

November 3, 2011

Regulatory Affairs Correspondence
Email: gas.regulatory.affairs@fortisbc.com

Energy Services Association of Canada
Suite 1500, 1055 West Georgia Street
Vancouver, B.C.
V6E 4N7

Attention: Mr. Karl E. Gustafson, Q.C.

Dear Mr. Gustafson:

Re: An Inquiry into FortisBC Energy Inc. Regarding the Offering of Products and Services in Alternative Energy Solutions and Other New Initiatives (the "Inquiry")

Response to the Energy Services Association of Canada ("ESAC") Information Request ("IR") No. 2

In accordance with Commission Order No. G-164-11 setting out the Regulatory Timetable for the Inquiry, the FEU respectfully submits the attached response to ESAC IR No. 1.

There were a number of IRs that called for legal analysis. The FEU have provided responses to these IRs but reserve the right to make further submissions on these points in Final Argument.

If there are any questions regarding the attached, please contact the undersigned.

Yours very truly,

on behalf of the FORTISBC ENERGY UTILITIES

Original signed:

Diane Roy

Attachment

cc (e-mail only): Alanna Gillis, Acting Commission Secretary
Registered Parties

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1.0 AES Cost Recovery

Reference: 2012/2013 RRA Response to BCUC IR #164.0 (page 577)

"Pursuant to BCUC Order No. G-141-09, all costs associated with Thermal Energy Solutions (referred to as Alternative Energy Services in the BCUC Order No. G-141-09) are captured in a separate deferral account for future recovery from Thermal Energy Solutions customers. That is, the balance in the Thermal Energy Deferral Account will not be recovered from gas utility customers."

Reference: 2012/2013 RRA Response to BCUC IR #164.6 (page 581)

"Project specific costs will be recovered from the customers who elect to obtain thermal energy from FEI. These project-specific costs, along with a suitable level of overheads (discussed further below), will be included in the costs of service that will be filed to justify the rate within the contract signed by the customer."

It is also our intention to include in the TES deferral account TES project costs related to sales and marketing O&M, and overhead costs that have been incurred to-date and going forward. The methodology of how such costs will be allocated will be discussed in the first AES project to be filed in the coming months."

Reference: TGI 2010/2011 RRA Page 265

"TGI proposes that the contract approval process be treated similarly to the gas supply contract approval process in that the process is confidential and expedient. So long as the customer has agreed to the rates and agreement and that is consistent with the methodology described below, we would propose that the agreement be approved as filed."

Reference: TGI 2010/2011 RRA Page 268

"The economic assessment models used to determine customer rates for alternative energy systems will be based on accepted utility practices in B.C. for determining revenue requirements and designing rates."

Reference: TGI 2010/2011 RRA Page 270

*"The customer pays for the system and its operation over time at a rate that is acceptable to them, but which does not **unduly** impact the rates of other TGI customers." (Emphasis added)*

- 1.1 Assuming that FEU actually has Thermal Energy customers with Commission-approved tariffs, please indicate how FEU would recover sales, overhead and

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project-specific development costs for prospective AES projects or initiatives that do not result in signed agreements or approved tariffs that produce revenue for FEE. Specifically, please indicate if these costs would be recovered from 1) other AES/TES customers, 2) gas rate payers, or 3) absorbed by FEU shareholders and the extent to which those costs from each such group.

Response:

It is important to note that the excerpts related to the TGI 2010-2011 RRA in the preamble to questions in ESAC IR No. 1 are all derived from what was proposed in the application, not what was approved in the final Negotiated Settlement Agreement by Order No. G-141-09 (the "NSA"). One must consult the NSA for the approved items.

As part of the NSA, the project costs for all Thermal Energy Service projects, both the ones that result in a signed agreement and the ones that do not, will collect in the New Energy Solutions Deferral Account or now called the Thermal Energy Service Deferral Account, and will not be recoverable from natural gas customers. Where costs in the deferral account have been prudently incurred, regulatory principle dictates that they are recoverable from Thermal Energy Service customers as a Thermal Energy Service cost of service. How and when those costs get recovered, and from which thermal energy services customers, is ultimately a matter of future Thermal Energy Service rate design. The shareholder bears the risk of non-recovery for imprudently incurred costs, as is the normal regulatory principle.

- 1.2 If the answer to question 1.1 above is that some portion of the costs are recovered from other AES/TES customers, please provide evidence that prospective AES/TES customers are being told that their tariff could eventually be increased to cover the costs of other unsuccessful projects that FEU had been developing.

Response:

TES customers are provided details of the tariff/fees related to their specific services within the contract for service that they sign with FEI. Currently, the Thermal Energy Services rate design is based on the project-specific facilities and cost of service (including an overhead allocation). When a customer signs up for TES service, both the customer and FEI have accepted the terms of contract and the rates and the customer agrees that the proposed rates and rate setting parameters in the contract reflect value for the services provided. All customers are made aware that the BCUC approves the rates for their TES service and as such the customer and TES have access to the regulatory process to ensure that customers pay fair rates related to their service.

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- 1.3 The quotation from page 270 above from the 2010/2011 RRA clearly infers that there will be some impact on rates for other FEU customers from FEU's EAS/TES business. Please confirm that this would also be the case if the Commission were to approve EAS/TES tariffs submitted by FEU and identify which customers would be affected and explain how they will be affected.

Response:

It is important to note that the excerpts related to the TGI 2010-2011 RRA in the preamble to questions in ESAC IR No. 1 are all derived from what was proposed in the application, not what was approved in the final Negotiated Settlement Agreement by Order No. G-141-09 (the "NSA"). One must consult the NSA for the approved items.

The wording quoted in the question from the FEI's 2010 – 2011 RRA application itself reflects the Commission's role of ensuring that the rates charged for service provided by the utility are not "unduly" discriminatory, prejudicial or preferential. The words "undue" and "unduly" each appear a number of times in the *UCA*. The Commission is the judge of what constitutes "undue" discrimination, preference or prejudice. The need for the Commission to assess, for example, whether price discrimination is "undue" recognizes that there are valid reasons for some price discrimination (such as a large volume, high load factor industrial customer receiving lower rates than a low volume, low load factor residential customer).

The wording in the NSA reflects the final approved treatment of TES and sets out more explicitly the anticipated cost separation between the TES and natural gas classes of service. As noted in the response to ESAC IR 1.1.1, the project costs for all TES projects will accumulate in the Thermal Energy Service Deferral Account and be recovered from the TES class of service customers and not natural gas ratepayers. Over time natural gas ratepayers will benefit from the establishment of a TES class of service as TES customer rates absorb a growing share of common costs and corporate overheads and the TES project solution will often utilize natural gas as part of the energy solution within these projects. Natural gas customers will, therefore, not be unduly impacted by the TES class of service and in fact the TES class of service will provide benefits to the natural gas class of service. The notion of undue impacts, however, cuts in both directions. TES customers similarly should not be unduly impacted by having to absorb excessive cross charges from the natural gas class of service.

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- 1.4 The quotation from page 270 also infers that it is the acceptability of the tariff by the client that determines how thermal energy is priced as opposed to basing it on the full recovery of applicable costs within the agreement term. Please confirm whether or not this is ever expected to be the case.

Response:

The inference drawn in the question is incorrect. While customer needs are considered in rate design the rate must still recover the cost of service of the project.

- 1.5 Please indicate if the tariffs that are agreed to by customers and submitted to the Commission for approval (along with the associated economic assessments) are intended to be fixed for the entire period of each agreement or if they are subject to change as a result of future RRAs. If they are subject to change, please provide evidence that prospective customers have and are being made fully aware of this potential outcome.

Response:

The rate is not fixed for the whole term. Each TES tariff is based on the associated TES cost of service for that project and is set according to typical rate setting principles. The mechanism for changes to a tariff or rate is outlined in the customer contract including the option to adopt a new set of terms and conditions if future TES rate designs as approved by the BCUC are of interest to the TES customer.

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- 1.6 Aside from the possibility that the Commission may, during a future hearing process, deem a particular cost on an AES project to be imprudent, please indicate what, if any, financial risks FEU would be assuming in the construction and operation of AES projects that are approved by the Commission.

Response:

Please see the response to ESAC IR 1.1.1 regarding the recovery of costs.

- 1.7 Assuming that FEU actually has Thermal Energy customers with Commission-approved tariffs, please indicate what would happen in subsequent RRAs if the

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tariff for a particular AES project that was previously approved by the Commission turned out to be insufficient for FEU to fully recover all applicable costs within the term of the agreement. In particular, please indicate whether and to what extent these un-recovered costs would be:

- a) recovered by an increase to the tariff of the particular EAS/TES customer involved,
- b) recovered from other AES/TES rate payers,
- c) recovered from gas rate payers, or
- d) absorbed by FEI shareholders.

Response:

Natural Gas customers

The assumption of risk for non-recovery of amounts in the Thermal Energy Service Deferral Account (formerly referred to as the New Energy Solutions Deferral Account) was outlined in BCUC Order No. G-141-09. It states that the risk of non-recovery will not be borne by natural gas ratepayers and will not be recovered through natural gas rates. Whether or not a project proceeds, all costs related to the TES class of service within the utility including direct costs, sales and marketing O&M and business development costs, and the overhead allocation from FEI will accumulate within the Thermal Energy Service Deferral Account and will be recovered through the rates charged to thermal energy service customers established for the thermal energy projects.

The Individual TES Customer (specific to a particular project)

It should be noted at the outset that the GT&Cs of thermal energy agreements will outline all relevant conditions of the customer's thermal energy service of which term is but one. The rate determinations will be based on the utility cost of service and will be set to recover the cost of service over time and may or may not be tied to a contract term. The specific rate mechanism may vary from project to project but the outcome will be to recover all costs of a TES system from customers of that system.

Each contract outlines the basis for the cost of service. District energy contracts, for example, will have an internal review to establish if a rate change is necessary, which could result in filings with the Commission to reflect the evolving cost of service as customer loads change or increase. In all cases, adjustment to rates will depend entirely on the Commission's view as to whether the rates and the rate design reflected by the contract are just and reasonable in the circumstances. In any regulated utility, the Commission has the ability to alter rates that are no longer just and reasonable. The FEU cannot speculate on what facts would lead to a particular negotiated rate being unjust and unreasonable.

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Other TES Ratepayers

As noted for individual customers each contract outlines the basis for the cost of service and as such the rates and rate design approved by the Commission determines the method by which a TES customer may have its rate adjusted. In the future, the TES rate design will evolve to make continual improvements to the risk mitigation methods for potential additional costs. Accordingly, it is possible a TES customer may elect to become subject to a new rate design offered by the FEU and approved by the Commission. It is through prudently incurred costs and effective rate design that customers are best served and all costs are recovered through the revenue requirement over time.

Shareholder

The shareholder is responsible for imprudently incurred costs. As the shareholder cannot recover TES related costs from the natural gas customers under the current regulatory framework, the ultimate risk of non-recovery of amounts accumulated in the Thermal Energy Service Deferral Account if the business is unsuccessful is with the shareholder.

- 1.8 If the answer to 1.7 is either a) or b), please indicate if prospective AES/TES customers have or are being told that their tariff could eventually be impacted by the performance of other AES/TES projects.

Response:

Please refer to the response to ESAC IR 1.1.7 and 1.1.2.

- 1.9 In the scenario where FEU is allowed to fully recover all applicable and prudent costs associated with an AES project and the approved initial tariff for that project turns out to be insufficient to fully recover the actual costs within the term of the agreement, please explain what incentive there would be for FEU to accurately estimate those costs in the original tariff application or to ensure that actual implementation costs are minimized.

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Response:

The FEU's approach to determine customer rates for Thermal Energy Services will be based on established and accepted utility practices in BC for determining cost of service, revenue requirements and designing rates.

The Companies have every incentive to accurately forecast costs and ensure that the rate recovers those costs of service and nothing more. The Companies need to recover the balance in the TES Deferral Account through rates, and intentionally under-forecasting only leaves the shareholder exposed to a greater unrecovered balance in the deferral account. At the same time, the FEU will be motivated to provide cost effective TES service in order to compete for the customer's business, build and maintain the viability of the TES class of service, and to build ongoing customer loyalty by providing excellent products and service.

Further, TES as a regulated public utility service in British Columbia with oversight by the Commission, will assure that TES customers are protected by providing them with recourse to the regulator which will ensure just and reasonable rates and service that is reliable, safe and adequate. The Commission oversees rates, and determines whether they are just and reasonable based on the factors identified in the *UCA*.

- 1.10 If the estimated capital cost for a thermal project is expected to be less than the \$5.0 million threshold for a CPCN, please indicate whether FEU would subsequently apply for a CPCN if the actual capital costs turned out to exceed \$5.0 million.

Response:

No. In the FEU's view, it would make little sense from a regulatory perspective for the Commission to require a CPCN application once a project has been built, given that the actual costs would be assessed in a subsequent revenue requirement proceeding in any event.

- 1.11 With reference to District Energy System projects, please indicate if FEU plans to treat each District Energy project for which it contracts as a separate entity with its own separate RRA, or whether FEU plans to combine all District Energy projects along with other AES thermal projects into the overall thermal rate base for future RRA purposes.

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Response:

Currently, each TES project will be filed with individual applications. Future rate design may combine multiple District Energy and/or Discrete Energy project(s). Such a change to the ratemaking approach for TES would require an application to the Commission and Commission approval.

- 1.12 Please indicate how, in FEU's opinion, the above-noted process for AES tariff approval and the potential for inter-project subsidization might impact competitive situations where FEU may be competing for the same AES project with other firms that have no cross-subsidization capability with a potentially large thermal rate base and the pricing of the tariff is an important aspect of the customer's selection decision.

Response:

The FEU make three points in response to this question. First, the rate constructs are transparent and subject to regulatory oversight based on established principles. Second, the focus of the Commission's inquiry should be on ensuring appropriate rates for customers, not policing competition. Third, the model being employed by the FEU is available to competitors in any event.

Transparency and Established Ratemaking Principles

The TES rate construct is based on TES customers bearing their own costs. Rates are approved by the Commission and the Commission applies a statutory test that rates must be just and reasonable and not unduly discriminatory. Hence, there is ample protection for customers.

A basic principle in the provision of utility service is that there should not be *undue* discrimination in rates as between customers receiving the same service. There is a difference between discrimination and *undue* discrimination. Typically customers are grouped into rate classes such as residential or commercial and the like, and rates are the same for customers in a given rate class. However, the cost of serving all customers in the same rate class is not the same. Therefore if costs are examined closely enough intra-class cross-subsidization will be found. (For example, high volume residential customers may be cross-subsidizing low volume residential customers). Also there is likely to be inter-class cross-subsidization, such as the commercial class paying more than its allocated costs while the residential class is paying less than allocated costs. Commissions permit these differences (or cross-subsidizations) to exist within acceptable tolerances as not being *unduly* discriminatory. It is generally recognized that

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there are multiple approaches to cost allocation that have merit but that may yield conflicting results and also that trying to allocate costs on a very detailed basis may be excessively costly. The FEU believe that the proposed rate design for TES will not lead to material cross-subsidization between TES projects or between customer types within TES projects. To the extent it may occur it will certainly be well within acceptable levels so as not to constitute *undue* rate discrimination.

Just and Reasonable Rates, Not Competition

The FEU believe that the Commission's jurisdiction requires it to fix rates according to established regulatory principles, and not as a means of addressing the concerns of competitors. Please see the response to Corix IR 1.5.3.

Opportunities for ESCOs

The model for TES service that the FEU are developing is equally available to other TES utility providers. Other TES providers such as Corix or ESCOs can do the same thing with their portfolio of TES projects. The FEU would dispute the notion that other firms have no cross-subsidization capability, particularly since many of the possible TES market participants are large multi-national organizations. Also, other firms may have cross-subsidization capability that is not under the review of the Commission, such as between TES operations in different jurisdictions or between TES and other lines of business in BC or elsewhere.

Please also see Sections 6.4.1.3, 6.5.5, and 6.6 of the Evidence of FEU.

- 1.13 Based on the answers to 1.1 to 1.12 above, please provide a rationale for FEI's 2010/2011 RRA proposal that AES tariff applications be processed on a "confidential and expedient" basis and that each agreement essentially be "approved as filed". Please confirm that, in the proposed tariff approval process (in cases where the project cost estimate is below the \$5 million CPCN threshold), FEU expects that the Commission will accept, at face value, that the costs estimates in each tariff application reflect the true expected costs for each project.

Response:

It is important to note that the excerpts related to the TGI 2010-2011 RRA in the preamble to questions in ESAC IR No. 1 are all derived from what was proposed in the application, not what was approved in the final Negotiated Settlement Agreement by Order No. G-141-09 (the "NSA"). One must consult the NSA for the approved items.

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Prior to approval by the BCUC, the FEU are requesting that TES tariff applications be processed on a "confidential and expedient basis" as disclosure of the applications could result in commercial harm to the FEU to the benefit of competitors. It is anticipated that after BCUC approval the rates will be disclosed as tariff supplements and therefore that certain details of the application will no longer be confidential.

The FEU's proposal in this Inquiry is that information about TES projects will be provided to support a filed contract (with estimated costs over \$1M), so the statement regarding "accept at face value" is not confirmed.

- 1.14 Assuming for discussion purposes that the Commission agrees that discrete AES projects require regulated tariffs but decides that such applications require a higher level of scrutiny than FEU proposes, please indicate what implications this would have, in FEU's opinion, in terms of Commission staffing levels and technical expertise given the volume of AES tariff applications FEU expects to submit for approval and the number of projects the Commission would be expected to analyse in future RRA's to determine if all submitted actual costs were prudent.

Response:

The workload for the Commission would increase with the extent of the review performed, as would the costs of the review process for customers. The FEU cannot comment on the Commission staffing levels, technical expertise or their expertise at analyzing costs and believes the Commission will be in the best position to respond to this question.

- 1.15 What is FEU's estimate as to the cumulative development costs for "discrete" AES projects that do not have CPCN's as at December 31, 2011? Please confirm that these costs are included in a deferral account? Please confirm that each project is segmented in the deferral account.

Response:

The estimate of cumulative direct costs for discrete TES projects to the end of 2011 for FEI is estimated at \$1,070,000. All costs related to TES discrete projects are included in the TES deferral account. FEI utilizes separate accounts (i.e. Internal Orders) to track the costs of individual projects within the deferral account.

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2.0 AES Project Costs

Reference: 2012/2013 RRA: Response to BCUC IR# 201.1 (Page 721)

"The numbers used in the benefit-cost test example results provided in this response are based on the Companies' experience with similar projects in the past."

Reference: 2010/2011 RRA: Response to BCUC IR# 2-12.1 (Page 35)

"TGI's long history of installing gas mains and service lines facilitates the development of standardized costs or the calculation of average installation costs relatively straightforward for the gas system, the work required and the average time to complete and installation. TGI does not have a similar basis for deriving the average cost per installation for alternative energy systems, the work required or the average time required to complete an installation as each project is unique and as such these factors will vary depending upon the installation."

As noted in the response to CEC IR 1.35.6 of the Terasen Utilities ROE application, each alternative energy installation is uniquely configured, and TGI does not have a large number of these installations from which to derive average costs."

Reference: 2010/2011 RRA: Response to BCUC IR# 2-12.2 (Page 36-37)

"Second, the economic assessment approaches are undergoing a very thorough review as part of this Application (the alternative energy solutions section of the Application has already been the subject of dozens of IRs). As such, TGI believes the Commission will be well able to assess and approve the alternative energy service economic models and tariff changes brought forward by the Company. TGI believes that the Commission should review the economic assessment models within this proceeding rather than waiting for a separate proceeding wherein TGI would be providing similar information."

Third, under the proposed approach, the Commission will review contracts entered between TGI and alternative energy customers, providing additional protection for customers."

Reference: FEU AES Inquiry Evidence Item # 6.4.1.4 (page 119)

"As such, FEI will be filing each of its new contracts (i.e. those established in 2010 and after) with the Commission for acceptance as a rate, irrespective of their size. Since each project has been or will be developed using an economic test that is consistent with the test provided in the 2010-2011 RRA (FEI Tariff, GT&C Section 12A77), these contracts should satisfy the Commission requirements under Order No. G-141-09 and the UCA. Since the projects are economic as per the test, it is reasonable to expect that

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they will recover their cost of service over their economic lifespan including an amount for the New Energy Solutions Deferral Account and an amount for recovery of overhead allocation of the entire public utility."

- 2.1 Given that FEU did not have a large number of these installations at the time of the 2010/2011 RRA process from which to derive average costs and that the work required for each project is unique, please indicate the anticipated basis for cost estimates for AES projects that will be used in the economic assessments and resultant tariff applications.

Response:

The anticipated basis for cost estimates for TES projects is third-party feasibility studies and engineering cost estimates undertaken by qualified firms commissioned by FEI for individual projects. These engineering cost estimates are scrutinized using FEI's internal expertise which is based on a lengthy history of installing natural gas mains and related equipment, and FEI's expertise gained from supporting FAES work and prior experience with respect to the design and build of TES projects. Furthermore, FEI employs fixed price design and build contracts where appropriate in order to solidify cost estimates.

- 2.2 Please indicate if FEU plans to have firm pricing from third parties for the entire scope of work for each project in advance of the establishment of the tariff and its approval by the Commission.

Response:

Advance firm pricing will be one of the tools used to simplify rate setting. However, the cost of service will ultimately reflect actual prudently incurred costs and if firm prices for all aspects of a project are not available in advance of construction, then the initial cost of service rates may utilize engineering estimates and subsequently be adjusted after construction is complete.

- 2.3 With reference to the Commission being able to review contracts in advance to provide additional protection, please reconcile this statement with the original proposal in the 2010/2011 RRA on the proposed approval process for AES projects whereby "the process is confidential and expedient" and that "the agreement be approved as filed" (page 265). Has FEU changed its position in this regard?

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Response:

No, the FEU have not changed its position in this regard. The intention is to provide the contracts to the Commission on a confidential basis, but not to any other parties to maintain business competitiveness. After the customer contract is approved by the BCUC it will become a public tariff supplement in FEI's tariff.

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3.0 Thermal Energy Pricing

Reference: FEI AES Inquiry Evidence Item # 6.5.5 (page 131)

"The FEU's rates for TES are cost of service based, which necessarily precludes so-called —predatory or below-cost pricing."

- 3.1 Please confirm that the AES tariff approval process proposed under the 2010/2011 RRA results in a tariff being initially approved based on estimated costs in the Economic Assessment and that FEU contemplates that these tariffs could increase as a result of future RRAs to recover all costs in the Thermal Energy Deferral Account.

Response:

This response addresses ESAC IRs 1.3.1, 1.3.2 and 1.3.3.

The FEU will follow the BCUC approval process set out in the FEI's 2010-2011 RRA NSA (BCUC Order No. G-141-09). Rates are designed to recover all forecast costs of the project. The terms for future rate increases are set out in each customer contract and as such may be subject to future RRAs if so established in the contract. The Companies approach TES contracts for service on the basis that the contractual rates will remain in place. The Commission always retains the ability to alter contracts to ensure that they remain just and reasonable. This is inherent with any rate charged by a regulated public utility, and could be instigated at the instance of the customer, the FEU or the Commission. The FEU have found that potential TES customers like the fact that the Commission has the final say on rates.

Proposed rates that are initially submitted to the BCUC will outline the level of cost certainty based on appropriate engineering standards (e.g. "Costs are based on "Class 3" estimates") or on firm quotes received if applicable. These cost estimates may be higher or lower than the actual costs prove to be. This is the same for any project undertaken by a utility in this Province. The FEU have every incentive to estimate accurately to avoid the need for a prudence review.

TES rates are not based on a customer's ability to pay but do give consideration to what other options the customer has to meet thermal energy needs. In order to remain competitive with other conventional forms of energy, rate design for TES projects strives to be as competitive as possible with alternatives available to customers to the extent that these rates will reasonably capture the cost of service over time.

- 3.2 Please confirm that the tariffs submitted for initial approval are also based on the customer's ability to pay.

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Response:

Please see the response to ESAC IR 1.3.1.

- 3.3 Please confirm that the possibility exists that the costs estimates used in the Economic Assessment and associated initial tariff approval submission could be less than what the actual prudent costs of service turn out to be.

Response:

Please see the response to ESAC IR 1.3.1.

- 3.4 Do you agree that the tariff approval process for AES projects proposed in the 2010/2011 RRA (including the requirement that "the process is confidential and expedient" and that "the agreement be approved as filed") provides little or no oversight on the part of the Commission which would otherwise help to ensure that the costs estimates used in the Economic Assessment are reasonable. If you do not agree, please explain why.

Response:

The FEU do not agree.

The FEU also note that we have proposed in this Inquiry filing supporting information with contracts.

In the 2010-2011 RRA, as is still the case today, our overall objective has been to develop a process that strikes a balance between an efficient process and an appropriate level of oversight on the part of the Commission. The Commission always has the ability to obtain the necessary information to make an informed decision. In the case of TES projects, there should be some room for an efficient and timely regulatory process as well. Customers will have entered into contracts willingly and with full knowledge of how other energy solutions compare, and rates will have been established based on the accepted cost of service model. Ideally, contract approval should be timely to ensure that the FEU and third parties can deliver on their individual and mutual obligations with the customer.

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In terms of confidentiality, many of the contracts negotiated are frequently going to be commercially sensitive vis-a-vis both the FEU's competitors and the competitors of the FEU's contractors and if so should remain confidential while the process unfolds. The Commission has recently determined that rate schedules must be filed publicly.

The FEU expect that the contract approval process will become more streamlined over time as the Commission provides further guidance and direction in response to the initial TES applications that are brought forward for approval. In addition, as the TES business mature, the ability to pool similar projects into a single tariff would also result in greater regulatory efficiencies.

- 3.5 To the extent that the tariff approval process for AES projects does not provide effective assessment and oversight of actual costs, what safeguards are appropriate to ensure that the initial tariffs were in fact fair and reasonable and what would be the remedies available to the Commission and AES customers if it is found that the initial tariffs turned out to be materially lower than what is required to recover all prudent actual costs within the agreement term? In FEU's view, what would be the appropriate remedy?

Response:

The FEU believe that the tariff approval process for TES projects does provide effective assessment and oversight of forecast project costs akin to the level of oversight associated with any public utility project of similar magnitude. Since the FEU's TES rates are based on cost of service, applications will be made to the BCUC for the projects from time to time to review and set just and reasonable customer rates based on the best information available. To the extent that initial rates turn out to be materially lower than what is required to recover all prudent costs, this difference will reside in the TESDA for recovery through future contracts or existing contracts.

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4.0 Boiler Replacements

Reference: 2012/2013 RRA (Appendix G Section 2.4 Page 12 Table G-1)

*"FEI has an agreement with the Delta School District for the delivery of cleaner thermal energy for 17 schools and two school district buildings through the implementation of state-of-the-art geoexchange systems and **high-efficiency condensing boilers**, which will replace aging heating plants at school district sites. These systems provide many benefits, ranging from saving energy and improving indoor comfort to stable energy rates and a smaller carbon footprint."*(emphasis added)

Reference : 2010/2011 RRA (Part III, Section-C Tab-3, Page 261)

"For the purpose of this application, integrated and alternative energies include geo-exchange, solar thermal and District Energy systems."

Reference : 2010/2011 RRA (Part III, Section-C Tab-3, Page 263)

"District energy systems ("DES") employ a range of energy technologies and sources to deliver piped heating (hot water) and/or cooling (ambient or chilled water) to multiple buildings and customers within a neighbourhood from a central plant location or locations" (emphasis added)

- 4.1 Given that the above definitions of AES services in the 2010/2011 RRA and subsequent NSA do not include boiler replacements, please indicate whether and how FEU has received approval to include these types of retrofits as part of the proposed regulated AES or thermal offerings.

Response:

The approved GT&C Section 12A defines Alternative Energy Extensions inclusively. As noted in the 2010/2011 RRA (Part III, Section-C Tab-3, Page 261), Thermal Energy Service can be comprised of various types of technologies. Boilers, whether based on gas, wood or biomass, oil or other energy source, are one mechanism to provide Thermal Energy Service. The customer will be purchasing the output of the boilers, i.e. thermal energy. Please see the response to ESAC IR 1.4.2 for examples of District Energy Systems that consist of a natural gas boiler.

- 4.2 Please provide any examples FEU is aware of outside of B.C. in which the ownership of replacement boilers is held in a regulated utility and the costs are recovered in a regulated rate tariff approved by a regulatory agency.

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Response:

Every jurisdiction operates under a different regulatory framework that determines how TES is regulated. In BC, Thermal Energy Service delivery is regulated by the BCUC, as it falls within the definition of a regulated utility in the *Utilities Commission Act*. Utilities in BC that own boilers (including the replacement of boilers) as part of a regulated utility include Dockside Green, Central Heat, and SFU UniverCity. Further, with respect to SFU UniverCity which uses gas-fired boilers as a "temporary" initial solution, the Commission in Order No. C-7-11, noted (emphasis added) that the boiler solution may well be permanent:

*"Within the evidentiary record the Company has outlined several potential solutions in addition to the proposed Biomass solution. One of these involved a new Data Centre at SFU while the other was a joint solution with SFU and SFU Trust for a larger **Biomass plant which would serve the needs of both the SFU campus and phases 3 and 4 of the UniverCity development.** Neither of these is far enough along to determine with any degree of certainty that either will proceed."*

The SFU campus in question would involve the replacement of the existing ageing boilers with a connection to a biomass boiler plant.

Every steam utility, regulated or not, would require replacement boilers from time to time. Examples of steam utilities in other jurisdictions that are regulated are listed in the EES Consulting TES Report (included in Appendix F-6 of the Evidence) beginning at page 5. The ownership of replacement boilers does not change the nature of the regulation.

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5.0 Delta School District Announcement

Reference: 2012/2013 RRA Response to BCUC IR #213.4 (page 792)

"Also under the PSECA program, FEI is working with Delta School District to put together a thermal energy services package for this customer. EEC incentives will likely form part of this package; however the incentive amount has not yet been finalized so is not included in this table".

Reference: Press Release Data Feb 7th 2011

Thermal Energy Upgrade (Refer to ESAC IR #2 to FEI RRA)

- 5.1 The information on FEU's website indicates that the project will result in a net annual utility savings of \$100,000 per year for the Delta School District after accounting for the cost of the new thermal tariff. Please indicate if the tariff negotiated for this particular project is or will be based on this financial outcome for the Delta School District or based on what is required to fully recover all of FEU's applicable costs within the term of the agreement.

Response:

According to Order No. G-118-11:

"This inquiry will address the issues at a principles level. The Terms of Reference are set out in Appendix B to this Order."

Projects, such as this one, will be subject to Commission review as part of the regular course of regulation subject to the FEI's 2010-2011 RRA NSA (BCUC Order No. G-141-09) and GT&C Section 12A of the FEI Tariff for Thermal Energy Service.

- 5.2 Please advise whether (i) the total capital cost of \$4.9 million for the project is a fixed "all in" cost, and (ii) the \$4.9 million figure was in any way influenced by the \$5.0 million threshold for a CPCN hearing that formed part of the 2010/2011 RRA Negotiated Settlement Agreement. Also please indicate whether or not, in FEI's opinion, a CPCN would be required if it came to the attention of FEU that the total capital cost would exceed the CPCN threshold after the Tariff had been approved by the Commission.

Response:

Please see the response to ESAC IR 1.5.1.

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- 5.3 Please indicate which party is assuming the risk that the net estimated utility cost savings will in fact be realized and whether or not the increases in the marginal rate for general service electricity rates that went into effect on January 1st, 2011 have been factored into the estimated impact on electricity costs for the Delta School District.

Response:

Please see the response to ESAC IR 1.5.1.

- 5.4 If the Commission does not approve a tariff application for this project, please indicate whether FEU would be willing to proceed with the project based on the agreed-upon tariff and, if so, whether or not FEU's shareholders will then assume the risks associated with possible non-recovery of actual costs (including capital costs).

Response:

Please see the response to ESAC IR 1.5.1.

- 5.5 Please indicate how the benefits of having a regulated tariff for this project were explained to the Delta School District and, in particular, what FEU told the Delta School District would happen (if anything) to its particular tariff or the rates of other FEI rate payers in the event the negotiated tariff was insufficient to fully recover all of FEI's applicable costs within the term of the agreement. Please explain why it would be in the Delta School District's interest to have the negotiated tariff approved and regulated by the BCUC as opposed to simply implementing the project based on the agreed-upon scope of work and the negotiated tariff.

Response:

The details regarding discussions with customers and the benefits of regulation, as outlined in the responses to ESAC IRs 1.1.5 and 1.1.7 are consistent for all customers including the Delta School District.

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- 5.6 Please indicate if FEU has secured firm pricing from third parties for the entire scope of work required which would ensure that the capital cost would not exceed \$4.9 million and thus transfer any risks of cost overruns to these third parties.

Response:

Please see the response to ESAC IR 1.5.1.

- 5.7 Please confirm that individual projects contemplated in the February 7th Press Release are in fact "discrete" projects as defined by FEU in its AES Inquiry evidence.

Response:

Please see the response to ESAC IR 1.5.1.

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6.0 Delta School District Project Financial analysis

Preamble: ESAC has reviewed the publicly available information from the sources it was able to find including the press release information from the FortisBC's website, the Delta School Board website and media reports related to the press release. The following is a summary and analysis prepared based on this information:

Publicly Released Information:

Total Net Energy Savings:	32,000 GJ
Total Emissions Reduction:	2,000 Tonnes
Avoided Annual Emissions Offset Costs:	\$50,000 (@ \$25/Tonne)
Total Capital Cost:	\$4.9 million
PSECA Contribution	\$1.4 million
EEC Funding	\$0.8 million
Net FEI Capital Investment:	\$2.7 million
Net annual savings to the School District:	\$100,000

Assumed CO2e emissions factors:

Natural Gas:	.050 tonnes per GJ
Electricity	.026 tonnes per MWh

Resultant calculation of annual utility reductions:

Natural Gas:	41,352 GJ
Electricity	(2,599,832) kWh (i.e. increase)

Marginal Utility Price Assumptions

Natural Gas	\$6.54 per GJ
Electricity (*)	\$.080 per kWh

(*) \$/kWh includes the marginal impact on peak monthly demand and new General Service Part 2 Energy Charge

Resultant Net Annual Utility Cost Reduction

Natural Gas Savings:	\$270,442
Electricity <u>Increase</u> :	<u>(\$207,986)</u>
Net Annual Utility Cost Savings:	\$62,456
Annual savings net of Offset cost savings:	\$112,456

Assumed Cost of \$2.7 Million of Capital over 25-Year Agreement Period

Pre-tax WACC	9.01%
Levelized annual capital charge	\$275,000

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Net annual savings after tariff (capital only) (\$162,544) (i.e. net increase in costs)

Conclusion

A tariff set at a level so as to reduce Delta School District's annual utility cost by \$100,000 (or at break-even) would not be sufficient to cover even a small portion of the capital costs let alone any operating expenses. As a result, the vast majority of the costs would not be recovered by the tariff and would accumulate in the Thermal Energy Deferral Account for future recovery from Thermal Energy customers. This will result in significant future rate increases for Delta School District and potentially other Thermal Energy customers. This would be compounded if actual capital costs exceeded \$4.9 million.

- 6.1 Please indicate if there are any incorrect assumptions or other errors in the above analysis and conclusion and, if so, please provide a corrected analysis along with an explanation as to any factors that FEU believes are incorrect.

Response:

Please see the response to ESAC IR 1.5.1.

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7.0 Pre-Existing Discrete Geo-Exchange Assets

Reference: FortisBC Presentation CDEA-IDEA Conference, June 2011, Toronto

"Existing FortisBC discrete assets:

- *Approx 60 geo-exchange systems*
- *Operating since 2007; approx \$8 million assets"*

Reference: Response to CEC IR 1.4.1 & BCUC IR 1.78.1

Reference: FEU - AES Inquiry Evidence Item # 6.4.1.4 (page 118)

"Prior to 2010 a number of TES projects were developed by FortisBC Alternative Energy Services Inc. ("FAES", formerly Terasen Energy Services). These projects have not been actively regulated by the Commission up to now. Since January. 1, 2010, the TES previously offered by FAES are now being done through FEI as approved by the FEI 2010-2011 RRA NSA. FAES has not applied to the Commission for approval of the rates for the contracts that were in place prior to January 1, 2010. The degree of regulation of these systems is not unreasonable given the relatively small scale of the services to date. However, the absence of active regulation does not in any way mean that the service is not and has not been public utility service under the UCA."

- 7.1 How many of the above noted systems would fall under FEU's current definition of Alternative Energy Systems (or Thermal Energy Services) requiring regulated tariffs as per the 2010/2011 RRA and NSA?

Response:

The FEU believe that all discrete geo-exchange systems owned and operated by either FAES or FEI fall within the FEU's definition of the TES class of service and are regulated activities under the UCA.

- 7.2 How many of these systems were submitted to the BCUC for tariff approval at the time they were acquired or developed? Please provide any Commission Order numbers in relation to these approvals.

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Response:

To date, no contracts for these systems have been filed with the Commission for acceptance as a rate.

Please also see the response to BCUC IR 1.69.4.4.

- 7.3 Have any of these systems or related assets been transferred to FEU? If not, is this being contemplated in the foreseeable future?

Response:

No FAES assets have been transferred to FEI at this time; however it is intended that these systems will be transferred once the issues in this Inquiry have been determined. Please see the response to BCUC IR 1.69.3.

- 7.4 Which of these systems received a CPCN from the Commission? Please provide the applicable Commission orders granting each such CPCN.

Response:

None. The geo-exchange systems referenced in the CDEA-IDEA conference quote continue to be owned and operated by FAES at this time and have not been transferred to FEI as yet. As the FEU have not filed any of the contracts with the Commission and there are no applicable Commission orders.

Please also see the response to BCUC IR 1.69.4.4.

- 7.5 Please provide the applicable approved Schedule 12A for each of these systems. If there is no Schedule 12A applicable to any of these systems, please explain why such schedules do not exist.

Response:

Section 12A of the General Terms and Conditions of FEI's Tariff sets out the basis upon which FEI will provide Alternative Energy Extensions. FEI will be submitting project-specific TES

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contracts with the Commission for acceptance as a rate and anticipates doing the first of these in the fall of 2011. When applications for these systems are filed, they will include an analysis that demonstrates that the rates have been established in keeping with Section 12A. For clarity, it is the TES contracts that the Commission will be reviewing for acceptance; there will not be individual approved Schedule 12As as suggested in the question.

The reason there has been no contract submitted under Section 12A for the contracts developed by FAES is because FEI and FAES have not yet applied to transfer the existing FAES projects to FEI.

- 7.6 Have there been any amendments to the ***Utilities Commissions Act*** (the "**UCA**") since these system were acquired or developed that have caused FEU to change its opinion as to whether or not these systems should be characterized as "public utilities" under the UCA requiring regulated tariffs?

Response:

No. Please see the response to BCUC IR 1.69.4.4.

- 7.7 Where in the 2012-13 RRA are the revenues and expenditures for these systems set forth?

Response:

The revenues and expenditures for FAES (formerly Terasen Energy Services) projects reside in a separate company from the FEU. As such, the revenues and expenditures for FAES are separate, and not part of the FEU's 2012-2013 RRA.

- 7.8 Could FEU place these assets in a "stand-alone" utility (i.e. a separate legal entity) that is also regulated by the BCUC and also separate from the existing natural gas assets?

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Response:

Yes, the FEU could place these TES systems in a "stand-alone" utility; however, pages 122-123 of the FEU's evidence (Exhibit B-2) and the response to BCUC IR 1.91.1 outline the benefits of offering TES service to customers as a separate class of service under FEI.

A "stand alone" TES utility would not offer the level of cost or regulatory efficiencies as can be achieved in the FEU's model of a single utility that offers multiple classes of service.

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8.0 Terasen Energy Services Article November, 2008

Reference: November 3, 2008 article in Energy Evolution (Attachment "A")¹ with quotation by Kristen Mucha, Manager of Business Development for Terasen Energy Services:

"DES rates are regulated by the British Columbia Utilities Commission, while those for stand-alone geoexchange systems are not."

¹ Attachment found at <http://www.airwaterland.ca/print-article.asp?id=2375>

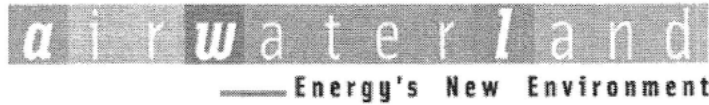
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Terasen Energy Services Plans To Expand District, Geoeexchange Potential

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Attachment "A"

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Energy Evolution: November 3, 2008

Terasen Energy Services Plans To Expand District, Geoeexchange Potential

Terasen Energy Services (TES) Inc. will continue to use the financial power of its parent company, one of the largest utility owners in Canada, to expand its district and geoeexchange power project potential, says a senior executive.

"We have the capital resources to develop district energy and geoeexchange systems and our intention is to continue to grow the business," Kristen Mucha, manager of business development and customer relations at TES, told Nickle's Energy Group.

TES was established four years ago prior to Fortis Inc., which operates utilities in five Canadian provinces, buying the Terasen Inc. natural gas distribution and services operations from Kinder Morgan Inc.

Mucha said TES is fortunate in being backed by a company, such as Fortis, that has deep pockets and especially important in these times of financial stress.

"These are long-term projects," she said. "We didn't just jump on the environmental bandwagon. We view this as a good business case, while also reducing the environmental footprint (of the projects)."

TES has just signed an agreement to design, build and manage a biomass- or water-based geoeexchange system for the 45-acre West Harbour project, planned by Troika Developments in the Westbank First Nation at Okanagan Lake, near Kelowna, British Columbia.

The project, on the west side of Okanagan Lake from Kelowna, will include over 1,500 homes and 80,000 square feet of commercial space. A district energy system (DES) will be set up to incorporate heat from multiple sources that is then piped throughout the community to provide space, domestic hot water heating and air conditioning.

The Troika project is the largest renewable energy project for TES to date. The first phase is expected to be operational in 2010.

TES helped design a DES used at the Whistler Athletes' Village, a complex developed for the 2010 Vancouver Winter Olympic Games, which is now owned and operated by the municipality.

TES is also involved in the Victoria, B.C.-based Dockside Green development, described as one of the largest, multi-user complexes qualified for the gold standard in Leadership in Energy and Environmental Design (LEED).

Upon completion, Dockside Green would house about 2,200 people in 26 buildings totalling 1.3 million square feet, with retail, office and light industrial space included. There will be about 1,000 individual housing units.

Dockside Green will cost an estimated \$500 million to develop, with a projected completion date of 2012 or sooner.

At this point Mucha said TES is only developing projects in B.C., but she said that will likely change.

ESAC IR #1 to FEU

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Terasen Energy Services Plans To Expand District, Geoxchange Potential

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Attachment "A"

"We see a potential to go beyond B.C.," she said.

The company has five geoxchange projects in place or under development, including:

- The 50-unit Wakefield Beach housing project near Sechelt;
- The 30-storey Pomaria residential tower in Vancouver;
- The 26-storey Flat Iron Building in Vancouver, also a residential complex,
- The 174-unit condominium, high-rise, Indigo project in Osoyoos; and
- the 560-unit Aquattro residential development near Victoria.

"Those are the projects we've publicized so far, but we have several others in early stage agreements," said Mucha.

The DES project for TES is not a new area for Fortis either. The parent company has owned and operated a DES in Cornwall, Ontario for many years. That system produces 5.5 megawatts of electricity and 11 megawatts of heat for two hospitals, several schools, two senior citizen residences and five other buildings.

Mucha said geoxchange technology, in particular, holds great promise.

"Our goal is to continue to build geoxchange infrastructure in B.C.," she said. "We are already the leaders in that technology in the province."

At this point all of its projects have been new developments, but she said TES is looking at doing retrofits of existing projects.

"It does make sense to do some retrofits and we do get interest in doing some," Mucha said.

The contracts it signs with its customers extend for 25 years, so short-term volatility in energy prices has little impact on its roll out of renewable technologies, Mucha said.

"We make the capital investment in the technologies and spread the cost out on a monthly basis over 25 years," she said. "The owners of the projects then distribute that cost to the individual owners."

Mucha said the user rate is "comparable to conventional energy" and customers like the cost certainty the systems provide.

She said the geoxchange systems provide price certainty, since the energy source is constant and reliable.

However, with DES it depends on what fuel source and technologies are being used.

For instance, if biomass is the source, it's possible the price could rise in the future.

DES rates are regulated by the British Columbia Utilities Commission, while those for stand-alone geoxchange systems are not.

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ESAC IR #1 to FEU

<http://www.airwaterland.ca/print-article.asp?id=2375>

11/09/2011

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- 8.1 Please indicate if the above quotation by Ms. Mucha represented Terasen Gas Inc.'s corporate position at the time in terms of the jurisdiction of the BCUC with regard to regulating discrete geo-exchange systems owned and operated by Terasen Energy Services. If not, please indicate the steps Terasen Gas Inc. took to correct the record.

Response:

The sentence referenced in the article is not a quote attributed to Ms. Mucha. For clarity, Terasen Gas Inc. was not a party to the article. Please see the response to BCUC IR 1.69.4.4 regarding the evolution of the TES business and related understanding of the regulated nature of TES.

- 8.2 If the above quotation was representative of Terasen Gas Inc.'s position at the time, please indicate what changes have been made to the UCA since that time to cause FEU to change its opinion on BCUC jurisdiction with respect to regulating discrete thermal energy projects.

Response:

Please see the responses to ESAC IR 1.8.1 and BCUC IR 1.69.4.4.

- 8.3 Please explain the apparent discrepancy between the position described by Ms. Mucha and the FEU evidence in this proceeding.

Response:

Please see the responses to ESAC IR 1.8.1 and BCUC IR 1.69.4.4.

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9.0 Thermal Energy Regulation Precedents

Reference: FEU AES Inquiry Evidence Item # 6.4.1.2 (page 116-117)

"The FEU are also aware of a number of Commission orders involving the sale of thermal energy, which further confirm that the sale of thermal energy in BC as proposed by the FEU is public utility activity."

Reference: UCA – Section 88

- 88** (1) *In making an order, rule or regulation, the commission may make it apply to all cases, or to a particular case or class of cases, or to a particular person.*
- (2) *The commission may exempt a person from the operation of an order, rule or regulation made under this Act for a time the commission considers advisable.*
- (3) *The commission may, on conditions it considers advisable, with the advance approval of the Lieutenant Governor in Council, exempt a person, equipment or facilities from the application of all or any of the provisions of this Act or may limit or vary the application of this Act.*
- (4) *The commission has no power under this section to make an order respecting a person, or a person in respect of a matter, who has been exempted under section 22.*

- 9.1 The three examples of thermal energy regulation cited on page 117 (Canadian Forest Products Ltd., Al Stober Construction Ltd., and Canada Place Corporation)) involve the delivery of energy between two legal entities across property lines. Does FEU agree or disagree with that distinction?

Response:

The FEU, in the Evidence Submission, page 116 – 117 stated the following:

"The FEU are also aware of a number of Commission orders involving the sale of thermal energy, which further confirm that the sale of thermal energy in BC as proposed by the FEU is public utility activity. The circumstances in each of these cases involved the sale of thermal energy from an owner of thermal energy producing equipment to another party, and an application by the seller to be exempt from active regulation under the UCA. In each case the seller sought and obtained advance approval of the Lieutenant Governor in Council for exemption, and the Commission approved the exemption request."

The FEU agree that the three examples involve delivery of energy between two legal entities across property lines but the FEU do not agree that the sale of energy from one party to another

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must cross property lines in order for it to be public utility service in BC. The exemptions to regulation were required as all three entities met the definition of public utility as noted below.

The definition of public utility in the *UCA* is as follows:

"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,"

In many cases delivering energy to the public or a corporation will result in the energy crossing property lines, but this is not the test in the *UCA*.

- 9.2 Please provide examples of the BCUC regulating discrete thermal energy projects as per the definition of Discrete Thermal Energy Systems provided in Section 6.1.1 (page 102) of FEUs evidence in this proceeding.

Response:

For ease of reference, page 102, section 6.1.1, "Discrete Thermal Energy System" of the Evidence states the following:

"6.1.1 Discrete Thermal Energy System"

The characteristics of a typical discrete TES contemplated by the FEU are as follows:

- A discrete system typically serves one customer (building type) in one or more buildings such as an individual home, a strata building, or a commercial property on one piece of land.*
- Discrete energy systems employ a range of energy technologies and sources to deliver piped heating (ambient, hot water and/or steam) and/or cooling (ambient or chilled water) to one or more buildings and customers within a property from a central or distributed plant location or locations.*
- There is usually only one class of customer and one charge or rate to the customer for energy. The target customers of this offering would be charged rates that would recover the FEU's cost of service, although the high upfront capital costs of these systems may necessitate the use of rate management techniques such as levelized rates to avoid prohibitively high rates for the initial customers joining the system. In these cases the rates would recover the cost of*

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service over a longer time period such as the life of the assets or the term of the service contract. The rate includes cost recovery for capital, O&M (including energy inputs), taxes, depreciation, etc.

- *The agreement to provide service is with the strata or commercial business, although the development of the discrete system is often carried out by a developer.*
- *Development of a discrete system is much quicker than the District Energy Systems described below due to the limited number of partners, stakeholders and customers."*

With the caveat stated below, the FEU are not aware of any discrete energy systems meeting the above description that have been regulated by the Commission. This issue of regulation of these types of systems has only come to the forefront recently with the development of the market for these services. The regulation of these systems is warranted, not only because they meet the definition of "Public Utility" in the UCA, but also because of the inherent monopoly involved in the service once the systems are installed for the customer. The caveat noted above is that one may or may not consider the following three projects to be a discrete energy system, and those projects would have been regulated if exemptions had not been granted, (Exhibit B-2, page 117):

1. *"Canadian Forest Products Ltd. (Order G-104-04): regarding the sale of steam from its prince George pulp and paper mill to a neighbouring chemical facility owned by Chemtrade Pulp Chemicals Limited partnership.*
2. *Al Stober Construction Ltd. (Order G-81-08): regarding the sale of thermal energy from a geothermal energy system (built initially to serve buildings owned by Al Stober Construction and Partners) to a nearby strata condominium being developed by Mode Properties Ltd.*
3. *Canada Place Corporation (Order G-151-08): regarding the sale of chilled water for cooling purposes to Westbank Projects Corp. for is Fairmont pacific Rim Hotel and Residences."*

- 9.3 Noting that the three examples provided involved the seller seeking (and obtaining) exemption from regulation under Article 88 of the UCA, please provide FEU's opinion of the merits of the BCUC potentially seeking a blanket exception for discrete thermal projects (in advance) under Article 88 given that they do not represent a "natural monopoly" which has been the Commission's test for regulatory status until now.

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Response:

A company's regulatory status is, and always has been, determined by the definition of "public utility" in the *Act*.

The three examples provided in the Evidence, page 117, all involve a commercial agreement where the LGIC and the Commission judged that the interests of others would not be materially affected as evidenced by the exemptions granted. However wording in two of the three exemption orders indicates that the Commission might in the future revoke the exemption "following the determination of any complaint it receives from a person whose interests are affected". The exemptions therefore are not unconditional.

Another established blanket exemption, the Independent Power Producers exemption from regulation (Ministerial Order M22-0205) pertains to upstream commercial arrangements whereby the IPP must sell all the power from a given project to BC Hydro. BC Hydro retains the responsibility of serving the end use customer and uses IPP-generated power along with its own electricity generation and other supply resources to meet customer demands. BC Hydro's acquisition of the power is regulated, and thus the Commission retains control over the relationship between the IPP and BC Hydro.

The FEU do not believe that a blanket exemption from regulation for discrete energy systems, particularly an unconditional one, is the best approach at this time. Some customers want the protection afforded by the oversight of the Commission, which they should be entitled to have if they want. However, there may be other customers that place a higher value on the administrative efficiency of not having regulation, in which case they can support the developer in applying for an exemption on a case for case basis.

Please also refer to the responses to BCUC IRs 1.35.1 and 1.35.2.

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10.0 Regulation of Discrete AES/Thermal Projects

Reference: UCA – Section 1

"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, or

(b) the conveyance or transmission of information, messages or communications by guided or unguided electromagnetic waves, including systems of cable, microwave, optical fibre or radiocommunications if that service is offered to the public for compensation,

but does not include

(c) a municipality or regional district in respect of services provided by the municipality or regional district within its own boundaries,

(d) a person not otherwise a public utility who provides the service or commodity only to the person or the person's employees or tenants, if the service or commodity is not resold to or used by others,

(e) a person not otherwise a public utility who is engaged in the petroleum industry or in the wellhead production of oil, natural gas or other natural petroleum substances,

(f) a person not otherwise a public utility who is engaged in the production of a geothermal resource, as defined in the Geothermal Resources Act, or

(g) a person, other than the authority, who enters into or is created by, under or in furtherance of an agreement designated under section 12 (9) of the Hydro and Power Authority Act, in respect of anything done, owned or operated under or in relation to that agreement;"

10.1 Based on FEU's current interpretation of the definition of a public utility (which requires the regulation of discrete thermal energy projects), please explain whether, in FEU's opinion, the following situations or services also constitute a "public utility" thus requiring BCUC approval and tariff regulation. If they do not, please explain what exemption would be applicable under the UCA:

- a) A propane tank owned by a propane supplier that is placed on a customer's property for building heating where the customer pays monthly for actual

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propane consumption (by metering the amount of propane required to top-up the tank periodically when it is delivered) and a monthly rental fee for the tank.

Response:

The FEU believe that whether this case is regulated or not is dependent on whether the service provider is otherwise a public utility or not. This is based on the exemption for parties that are engaged in the petroleum industry that are not otherwise public utilities. Propane is defined as a petroleum product in the *UCA*.

The FEU note that the exception for parties engaged in the petroleum industry includes (among other things):

- the storage of petroleum or petroleum products;
- the wholesale or retail distribution or sale of petroleum products;

Most likely the exception for the propane tank (and monthly rental fee for it) for parties not otherwise public utilities would be tied to the second bullet, i.e. a component of the retail distribution or sale of propane, however it could be considered a temporary product storage site. In either case, it would not be regulated unless it was otherwise a public utility.

- b) A temporary heating system is provided to a construction site where the supplier owns the heating and fuel storage equipment and charges the customer a rental fee for the equipment as well as a fuel charge based on actual consumption delivered to the site.

Response:

This service would be regulated under the *Act*. The company in the example is engaged in re-selling energy and providing that service by way of its own facilities. The Commission is admittedly unlikely to be interested in regulating a person that owns a single piece of equipment; however, it becomes easier to see why this service would be regulated in a hypothetical case where a large corporation was providing the service at hundreds of locations with hundreds of pieces of equipment. In those circumstances, it starts to look more like a small electric utility that purchases electricity from BC Hydro as a commercial customer and then resells it to residents and businesses in its service area.

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- c) A building owner who uses fuel oil for heating and pays a heating oil supplier for heating oil delivered to the site (where consumption is measured at the delivery truck for each delivery).

Response:

In this scenario, the "heating oil" would meet the definition of "petroleum product" and therefore this service would not be regulated.

- d) A building owner who uses wood pellets or biomass for heating and pays a pellet or biomass supply company for fuel delivered to the site periodically.

Response:

The FEU believe that the provider of pellets or biomass is not regulated. These inputs, like raw biogas, do not in and of themselves provide the electricity or heat energy; they first require burning in facilities designed to convert them to energy. The heat or electric energy output from the equipment used to consume/burn the pellets would be regulated if sold to a third party(ies), but in the example provided it appears the building owner is self-providing.

- e) A propane tank owned by an energy provider located on a multi-unit residential complex where the strata corporation pays the provider for actual propane consumed at negotiated rates relative to an index as well as a pre-determined capital charge for the tank and allocates those costs to individual tenants.

Response:

Please refer to the response to ESAC IR 1.10.1 (a). The same analysis applies.

- f) A supplier who provides rental air conditioning services on a temporary or permanent basis to buildings, commercial tenants, residential tenants or transient users (such as movie sets).

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Response:

Please refer to the response to ESAC IR 1.10.1 (b). The same analysis applies.

- 10.2 Please indicate if, in FEU's opinion, the BCUC has any discretion in determining if a certain service qualifies as a public utility for regulation purposes or if they are legally forced to apply the definition of a "public utility" literally without exception even if no natural monopoly exists?

Response:

Please refer to the response to BCOAPO IR 1.9.1.

- 10.3 If the answer to 10.2 above is that the Commission has no discretion, please provide FEU's opinion as to how the BCUC should deal with the massive increase in the number of assets or projects it would be required to regulate (with the term "any other agent" being equally applied to thermal energy and fuels such as propane, fuel oil, biomass and air conditioning) even if those assets or projects (i) do not constitute natural monopolies or (ii) have minimal impact on public risk or convenience.

Response:

For the reasons described in the response to ESAC IR 1.10.1, the FEU does not regard all of those services as regulated. To the extent that they would be caught by the *Act*, the *UCA* provides for the power to grant exemption orders. Even if there is no exemption, the Commission can apply light handed regulation or complaints-based regulation where appropriate. Please refer to the response to BCOAPO IR 1.9.1.

- 10.4 In the BCUC's 1997 RMDM Decision, the Commission used a "natural monopoly" test to determine if a service represented a "public utility" requiring regulation and referred to the *UCA* definition of a public utility as "a very broad definition of a public utility". The Commission also noted that this definition has remained

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unchanged since the 1970s. Is it FEU's opinion that the Commission's previous interpretation as to what constitutes a "public utility" was incorrect?

Response:

The FEU understand ESAC to be referring to the following paragraph of the RMDM guidelines:

As discussed in the staff position paper, utilities are generally established in response to natural monopoly conditions. A natural monopoly is said to occur if the provision of a good or service can be provided at lowest cost by a single firm, rather than by two or more firms; i.e., there exist substantial economies of scale. Utilities may also be asked to provide an associated product if its provision by the utility leads to economies of scope; i.e., a single firm is able to produce two or more joint products at a lower unit cost than single firms each producing just one of these products. However, because the provision of the good or service by a single firm leads to the potential of monopoly pricing, utilities are generally regulated with respect to price and service quality. A very broad definition of a public utility is provided in the Utilities Commission Act ("the Act") for the purposes of regulation under Part 3 of the Act. The definition has remained unchanged since the 1970s.

The FEU do not agree with ESAC that in this paragraph the Commission "used a "natural monopoly" test" to determine if a service is regulated under the Act. The Commission only says that "utilities are generally established in response to natural monopoly conditions", and then goes on to describe when natural monopolies occur. The Commission then states that the Act has a very broad definition of public utility for the purposes of regulation.

The test is that set out in the definition of "public utility". It would be an error of law for the Commission to adopt a "natural monopoly" test for determining whether a person or service is subject to regulation under the Act in place of applying the definitions provided in the Act. Please refer to the responses to ESAC IR 1.10.3 and BCOAPO IR 1.9.1.

- 10.5 Please explain the relevance of a TES customer being a "non-regulated" entity (p 165, point #6). Does this mean that a TES customer cannot be a regulated entity? If a customer is non-regulated, is it FEU's view that it would be exposed to future rate increases of an AES project as the non-regulated entity freely entered into an agreement with FEU for future services.

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Response:

No, the reference to the TES customer being a non-regulated entity doesn't mean that a TES customer cannot be a regulated entity. The statement reflects the fact that in most cases the customer who obtains the service from a public utility will not be regulated. For example, FEI is regulated as a provider of natural gas service. By "regulated" FEI means that it has various obligations and duties under the provisions of the *Act*. FEI's natural gas customers on the other hand are not normally going to be regulated under the *Act* unless they take gas service for the purpose of acting as a small distribution utility. A TES customer would similarly not be regulated unless it is reselling the thermal energy it purchased from the FEU to the public for compensation. That is, the *Act* does not impose obligations and duties on the customer simply because it is a customer of a public utility, although as customers they do have various rights and remedies under the *Act* in terms of the service they receive. This is all that is meant by the customer being "non-regulated" in point # 6.

In answer to the second part of the question, as stated above, a customer such as a corporation could both receive public utility service and provide it, and in fact be a regulated entity. For instance, Corix takes service from FortisBC (electric) and provides regulated electric service to residents within its small service area.

The answer to the third part of the question, the rates that TES customers will pay are determined by the TES contract, and the Commission according to the provisions of the *Act*. TES customers, like any other public utility service customer, can face rate increases from time to time. They can also complain to the Commission in the event that they are concerned about the rates they are paying. Regulated rates must be in all respects just and reasonable. The regulatory oversight is a source of comfort for customers.

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11.0 Thermal Energy for Schools EEC Funding

Reference: FEU Response 2012/2013 RRA ESAC IR 2.4.1 (Page 10)

"Staff involved in discussions with School Districts do not specifically recall such discussions taking place, but it is generally the case with all of our customers that they are interested in and inquire about available incentives from all sources (whether the utility or government)."

Reference: FEI Response 2012/2013 RRA ESAC IR 2.4.1 (Page 17)

"FEI is developing thermal energy projects with other schools districts and boiler replacements are expected to comprise a portion of the new thermal energy systems installed in these projects."

- 11.1 Given the degree to which Thermal Energy projects for schools are dependent on EEC incentive for viability (as evidenced by their low TRC scores), please explain how it is possible that FEU staff do not recall discussing potential EEC funding with school district clients where thermal energy projects are being developed.

Response:

Thermal energy projects for schools are not dependent upon EEC incentives for viability.

Further, the first quote referenced above in this Information Request regarding discussions about EEC is taken out of context. The entire response from the response to ESAC IR 2.4.1 in the FEU's 2012-2013 RRA proceeding is copied below. The question in the RRA refers to upcoming funding potentially available if the FEU receive approval for the Thermal Energy Services for Schools Program Area in the 2012-2013 RRA proceeding. While FEU Energy Solutions staff discuss EEC with many customers, these staff have advised that they have not discussed with customers potential funding pending approval in the FEU's RRA proceeding for the Companies' proposed Thermal Energy for Schools Program. See the response to ESAC IR 1.11.2 for further information.

"4.0 Thermal Energy Services for Schools

Reference: 2012/2013 RRA Appendix K Section 4.3 Page 14

"FortisBC is proposing a \$22 million incentive program for geothermal and energy efficiency retrofits in up to 260 schools over two years"

Reference: 2012/2013 RRA - Response to BCUC IR 204.3 & 204.3.1

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4.1 Please indicate if, prior to the submission of the 2012/2013 RRA, any FEI staff members, including any member of the designated Thermal Energy Services Group, discussed with any School Districts the possibility of TES EEC funding being approved under the pending RRA. If so, please indicate if any of these discussions took place in the context of FEI or any affiliate developing Thermal Energy solutions for these customers whereby the EEC funding would potentially be used to improve the financial viability of TES projects that would be owned and operated by FEI. Please indicate the number of School Districts (including the total number of schools involved) where these discussions have taken place.

Response:

The FEU are assuming that the "TES" referred to in this question refers to the Companies' proposed Thermal Energy for Schools Program, for which approval has been requested in this Application (Exhibit B-1), and the response to this question is based upon that assumption.

Staff involved in discussions with School Districts do not specifically recall such discussions taking place, but it is generally the case with all of our customers that they are interested in and inquire about available incentives from all sources (whether the utility or government). The FEU sales staff recognize that they are not in a position to make any commitments about EEC funding. Each customer must qualify for EEC funding based on the terms and conditions of the EEC program to which the customer is applying. Moreover, as the proposed Thermal Energy for Schools Program has not yet been approved, the Companies' EEC team has not yet commenced program design for Thermal Energy for Schools, which would include the development of the terms and conditions for a Thermal Energy for Schools Program."

11.2 Please confirm that FEU Thermal Energy staff developing projects with school districts would have been aware of the potential for Thermal Energy for Schools EEC funding that was being proposed in the 2012/2013 RRA and that they would have been in a position to discuss the potential for this funding to be available to these school districts subject to BCUC approval.

Response:

Not confirmed. To clarify, it is the FEU's front line Energy Solutions staff that have prime responsibility for customer engagement and interaction for both natural gas solutions and TES. These Energy Solutions staff are different from the TES staff (please also see the responses to BCUC IR 1.74.1 and ESAC IR 1.11.1). The FEU canvassed the front line Energy Solutions

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Staff regarding their knowledge of the EEC proposals in the RRA and whether or not they had spoken to customers about potential EEC programs. The frontline Energy Solutions staff did not have knowledge of the EEC programs proposed in the RRA and therefore have not spoken to customers about any potential 2012-2013 RRA EEC programs.

- 11.3 Please confirm that such conversations could have taken place before the submission of the 2012/2013 RRA and therefore before any other entities besides FEU would have been aware of the existence of this potential EEC funding irrespective of whether or not it had been approved by the BCUC.

Response:

Not confirmed. The FEU have not had any conversations with customers regarding specific potential funding arising from any approvals in the 2012-2013 RRA. Please see the response to ESAC IR 1.11.2.

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12.0 Geo-Exchange Assumptions

Reference: FEU 2012-2013 RRA

Response to BCUC 201.1 - Geo-exchange TRC and SCT tables

- 12.1 The tables for the SCT and TRC tests for geo-exchange for elementary and secondary schools show generic costs estimates of \$167,000 and \$524,000, respectively. Please advise whether these costs are based on open-loop technology or closed-loop technology.

Response:

The costs presented are based on a mix of both open and closed loop technologies, with greater emphasis on open as opposed to closed loops. These are estimates only. Should the Commission approve the Thermal Energy for Schools initiative, the Companies will begin detailed program design which would include refining all inputs to the benefit-cost analysis including refining the incremental cost of the technology that is the target of the program. Should a program come to fruition, the incentives available would be based upon the volume of natural gas avoided, and the customer would determine what technology (open or closed loop) they would install.

- 12.2 If they are based on open-loop technology, please provide a rationale for this given the expected challenges to the viability of open-loop systems within FEU's service territory with respect to hydrology and environmental issues.

Response:

Please see the response to ESAC IR 1.12.1.

- 12.3 If they are based on closed-loop technology, please provide a breakdown of how the cost estimates were arrived at including assumed school area sizes for both elementary and secondary schools.

Response:

Please see the response to ESAC IR 1.12.1. These are estimates only. Should the Commission approve the Thermal Energy for Schools initiative, the Companies will begin

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detailed program design which would include refining all inputs to the benefit-cost analysis including refining the incremental cost of the technology that is the target of the program.

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13.0 Cost of Regulation

Reference: FEU – AES Evidence Section 6.4

- 13.1 With respect to "discrete" AES projects, such as the ones contemplated for the Delta School District, please provide an estimate of the cost of economic regulation of these types of projects either on an absolute dollar basis or as a percentage of the capital cost. Please consider all stages of the project including:
- a) at the start up including the filing of the CPCN and the establishment of the initial rates for thermal projects;
 - b) the cost of filing and implementing rate increases required from time to time; and
 - c) routine annual filings such as Annual Reports to the Commission.

Response:

The regulatory obligations would be the same for ESAC's member companies, or any entity engaged in similar projects in BC. All costs related to TES including the costs of regulation would be recovered from TES customers, as would be the case for any other provider of the service. As the FEU have yet to complete a significant number of filings to the BCUC there is no basis to calculate the costs of regulation for TES projects as outlined in the question. The FEU have proposed guidelines for streamlined processes for our own projects with the hope of making the regulatory processes as cost effective as possible for our customers.

- 13.2 Please confirm that FEU will attempt to recover all costs associated with economic regulation from its TES customers.

Response:

Please see the response to ESAC IR 1.13.1.

- 13.3 If these projects were provided on a non-regulated basis, please confirm that the costs associated with economic regulation would be nil. If it is FEU's view that there would continue to be a cost of economic regulation, please state what

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these would be related, how they would compare to the answer in IR 13.1 and who would pay for these costs.

Response:

The key point is that discrete TES are regulated in BC so the comparison to doing them on a non-regulated basis is not realistic. Nevertheless, the FEU provide the following comments.

While costs directly related to the time required to file and respond to the Commission regarding TES filings would not be incurred in a non-regulated business, the majority of costs still exist. These include activities such as project justification for internal business purposes, legal agreements, and accounting of costs. In accordance with normal business practice these costs would be recovered from customers. In a non-regulated business it is possible that total rates charged to customers could be higher than in a regulated business given that there is a lack of transparency - profits or other cost elements could be inflated and customers would not have recourse to the Commission.

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14.0 Natural Gas Load Loss

Reference: FEU – AES Evidence Section 2.1

Preamble: In its evidence, FEU expresses concerns regarding the loss of natural gas load and the resulting adverse impact on natural gas ratepayers.

14.1 In FEU's view, is the allowed return on equity provided to FEU adequate for the risk of declining natural gas load described in its evidence? If not, please provide the evidence FEU submitted to the Commission to justify a higher ROE in this regard.

Response:

The FEU discussed the factors that have led to increased business risk in recent years in detail in the 2009 ROE and Capital Structure Application proceeding, which is a matter of public record. The Commission, in its Decision, by Order No. G-158-09, accepted the FEU's characterization of its business risk (page 19 of the Decision) and recognized that the FEU's business risk has increased (page 37 of the Decision) and determined the allowed ROE and capital structure for the FEU. The FEU had applied for benchmark ROE of 11%, which was higher than the Commission ended up setting, and we had considered our original request to be reasonable based on the evidence provided.

The FEU considers that the risk facing the Companies is most likely increasing over time as, for instance, throughput declines and the policy environment remains challenging for a natural gas provider to retain and attract load.

14.2 Is it FEU's position that it should be entitled to enter the TES sector in order to attempt to mitigate the risk of declining natural gas load?

Response:

The FEU believe that it currently has the legal *entitlement* to enter this business.

In terms of why the Companies have elected to pursue TES (along with the other New Initiatives), addressing declining natural gas load is a significant driver. As discussed in Section 2 of the Evidence Submission, the FEU's New Initiatives provide a more comprehensive set of energy service options to customers and represent part of the Companies' response to challenges we face in the changing energy environment in which we operate. One of the challenges the FEU face is declining natural gas throughput levels, which, all else equal, can result in higher rates for natural gas ratepayers. The FEU's pursuit of New Initiatives may mitigate increases to the long term risk to natural gas customers by finding new ways to make use of natural gas system and infrastructure.

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The FEU have addressed this issue further in the response to BCOAPO IR 1.9.2.

- 14.3 Aside from the recovery of shared services, please confirm that natural gas ratepayers will not benefit from the return on rate base component of TES projects and that those returns are provided to the debt holders and shareholders of FEI.

Response:

Confirmed.

- 14.4 Does FEU foresee a point in the future when the natural gas load loss will be significant enough to warrant sharing the recovery of the EEC deferral account from non-natural gas ratepayers such as TES customers?

Response:

The FEU are of the view that ratepayers for each class of service, natural gas or TES, will be responsible for cost recovery of only that class of service. EEC initiatives are undertaken for the benefit of natural gas customers and therefore only natural gas customers would be responsible for the recovery of the EEC deferral account.

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15.0 EEC Fund Distribution

Reference: FEU – AES Evidence Section 7.4

- 15.1 Please confirm that the EEC Department reports to the same Vice President as the Thermal Energy Services Group.

Response:

Confirmed. Both departments report to the Vice President, Energy Solutions and External Relations.

- 15.2 To what degree does the EEC Department function separately and independently from the TES Group? Do they occupy common office space? Do they communicate on a frequent basis?

Response:

For the purposes of this response, the FEU are assuming that "TES" in the Information Request refers to Thermal Energy Services. EEC and Thermal Energy Services staff function as entirely separate departments within the FEU as indicated in the following excerpt from the Companies' 2012-2013 RRA proceeding, response to ESAC IR 2.5.9:

"The staff involved in developing projects for school district customers are distinct from those that distribute EEC funds under the High Efficiency Boiler program.

The FEU staff that develop the thermal energy solution projects are in the Thermal Energy Solutions group, reporting to the Director, Business Development. The FEU staff responsible for administering the Efficient Boiler Program are in the EEC group, and in the Energy Products and Services group, reporting to the Director, Resource Planning and Market Development."

The staff in these departments occupy separate office spaces. EEC staff are located in the FEU's Surrey Operations centre, while TES staff are located at the FEU's Burnaby and Victoria sites. EEC staff do not communicate frequently with Thermal Energy Services staff though there are no restrictions on the frequency of communication between the two groups.

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- 15.3 Would the fact that the TES Group is working with the Delta School District on a non-prescriptive project be "flagged" on the Delta School District application for EEC funds?

Response:

No. The FEU's EEC staff are primarily concerned with ensuring that applicants are in fact eligible for an incentive based on whether an applicant's project conforms with the terms and conditions of an EEC program.

As stated in the FEU's 2012-2013 RRA proceeding, and in the response to ESAC IR 2.6.5, funding became available to the Delta School District via the FEU's defined PSECA Initiative as follows:

"The EEC funding becomes available for PSECA applicants such as DSD in the following manner: DSD first submitted an application and detailed energy study to the Climate Action Secretariat ("CAS") for internal CAS review and prioritization. The CAS then forwarded the energy study to the utility PSECA partners (FEI and BC Hydro). FEI reviewed the study to ensure reasonableness of the conclusions, and subsequently submitted each of the proposed energy conserving measures (i.e. the proposed thermal upgrade at each school) to the PSECA Initiative's screening and funding models. Each proposed upgrade was first subjected to a Total Resource Cost (TRC) screening. A portfolio of projects which maintain a TRC score of approximately 1.0 was then selected and incentives for each project developed. Incentives were determined based on the expected stream of natural gas savings. More specifically the incentives were calculated as 5 \$/GJ, on the discounted stream of the expected natural gas savings, over 50% of the measure life, up to a maximum of 10 years."

This process focuses on the participant and the proposed energy solutions, and does not consider the energy services provider. Additional details may also be found in the response to BCUC IR 1.119.1 in this proceeding.

- 15.4 Please confirm that when the EEC Department receives a request for funding that it is prohibited in sharing the existence of that request and any information related to that request with the TES Group.

Response:

Not confirmed. As described in the response to Corix IR 2.4.6 in the FEU's 2012-2013 RRA and in the response to BCUC IR 1.99.3 in this Inquiry proceeding, there is no prohibition

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regarding the sharing of customer information between departments within FEI. In practice however, it is uncommon for the two groups to communicate directly. As described in the response to ESAC IR 1.15.2, the groups are located in different offices and are functionally separate, apart from reporting to the same member of the executive team. It should be noted as well that in no instance has a request for EEC funding to the EEC department been used as an opportunity to initiate a TES project.

- 15.5 On page 151, FEU states that "BC Housing, for example, has used [Ameresco] (an ESAC member) as their energy services company and has received many thousands of dollars in Efficient Boiler Program incentives in recent years." Please confirm that this program is a prescriptive program where the criteria for funding are readily defined; as a result, there is no discretion for the EEC Department other than assuring that the project is completed before issuing funds to the natural gas customer.

Response:

Confirmed. Our entire EEC incentive funding portfolio, with the exception of very limited pilot activity, is provided through programs that are currently (and will continue to be) delivered to customers via defined programs with published eligibility criteria, terms and conditions. This follows from the Companies' commitment to the principle of universality as outlined in the excerpt below, taken from page 47 of Companies' original EEC Application:

"Programs will have a goal of being universal, offering access to energy efficiency and conservation for all ...customers..."

As indicated in the FEU's 2012-2013 RRA proceeding, response to Corix IR 2.6.2:

"The principle of universality put forward by the Companies in 2008 means that all eligible customers that comply with the terms and conditions of any given program can participate in that program."

Pursuant to the above, the Efficient Boiler Program is an established prescriptive EEC program with defined terms and conditions. Should a customer's project conform to the terms and conditions of any established EEC program, including the terms and conditions of any future programs that could support thermal energy projects regardless of a customer's choice of ownership model, that customer would be eligible for an EEC incentive.

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16.0 BC Hydro EEC Programs

Reference: FEU – AES Evidence Section 7.5

- 16.1 Please give examples where BC Hydro provides EEC type funding (e.g. Powersmart) to energy and efficiency projects in which BC Hydro has a direct or indirect role in owning, financing, operating, maintaining or providing services.

Response:

The FEU are not aware of all of the details of BC Hydro's PowerSmart programs, and cannot answer definitively on behalf of BC Hydro.