BRITISH COLUMBIA UTILITIES COMMISSION

ORDER NUMBER C-1-08

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IN THE MATTER OF
the Utilities Commission Act, R.S.B.C. 1996, Chapter 473

Application by Dockside Green Energy LLP
for Approval of a Certificate of Public Convenience and Necessity
to construct and operate a District Energy System for the Dockside Green Project in Victoria, B.C.

and

Approval of the proposed Revenue Requirement, Rate Design and Levelized Rates

BEFORE: L.F. Kelsey, Panel Chair
and Commissioner
P.E Vivian, Commissioner
A.A. Rhodes, Commissioner

April 17, 2008

O R D E R

WHEREAS:

A. By letter dated December 21, 2007, Dockside Green Energy LLP ("DGE") applied to the Commission for a Certificate of Public Convenience and Necessity ("CPCN") to construct and operate a district energy system ("DES") to provide energy service to the Dockside Green development ("Dockside Green") currently being built on the Inner Harbour in Victoria, B.C. and for approval of Service Agreements, Terms and Conditions of Service and levelized rates (the "Application"); and

B. Dockside Green is being constructed on fifteen acres of former industrial land adjacent to the Upper Harbour and downtown Victoria, between the Johnson and Bay Street bridges. The total planned development is approximately 1.4 million square feet of mixed residential, office, retail and industrial space; and

C. Dockside Green is being developed by Dockside Green Limited Partners ("DGLP" or the "developer"), which is jointly owned by Vancity Capital Corporation (Vancity") and Windmill West Properties LLP ("Windmill"); and

D. DGE, the proposed utility, was established to serve the Dockside Green community in Victoria harbor and provide space heating and domestic water service through a DES; and

E. DGE is jointly owned by Vancity, Windmill, Corix Utilities Inc. ("Corix") and Terasen Energy Services Inc. ("TES") and has selected Corix and TES to develop the DES; and

F. The DES comprises a central heating plant containing a wood-waste gasification system and back-up natural gas boilers, a distribution system comprised of insulated pipe to deliver energy in the form of heated water to customers, heat exchangers which transfer heat from the distribution system to customer buildings, and energy meters that measure the energy transferred to customers. DGE will install revenue-grade meters at the building and use these readings to issue bulk energy bills to each strata customer within the development. Each strata will then allocate the total energy costs to residents based on a pro-rata allocation of common and in-suite energy usage; and

G. DGE will be seeking to reduce the cost of serving the Dockside Green customers by serving off-site properties in close proximity to the Dockside Green development to earn incremental revenues; and

H. Dockside Green has secured federal funding to offset some of the capital costs of the DES through the Technology Early Action Measures ("TEAM") federal funding program; and

I. During the first several years of the build-out period, it is expected that operating cashflows will be less than the interest and principal payments on the utility's debt. In these instances, the developer has agreed to provide funding to make up the shortfall by way of non-interest bearing refundable customer contributions. These contributions are repayable to the developer on a straight-line basis over a six year period beginning in year 15 of the project; and

J. Corix has been contracted by DGE to provide operation and maintenance and administration services under a ten year agreement called the Energy Services Agreement. The Energy Services Agreement requires DGE and Corix to meet annually for the initial three years of the DES operations to review costs and determine operating budgets for the following year. Beginning in year four of the agreement, DGE and Corix will agree upon a fixed price, subject to the Consumers Price Index and changes in regulatory requirements, for the remaining seven years of the agreement; and

K. At the time of the Application there is a 20-year draft supply agreement between DGE and Three Point Properties to supply wood-waste at a fixed price of $25 per bone dry tonne ("BDT") for the first ten years and $30 per BDT escalating with inflation of 3 percent for the remaining ten years; and

L. DGE is proposing a 20-year levelized rate mechanism in order to provide a reasonable rate to strata customers in the early years of the project with a deemed capital structure of 60 percent debt and 40 percent equity and long-term debt financing at 6.5 percent; and

M. The proposed levelized rates are based on an annualized rate of return over the 20 years equal to the low risk benchmark utility return plus 100 basis points or 9.62 percent. Should it be necessary for rate changes during the initial ten year period due to changes in forecast revenue requirements, a revised schedule of levelized rates will be filed for approval with the Commission that allows DGE the opportunity to earn its target return over the 20-year period taking into account achieved return on equity from start-up to the current year; and

N. DGE proposes the deferral of depreciation of plant assets for the initial seven years of the operation and depreciation over 50 years starting in the eighth year of operation; and

O. DGE is proposing a fixed/variable rate structure that recovers 50 percent of forecast revenue through a fixed monthly charge per square meter and 50 percent through a volume based rate; and

P. The levelized rate term is for 20 years commencing January 1, 2009, with a rate structure that is based on a fixed charge of $2.57 per square metre per annum escalated at 3.0 percent per annum and a variable charge of $14.01 per GJ escalated at 3.0 percent per annum. The gas cost recovery charge is based on the actual cost of natural gas and allocated based on square meters to each strata on a pro rata basis; and

Q. Natural gas usage is not expected to be significant except during planned shut down periods and during peak periods at full build out. DGE is proposing a separate natural gas recovery charge applied to peak usage periods to recover actual gas costs from strata customers; and

R. There are cost risks associated with forecast customer additions and corresponding energy demand as well as construction costs. The first risk has been mitigated through the proposed rate structures and service agreements whereby DGLP has entered into a contract for the use and payment to DGE whereby DGLP will pay DGE the monthly fees until such time as a unit is sold. DGE will attempt to mitigate construction cost risk with fixed price contracts; and

S. By Order No. G-8-08 dated January 11, 2008, the Commission established a Written Public Hearing and Regulatory Timetable; and

T. By letter dated January 11, 2008, the Commission issued Information Request No.1 to DGE; and

U. By letter dated January 21, 2008 DGE filed a response to Information Request No.1; and

V. By e-mail dated January 23, 2008 SunGen Sustainable Developments Inc. filed a request for Intervenor status; and

W. By letter dated February 15, 2008, the Commission issued Information Request No. 2 to DGE; and

X. By letter dated March 6, 2008 DGE filed a response to Information Request No.2; and

Y. By letter dated March 11, 2008 DGE filed its final submission; and

Z. By letter dated March 20, 2008 DGE filed responses to outstanding questions from Information Request No. 1; and

AA. By letter dated March 20, 2008 DGE requested Commission approval for Interim Rates pending a final Decision; and

BB. By letter dated March 28, 2008 the Commission denied DGE's request for approval of interim rates prior to the issuance of a CPCN to DGE. The Commission stated that it is unlikely to object to DGE charging for such service and views the arrangements for service prior to granting a CPCN as a private matter between the parties; and

CC. The Commission has reviewed the information and finds that the Application is in the public interest subject to conditions.

NOW THEREFORE pursuant to Sections 45, 46, 59, 60 and 61 of the Utilities Commission Act (the "Act"), the Commission orders as follows:

1. The Commission grants a CPCN to DGE for the construction and operation of a DES to provide hydronic energy service at Dockside Green as set out in the Application, subject to the following conditions:

   1.1 Any extraordinary capital expenditures or operating and maintenance expenses, natural gas and/or any other fuel commodity costs that are incremental to the costs included in the revenue requirements estimate presented in the Application and are required in order that the thermal energy generation system referred to as the Nexterra Plant fulfills the role described for it in the Application and supporting material, will not be included in DGE rate base and revenue requirements and will not be recovered in DGE customer rates.

   1.2 Any extraordinary capital expenditures or operating and maintenance expenses, natural gas and/or any other fuel commodity costs that are incremental to the costs included in the revenue requirements estimate presented in the Application and are required in order to obtain, process, handle or replace the fuel source for the district energy system, including the cost of gas that is used because wood supply is not available or the cost of wood supply to the extent it exceeds the price set out in the Binding Letter of Intent with Three Point Properties LLP that is Attachment 7.1 in Exhibit B-2, will not be included in the DGE rate base and revenue requirements and will not be recovered in DGE customer rates.

   1.3 DGE has provided written confirmation to the Commission that it accepts the conditions to the CPCN, within 60 calendar days of the date of this Order.

2. If any of the conditions in the CPCN for the district energy system are not met, the CPCN is cancelled immediately.

3. DGE is responsible for obtaining all other necessary licences, permits and agency approvals.

4. DGE will file with the Commission annual reports on the construction of the district energy system that provide explanations for any material variances from the schedule and cost estimate in the Application.

5. Subject to DGE holding a CPCN for the DES, the Commission approves the revenue requirements methodology as set out in the Application and supporting materials, including that the revenue requirements will be calculated using a capital structure that has 40 percent equity, a return on equity (“ROE”) that is 100 basis points higher than the benchmark ROE that the Commission establishes for a low-risk benchmark utility, and DGE’s actual interest rate. This methodology will apply for subsequent years unless and until it is changed by future Commission Order.

6. The Commission approves the rate design proposed by DGE, which has a 50 percent variable component and a 50 percent monthly charge based on area in square metres, unless and until it is changed by a future Commission Order.

7. Subject to DGE holding a CPCN for the district energy system, the Commission approves the revised Hydronic Energy Service Terms and Conditions (the “Tariff”) for Dockside Green as set out in Exhibit B-4, Attachment 19.1, subject to DGE filing by June 1, 2008 a Tariff that incorporates the revision to Section 23 that is directed in the Reasons for Decision in Appendix A.

8. DGE will maintain separate accounts for the district energy system at Dockside Green and will file Annual Reports and financial statements that summarize the results of utility operations within four months of its fiscal year-end, and which address the directions on Annual Reports that are set out in the Reasons for Decision in Appendix A. The Annual Reports will be in a form to be developed in consultation with Commission staff.

9. DGE will provide a copy of this Order and the 24-hour emergency contact number to each current and new customer, and will maintain a copy of its approved Tariff and current customer rates for inspection by customers on its web site and, in the event it maintains an office in Victoria, at the Victoria office.

10. DGE will submit all service agreements with off-site customers to the Commission in a timely fashion, for approval as Rate Schedules or Tariff Supplements.

11. DGE will comply with all directions in the Reasons for Decision attached as Appendix A to this Order.

DATED at the City of Vancouver, in the Province of British Columbia, this 18th day of April 2008.

BY ORDER

Original signed by:

L.F. Kelsey
Commissioner

Attachment

Dockside Green Energy LLP
Application for a Certificate of Public Convenience and Necessity
To Construct and Operate the Dockside Green District Energy System

REASONS FOR DECISION

1.0 BACKGROUND

1.1 Application

On December 21, 2007 Dockside Green Energy LLP ("DGE") applied ("the Application") to the British Columbia Utilities Commission ("BCUC", "Commission") for:

(a) a Certificate of Public Convenience and Necessity ("CPCN") to construct and operate a district energy system ("DES") to provide energy service to the Dockside Green development currently being built on the Inner Harbour in Victoria;

(b) approval of:

- a levelized rate base
- forecast revenue requirements, including:
    - a deemed capital structure of 40% equity, 60% debt
    - an allowed return on equity of 9.62%
    - long term debt financing at 6.5%
    - forecast operating costs
- accounting treatment of:
    - depreciation of plant assets
    - a 20 year levelized rate structure
- rate design
- Service Agreement Terms & Conditions [Tariff]

The Dockside Green development is, if not unique, at least rare in its commitment to environmental and energy sustainability relative to current standards of development. These characteristics are described in the following section. The extent to which these factors have a bearing on the Commission's review of the Application is described elsewhere in this Decision.

1.2 The Dockside Green Project

Dockside Green is a mixed residential, office, retail and industrial development with a planned total floor space of 129,658 square meters (approximately 1.4 million square feet) on fifteen acres of formerly contaminated industrial land in Victoria. The project is to be developed in nine phases over seven years and the first phase of residential condominiums is now complete.

The developer of the project is the Dockside Green Limited Partnership ("Dockside Green LP" or "Developer"), which is owned by Vancity Capital Corporation ("Vancity") and Windmill West Properties LLP ("Windmill"). The Disclosure Statement filed with the Superintendent of Real Estate ("Disclosure Statement") and with the Commission in response to Commission Information Request No. 1 (Exhibit B-2) states that the Developer intends to construct a biomass facility to provide hot water heating to Dockside Green and will establish a private utility company to operate a wood-waste gasification system (the "Waste Wood Facility"). Further to that commitment, Dockside Green LP has established DGE as the district energy system utility.

The Dockside Green project will be a sustainable development certified by the Canada Green Building Council's Leadership in Energy and Environmental Design ("LEED"™) green building rating system (Exhibit B-1, p. 30). LEED certification involves certification and credits in five principal LEED categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. LEED-Platinum is the highest of the four possible levels of LEED certification (Exhibit B-1, p. 7; Exhibit B-2, p. 1). The Application states that the Developer's commitment to the LEED-Platinum certification is reinforced by a developer covenant with the City of Victoria that requires the Developer to pay the city a penalty for every square foot of every building that does not achieve the LEED-Platinum rating (Exhibit B-1, p. 30).

Further to the LEED-Platinum certification of the project, DGE will use a wood-waste fired gasification system provided by Nexterra Energy Corp. ("Nexterra") capable of delivering 2 MW thermal heat ("MWth") for residential/commercial district heating. Nexterra also has plants operating at the University of South Carolina and the Tolko Industries Ltd. plywood mill near Kamloops (Exhibit B-1, pp. 52-53). The energy derived from the system is intended to reduce the greenhouse gas emissions that would otherwise be produced from energy use at the development (Exhibit B-1, p. 7; Exhibit B-2, Attachment 9.3, p. 4). Technology Early Action Measures ("TEAM") funding from the federal Department of Natural Resources will provide partially repayable assistance of $1.5 million. TEAM funding supports projects that are designed to demonstrate technologies that mitigate gas emissions and sustain economic and social development (Exhibit B-1, pp. 52-53).

Also as part of the project's LEED-Platinum certification, the Developer intends to construct on-site sewage treatment systems and will establish a separate private utility company to operate the sewage systems to provide sewage service to Dockside Green, and to provide irrigation service and water for toilet facilities. DGE states that Dockside Green, with future growth, will also include sewer waste heat recovery technology to provide energy to customers through the DES (Exhibit B-2, Attachment 1.1, p. 28).

In addition, the Developer has agreed to implement certain transportation strategies including: a mini-transit service offering shuttle service from Dockside Green to various downtown Victoria locations; a car-share program offering residents the use of electric and high fuel-efficiency vehicles to be provided by the developer; and installation of bicycle racks throughout Dockside Green (Exhibit B-2, Attachment 1.1, p. 28).

The Application states that all of the buildings in the development will be designed to outperform the Model National Energy Code for Buildings by at least 40 percent which "…will translate into savings for occupants as well as peak electricity demand reductions that will benefit the Province of BC" (Exhibit B-1, p. 31).

1.3 Dockside Green Energy LLP

DGE is jointly owned by Corix Utilities Inc. ("Corix"), Terasen Energy Services Inc. ("TES"), Vancity and Windmill. Corix, Windmill, and TES each own a 17 percent interest in DGE and Vancity owns the remaining 49 percent. Corix is experienced in the ownership and operation of utility and district energy systems, and DGE has contracted with Corix to provide utility operations (Exhibit B-1, pp. 2-8).

In addition to serving the customers within the Dockside Green development, DGE will be seeking to serve customers in close proximity to, but outside of, the project ("Off-site" customers) in order to earn incremental revenues and reduce the cost of serving the Dockside Green customers. Although DGE states that it has received expressions of interest from other nearby developments and is engaged in other nearby prospects, the only Off-site customer currently forecast to be served by DGE is a Delta Hotel. DGE currently has a Memorandum of Understanding ("MOU") with the Delta Hotel and DGE assumes that the Delta Hotel MOU will be converted into a sales agreement with no material changes (Exhibit B-1, pp. 20-21).

DGE will meter energy use at the building level and will bill each strata as a separate customer. Each strata will sub-meter energy use for the purpose of allocating energy costs within the strata (Exhibit B-1, p. 8).

1.4 Regulatory Process for Review of the Application

DGE filed its Application on December 21, 2007. By Commission Order No. G-8-08 dated January 11, 2008, the Commission determined that a written public hearing process was necessary to review the Application and a public notice and Regulatory Timetable were prepared. On February 28, 2008 DGE's letter to the Commission requested that the Regulatory Timetable be revised, and by letter dated February 29, 2008, the Commission accepted DGE's proposal.

The Commission issued Information Requests No. 1 and 2 to DGE on January 11, 2008 and February 15, 2008, respectively and DGE filed its responses on January 21, 2008 and March 6, 2008 respectively. On March 11, 2008 DGE filed some outstanding responses to Information Request No. 1 and its Final Submission.

The only party to intervene in the written hearing process was SunGen Sustainable Developments Inc., which did not file information requests, evidence or final submissions with respect to the Application.

On March 20, 2008 DGE filed a request for approval to charge the rates proposed in the Application on an interim basis in order to supply hydronic energy service to the initial strata complex at Dockside Green based on the applied-for rates and terms and conditions pending a final Commission Decision. The Commission, by letter dated March 28, 2008, concluded that it would not be appropriate to approve rates for Dockside Green prior to the issuance of a CPCN to DGE and denied DGE's request for approval to charge rates on an interim basis. The Commission noted that the lack of a CPCN and approved rates should not of itself prevent DGE from providing service to customers at Dockside Green, and the Commission would be unlikely to object to DGE charging for such service, as it views the arrangements for service prior to granting a CPCN as a private matter between the parties.

2.0 CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

DGE applied pursuant to Sections 45 and 46 of the Utilities Commission Act ("UCA" or "Act") for a CPCN to construct and operate a DES to provide energy service to the Dockside Green development.

Section 45 of the UCA states, in part:

> "**45** (1) Except as otherwise provided, after September 11, 1980, a person must not begin the construction or operation of a public utility plant or system, or an extension of either, without first obtaining from the commission a certificate that public convenience and necessity require or will require the construction or operation."

Section 46 of the UCA states, in part:

> "(1) An applicant for a certificate of public convenience and necessity must file with the commission information, material, evidence and documents that the commission prescribes.
>
> (2) The commission has a discretion whether or not to hold any hearing on the application.
>
> (3) The commission may issue or refuse to issue the certificate, or may issue a certificate of public convenience and necessity for the construction or operation of a part only of the proposed facility, line, plant, system or extension, or for the partial exercise only of a right or privilege, and may attach to the exercise of the right or privilege granted by the certificate, terms, including conditions about the duration of the right or privilege under this Act as, in its judgment, the public convenience or necessity may require."

The Commission reviewed the Application through a written hearing process as described above and notes that there was no opposition to the Application. The Commission understands the nature of both the DES and the Dockside Green project to be unique in many respects. The thermal energy generation system technology proposed for the DES will be provided under contract as a "turn key" installation (Exhibit B-1, p. 12). A multi-year draft contract for the supply of biomass for the DES is in place (Exhibit B-1, p. 39). The Commission considers the unique nature of the development, the emerging technology of the thermal energy generation system and the security of supply and quality of biomass to be risks unique to this project and, to properly conserve the public interest, should be shareholder risks. These issues are addressed elsewhere in this Decision.

Commission Determination

The Commission Panel approves the CPCN Application for the DES as described in the Application subject to the conditions made elsewhere in this Decision. DGE will provide written confirmation to the Commission accepting the conditions of the CPCN within 60 calendar days of this Order. Should such confirmation not be received the CPCN is cancelled immediately.

3.0 RATES

3.1 Adjustment of Rates

DGE states that because it has proposed offering levelized rates, it will be forgoing a portion of its allowed return during the build-out period in order to offer customers lower initial rates, and that the opportunity for generating additional revenue (from off-site customers) reduces the under-earning in the early years of the project (Exhibit B-2, p. 7). DGE is proposing that additional revenues from other off-site customers be credited to the utility in order to allow a potential equity return over the 20-year period that is equal to or in excess of the target ROE (Exhibit B-1, p. 49).

DGE also states that it "…would adjust the levelized rates provided that DGE has earned a cumulative average rate of return since the inception of rates exceeding its allowed rate of return or if such rate adjustment would not otherwise impair DGE's ability to earn a reasonable rate of return on its investment over the term of the levelized rate period" (Exhibit B-2, p. 7).

Commission Determination

The Commission Panel notes that the allowed rate of return is not a guarantee that the utility will achieve that return, and also that a levelized tariff rate over time implies a recognition that there may be over-earnings in some years that compensate for under-earnings in the early years of a project**. The Commission Panel determines that given the nature of the Dockside Green project the levelized rate proposed, including the proposed deferral of depreciation of plant assets for the Dockside Green project, is appropriate.**

The Commission Panel determines that in its Annual Reports, DGE should include a calculation of the cumulative average rate of return since the inception of rates. The Commission will consider that cumulative average rate of return along with any other factors it considers appropriate to determine at that time whether a revision to the tariff rate is required.

4.0 REVENUE REQUIREMENTS

4.1 Capital Structure and Return on Equity

DGE states that it expects to capitalize 60 percent of the net rate base with long term debt, with the interest rate on the debt expected to be 6.5 percent and amortized over 258 months. DGE expects to capitalize the remaining 40 percent of the rate base with common equity "…at a target return on equity (ROE) of 9.7 percent, which is based on the current allowed ROE for a low-risk benchmark utility plus 100 basis points" (Exhibit B-1, p. 39). DGE subsequently revised its financial model to incorporate an ROE of 9.62 percent, which is 100 basis points greater than the 2008 allowed ROE for a low-risk benchmark utility of 8.62 percent (Exhibit B-4, p. 7).

DGE states that the capital structure and target ROE provide the utility owner an opportunity to earn a fair return on invested equity taking into consideration various risks associated with the enterprise (Exhibit B-1, pp. 48-49). DGE provides a table showing the capital structures and risk premiums for some other British Columbia utilities and submits that DGE's business risk is directionally higher than established utilities because "…DGE is a new business venture employing emerging technology, in which the exact nature of future customer needs is difficult to estimate with precision" (Exhibit B-4, p. 6).

DGE highlights the energy demand risk arising from the long lead time required for the Dockside Green project and the consequent uncertainty in forecasting the composition of future housing and timing of customer additions. DGE notes that the assumed energy use volumes for Dockside Green are based on engineering estimates that consider the expected energy requirements associated with LEED-Platinum standards, and that the volume risk arises from occupancy, energy intensity, weather and other forecast errors (Exhibit B-4, p. 4). DGE notes that it has mitigated the demand forecast risk in large part through the proposed rate structures (a 50 percent fixed/50 percent variable rate structure) and through Service Agreements with DGLP (Exhibit B-1, p. 48).

The other significant risk claimed by DGE is that of construction cost escalation, which it submits has also been mitigated through the Service Agreement with DGLP. DGE also states that it will attempt to further mitigate the risk through fixed price contracts (Exhibit B-1, p. 48). DGE confirms that Nexterra has offered a fixed price turn key contract for the gasification plant, back-up boiler and building, and that DGLP will provide the site preparation, road access, landscaping and all required utilities to the central heating plant. DGE further confirms that the only areas of uncertainty arise from changes to the specifications or scope of the project required by DGE (Exhibit B-2, p. 9).

Other risks cited by DGE include:

- Operating cost inputs and inflation rates;
- Uncertainty of Off-site sales volumes;
- Unknown escalation rates of competing fuels; and
- Small size company and limited customer base.

DGE is proposing that changes in non-controllable costs be flowed through in future onsite rates, such changes to include changes in plant operating costs during the initial three years, changes in biomass, natural gas, and electricity costs, and changes in legal and regulatory requirements. The achieved return on capital over the 20-year levelization period would be subject to future reviews for reasonableness by the Commission (Exhibit B-1, p. 49).

The risk of cost changes related to the primary fuel (wood-waste) for the Wood Waste Facility, is limited by the binding letter of intent between DGE and the supplier, Three Point Properties LLP ("Three Point"), which provides for a 20-year supply of fuel at a fixed price of $20 per BDT for the first ten year period and $30 per BDT for the subsequent ten year period. DGE notes that the arrangement with Three Point provides the utility with a reliable supply of biomass that meets the Nexterra specifications at a stable predictable cost, but that the arrangement does not restrict the utility from pursuing other supply sources, which may enhance price-competitiveness (Exhibit B-2, p. 5).

Commission Determination

The Commission has reviewed the evidence provided by DGE and concurs that there are risks associated with the project, but also notes that DGE has taken measures to mitigate those risks. Such measures include the levelized rate structure that includes a higher fixed rate component than typical utility rates, the use of cost or risk sharing agreements, and the use of fixed price long-term contracts.

DGE provided a list of some other B.C. utilities and the capital structures and risk premiums allowed for those utilities (Exhibit B-4, p. 6) and the Commission has also considered those comparables.

Finally, the Commission has considered the LEED-Platinum design of the Dockside Green development and that all of the buildings in the development will be designed to outperform the Model National Energy Code for Buildings by at least 40 percent, which will translate into savings for occupants. Vancity and Windmill make up DGLP and own 49 percent and 17 percent of DGE respectively. In the Commission's view, the allowed capital structure and ROE should not penalize green developments that incorporate DES.

The Commission determines that given the unique nature of this project, its small size, and the fact that it is an entirely greenfield project, the applied-for capital structure and risk premium of 100 basis points should be approved. The Commission also determines that even though the levelized rate is based on an ROE of 9.62 percent, DGE should use the ROE for a low-risk benchmark utility as determined by the Commission plus the additional 100 basis points allowed as a basis for calculating its allowed earnings for each year for service to Dockside Green.

The Commission conditionally approves the long-term debt financing rate of 6.5 percent but requires that any debt instrument be filed with the Commission and such instrument will be subject to acceptance at that time.

5.0 TARIFF TERMS AND CONDITIONS

5.1 Sections 22 and 23

Section 22: Term of Service Agreement states that the initial term of the service agreement, when a Main Extension is required, will be for a period of time fixed by the utility not exceeding the number of years used to calculate the revenue in the Main Extension test. The Main Extension test is an economic test described in Section 10 of the Tariff Terms and Conditions, and establishes that if the economic test results indicate a negative net present value for a proposed extension, the extension may proceed if the customers to be served by the extension provide a contribution in aid of construction so that any projected revenue shortfall is eliminated. Section 23: Termination of Service states, among other things, that termination of service may result in the customer being charged the full cost of all infrastructure associated with the provision of service to the customer as determined by the utility to ensure other customers are not adversely impacted by the termination.

The Commission Panel is not persuaded that the requirement in Section 23 indicating that a customer terminating service may be charged the full cost of all infrastructure associated with the provision of service to the customer "…as determined by the utility…" is necessary or in the public interest. The Commission Panel also notes that the "…full cost of all infrastructure…" is not a defined term. While the Commission Panel can speculate or assume that the "full cost" refers to the depreciated book value of the infrastructure in question, and that the use of the depreciated book value might be sufficient to ensure that other customers are not adversely impacted, it is not clear that such is the case. The Tariff provision as currently worded would not preclude an argument that full cost refers to the original, undepreciated cost of the infrastructure.

Commission Determination

Provisions concerning recovery of infrastructure costs may be appropriate and may be included in contracts between the DGE and the Developer, and ultimately stratas within the Dockside Green development. That appears to be within the control of DGE and the Developer. For new Off-site attachments, to the extent that they require new infrastructure, the Commission Panel is of the view that DGE has the ability under Section 22 to set a term of service equal to the number of years used to calculate the revenue in the Main Extension test. Therefore, the Commission determines that contractual provisions between the customers and DGE, the Main Extension test, and the ability of DGE under Section 22 to establish for any new customer on a main extension a term of service that is equal to the number of years used to calculate the revenue in the Main Extension test, in combination, provide adequate protection to DGE, without the need for the noted provision in Section 23. **Consequently, the Commission directs DGE to remove the sentence that reads as follows from Section 23:**

> **"Termination of Service may result in the Customer being charged the full cost of all infrastructure associated with the provision of Service to the Customer as determined by the Utility to ensure other Customers on the Hydronic Energy system are not adversely impacted by the termination."**

The Commission also requires that any rate changes, which may be required either for new or existing customers, be included in a tariff and submitted to the Commission for approval prior to such rates coming into effect.

6.0 RESPONSIBILITY FOR RISKS

DGE identifies a number of risks and notes the actions it has taken to mitigate many of the risks. The Commission, in approving the requested capital structure and ROE, is recognizing the risks associated with the unique nature of the project, in every respect.

For greater clarity and certainty the Commission addresses the following risks and clarifies responsibility for each.

6.1 Thermal Energy Generation System

DGE states that Nexterra has been contracted to provide a turn key gasification system that will supply 2 MWth of hot water to the Dockside Green DES and that the gasification system will be housed to ensure that there is no disturbance to the local community from the gasification system operations (Exhibit B-1, p. 12). Nexterra will guarantee the heat generation capacity and emissions for the gasification system (Exhibit B-1, p.18). The system will have a 3.4 MWth natural gas back-up system that will provide peaking capacity and back-up heat when the gasification plant is not in operation. The Application states that as a requirement of the LEED-Platinum designation, any credits or monetary value assigned to greenhouse gas emissions at Dockside Green will be owned by the developer (Exhibit B-1, p. 33).

DGE, in its justification for requested equity ratio and risk premium, describes the operation as a "new business venture employing emerging technology" (BCUC IR 2.23.1). The Commission is of the view that in allowing the requested equity ratio and risk premium, customers should not be exposed to risks from uncertainties related to the "emerging technology". Furthermore, the inability of customers to share in any monetary benefits related to the greenhouse gas impact of this technology indicates that it would not be reasonable for them to be responsible for any extraordinary costs that may be required in order to realize such benefits.

Commission Determination

Any extraordinary capital expenditures or operating and maintenance expenses, natural gas and/or any other commodity costs that are incremental to the costs included in the revenue requirements estimate presented in the Application and are required in order that the thermal energy generation system referred to as the Nexterra Plant fulfills the role described for it in the Application and supporting material, will not be included in DGE rate base and revenue requirements, and will not be recovered in DGE customer rates.

6.2 Biomass Plant Fuel and Operating Costs

DGE states that biomass for the gasification plant will be supplied from local sources and, at the time of the Application, there is a draft 20-year fixed price agreement between DGE and a local supplier to supply wood-waste (Exhibit B-1, p. 38). DGE states that in addition to this draft agreement it has identified several alternate sources of supply should these be required. DGE proposes that changes in non-controllable costs be flowed through in future onsite rates, and includes in those costs, changes in plant operating costs and changes in biomass costs. In view of the costs stated in the draft 20-year fixed price agreement, which underpin the economics of the DES and the assurance of alternate sources of supply, and consideration of the risks associated with emerging technology in the ROE, the Commission Panel will not permit the customer to be exposed to the risk of higher costs for biomass fuel.

Commission Determination

Any extraordinary capital expenditures or operating and maintenance expenses, natural gas and/or any other commodity costs that are incremental to the costs included in the revenue requirements estimate presented in the Application and are required in order to obtain, process, handle or replace the fuel source for the district energy system, including the cost of gas that is used because wood supply is not available or the cost of wood supply to the extent it exceeds the price set out in the Binding Letter of Intent with Three Point Properties LLP that is Attachment 7.1 in Exhibit B-2, will not be included in the DGE rate base and revenue requirements, and will not be recovered in DGE customer rates.

7.0 ANNUAL REPORTING REQUIREMENTS

Section 24 of the Act requires that:

> "In its supervision of public utilities, the commission must make examinations and conduct inquiries necessary to keep itself informed about
>
> (a) the conduct of public utility business,
> (b) compliance by public utilities with this Act, regulations or any other law, and
> (c) any other matter in the commission's jurisdiction."

In compliance with Section 24, the Commission has directed the utilities under its jurisdiction to file Annual Reports within four months after the end of the financial year. The Commission is empowered to require the Annual Report filing pursuant to Section 49 of the Act which states that:

> "The commission may, by order, require every public utility to do one or more of the following:
>
> (a) keep the records and accounts of the conduct of the utility's business that the commission may specify, and for public utilities of the same class, adopt a uniform system of accounting specified by the commission;
>
> (b) provide, at the times and in the form and manner the commission specifies, a detailed report of finances and operations, verified as specified;
>
> (c) file with the commission, at the times and in the form and manner the commission specifies, a report of every accident occurring to or on the plant, equipment or other property of the utility, if the accident is of such nature as to endanger the safety, health or property of any person;
>
> (d) obtain from a board, tribunal, municipal or other body or official having jurisdiction or authority, permission, if necessary, to undertake or carry on a work or service ordered by the commission to be undertaken or carried on that is contingent on the permission."

The Commission direction to utilities regarding the annual report requirements were updated in Commission Letter No. L-36-94.

The Commission has established an Annual Report form for steam/hot water utilities that are applicable to DGE. DGE can obtain a copy of the Annual Report forms for steam/hot water utilities from the Commission.

DGE's Annual Report to the Commission is also to contain an updated CPCN Summary section of the Financial Model that was submitted in Exhibit B-4 ("Updated CPCN Summary"). The Updated CPCN Summary in DGE's Annual Report to the Commission is to show the forecast and actual results by year from 2009 to 2018 with an explanation of the variances in the current year from forecast.