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## **Private Water Utilities in BC**

Regulated Under the *Water Utility Act*  
and *Utilities Commission Act*

### **Financial Guidelines**

for

Certificate of Public Convenience  
and Necessity (CPCN) Applications

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## **1.0 FOREWORD**

This guide assists applicants in preparing the financial information required to support an Application for a Certificate of Public Convenience and Necessity (CPCN) and an Application for a Water Tariff, including revenue requirements and rates.

Requirements for an Application for a CPCN are outlined in the CPCN Guidelines. These Financial Guidelines are a supplement to and expansion of the financial information required and provides templates to guide the applicant. See the References section at the end of this document for further details.

## **2.0 OVERVIEW**

The Comptroller of Water Rights (“Comptroller”) is responsible for the regulation of water utilities under the *Water Utility Act* and the *Utilities Commission Act*. Under the *Water Sustainability Act*, Comptroller includes a Deputy Comptroller. As regulator, the Comptroller is charged with protecting the public interest and ensuring that rates charged by regulated utilities are fair, just and reasonable. The Utility Regulation Section of the Water Management Branch delivers to the Comptroller all the necessary information, advice and recommendations required to support approvals, decisions and orders with respect to the regulated utilities.

Although the guides noted in the References provide substantial detail, they are not intended to explain or limit the requirements for all circumstances specific to a particular utility application or proposal. It is important that applicants communicate with staff of the Utility Regulation Section at an early stage in preparing a CPCN and Tariff application. It is also important that applicants apply for a CPCN before commencing construction and that if an applicant does not do so, it bears the full risk of the costs and possible denial of the CPCN.

## **3.0 FINANCING AND VIABILITY**

In order for a utility to be a viable business entity and to provide adequate service at fair, just and reasonable rates to meet its customers’ needs, it must receive sufficient revenues to pay all operating, maintenance and administration costs and to provide for the replacement of system components by way of an annual contribution to the Replacement Reserve Fund (depreciation allowance) and have access to financing. It is expected that all facilities will be contributed by the developer with financial support and contributions to other reserves as determined by the Comptroller.

See Sections 59 and 60 of the *Utilities Commission Act* with respect to the setting of rates. Note that Section 59(4) (a) states “*It is a question of fact, of which the commission is the sole judge, whether a rate is unjust or unreasonable*”. The Comptroller will generally look to the rates of comparable utilities and the rates of utilities in the region as well as the specific operations of the Applicant in the determination of fair, just and reasonable rates.

Applicants for new utilities are required to submit a proposed Water Tariff (see References section or contact Utility Regulation Section for a sample Tariff booklet including terms and conditions and rate schedules), projected operating & maintenance costs, capital expenditures and cash flow statements and to provide rate and annual water cost comparisons to surrounding and comparable public and private water utilities.

To achieve a minimum level of viability, the owners of private utilities are expected to subsidize the operation until there are enough rate-paying customers for the utility to become self-sufficient. The subsidy may be perpetual for small utilities, and may include some or all of the following through contributions of assets, undertakings, funding, irrevocable letter of credit (“ILOC”), performance bonds and/or insurance:

- Contribution of the water works system
- Donation of time and resources
- Revenue Deficit Reserve Fund (RDRF)
- Rent Charge Reserve Fund (RCRF)
- Replacement Reserve Fund (RRF)
- Construction Reserve Fund (CRF)
- Deferred Capacity Reserve Fund (DCRF)

#### **4.0 CONTRIBUTION OF WATER WORKS**

Section 3.2 item 10.2 of the Guide to Applying for a CPCN states *“Building a utility plant to serve an area having no customers initially and financing that plant to receive a return on investment is clearly uneconomic. Construction may be feasible, however, if the person or company who benefits from the construction is prepared to contribute (with no expectation of a return on and of investment) the entire cost of installing the necessary waterworks. For that reason, it is a widely accepted practice for real estate developers to contribute to the utility the cost of constructing the waterworks to serve the land they wish to market as serviced lots. A letter to that effect is required as part of the CPCN application process (see Appendix 7) and before subdivision approval is granted.”*

In circumstances where a developer must build a private water utility, the developer is expected to contribute all of the capital plant, or water works, that will service the development. This is most often the only way to create a financially viable and stable long term water utility operation. The developer contribution required may also include underwriting operating costs and/or providing security to fund future replacement costs. Operating losses must be funded by the developer and are not recoverable by the developer from utility customers or the utility.

The original cost of the facilities is to be recorded in the appropriate asset accounts of the utility and the total value is treated as a Contribution in Aid of Construction (CIAC).

For water system extensions, it is normal for a developer to pay for all onsite servicing costs for new lots or projects, as well as connection charges for water and sewer where such services are available. The developer may also be responsible for necessary capacity expansions of all

waterworks, including treatment. The new development is absorbed into larger systems and customer bases, which helps provide rate stability and financial viability for the long term. This position is comparable to developments attaching to local government systems where contribution of the facilities and connection costs, a capacity charge and a development charge is common.

## **5.0 DONATING TIME & RESOURCES**

The developer may need to donate time and resources for:

- Management
- Engineering
- Operating & maintenance
- Meter reading and billing
- Financial reporting & accounting
- Reporting to regulatory agencies

In order to ensure that all of the activities and operating costs of the utility are reflected in the detailed accounting and regulatory reporting, these costs should be accounted for in the accounts of the utility with an offset (contra) shown separately in the designated account(s). Note that for financial statements, the net cost of donated services is nil but that the donated services should be reported by way of a note to the financial statements if they are not disclosed as a separate line item in the financial statements.

## **6.0 RESERVE FUNDS**

From time to time the Comptroller orders the establishment of reserve funds for specific purposes. They are generally provided to ensure financial viability, reasonable rates of the utility and to avoid future rate shocks. They are to be recorded as reserves and segregated from the operating accounts of the utility.

No distributions may be made from reserve funds without written authority of the Comptroller, except for interest earned on Revenue Deficit and Rent Charge Reserve Funds. The funds provided by developers and/or customers are required to be deposited into a restricted reserve account in the name of the Utility at a financial institution of its choice in BC.

### **6.1 Revenue Deficit Reserve Fund (RDRF)**

The RDRF is a required financial institution deposit in the name of the Utility by the developer with interest earnings used by the Utility to help offset revenue deficits (operating losses). A minimum of \$250,000 is required and is generally in the \$250,000 to \$1,000,000 range. Any further operating losses must be funded by the developer and are not recoverable by the developer from the Utility or its customers. These RDRFs may be returned to the developer/contributor when they are no longer required, as determined by the Comptroller. The interest earned on RDRFs is to assist utilities in meeting operating costs, including replacement provision (depreciation), where revenues are inadequate during build-out periods and possibly thereafter.

Generally the RDRF requirements are derived from the projected revenue shortfalls both during build-out and after all lots are connected. Contact Utility Regulation Section for direction and sample forecast models and Tariffs. The RDRF deposit must be sufficient to generate enough interest income from a GIC to cover the revenue shortfalls.

### **6.1.1 Rent Charge Reserve Fund (RCRF)**

Annual developer subsidizations for CPCN approval and financial viability tests are to be limited to the Availability of Service (Rent) Charges on developer owned/unsold lots up to a maximum of \$25,000 per year. Forecast financial models should show breakeven net income with rate caps set by the Comptroller and rent charges set at 70% of approved user rates. Utility owners or their agents should contact the Utility Regulation Section in the office of the Deputy Comptroller of Water Rights for direction and guidance including sample forecast models. If forecast rent charges on unsold lots exceed \$25,000 per year, the Utility owner/developer will be required to deposit enough monies into a Rent Charge Reserve Fund (RCRF) to generate sufficient interest income to reduce the subsidy to \$25,000 or less. Interest earnings on the RCRF may be used by the Utility to offset the rent charges payable by the developer or to pay the interest earned to the developer if the annual rent charges have already been paid by the developer. The latter approach is preferable as rent charges are billed annually in advance. The Utility or developer may apply to reduce the required RCRF in subsequent years as lots are sold and updated financial models support it.

### **6.2 Construction Reserve Fund (CRF)**

CRFs are generally provided by land developers as a source of capital for a known, specific project. Authorized releases may be made upon evidence of project progress and completion.

All property developments face economic risks with respect to market absorption rates, completion of development and construction and cost management. The Comptroller may require a CRF from the developer to reflect the risk of a delay in or cancellation of build-out or economic viability of the property development and an increase in construction costs. The developer will be required to provide a range of financial projections under various build-out schedules and capital costs. See Section 4.1 of the CPCN Guide for detailed requirements.

### **6.3 Replacement Reserve Fund (RRF)**

The RRF provides funds (depreciation) collected from customers and/or interest earnings from Revenue Deficit/ Rent Charge Reserve Funds to pay for replacement of water system components when required. Interest earned on the RRF is to be retained in the RRF. Funds may only be released by authority of the Comptroller, upon evidence of replacement and review by the Utility Regulation staff. The RRF monies are to be Utility property integral with the water system and, consequently, are to be included as such in the event of any change in ownership of the Utility property requiring approval of the Comptroller under Section 52 of the *Utilities Commission Act*. Utilities are expected to deposit monies into the RRF as ordered by the Comptroller as rates are collected and/or interest on Revenue Deficit/ Rent Charge Reserve Funds are earned. Total annual deposits should be equal to standard depreciation rates for the water system components as shown on the attached depreciation schedule (generally around 2.5 to 3% of the total capital cost).

The following procedures shall apply:

- a) Total capital cost for all works including costs associated with any over building of system capacity for the subject phase and previous phases are to be considered. Capital costs are to be used in the original dollar amount at the time of expenditure. Depreciation of all works shall commence on the date of the new CPCN or CPCN Amendment approval on a straight line basis.
- b) For new utilities, the developer must deposit 10 years' worth of annual RRF required contributions into the RRF as a loan to the Utility to ensure the funds stability for the initial years while lots are being marketed. This non-interest bearing loan may be repaid to the developer over ten years provided that the developer has been paying the annual rent charges on unsold lots and the Utility deposits the required amounts into the RRF.

#### **6.4 Deferred Capacity Reserve Fund (DCRF)**

The DCRF accumulates one-time charges from applicants for service from outside the boundaries of an existing utility or from subdivision of existing lots. The amounts deposited into the fund as ordered by the Comptroller and provided in the Tariff (Aid to Future Construction Charge schedule) with accumulated interest are available to pay for future expansion of water system capacity when authorized by the Comptroller. An Irrevocable Letter of Authority (ILA) signed by the Utility and its bank is required to initially set up the DCRF (Appendix 10).

The Utility may waive the required DCRF contributions if the Applicant contributes sufficient infrastructure capacity to the system such that the new application has a net zero effect on (or increases) the systems existing capacity, or if the applicant is the primary developer and has already built sufficient capacity into the system to accommodate the new demand of the application. If the Applicant does not proceed with an application within one year of paying the DCRF to the Utility, the Utility shall refund the DCRF amount per the Tariff.

## **7.0 UTILITY COST RECOVERY AND FINANCING OF FACILITIES**

### **7.1 Background**

Circumstances of the Utility constructing the water system may include:

1. Provision of service to a new property development (sub-division): Developers are required to contribute the whole water system.
2. Expansion to serve new developments: The developers are expected to pay for the capacity and any new capital costs required to provide service.
3. Expansion to serve existing developments or customers: The customers and developers are expected to pay for the capacity and any capital costs required to provide service.
4. Upgrades or replacements to the existing facilities unrelated to new development: Essential capital expenditures may be adequately provided for and funded by the Replacement Reserve Fund and/or the Deferred Capacity Reserve Fund. If not, the approaches that the Comptroller would consider for funding the costs are:
  - a. Contributions from existing customers.
  - b. Contribution/transfer of the Utility system assets to local government.
  - c. Debt funding with an interest and debt repayment plan.
  - d. Rate Base and Capital Structure in limited and exceptional circumstances only.

### **7.2 Financial Capability**

A CPCN application must provide evidence of financial capability, operating capability and long term economic viability of the utility. The financial information must include:

1. Financial projections for 10-15 years depending on build-out and economic viability and must include:
  - a. Original Cost of Facilities,
  - b. Income Statement,
  - c. Revenue Requirements,
  - d. Capital Expenditures,
  - e. Contributions to the Replacement Reserve Fund,
  - f. Cumulative Revenue Deficiency before Contributions,
  - g. Balance Sheet,
  - h. Cash Flow,
  - i. Developer and Customer Contributions, and
  - j. In exceptional circumstances only:
    - i. Cost of Capital
    - ii. Return on Equity
2. Financial projections of various build-out scenarios to assess risk and required level of developer contributions and financial support.
3. Evidence of debt and equity financing of the project and the utility.
4. Contingency plans.
5. Rate Comparisons.
6. Proposals for Reserves, Bonds and Insurance.

### **7.3 Risk**

Water utilities and the investors may face several types of business and financial risk that may need to be assessed and accommodated in determining revenue requirements and rates. Risk includes, for example:

1. Competitive risk – The risk of losing sales or customers to a lower cost alternative is unlikely for a water utility.
2. Supply risk – A utility may face a risk of inadequate water supply due to the nature of the supply. However, this risk is generally foreseeable and short term.
3. Quality risk – Water quality is managed through treatment and protection of the water supply. This risk is low and manageable but may be expensive.
4. Economic risk – A utility may face economic risk linked to the local, regional, provincial or national economy. For example, in extreme circumstances, the loss of a local industry may result in the loss of customers to the extent that the viability of the utility is at risk.
5. Operating Risk – There is a risk that operating expenses will exceed revenues and that for smaller utilities without an equity return, a loss will result and in some cases the loss may impair the financial capability of the utility. An Operating Risk Margin may be provided to reflect the operating cost risk or, alternatively, deferral accounts may be considered.

### **7.4 Operating Risk Margin for Investor Owned Utilities without a Rate Base**

For larger utilities without an approved rate base, which is the norm, the Comptroller may approve an allowance for unanticipated expenses and events in the rates in lieu of an equity return which would otherwise incorporate the business risk. One approach that may be employed is a percentage (up to 10%) of Operating & Maintenance and Administration costs (excludes interest, insurance and depreciation) of the utility that reflects the risk of the utility (operating risk margin). Alternatively, deferral accounts may be considered.

### **7.5 Capital Structure for Investor Owned Utilities with a Rate Base**

*A CPCN Application and approval is required in advance of construction. If an applicant does not do so, it bears the full risk of the costs and possible denial of the CPCN.*

*In limited and exceptional circumstances only*, a Rate Base and Capital Structure will be considered. (See 7.1, Point 4d.) The capital structure for utilities generally varies between 50/50 and 80/20 debt/equity depending on the size and risk of the utility. Factors such as interest coverage, debt service, diversity, competitive risk and other business risk affect the actual capital structure. A range of 65/35 to 60/40 debt/equity is most common.

The utility is required to achieve an economically efficient capital structure and cost of capital. To some extent cost of capital and capital structure are inter-related. The capital structure and return are approved by the Comptroller, based on a judgment of the evidence provided.

#### **7.5.1 Cost of Capital – Debt**

Short-term debt includes bank advances, credit lines, bankers' acceptances and other debt with a term of less than one year. The interest rate is the rate charged by the lender.

Long term debt includes term loans, bonds and debentures. The debt cost is based on the embedded cost of debt determined based on the interest rate and the proceeds net of costs. The utility is required to obtain financing under the most attractive and reasonable terms possible.

### **7.5.2 Return on Common Equity (ROE) for Investor Owned Utilities with a Rate Base**

The return on equity is set by the regulator, the Comptroller, based on the circumstances of the industry and the utility relative to a benchmark set by the British Columbia Utilities Commission (BCUC) for the natural gas and electric utilities, taking into account capital structure and ROE. (See Risk)

Utilities should expect an equity ratio of between 35% and 40% with a return based on a risk premium that reflects the relative risk of a water utility vs. the benchmark natural gas utility as set by the BCUC. The return may be less than, similar to or more than the level set by the BCUC, depending on the relative risk.

## **8.0 REGULATORY APPLICATIONS FOR COSTS AND RATES**

The utility (Applicant) must apply for approval of costs and rates and may do so at its discretion or as directed by the Comptroller. A forecast test period, in conjunction with comparisons to historical costs and the previous decision by the Comptroller, is generally used.

Interim rates may be granted where deemed appropriate and are subject to change when the final decision of the Comptroller is rendered.

## **9.0 REVENUE REQUIREMENTS**

The utility, when filing for approval of costs and a change in rates, must file adequate information with details, support and explanations, including, but not limited to:

- Fixed Assets
- Facility Additions
- Rate Base (Average Investment, including cash working capital)
- Operating, Maintenance and Administrative Costs
- Revenues by customer class
- Support for demand and consumption forecasts (Customer Analysis with equivalent units, etc.)
- Depreciation & Amortization
- Property & Other Taxes
- Income Taxes
- Capital Structure and Financing Costs
- Reserve Funds
- Important Changes
- Rate/Bill Impact of Proposed Rates

## 10.0 COST OF SERVICE AND RATE DESIGN

A utility may have a diverse group of customers with costs of providing service that vary materially due to the quantity of water used or facilities required to provide service. Rates should to the extent possible reflect the costs of providing service. A fully allocated cost of service study may be required from time to time to establish the cost by customer class.

## 11.0 REFERENCES

Utilities are directed to the following additional references:

Guide to Applying for a Certificate of Public Convenience and Necessity (CPCN)

[http://wwwd.env.gov.bc.ca/wsd/water\\_rights/water\\_utilities/utilities\\_application\\_index.html](http://wwwd.env.gov.bc.ca/wsd/water_rights/water_utilities/utilities_application_index.html), in particular:

Section 2.2.4 and 3.2, Item 10	Financial Considerations
Section 2.2.5	Reporting Requirements
Section 2.2.6	Strata Developments
Section 3.2, Item 1	Corporate Structure and Water Utility Organization Details
Section 4.7	Cost of Constructed Works
Appendix 2	Sample Water Tariff
Appendix 3	Check list items enclosed with CPCN Application
Appendix 6	Capital Cost Estimates
Appendix 7	Sample Letter of Contribution
Appendix 8	Sample Letter of Undertaking to Subsidize Operating Losses
Appendix 9	Sample Utility Company Projected Cash Flow Statements
Appendix 10	Sample Reserve Fund Deposit (RF-D) and Irrevocable Letters of Authority (ILA) forms
Appendix 11	Rent Charge Agreement/Availability of Service Charges

Sample Reserve Fund Orders and Irrevocable Letters of Authority forms (see Guide to CPCN for forms or contact Secretary to Comptroller for direction).

Annual Reporting Guidelines (contact Secretary to Comptroller for forms and direction).

The Reporting Guidelines and templates set out mandatory reporting requirements. For larger utilities a more comprehensive Annual Report may be required by the Comptroller.

Prescribed Uniform System of Accounts for Class A, B or C Water Utilities (to purchase through National Association of Regulatory Utility Commissioners, Washington, DC: [www.naruc.org/Store/](http://www.naruc.org/Store/)). The Uniform System of Accounts is fundamental to and forms the basis for accounting records, financial reporting, regulatory reporting, revenue requirement applications and cost of service allocations and rate design.

For “Depreciation Rates for Water System Components Form”, see “Schedule A” on website.

[http://www.env.gov.bc.ca/wsd/water\\_rights/water\\_utilities/utilities\\_application\\_index.html](http://www.env.gov.bc.ca/wsd/water_rights/water_utilities/utilities_application_index.html)