended 12.75 to 13.25 percent.

Both of these recommendations exceed the rates of return on equity applied for by the Company, namely 12.33 percent for 1992 and 12.25 percent for 1993.

## **6.2 Position of Intervenors**

Dr. Waters, appearing for the Wholesale Customers, estimated the appropriate rate of return on common equity for WKP using the DCF test and the Risk Premium test. Dr. Waters rejected the comparable earnings test, stating that:

- "(i) *the concept of comparable earnings does not necessarily have any relationship with the concept of a fair return:*
- (ii) *the measurement of comparable earnings (based on accounting data) provides results which are difficult to compare meaningfully across companies and across time.*" (Exhibit 59, p. 61)

As indicated in the previous section, the DCF test is applied to samples of low risk Canadian non-utilities. Using data contained in the Financial Post's computer data base, Dr. Waters selected 208 companies which met specific data criteria and ranked them from lowest to highest risk based on five selected risk measures. His primary sample consisted of the 20 non-utility corporations which, on the basis of five risk measures, were determined to be in the lowest risk septile. Two supplementary samples were also examined, consisting of the 20 largest corporations, inclusive of financial institutions, in the lowest and next to lowest risk septiles, and the 20 largest corporations, exclusive of financial institutions, in the lowest and next to lowest risk septiles.

Dr. Waters testified that the DCF test indicated that the investors' required rate of return for low risk non-utilities was no higher than 11.0 percent. However, based on information developed as part of the risk premium test, Dr. Waters stated that the low risk non-utilities were riskier than the

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lowest risk utilities and required an investors' required rate of return some 70 basis points greater than utilities. Therefore, he deducted this difference from the 11 percent value determined above and found that the investors required rate of return for lowest risk utilities was approximately 10.25 percent (Exhibit 59, p. 59). However, due to unsettled conditions in the financial markets, Dr. Waters concluded that the risk premium test should be given greater weight in determining the cost of equity capital.

To undertake the risk premium test, Dr. Waters estimated the required risk premium for the Canadian equity market as a whole, for his sample of low risk non-utilities and for lowest risk utilities. Using historical data from five different sources, he concluded that the equity market risk premium was in the range of 4.0 to 4.5 percent. Based on three measures of share price volatility and two measures of per share earnings volatility, Dr. Waters determined that his sample of low risk non-utilities had approximately two-thirds of the risk of the equity market as a whole (Exhibit 59, p. 50) while low risk high grade utilities were only one-half as risky as the market. (Exhibit 59, p. 52) giving rise to premiums of 3.0 and 2.3 percentage points respectively.

Assuming a long-term Government of Canada bond yield of 8.0 to 8.5 percent for 1993, Dr. Waters determined the investor's required rate of return for lowest risk utilities by adding to it the premium determined above. This gives rise to an estimate of 10.25 to 10.75 percent. To this number he added 25 basis points to account for the difference in risk between WKP and the lowest risk utilities and a further 50 basis points as a margin of safety or allowance for "*flotation costs*". Dr. Waters stated that this second adjustment was intended to cover costs associated with the issue of new common equity and minimize the possibility of diluting shareholder equity if issues of new equity needed to be made into unfavourable markets (Exhibit 59, p. 4). Thus, the risk premium test indicated that the appropriate rate of return on common equity for WKP in 1993 was 11.0 to 11.5 percent.

Based on the above, Dr. Waters concluded that WKP's financial integrity would be maintained if its return on common equity were set in the range of 11.0 to 11.5 percent for the 1993 test year. The same range was recommended for 1992.

The position of the Wholesale Customers was supported by the CAC et al.

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The Regional Districts of Central Kootenay and Kootenay Boundary argued that the evidence of both Dr. Evans and Dr. Waters focused on the economic health and security of the utility and its investors and did not take into account the ability of the utility's customers to pay or the specific economic circumstances of the region (T. 1564). Characterizing such an approach as unacceptable to the public in the current "*tough*" economic environment, they called upon the Commission to administer to WKP "*a dose of reality*" (T. 1565) and allow the Company a rate of return on equity of 10 percent. They argued that such a rate met all the legal and economic criteria that must be met in setting the fair rate of return and protected the public interest.

In support of this suggestion, the Regional Districts noted that the blended or merged rate of return on common and preferred equity which flowed from Dr. Waters capital structure proposal was 10.1 percent (T. 1566, Exhibit 51, Question No. 2).

The ECA argued that it was inappropriate to award WKP the same rate of return that it would merit if it were a publicly traded company since the 100 percent ownership of WKP by UtiliCorp B.C. lessened the risk borne by the investor in the utility. As an example of the lessened risk, the ECA noted that WKP could issue additional shares to UtiliCorp B.C. without risk of diluting the value of the existing shares (T. 1610).

As a result, the ECA argued that the appropriate rate of return on common equity was no more than 10 percent.

### **6.3 Commission Determinations**

As indicated in Section 5.4, the Commission believes that the current level of common equity contained in WKP's capital structure substantially exceeds that which is appropriate. Although Dr. Evans accounted for the excess equity by recommending a rate of return on common equity 25 basis points less than he would otherwise have recommended, the Commission believes this adjustment to his findings does not adequately reflect the costs imposed on customers by the excessive equity component.

Further, the Commission is not convinced that the cost of common equity capital estimated by Dr. Evans through the comparable earnings, DCF and Risk Premium tests reflects the costs faced

by WKP. In particular, the Commission notes, that on the basis of three of the five measures used by Dr. Evans to rank companies by risk, WKP ranks between the tenth and eleventh company of the 54 companies from which Dr. Evans drew his sample, when ranking is done from least to greatest risk. In addition, the Commission is not convinced that the equity risk premium for low risk high grade utilities is appropriately estimated at a value which exceeds two of the studies on which Dr. Evans relied to estimate the market as a whole. The Commission also recognizes the discrepancies between the risk premiums estimated by Dr. Evans and Dr. Waters.

The Commission does not accept the argument that the appropriate rate of return on equity should be set with regard to the ability of customers to pay. While sympathetic to the concerns of the Regional Districts, the Commission agrees with Dr. Evans that returns to invested capital should be based on the best alternative use of that capital (its opportunity cost) and that this principle of regulation offers the greatest long run benefits to consumers.

**The Commission determines that the appropriate rate of return on common equity for 1992 is 11.75 percent and for 1993 is 11.5 percent.**

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## **7.0 RATE DESIGN CHANGES**

### **7.1 Residential Rate Flattening**

In Commission Decision and Order No. G-109-90 dated December 20, 1990, the Commission directed WKP as follows:

*"Thus, the Commission directs the Company to study specific load changes, by rate classes, in order to better understand the effect of load curtailment and growth at the margin. The purpose of such a study is to identify the sources of negative contribution margin and to target changes in rate design or DSM that will alleviate this anomaly."*

and,

*"In addition to the amended connection charge directed on Page 18 of this decision, which is intended to recover the full cost and other related charges, new tariff rates should be developed by July 1, 1991. The process should include effective public consultation with interested parties, and should have the objective of removing the negative margin referred to above."*

In June 1991 the Company responded to these directions by filing a proposal to flatten its residential rate structure. After examining the proposal, the Commission directed WKP to seek customer input. WKP reviewed the proposal with its Customer Advisory Panels and with other interested groups throughout its service area.

Currently, WKP's residential customers are served under one of three rate schedules. Schedule 1 applies to all residential customers in the Trail/Rossland area, while Schedule 3 and Schedule 4 apply to non-electric heat and electric heat customers, respectively, elsewhere in the service area. At present, all three of the Schedules consist of three blocks: a fixed bimonthly charge for the first 40 kW.h of energy, which must be paid whether or not the energy is taken, and a per kW.h charge for each of the remaining two blocks. The per unit cost declines with each successive block.

The proposed rate structure consists of a basic bimonthly charge, which must be paid whether or not any energy is taken but to which no energy attaches, and a single per kW.h charge which applies to all units of energy taken. A comparison of the existing and proposed changes is given in the following table.

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**Existing Rate Schedule 1**

For a Two Month Period

First 40 kW.h or less \$14.98  
 Next 360 kW.h at 5.176¢/kW.h  
 All over 400 kW.h at 3.847¢/kW.h

Minimum \$14.98  
 Discount 10 percent

**Existing Rate Schedule 3 and 4**

For a Two Month Period

First 40 kW.h or less \$14.98  
 Next 360 kW.h at 6.633¢/kW.h  
 All over 400 kW.h at 3.847¢/kW.h

Minimum \$14.98  
 Discount 10 percent

**Proposed Rate Schedule 1**

For a Two Month Period

Basic Charge \$14.91  
 All Energy 4.044¢/kW.h

Net Basic \$13.42  
 Discount 10 percent

**Proposed Rate Schedule 3 and 4**

For a Two Month Period

Basic Charge \$18.91  
 All Energy 4.044¢/kW.h

Net Basic \$17.02  
 Discount 10 percent

(Exhibit 6, pp. 140 and 141, T. 1014)

As shown in the table, under the current rate schedules, the fixed bi-monthly charge is the same for all rate schedules but the energy charge for the second block is lower for Schedule 1 than for Schedules 3 and 4. Under the proposed schedules, the energy charge is the same for all three schedules but the basic charge is lower under Schedule 1 than under Schedules 3 and 4. WKP stated that there was no "*necessary rationale*" for the differential in fixed charges between Schedule 1 and Schedules 3 and 4, although it maintained the differential that is present in the existing rate schedules. WKP proposes to phase out the differential over time. However, the Company stated that to do so immediately would result in a transfer of costs from the customers of one rate schedule to the other and, in addition, would result in rate impacts which the Company wished to avoid (Exhibit 6, p. 136, T. 1017). The Company showed that the financial impacts from the proposed rate changes ranged from declines of \$15 per annum (-5.4 percent) for customers consuming 4500 kW.h per annum to increases of \$46 per annum (3.1 percent) for customers consuming 40,000 kW.h per annum. Customers using less than 500 kW.h per annum, identified primarily as seasonally used cottages, vacant houses, garages etc. (T. 785), faced increases of approximately \$21 per annum (21 percent) as a result of the increase to the basic charge.



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WKP stated that it had not updated its cost of service study since its 1983 Rate Design Application but believed the residential rate flattening proposal was non-controversial and provided a platform to progress to:

*"... a rate structure with either seasonal or inverted characteristics or higher energy and/or demand in basic charges. . ."* (Exhibit 6, p. 136)

In support of its non-controversial nature, WKP testified that the proposal had received *"unanimous support ... from all parties contacted"* (Exhibit 3, Tab 17, p. 1). In addition, WKP stated that the proposed rates: were easier to understand, established a distinction between the costs of administering an account and the cost of energy, moved closer to a structure which recognizes the company's increasing marginal costs, and encouraged energy savings (Exhibit 3, Tab 17, p. 4).

WKP indicated it plans to file a complete rate design application by the end of 1993 (T. 1023).

As a general principle, the Commission does not favour piecemeal rate design changes, and would have preferred to see WKP file a complete rate design package, including a cost of service study, for the Commission's consideration. However, in this case, the Commission believes the Company has provided sufficient justification for regulatory consideration of the residential rate flattening proposal.

Based on the evidence which showed that the declining block rate structure currently embedded in the residential rate schedules is inconsistent with the increasing marginal cost structure faced by the utility, the Commission finds that it is appropriate for the utility to move to a flat residential rate structure. The Commission notes that this structure has received substantial approval from the customers most directly affected. In addition, the Commission approves the change from a minimum charge which includes an energy component to a basic charge which does not.

However, the Commission is concerned about the proposal to increase the level of the basic charge for customers served under Schedules 3 and 4 from the current minimum charge level while maintaining approximately the same level of charge for customers served under Schedule 1. The Company has testified that the difference in the basic charges for the various rate schedules does not reflect differences in the costs of serving the customers under the different rate schedules, but has been instituted to reflect a historical differential between the rates to prevent the transfer of revenue responsibility from customers served under one rate schedule to another, and to prevent

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undue rate impacts on high use customers which would occur if more of the revenue requirement is collected through the energy charge.

**Without evidence from a cost of service study to support the level of the basic charge, the Commission does not accept that the basic charge for Schedules 3 and 4 should be increased from the level of the minimum charge currently being collected. In making this determination, the Commission recognizes that there will be some shifting of the revenue requirement between Schedule 1 and Schedules 3 and 4; however, as the Company has presented no evidence to indicate that the costs imposed by the customers of one schedule are different from the costs imposed by the other customers, such a shift is acceptable.**

**Therefore the Commission orders that WKP proceed with its proposal to flatten residential rates effective October 1, 1993 but requires the Company to keep the basic charge for both schedules at the current minimum charge level of \$14.98 per two month period.**

## **7.2 General Service Rate Restructuring**

By Order No. G-109-90, the Commission directed WKP:

*"...to file tariffs which confirm the interim of 5.5 percent for 1990, to file tariffs for 1991 incorporating an increase of 5 percent to all customer classes and to apply the 1991 commercial rate allocation to reduce the rate in the second energy block of Rate Schedule 20, Small General Service and Rate Schedule 21, General Service effective January 1, 1991."*

WKP has complied with this Order and now seeks permission to further reduce the revenues derived from the second block of Rate Schedules 20 and 21 by an amount of \$700,000. The Company stated that such a reduction would have the impact of bringing the second and third blocks closer together as a step towards the eventual flattening of the rate, and would provide for a more equitable cost recovery from this class.

As indicated above, WKP has not produced a cost of service study since 1983 and therefore has no direct evidence in support of its assertion that reducing the amount of revenue collected from the general service customers will result in a more equitable cost recovery. However, the Company provided charts indicating that WKP's general service rates as a percentage of residential rates was

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substantially greater than the ratio for several other Canadian electrical utilities. In addition, WKP showed that its small commercial rate significantly exceeded that of B.C. Hydro while all of its other rates fell below B.C. Hydro's rates (Exhibit 3, Tab 17, pp. 9-11).

**The Commission accepts the evidence put forward by WKP in support of the General Service rate restructuring and orders the utility to make the proposed changes effective October 1, 1993.**

### **7.3 Rate Schedule 73 - Distribution Line Extension Policy**

This is an Application to increase the costs charged to customers for extending distribution service (Exhibit 3, Tab 16).

The Application increases the pole-in-place costs used to calculate the customer contribution to construction by approximately 24 percent and the monthly extension charge to new customers by 100 percent.

WKP estimates that the revised charges would increase customer contribution in aid of construction by \$110,000 annually. The resultant reduction in rate base would decrease revenue requirements by \$18,000 per year.

**The Commission accepts the revision in charges and directs that an amended Rate Schedule be filed for approval. The Commission points out that, in similar cases, it would be desirable to amend such charges more frequently to avoid subsidization by other customers.**

### **7.4 Rate Schedule 73 - Environmental Aesthetics**

On April 2, 1992, WKP applied to the Commission to amend Rate Schedule 73 - Extensions to add a provision to enable WKP to participate in municipal projects to meet environmental and visual aesthetic objectives. Under the policy WKP would contribute one-third of the costs of placing electric service underground for environmental impact, aesthetic reasons, and/or in response to community/public redevelopment projects. It was anticipated that one-third of the costs would be paid by the Province but the WKP share was not dependent upon this participation. The initial budget was set at \$100,000 annually. Requests exceeding the allocation would be

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resubmitted the following year and would receive priority. On June 11, 1992 the Commission advised WKP the request was denied and informed the Company that the Application would be considered at the next Rate Hearing.

The Company re-submitted the Tariff in this hearing (Exhibit 48) with a proposed effective date of January 1, 1994. The proposal is modelled after that of B.C. Hydro, except that the B.C. Hydro policy is not filed as a Tariff (T. 772). Commission Counsel's cross-examination noted some problems with the proposal, namely that the program would not be available immediately to wholesale municipal customers and that it was in conflict with the current WKP policy on above-ground service (T. 926). WKP viewed the undergrounding of lines in urban centres as being of benefit to its customers over the long-term.

**The Commission is concerned about the potential discriminatory effects of this proposed Rate Schedule and the potential for subsidization of some projects by the ratepayers in general. While the Commission supports the purpose and intent of this schedule, it is of the view that the policy requires further investigation and better refinement. The Commission encourages WKP to return at the rate design hearing with a proposal that more completely reflects the assignment of costs to those who benefit. This amendment application is rejected.**

#### **7.5 Rate Schedule 82 - New/Upgraded Service Connection Fee**

In its December 20, 1990 Decision the Commission, at page 18, directed WKP to apply for a revised connection fee *"so that new installations of residential space heating will pay the full cost of the connection and other related costs."* On January 21, 1991, WKP applied to change the connection fee for residential service to add a size of service component of \$10 per amp. above 100 amps for single-phase service and \$20 per amp. for three-phase service. The Application also requested approval to add a size of service component of \$40 for each kW over 20 kW to the connection fee for general service and industrial space heating. WKP also suggested an increase from \$27 to \$200 in the basic service connection fee. The Commission directed on June 14, 1991 *"that WKP undertake public consultative information sessions."*

On January 8, 1993 WKP amended its Application to modify Rate Schedule 82 to change the connection fees for new or upgraded service for residential and general service customers (Exhibit 5, Tab 3). The proposed fee structure is designed to move towards a more complete

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recovery of the costs of providing the service. For both classes of service there would be an increase in the basic connection fee from \$27 to \$200. For residential service only, WKP has proposed an additional variable component of \$2 per amp. for single phase service above 100 amps. and \$4 per amp. for three-phase service above zero amps. Examples of the fees for new or increased residential service, based on normal voltages, would be:

- (i) For a 100 amp. single-phase service: \$200 fee.
- (ii) For a 200 amp. single-phase service:  
\$200 basic fee plus \$2 per amp over 100 amps. \$400 fee.
- (iii) For a 200 amp. three-phase service:  
\$200 basic fee plus \$4 per amp over zero amps. \$1,000 fee.

The Application provides the cost basis for the fees. In the above examples, the fees for single-phase service represent about one half of the additional distribution plant cost and the fee for three-phase service represents about one quarter of this additional cost (Exhibit 5, Tab 3, p. 3).

The evidence shows that WKP obtained public input on the proposals primarily through its customer advisory panels. WKP testified that some survey results of residential customers indicated that a single-phase service fee greater than \$2 per amp. would be supported by the residential class (T. 455). The customer advisory panel at Castlegar, on the other hand, felt that a \$10 per amp. fee was excessive (Exhibit 6, p. 237).

WKP testified that the new fees do not have an impact on revenue requirements because the fees are customer contributions in aid of construction (T. 1030).

**The Commission approves the application for a new connection fee to take effect on October 1, 1993. This will provide WKP time to give sufficient notice to customers who may wish to modify their construction plans. WKP is also directed to apply in its next rate application, for a further revision to its connection fee for general service customers so as to add a "size of service" component.**

**One benefit of the increased connection fee for large amperage services is to encourage customers to minimize the size of their connection requirements by implementing maximum energy efficiency. Further changes to service connection policies could encourage efficient installation for all customers where this can be demonstrated to be in the interests of the customers and the utility. WKP is directed to continue to explore how its connection fee policy may be used in support of broad utility objectives including cost recovery, efficient electricity use and Integrated Resource Planning.**

**WKP is to report its finding and any recommendations as part of its next rate application.**

## **8.0 REGIONAL DISTRICT PROPOSALS**

The Regional District of Central Kootenay and the Regional District of Kootenay Boundary ("Regional Districts") appeared as intervenors at the hearing. The Regional Districts are made up of 14 municipalities and 16 electoral areas with an estimated population of 85,000 persons (Exhibit 85).

They took the position that, for various reasons, the Application by WKP should be denied and a differential rate be designed for the Kootenays and the Okanagan areas (T. 1552).

The Regional Districts stated that the territories under their jurisdiction had been disadvantaged as a result of the loss of productive land through flooding by dams and reservoirs used for the generation of power to serve primarily other areas of British Columbia (Exhibit 85). Mr. McDannold, counsel for the Regional Districts, argued that, because the Districts forego taxation on most B.C. Hydro properties, local tax-payers are required to pay 40 percent more on their individual municipal and property taxes (T. 1553). The Regional Districts also felt that there was an additional inequity in that the municipal utilities in the Okanagan are able to resell the power purchased from WKP and use the profits to lower their own general tax rates (Exhibit 85).

Another concern of the Regional Districts was the accumulative impact of successive rate increases which, together, resulted in what they considered to be undue rate shock. Rate increases were being caused by increases in power purchase costs, water rental fees, taxation and operating costs. Counsel for the Regional Districts pointed out that the 1992/93 increases applied for, together with other increases forecast by WKP within the next few years, would result in rate increases of over 50 percent in just six years (T. 1553).

The Regional Districts argued that the Okanagan area was the most costly area for WKP to serve. The rapid growth in electricity sales in the area required more costly power purchases by WKP from B.C. Hydro. Transmitting power to the Okanagan over long distances on old power lines resulted in high line losses and added cost. In addition, the high capital cost of replacing and upgrading these lines placed an unreasonable and discriminatory burden on customers in the Central Kootenay and the Kootenay Boundary Regional Districts. Their counsel maintained that it was unreasonable and unduly discriminatory for power consumers in these Regional Districts to continue to pay for the ever-increasing high costs of supplying power to the Okanagan (T. 1552).

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Based on these arguments, the Regional Districts requested the design of differential rates for the Kootenay and Okanagan areas. They also suggested that the Okanagan portion of the WKP service area ought to be transferred from WKP to B.C. Hydro. In presenting final argument, Mr. McDannold stated at T. 1555:

*"Until the Commission at the next WKP rate design hearing has the opportunity to deal with both of these issues of differential rates and adjustment of the WKP service area, they submit that WKP ought not to be granted the massive rate increases which it is currently seeking, nor should they be granted the automatic flow-through costs, nor should they get the automatic rate increases and increases in the rates of return which they are now seeking."*

Several issues have been raised. The proximity of a region to generation facilities, the negative impact of dams and reservoirs on a region and the consideration for economically disadvantaged areas are among these. In fairness, these issues cannot be examined in only one region of the province. They have far-reaching implications for the rate-making principles that the Commission applies to the entire province. As well, they have implications for public policy initiatives undertaken by government.

The argument for differential rates or service area re-allocation are not without merit. However, there are counter-arguments and challenges which were not examined in detail at this rate hearing. In particular, the postage-stamp rate making principles have served the whole service territory well for many years. The Commission must also consider the long-term implications of a move to differential rates within the context of a more competitive electricity policy in British Columbia.

**At the commencement of this rate hearing, the Commission ruled that the proposition that a preliminary discussion of the evidence of the two Regional Districts at this hearing would be of benefit to participants in a future rate design hearing (T. 35). At this time the Commission is of the view that it is unable to accept the proposals for a differential rate between the Kootenays and the Okanagan or severance of the Okanagan area from the WKP service area.**



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DATED at the City of Vancouver, in the Province of British Columbia this            day of June,  
1993.

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Dr. M.K. Jaccard  
Chairperson

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L.R. Barr  
Deputy Chairperson

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K.L. Hall  
Commissioner

## APPEARANCES

M. MOSELEY	Commission Counsel
G. MACINTOSH, Q.C. R. HOBBS	West Kootenay Power Ltd.
C. WEAVER	Consumers' Association of Canada (B.C. Branch), B.C. Old Age Pensions' Organization, Counsel of Senior Citizens' Organizations of B.C., Federated Anti- Poverty Groups of B.C., West End Seniors' Network
D. AVREN	British Columbia Hydro and Power Authority
D. BURSEY	City of Kelowna, District of Summerland, City of Grand Forks, City of Penticton, City of Nelson
G. McDANNOLD	Regional Districts of Central Kootenay and Kootenay Boundary
W. MENNELL	Fairview Heights Irrigation District
E. BEALLE	Keremeos Irrigation District
J. HALL	Princeton Light & Power Company, Limited
R. MORTON D. BETTS	Apex Alpine Recreations Ltd.
D. SCARLETT	Kootenay-Okanagan Electric Consumers Association
J. and B. SLACK	Themselves
D. GEORGE	Himself
M. HERCHAK	Himself
C. PILKEY	Electrical Contractors Association of B.C.

## LIST OF EXHIBITS

	<u>Exhibit No.</u>
West Kootenay Power Ltd. Rate Application dated November 28, 1991, Volume 1	1
West Kootenay Power Ltd. Rate Application dated November 28, 1991, Volume 2	2
West Kootenay Power Ltd. Rate Application dated November 30, 1992, Volume 3	3
West Kootenay Power Ltd. Rate Application dated January 8, 1993, Volume 4	4
Update to West Kootenay Power Ltd. Rate Application Volume 4	4A
West Kootenay Power Ltd. Rate Application dated January 8, 1993, Volume 5	5
West Kootenay Power Ltd. Rate Application dated February 11, 1993, Volume 6	6
West Kootenay Power Ltd. Rate Application dated February 25, 1993, Volume 7	7
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## EXECUTIVE SUMMARY

The Commission has made the following determinations:

1. The appropriate rate of return on common equity for 1992 is 11.75 percent and for 1993 is 11.50 percent.
2. The Commission accepts the actual equity component of 47.41 percent for 1992 and deems a common equity component of 44.20 percent for 1993.
3. WKP is directed to undertake the necessary steps to achieve a common equity component of approximately 38 percent by year-end 1994 and approximately 35 percent by year-end 1995.
4. WKP is to proceed with its proposal to flatten residential rates effective October 1, 1993 but is required to keep the basic charge level of \$14.98 per two month period.
5. The proposed changes to Rate Schedule 90 up to December 31, 1993 are accepted.
6. The amortization of energy management programs will continue over a 20 year period.
7. The proposed changes to the General Service rate are accepted as of October 1, 1993.
8. Requested changes to Rate Schedule 73 are also approved with the exception of the provision to meet environmental and visual aesthetics objectives.
9. A new connection fee is approved to take effect on October 1, 1993 for Rate Schedule 82.
10. Future expenditures on the South Okanagan Substation, other than land acquisition, are to be placed in a deferral account outside of rate base, pending a decision on the Energy Project Certificate Application.
11. The Gas Turbine costs of \$1,516,000 are directed to be amortized over a five year period commencing in 1992. Additional costs of \$502,000 incurred in 1991 are to be retained in a deferral account outside of rate base.
12. The method of recognizing the lease payments for the new head office is accepted.

13. WKP costs for the B.C. Hydro Rate 3808 hearing are to be amortized over a period of five years commencing in 1993. The costs for the WKP 1992/93 Revenue Requirements Hearing are to be recovered in the 1992 and 1993 periods.
14. The amount of \$2.424 million paid in the demand billing dispute should stay in a deferred account at this time.
15. The proposals for a differential rate between the Kootenays and the Okanagan and for severance of the Okanagan areas from the WKP service area are not accepted.



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**COMMISSION ORDER NO. G-41-93**

**SCHEDULES**

**APPEARANCES**

**LIST OF EXHIBITS**