

William E Ireland, QC
Douglas R Johnson*
Alan A Frydenlund*
James L Carpick*
Michael P Vaughan
Heather E Maconachie
Michael F Robson*
Zachary J Ansley
Pamela E Sheppard

D Barry Kirkham, QC*
Josephine M Nadel*
Allison R Kuchta*
Christopher P Weafer*
Gregory J Tucker*
Terence W Yu*
James H McBeath*
Susan C Gilchrist
George J Roper

Robin C Macfarlane*
James D Burns*
Daniel W Burnett*
Paul J Brown*
Karen S Thompson*
Harley J Harris*
Paul A Brackstone*
Edith A Ryan
Daniel H Coles

J David Dunn*
Duncan J Manson*
Harvey S Delaney*
Patrick J Haberl*
Gary M Yaffe*
Jonathan L Williams*
Scott H Stephens*
James W Zaitsoff

OWEN BIRD

LAW CORPORATION

PO Box 49130
Three Bentall Centre
2900-595 Burrard Street
Vancouver, BC
Canada V7X 1J5

Telephone 604 688-0401
Fax 604 688-2827
Website www.owenbird.com

Direct Line: 604 691-7557
Direct Fax: 604 632-4482
E-mail: cweafer@owenbird.com
Our File: 23841/0077

Carl J Pines, Associate Counsel*
R Keith Thompson, Associate Counsel*
Rose-Mary L Basham, QC, Associate Counsel*

Hon Walter S Owen, QC, QC, LLD (1981)
John I Bird, QC (2005)

* Law Corporation
* Also of the Yukon Bar

August 22, 2012

VIA ELECTRONIC MAIL

British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Erica Hamilton, Commission Secretary

Dear Sirs/Mesdames:

Re: FortisBC Alternative Energy Services Inc. Application for a Certificate of Public Convenience and Necessity for the Approval for the PCI Marine Gateway Thermal Energy Project and Approval of Rates for Thermal Energy Service to PCI Developments Inc., Project No. 3698677

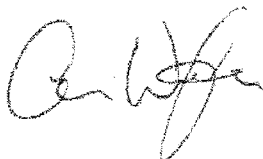
We are counsel for the Commercial Energy Consumers Association of British Columbia (CEC). Attached please find the CEC's Final Submission pertaining to the above-noted matter.

A copy of this letter and attached Final Submission have also been forwarded to FortisBC and registered interveners by e-mail.

If you have any questions regarding the foregoing, please do not hesitate to contact the undersigned.

Yours truly,

OWEN BIRD LAW CORPORATION



Christopher P. Weafer

CPW/jlb
cc: CEC
cc: FortisBC
cc: Registered Intervenors

**COMMERCIAL ENERGY CONSUMERS (“CEC”) ASSOCIATION OF BC
FINAL SUBMISSION**

FOR THE FORTISBC ALTERNATIVE ENERGY SERVICES (“FAES”) INC.

**APPLICATION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
 (“CPCN”) FOR THE APPROVAL OF THE PCI MARINE GATEWAY THERMAL ENERGY
PROJECT AND THE APPROVAL OF RATES FOR THE THERMAL ENERGY SERVICE TO
PCI DEVELOPMENTS INC. (THE “APPLICATION”)**

AUGUST 22, 2012

Part 1: Approvals Sought

FortisBC Alternative Energy Services Inc. (“FAES”) has entered into agreements with PCI Developments Inc. (“PCI”) to provide thermal energy for heating and cooling at a mixed use commercial and residential development at Cambie and Marine Drive in Vancouver (“the Development”) and seeks the following approvals:

- A Certificate of Public Convenience and Necessity (“CPCN”) for the construction and operation of the thermal energy project described in this application pursuant to section 45 and 46 of the Utilities Commission Act (the “Act”)¹
- Approval of the rates established by the Service Agreement filed with the Application including the capital structure, return on equity, and depreciation rates, as just and reasonable rates under sections 59-61 of the Act.

The approvals sought will allow FAES to construct and operate the thermal energy system (“TES”) for the project and implement the necessary rate structures and approvals to provide thermal energy to the tenants of the Development.

The CEC supports the proposed CPCN and agrees that the rates established in the Service Agreement are just and reasonable under sections 59-61 of the Act. It is also noted that the agreements between FAES and PCI allows for conditions that may be specified from the British Columbia Utilities Commission. (the “Commission”)²

Part 2: Applicable Legal and Regulatory Framework

FAES states that in the Act the definition of a “public utility” means a person, or the person’s lessee, trustee, receiver or liquidator, who owns or operates in British Columbia, equipment or facilities for

- (a) the production, generation, storage, transmission, sale, delivery or provision of electricity, natural gas, steam or any other agent for the production of light, heat, cold or power to or for the public or a corporation for compensation...³

¹ FAES Final Submission, Page 3

² Exhibit B-6 CEC 1.16.1

³ FAES Final Submission, Page 3

In this case such a service is being provided to PCI for the delivery of an agent to produce heat for compensation. Consistent with the Delta School District and Tswassen Springs projects which were both projects of a similar nature to this one in which both were determined by the Commission to be regulated under the UCA. Thus, FAES states that the provision of thermal energy service to PCI is a regulated service under the Act.⁴

The CEC agrees with FAES in that the service being provided is a regulated ``public utility`` service as defined in the Act

FAES states that pursuant to section 45 of the UCA, it is required to obtain a CPCN prior to constructing and operating the Project. Section 45 requires the weighing of interests of the affected members of the public and any legislated considerations in arriving at an opinion of whether a given project is in the public interest. The project mainly deals with the interests of PCI and the future tenants of the Development who will receive service from FAES. However, FAES states that public interest considerations relevant to this project include existing and future TES customers as well as City of Vancouver and it`s residents.⁵ It should be noted that this TES will be designed to be connectable with the energy systems of other developments as part of the City of Vancouver`s rezoning conditions. Such expansion plans will be re-examined once more detailed information is available for the adjoining sites.⁶

The Commission must also consider British Columbia`s energy objectives when assessing this CPCN which entails a consideration of the broader interests of the public.

The CEC agrees that pursuant to section 45 of the ACT, FAES is required to obtain a CPCN prior to construction and operation of the Project

The Commission must also approve the necessary rate structures to provide energy service to PCI pursuant to sections 59-61 of the UCA. FAES states that the terms and conditions of service applicable to PCI accord with the basic cost of service ratemaking principles that recover a ``fair and reasonable charge`` for service which accounts for a fair return on equity taking into account overall business and financial risk associated with delivering service to PCI.⁷

The CEC supports the proposed rate structure and agrees that the rates reflect a fair return on equity based on overall business and financial risk associated with delivering service to PCI.

⁴ FAES Final Submission, Page 3

⁵ FAES Final Submission, Page 3

⁶ Exhibit B-1, Page 9 & Exhibit B-6, CEC 1.1.1 & Exhibit B-9, CEC 2.1.2

⁷ FAES Final Submission, Page 4

Part Three: CPCN Considerations

A. Project Need and Alternatives Considered

FAES states that the project need is about the choice of energy system for the Development. A key aspect of this need is the City of Vancouver's ("COV") requirements for PCI's rezoning approval. The approval was contingent upon a number of legally binding conditions which PCI had to meet in order to build the Development including:

- (a) 70% of the annual space heating and domestic hot water energy requirements for the development would be provided through renewable energy sources; and
- (b) The system shall reduce Green House Gas ("GHG") emissions by a minimum of 50% relative to business as usual.⁸

FAES has stated that the COV requirement of 70% of annual energy from renewables is reasonable as this reasonableness is reflected by the reasonable rates determined for customers of this project.⁹ As it happens, by choosing the closed-loop geo-exchange for the Project to meet the 70% renewables criteria, the reduction in GHG emissions exceeds the minimum reduction specified by COV at 60%.¹⁰

The FAES has demonstrated that it meets the COV criteria, which is critical to having a viable project. The FAES has demonstrated that the developer has engaged FAES to supply the energy services, which is also a critical demonstration of need for the project.

FAES has examined alternatives and after a screening study settled on a geo-exchange system as a preferred approach. After further study of open loop design and closed loop designs as well as sewer recovery systems the FAES have settled on the closed loop design as the preferred approach.

The CEC accepts the FAES analysis of its preferred approach and although the CEC has some comments on the analysis and process the CEC has no reason to propose that FAES has not adequately met the anticipated requirements for the PCI Marine Gateway future customers, sufficiently to justify the granting of a CPCN for the Project.

The CEC believes that FAES has demonstrated that the proposed Project can meet the needs of the PCI Marine Gateway complex.

⁸ FAES Final Submission, Page 5

⁹ Exhibit B-6, CEC 1.2.1

¹⁰ Exhibit B-6, CEC 1.2.3

The CEC believes that FAES, within the constraints of its involvement in the project has made suitable efforts to identify the most cost-effective energy solution for the Project. The CEC has some comments on the process and analysis but has no reason to expect the FAES proposal to be inadequate from a customer cost-effectiveness point of view.

The CEC review and comments follow below.

The Developer was responsible for working with BC Hydro on BC Hydro's new building programs for conservation and efficiency for electrical consumption.¹¹ The development was designed with energy conservation standards ASHRAE 90.1-2007, supplemented by targeting LEED Gold Standard¹². Heat recovery has been planned from the commercial, grocery and restaurant use. Heat recovery totalling 8,518 GJ has been calculated from in-building refrigeration from the food store and in-building simultaneous cooling (air-conditioning) serving the office and commercial retail units.

FAES has designed the project to achieve the conservation and efficiency goals set by the COV. The project is integrated with the tenant facilities and has heating and cooling recovery from in building processes thereby optimizing energy uses¹³. Additional measures for conservation and efficiency could be built into such a project but would result in higher costs and higher rates¹⁴. The net result could be lower bills for the end customers for variable cost components but would not for fixed cost components, except for transfer of costs to those not as efficient or focused on conservation.

The CEC believes that it may be appropriate for the Commission to ask FortisBC for a submission in the future in regard to cost-effective plans for additional conservation and efficiency post-installation and during on-going operation.

FortisBC has established that the project environmental controls will be monitored remotely and has established that there are benefits achieved in doing so¹⁵.

The project is designed to be ready for connection to expanded applications with nearby building facilities. This has been accomplished with minimal expense¹⁶ relative to the total expansion requirements¹⁷.

¹¹ Exhibit B-6, CEC 1.3.8

¹² Exhibit B-6, CEC 1.3.4 & CEC 1.15.1

¹³ Exhibit B-6, CEC 1.3.7 & CEC 1.3.6

¹⁴ Exhibit B-6, CEC 1.3.5

¹⁵ Exhibit B-9, CEC 2.3.1 & CEC 2.3.2

¹⁶ Exhibit B-6, CEC 1.1.1 & CEC 1.2.1

¹⁷ Exhibit B-6, CEC 1.3.1

The CEC believes this future interconnection aspect of the project has been reasonably handled by FAES.

The design of the project to optimize the use of the renewable geothermal energy and the cost of natural gas depends on the load duration curve and the relevant cost trade-offs, which have been built into the design¹⁸. The GHG reductions are appropriately linked to the appropriate cost trade-offs but may not be in other circumstances¹⁹.

The CEC believes this is an important aspect of such a project and its interaction with in this case municipal guidelines. The CEC believes it may be useful for the Commission to encourage FAES to work with the municipal guidelines to ensure that single parameter objective setting does not over ride obtaining the most appropriate cost trade-off balances.

In reviewing the alternatives to the project the CEC notes that the co-generation alternative assumptions for electric sales have relatively low costs for electrical energy²⁰. Critical to the evaluation of alternatives will be the appropriate trade-offs between electrical energy values and GHG values. The annual GHG emissions and the intensity factor do not have trade-off values in the analysis²¹. The cost of electricity used in later cost comparisons was \$33.6/GJ which is a more appropriate representation of the marginal cost of electricity²². The CEC believes that the FAES process may not have consistently and adequately dealt with the trade-offs.

The terminal values for making comparative valuation over a 20 year timeframe are not calculated into the alternatives comparisons, though qualitatively FAES recognizes that there can be substantial differences²³. The CEC believes that the FAES may not have adequately dealt with terminal values in its analysis.

The CEC believes that the alternative review for this project is acceptable and given where the FAES is in respect to the project, working with the customers the CEC believes that it would be inappropriate to deny the CPCN based on the adequacy of the alternative review. However, the CEC believes that the FAES alternatives review process and comparisons can be tightened up and improved.

The CEC believes that the Commission may want to ask the FAES to improve its alternatives review process and methodology as it approaches future projects.

¹⁸ Exhibit B-6, CEC 1.2.2 & CEC 1.2.4

¹⁹ Exhibit B-6, CEC 1.2.3

²⁰ Exhibit B-6, CEC 1.5.1

²¹ Exhibit B-6, CEC 1.6.1

²² Exhibit B-6, CEC 1.9.1

²³ Exhibit B-6, CEC 1.5.2 & CEC 1.5.3

The Alternatives analysis has been subjected to some sensitivity analysis and the resulting selections appear to be the same when sensitivity to % of annual energy from the alternative source is varied²⁴.

The option to examine sewer heat recovery has been excluded from review in an early screening, yet the City of Vancouver has implemented this approach in its South False Creek applications²⁵. The developer and FAES have screened out this alternative because it is new technology and completely new to Metro Vancouver but remains a potential for future application and or inclusion in the expansion plans.

The integration of the energy systems designs with the building designs has been considered and discussed but the developer was too far along in design to enable FAES to affect potential optimizations and FAES notes these are outside of its scope²⁶. The FAES energy systems are not integrated with in-unit controls and optimization as these are separate systems²⁷.

The CEC believes that it is appropriate to seek to have as much optimization of the energy systems as possible, including integration with building design. The CEC accepts that there are practical points involved with respect to the timing of the FAES involvement and therefore accepts that not all optimization which may be possible may have been done.

The CEC believes that the Commission may want to encourage FAES to incorporate as much optimization scope as possible into future projects for the benefits of customers and therefore should be encouraged to communicate with developers and work with them as early as possible in the development cycle.

Alternative sources of energy may be considered in the future, such as solar thermal, but the characteristics of the source options and the features of the proposed system which would be displaced would be critical to assessing the future value of doing any replacement²⁸.

The control systems for the project, though not determined yet, including the HVAC controls and the Thermal Energy System controls, will be integrated to provide best in class system performance with reasonably responsive control²⁹.

The CEC believes that the system control plans are appropriate and will provide quality results for the customers.

²⁴ Exhibit B-6, CEC 1.7.1

²⁵ Exhibit B-6, CEC 1.8.1 & Exhibit B-4, BCUC 1.12.3

²⁶ Exhibit B-6, CEC 1.10.1

²⁷ Exhibit B-6, CEC 1.11.1 & CEC 1.11.2

²⁸ Exhibit B-6, CEC 1.12.1 & CEC 1.12.2

²⁹ Exhibit B-6, CEC 1.14.1 & 1.14.2 & 1.14.3

In summary the CEC believes that there is a demonstrated need for the project and that FAES has examined alternatives appropriately for the circumstances but that FAES could improve its processes somewhat in the future. The CEC believes that the Project is in the public interest and should be approved.

The CEC recommends that the Commission approve the CPCN requested as being in the public interest. The CEC believes that such approval should be accompanied with such comments on the FAES process and analysis as may be useful to improving these in the future.

Project risks and benefits

FAES identifies and addresses several areas of possible risk including development under-subscription, system performance, cost overruns, the risk of stranded assets, operational risks and the potential effects on physical, biological and social environments.³⁰ The CEC agrees that the risk in these areas is reasonable.

As indicated in the FAES Final Submissions the residential component is 100% Sold Out and the retail component has commitment from major retailers including Cineplex and Loblaws covering over 50% of the space.³¹ These are substantial commercial enterprises, are valuable to the residential customer base and are appropriate for the project overall. FAES also states that it has mitigated this risk in its Infrastructure Agreement (filed confidentially) because certain development targets must be met prior to the commencement of construction.³²

While the risk of under-subscription is not entirely absorbed by these commitments given the possibility of economic decline and possible default by residential purchasers and large commercial tenants it appears as a reasonably stable client base.

The annual uncertainty with respect to the demand volumes is expected to be within the range of -10% to -20% (on the low side) and +10% to +30% (on the high side).³³ The sensitivity of the Project to even a \$.01 change in the rates being charged or a 10% change would over 20 years result in a significant cost recovery issue. Hence the FAES believe that the cost of service approach is necessary to enable deferral account issues to tend toward zeroing out the account. These risks are managed for the FAES but are borne by the customers.

³⁰Exhibit B-1 Application, p. 38-39

³¹ FAES Final Submissions, p. 11-12

³² Exhibit B-1 Application, p. 38

³³ Exhibit B-6 CEC 1.25.1 & CEC 1.25.2

The FAES have also examined 8 different external variables to the project and performed a Monte Carlo analysis on these project variables to settle on its projected rate values. Again there is some significant variability and as a consequence having the cost of service approach to the rates is essential to ensuring stability of the regulatory balance between shareholder and the end customers. These risks are managed for the FAES shareholder but are ultimately borne by the end use customers.

FAES states that system performance is reliable because it relies on proven technology and FAES will take reasonable steps in commissioning the system to ensure that the Project will meet system design requirements. Performance of the system will be tested in commissioning that encompasses individual testing of the related components, verification of the component interconnection against the drawings, and the functional testing of the system as a whole.³⁴

System performance risk may be mitigated or exacerbated through building design. Heat recovery systems provide for Annual Heating of 8521 Gigajoules or 28% of Total Heating and 6390 Gigajoules or 42% of Total Cooling³⁵. FAES has also been able to integrate its TES designs with building and facility designs³⁶ and the equipment inside the Energy Centre will provide sufficient heat to satisfy the base building requirements for flow and temperature.³⁷

The natural gas boilers can meet the entire system load if necessary which provides appropriate back-up in the event of system failure.³⁸

Long term maintenance and operation has been considered. The building was designed by an experienced and reputable firm so the building envelope is expected to perform to specification and the design of the energy system will be done by experienced consultants and the system built according to design specifications. Heating/cooling system operations is within the scope and control of FAES.³⁹

Capital cost overruns are mitigated by a contingency of 25% which is in the range contemplated for a Class 3 cost estimate and is based on previous project experience and construction industry estimates.⁴⁰

Stranded capital is not expected to be a risk as the client base is large, PCI is incented to replace tenants who leave, and service agreements require that departing customers pay their

³⁴ Exhibit B-6 CEC 1.3.4

³⁵ Exhibit B-6 CEC 1.3.6; Exhibit B-1 Application p. 25 Table 3-9 Summary of Energy Sourcing

³⁶ Exhibit B-6 CEC 1.3.7

³⁷ Exhibit B-6 CEC 1.3.10

³⁸ Exhibit B-6 CEC 1.10.4

³⁹ Exhibit B-13 BCUC 2.3.6

⁴⁰ Exhibit B-4 BCUC 1.22.1

proportionate share of rate base value of the assets in service⁴¹. Further, FAES would recover costs of any stranded assets from other FAES customers through the TESDA.^{42, 43}

The risk of unauthorized access from remote monitoring will be addressed by secure network connections and password protected multilevel permission access. Accidental equipment activation and deactivation will be controlled by highest level of system access and no personal data will be stored on the system.⁴⁴

The risk factor comparison to other projects indicates an acceptable level of risk. The analysis of risks includes capital cost structure, technology risk, fuel risk, customer base and risk of default, property development, developer-customer connection, load forecast uncertainty, construction and operating cost risks, rate design, financial risk, competitive challenges and regulatory and environmental uncertainty among others.⁴⁵

Overall the CEC believes that these risks appear reasonable and are not dissimilar to the risks, which are transferred to the customers of other utility operations. One key difference is the project by project rate setting and the small number of customers associated with each project and each set of risks.

The CEC does not believe that there is evidence in this regulatory process of a sufficiently substantive risk, which would lead the CEC to believe that the Project should be denied a CPCN and or the proposed rate design and rates.

The CEC, however, believes that this approach, of setting rates and determining cost of service on a project by project basis, will at some point have the potential to result in a failure due to realization of some specific risk that otherwise could have been managed across a larger customer base as is the case for more mature utility services.

The CEC believes that FAES and the Commission should be planning toward integration of these alternative energy service rates, at some point in order to manage certain customer risks across a larger pool of customers. While the CEC does not believe that this Project or this time is the appropriate point for this integration, the CEC encourages the Commission to ask FAES to plan for this potential and provide the Commission with perspectives on how, when and to what degrees this may be done in the future.

⁴¹ Exhibit B-4 BCUC 1.21.1

⁴² FAES Final Submissions, p. 12

⁴³ Exhibit B-5 BCOAPO 1.6.2

⁴⁴ Exhibit B-9 CEC 2.3.3

⁴⁵ Exhibit B-4 BCUC 1.42 & Exhibit B-6 CEC 1.41.3 & CEC 1 41.4

Alignment with British Columbia's Energy Objectives

The CEC agrees with FAES that it has met the tests for consideration as to whether or not the proposed project is sufficiently aligned with British Columbia's Energy Objectives⁴⁶.

Reasonable Cost Estimate

The CEC has reviewed the FAES cost estimates provided.

The CEC believes that the FAES consultant's ACEE Class 3 cost estimate of \$9.2 million for the project is reasonable. The CEC believes that having the supplier quotes on the major components of the project provides reasonable assurance as to the cost estimates. The CEC believes that the 25% contingency included in the costs estimate is reasonable and provides an appropriate level of assurance as to the potential to provide the project for the cost estimated. Although this level of contingency has not been applied on previous projects the CEC believes that the FAES rationale related to the class of cost estimating is appropriate⁴⁷.

The FAES cost estimates do not include a significant cost for expansion to other sites⁴⁸. The FAES cost estimates do not include the building energy use controls but do include the project energy service controls⁴⁹. The regulatory costs are included as an estimate⁵⁰. The development costs have been included at \$.68 million, are about 6.8% of the project and fall in between 10% and 5% of the project representing prior project projected experience⁵¹. The AFUDC of \$305 thousand appears to be reasonable and appropriately calculated⁵².

The CEC believes that the cost estimates for the project have been appropriately bounded and do not contain costs that would be inappropriate. The CEC also believes that the project cost estimates contain all of the costs necessary to provide the project plan.

The CEC believes that the Commission can rely on the FAES cost estimate and can approve the cost estimate as supplied by FAES.

⁴⁶ Exhibit B-4, BCUC 1.49.1 & 1.49.2

⁴⁷ Exhibit B-4, BCUC 1.22.1

⁴⁸ Exhibit B-6, CEC 1.1.1 & CEC 1.1.2 & CEC 1.1.3

⁴⁹ Exhibit B-6, CEC 1.18.1 & CEC 2.2.1 & CEC 2.2.2

⁵⁰ Exhibit B-6, CEC 1.19.1

⁵¹ Exhibit B-4, BCUC 1.23.1

⁵² Exhibit B-4, BCUC 1.24.1 & BCUC 1.24.2

Adequacy of Public Consultation

The CEC has reviewed the FAES public consultation efforts in respect of the Project and believes them to be adequate and sufficient.

Part Four: Rate Design Considerations

Rate Design & Rates

The FAES rate design is intended to provide a \$/KWh all variable cost rate to customers. The first three years of the rate have been fixed and then the rate transitions to a cost of service rate.

The rate transition is not expected to create a significant discontinuity for customers as it is expected to be a relatively smooth change⁵³. The rates to be charged and the costs to customers are expected to be reasonable in comparison to other end use costs⁵⁴.

The rates to be charged are drawn from the BC Hydro residential rates and transition smoothly to the cost of service rates⁵⁵. The analysis of rates for this Project has shown that the rates will be competitive with other rates for such projects approved by the Commission⁵⁶.

The Project system has significant capital components, which are expected to have a considerable expected life⁵⁷ and therefore may be expected to deliver good value for customers over time. The large fixed capital cost components will make the variable cost rate to customers vulnerable to changes in demand or use per customer⁵⁸.

The customer rates will be vulnerable to uncertainty around volume projections and any potential volume changes⁵⁹. However, it must also be remembered that reduced customer demand will lower customer bills to the extent the demand is reduced relative to other customers receiving the service.

⁵³ Exhibit B-4, CEC 1.17.1 & CEC 1.17.2 & CEC 1.17.3

⁵⁴ Exhibit B-4, CEC 1.3.1 & CEC 1.3.2 & CEC 1.3.3

⁵⁵ Exhibit B-6, CEC 1.20.1

⁵⁶ Exhibit C-4 BCUC 1.50.5

⁵⁷ Exhibit B-6, CEC 1.21.3

⁵⁸ Exhibit B-6, CEC 1.23.1 & CEC 1.23.2

⁵⁹ Exhibit B-6, CEC 1.25.1 & CEC 1.25.2

There are potential risks related to the competitiveness of the rates based on the type of unit owners and any transition to occupancy and use⁶⁰.

The expansion of the system to surrounding buildings would be pursued if there was no negative impact on the Project rates⁶¹, but the expected costs would be anticipated to be shared as would some of the benefits⁶².

The Project deferral account will accumulate any costs not charged to customers initially through the first three years and will enable these to be recovered from customers later⁶³. This enables smooth competitive rates and manages risk for FAES.

The TESDA is expected to provide a significant element of management of the cost of service and rates for customers and in the final analysis if not appropriately recovered from customers would be the responsibility of the shareholder. The TESDA is not expected to be impacted by a future expansion as it may relate to the Project⁶⁴. The TESDA has accumulated a balance of approximately \$7.5 million⁶⁵ and the FAES does not believe that it helps reduce risks related to the Project.

The CEC believes that the TESDA does reduce risks by allowing deferral of upfront costs to periods when the stable levels of capital investment will create the potential for the Project service to be increasingly competitive with alternative service costs. The CEC will reserve further comment on the TESDA until the Commission engages in a regulatory process to deal with its disposition.

Customers will have an incentive to manage their costs of energy based on the variable cost⁶⁶.

The CEC believes that the rate design being a variable cost to the customer will be effective in ensuring cost efficient use.

The CEC believes that the proposed project is quite integrated in its use of energy sources including integration with customer sources. This would make cost allocation approaches for the rate setting quite challenging⁶⁷. The CEC is prepared to accept the rate designs and their simplicity over more complicated designs at this time and is prepared to reserve such further considerations until such time as more experience has developed and more sophisticated

⁶⁰ Exhibit B-6, CEC 1.26.1 & CEC 1.26.2 & CEC 1.26.3

⁶¹ Exhibit B-6, CEC 2.4.1

⁶² Exhibit B-6, CEC 2.4.2

⁶³ Exhibit B-4, BCUC 1.21.1

⁶⁴ Exhibit B-6, CEC 2.4.3

⁶⁵ Exhibit B-4, BCUC 1.45.1

⁶⁶ Exhibit B-6, CEC 2.2.3

⁶⁷ Exhibit B-4, BCUC 1.19.3 & BCUC 1.19.4

analysis and design may prove to be useful in providing additional fairness in the rates, if such can in fact be done.

The CEC believes that FAES has demonstrated that the proposed rates will be reasonable and competitive. The CEC believes that there is no evidence to suggest that there will be anything unduly discriminatory about the rate design or application. The CEC believes that the FAES have proposed a rate design, which at this stage would appear to be fair to the customers.

The CEC believes that the Commission should approve the proposed rates as fair just and reasonable and not unduly discriminatory.

Reasonableness of inputs used to derive rates

The FAES have capitalized overhead into the Project costs and have modelled costs including overhead but do not believe that there are any future capital expenditures which would require overhead capitalization.

The CEC agrees that capitalization of overheads in the initial project make sense and that it is likely inappropriate to capitalized overheads on an ongoing basis because there are not expected to be capital expenditures which would warrant such capitalization.

Capital structure, Cost of Debt and Return On Equity

The FAES have included cost of debt based on BBB rated entities and noted that this is consistent with the Commissions decisions in other cases. The cost of debt has been amended to 5.37%⁶⁸.

The CEC does not see any good reason that the customers for the FAES should be required to bear additional costs of debt over and above that that the service provider can deliver. The CEC believes that the regulatory cost of service approach should not include such inordinate addition of earnings to the shareholder over and above the risk premium on ROE sought because the FAES is a small utility operation isolated from the shareholders other business.

The CEC believes that the 60% debt and 40% equity capital structure is appropriate for the FAES.

⁶⁸ Exhibit B-4, BCUC 1.42.1

The CEC believes that the 50% risk premium above the base benchmark is appropriate for this small isolated utility operation.

Conclusion

The CEC believes that the Commission should approve the FAES application for a CPCN for its proposed PCI Marine Gateway Project, subject to any comments the Commission may believe appropriate for the improvement of future processes and analysis.

The CEC believes that the Commission should approve the Rate Design and Rates for the PCI Marine Gateway Project, subject to reporting of costs and performance of the Project as well as future determinations with respect to deferral accounts and the TESDA regulatory determinations.