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October 26, 2022

Commercial Energy Consumers Association of British Columbia
c/o Owen Bird Law Corporation
P.O. Box 49130
Three Bentall Centre
2900 – 595 Burrard Street
Vancouver, BC
V7X 1J5

Attention: Mr. Christopher P. Weafer

Dear Mr. Weafer:

**Re: FortisBC Inc. (FBC)**

**Application for Approval of a Large Commercial Interruptible Rate (Application)**

**Response to the Commercial Energy Consumers Association of British Columbia (CEC) Information Request (IR) No. 1**

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On July 6, 2022, FBC filed the Application referenced above. In accordance with the regulatory timetable established in British Columbia Utilities Commission Order G-226-22 for the review of the Application, FBC respectfully submits the attached response to CEC IR No. 1.

For convenience and efficiency, if FBC has provided an internet address for referenced reports instead of attaching the documents to its IR responses, FBC intends for the referenced documents to form part of its IR responses and the evidentiary record in this proceeding.

If further information is required, please contact the undersigned.

Sincerely,

**FORTISBC INC.**

***Original signed:***

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

# INTRODUCTION, PROVINCIAL POLICY, LEGISLATIVE CONTEXT AND APPROVALS SOUGHT

**1. Reference: Exhibit B-1, PDF Page 5, Lines 12-13**

> Commercial customers, herein referred to as the Large Commercial Interruptible Rate (LCIR). As proposed, eligible customers could choose to take service using this optional interruptible rate for new or existing customers who would otherwise be eligible to receive service under either Rate Schedule (RS) 30 - Large Commercial Service – Primary, or RS 31 - Large Commercial Service – Transmission. The LCIR will provide non-firm, interruptible service under a set of certain defined circumstances, and be priced in relation to the hourly level of the Intercontinental Exchange (ICE) Day Ahead Mid-Columbia (Mid-C) Index. The LCIR is being proposed as a means to better utilize the transmission and/or primary distribution networks; offer a market-based rate option for customers; and further the province's energy objectives. Once approved, the LCIR would be referred to as RS 38 - Large Commercial Interruptible Service.

1.1 Please explain (by elaborating on all practical aspects) how the introduction of LCIR would lead to a better utilization of FBC's transmission and/or primary distribution networks.

**<u>Response:</u>**

In the context of the LCIR, better utilization of transmission and/or primary distribution networks simply means that FBC is able to attract additional load and generate additional revenue from existing assets. To the extent that additional revenue can be generated with a positive margin, there is a general mitigation of rates as fixed costs can be spread over more kWh.

1.2 Please provide a high-level discussion of potential (net) impact(s) from the introduction of LCIR on FBC's transmission and/or primary distribution networks (specifically as it concerns average utilization of these networks), on account of not only the expected LCIR uptake by large commercial customers but also of their anticipated future use (of these networks) for firm-load serving needs.

**<u>Response:</u>**

Please refer to the response to CEC IR1 1.1. To the extent that additional firm load can also be connected, the potential benefits of increased utilization discussed in the referenced response can be maximized.

1.3 Where appropriate, please distinguish between transmission network impacts and primary distribution network impacts.

**Response:**

FBC does not anticipate that the LCIR will have impacts on either the transmission or primary distribution networks. One of the foundational aspects of the LCIR is the concept of "doing more with the same", and the potential to generate additional margin without the need to upgrade or add to FBC's infrastructure requirements.

1.4 Please discuss the (order-of-magnitude) impact(s) that the proposed 50 MW of total connected interruptible load would have on the utilization of FBC's transmission and/or primary distribution networks.

**Response:**

Please refer to the response to BCSEA IR1 3.3.

FBC expects that if 50 MW of LCIR load at 100 percent load factor is added to the system but is all interrupted at the time of the system peak, then the system load factor would improve by approximately 6 percent calculated as follows:

50 MW LCIR load / 777 MW 2021 system peak load

1.5 Please explain whether higher or lower ICE Mid-C prices (as compared to customer-designated price caps) would affect the utilization of FBC's transmission and/or primary distribution networks? How so?

**Response:**

The relative level of the Mid-C market price to Mid-C Price Cap will impact the utilization of the FBC system to the extent that customer interruption is increased. For example, where the Mid-C market price exceeds the Mid-C Price Cap such that the Customer is interrupted, power to the Customer would cease to flow and network use would be reduced.

## RATIONALE FOR NEW INTERRUPTIBLE RATE

**2. Reference: Exhibit B-1, PDF Page 8, Lines 24-26**

> Customers are unlikely to expose their operations to interruptions due to utility service suspensions without the opportunity to benefit from reduced energy bills. RS 38 provides a mechanism for achieving such a benefit, albeit dependent on the level of market rates.
>
> However, interruptible rates may provide an interim step that allows customers to connect to the utility system in the short term, with the goal of taking firm service in the future once required upgrades have been completed. This opportunity for interruptible service reflects the avoidance of the long lead time due to the necessary capital planning and construction activities required to add significant capacity to the existing FBC system.

2.1. Please confirm that RS 38 is a new rate schedule that FBC proposes to add to its Electric Tariff.

**Response:**

Confirmed.

2.2. Please explain if there are any parallels between the proposed RS 38 and FBC's existing RS 37.

**Response:**

RS 38 and RS 37 are distinct services. RS 37 is FBC's Stand-by Service. It is a Back-Up and Maintenance Service intended for and available only to those Customers that normally supply all or some portion of load from self-generation. RS 37 provides the Customer with a firm supply of electric power and energy when the Customer's generating facilities are not in operation or are operating at less than full rated capability. Both rates have a component of billing that is based on Mid-C pricing.

2.3. Please elaborate on whether RS 37 and RS 38 serve similar or different customer needs.

**Response:**

Please refer to the response to CEC IR1 2.2.

2.4. Please advise whether FBC considered modifying RS 37 to potentially address any perceived gaps in customer needs.

**Response:**

No, this was not considered since RS 37 and RS 38 address entirely different situations.

2.5. Please explain what added capabilities RC 38 brings on behalf of cost-savings measures for commercial customers.

**Response:**

FBC does not understand what is meant by the capabilities that RC 38 brings on behalf of cost-savings measures for commercial Customers. As explained in the Application, for Large Commercial Customers, the LCIR may result in reduced power supply costs, can allow a Customer to connect where it may not otherwise be able to because of a lack of firm system capacity, and can serve as a means to connect in the short term while facilities required for firm service are constructed.

**3. Reference: Exhibit B-1, PDF Page 8, lines 27-31**

> Customers are unlikely to expose their operations to interruptions due to utility service suspensions without the opportunity to benefit from reduced energy bills. RS 38 provides a mechanism for achieving such a benefit, albeit dependent on the level of market rates.
>
> However, interruptible rates may provide an interim step that allows customers to connect to the utility system in the short term, with the goal of taking firm service in the future once required upgrades have been completed. This opportunity for interruptible service reflects the avoidance of the long lead time due to the necessary capital planning and construction activities required to add significant capacity to the existing FBC system.

3.1. Please quantify (in months or years) the ‘long lead time due to the necessary capital planning and construction activities’ required to add ‘significant capacity’ to the existing FBC system.

**Response:**

Please refer to the response to BCUC IR1 3.8.

3.2. Please provide time ranges (in months or years) required to plan and complete projects necessary for adding ‘significant capacity’ to the FBC system, respectively for transmission and primary distribution networks.

**Response:**

Please refer to the response to BCUC IR1 3.8.

3.3. Please explain what type of factors impact FBC’s ability to add ‘significant capacity’ to its existing system?

**Response:**

Projects to add significant capacity to the system are primarily driven by the load forecast.

In most cases, FBC has the ability to add system capacity in response to a Customer’s request given adequate time and the funding required to add to or upgrade existing infrastructure. Factors that impact timing and cost are planning requirements, permitting and regulatory requirements, land requirements, engineering, material procurement, and construction.

3.4. Please elaborate on how the introduction of LCIR may impact the ability of FBC to provide assurances that future upgrades would be completed within reasonable timeframes for a commercial customer to convert from initially receiving interruptible service (under the LCIR) to firm service.

**Response:**

The LCIR does not impact the eventual provision of firm service to a Customer. A Customer that wants to be served on a firm basis will need to make the required application and follow the process contained in the Industrial Electricity Interconnection process. The LCIR would allow the Customer to take service prior to the availability of firm supply.

3.5. Please discuss whether and how the introduction of LCIR may affect FBC's existing interconnection processes for commercial customers.

**Response:**

In response to the question of "whether", the answer is no. The intention, as noted in Section 3.1.1 of the Application, is for the LCIR to use pre-existing standards and business practice documents that are available on the FBC website and that will be discussed with potential Customers in advance of and during the application process.

3.6. Please explain how FBC's interconnection processes for commercial customers may evolve to accommodate the provision of LCIR by FBC.

**Response:**

Please refer to the response to CEC IR1 3.5.

3.7. Please explain to what extent (if any) customer costs borne by existing large commercial customers to accommodate the receipt of interruptible service under LCIR would be incurred in anticipation of future system upgrades?

**Response:**

A Customer that initially takes service on the LCIR in anticipation of transitioning to firm service in the future will not incur any costs that would not ultimately be incurred to take firm service, or that would be incurred if taking firm service from the onset. Interconnection costs are generally the same in any case. The possible exceptions are the need for multiple meters required to split firm from non-firm load, and the requirement for enhanced communication and separation infrastructure for a primary-connected (RS 30) load under the LCIR.

**4. Reference: Exhibit B-1, PDF 10, Lines**

> The LCIR, as it is proposed, will allow FBC customers to purchase power at prices that are based on the market cost, with a component (the Transmission Adder) that will cover costs associated with the use of the transmission system that has been funded by all customers over time. It therefore provides an alternative to the previously approved, but not currently available, Retail Access.

4.1 Please discuss what impact (if any) would the introduction of LCIR by FBC have on FBC's current offering of non-firm service to large commercial customers.

**Response:**

FBC does not have a current non-firm service offering to Large Commercial Customers (with the exception of non-firm point-to-point transmission service that is not currently available as explained in Section 2.4 of the Application).

# THE LARGE COMMERCIAL INDUSTRIAL RATE (LCIR)

## 5. Reference: Exhibit B-1, PDF Page 11, Table 3-1, Energy Rate

**Table 3-1: Summary of Large Commercial Interruptible Rate Features**

| Feature | Description |
|---|---|
| Application Process | Potential LCIR customers will apply pursuant to the current Industrial Electricity interconnection process and Application forms,[5] working with a Key Account Manager. |
| Energy Rate | The LCIR includes a market-based rate tied to the ICE Mid-C index. A number of adjustments to the index price are made for transmission, administration, losses, and potentially, for the procurement of clean and renewable power as discussed in Section 3.2.1.2 of this Application.<br><br>In addition, a key feature of the LCIR is the inclusion of a "price cap" that will limit the maximum energy rate charged in a given hour. The price cap serves to limit the exposure of the Interruptible Customer to extremes in market prices, and of FBC to the risk of having to recover power purchase costs from customers during periods of extremely high market prices. |
| Demand Charge | As the LCIR is non-firm and interruptible, there is no demand charge component to the LCIR. |
| Customer Charge | The LCIR Customer Charge is the same as other respective Large Commercial rates. |

5.1 Under the 'Description' Column in Table 3-1, in the row titled 'Energy Rate', FBC states: 'The price cap serves to limit the exposure… during periods of extreme high market prices. As FBC uses the word 'limit' the exposure 'of FBC to the risk of having to recover power purchase costs…' and not 'mitigate' such risk or 'eliminate' such exposure, please describe in what situations would FBC assume risk (if at all) on behalf of FBC commercial customers related to purchasing of electricity in the ICE Mid-C, for use in its LCIR offering.

**Response:**

The ability of FBC to interrupt a Customer if it cannot procure power at a cost lower than the Mid-C Price Cap virtually eliminates the risk that power will be sold on an uneconomic basis. There is a slight risk that FBC will fail to recognize, anticipate, or react to any price disparity, but this is not an element of the Program. There is also a somewhat higher risk, but still very low, related to FBC not purchasing market electricity to supply LCIR Customers. It is possible that the alternative supply arrangements could end up costing more than the market price on any given day. Averaged out over the course of a longer time period this is not expected to be the case.

5.2 Please elaborate as to how ‘extreme’ and of what duration are those periods of ‘extremely high’ market prices are anticipated to be, and what risk would FBC be assuming in such extreme situations, in its ability to offer the LCIR.

**Response:**

The view of FBC is that there is little value in attempting to define a value at which prices are “extreme” since this is a subjective term without an industry accepted definition. The key point here is that without some limiting factor such as the Mid-C Price Cap, prices that are at multiples of the average or anticipated price for extended durations present a risk to the LCIR Customer and customers in general that would be unacceptable. Extreme conditions do not impact the ability of FBC to offer the LCIR, but if market prices that a Customer considers to exceed its comfort level are forecast to persist over a long term, this would likely reduce the participation levels.

5.2.1 Please advise if such risk would arise from potential ICE Mid-C price differentials as between day-ahead pricing for block purchases of electricity by FBC and real time ICE Mid-C prices at the time of delivery/consumption of such electricity purchases. If not, please explain.

**Response:**

No, the risk limited by price caps is not related to real-time prices as compared to day-ahead prices. Rather, it is the magnitude of the price itself. For example, 50 MW taken for 24 hours is 1,200 MWh. At a price of $250 per MWh, that is $300,000 per day or even higher if the price went higher. If this continues for a period of time, the total bill could be millions of dollars over the Customer’s comfort level. This creates an obvious risk to the Customer but it is also a risk to the utility in that the bill might not be paid by the Customer.

5.2.2 Please advise if such risk would arise from the quantities of day-ahead block purchases of electricity by FBC, and its ability to deliver it to the LCIR loads? Please explain.

**Response:**

Please refer to the response to CEC IR1 5.2.1.

**6. Reference: Exhibit B-1, PDF Page 13, Lines 5-17**

> For operational purposes there may be cases where a customer has one point of interconnection (POI) with FBC but has its total load split and separately metered downstream of the POI such that a portion is served under the LCIR, and a portion is served under another rate schedule. For example, a Large Commercial customer that would otherwise have a 3,000 kVA load served entirely under RS 30 - Large Commercial Service – Primary, may work with FBC to design a system downstream of the initial POI with FBC where 2,500 kVA is to be served under the LCIR, and 500 kVA remains on RS 30. In this case, it would be unfair to assess two Customer Charges, since only a portion of the Customer Charge is directly related to customer service functions such as billing or metering reading. FBC acknowledges that in these situations, there will be some work associated with additional meter reading and billing elements, but these incremental costs are not significant and FBC considers that the second Customer Charge can be waived without any material impact on remaining customers. This feature of the rate is addressed by the following language included in the tariff sheet:

6.1 Please provide the forward ICE Mid-C price curve(s) in use by FBC and which may have informed the development of FBC's LCIR.

**Response:**

FBC did not use any forward ICE Mid-C price curve(s) to inform the development of the LCIR.

6.2 Please advise if FBC has estimates of impact on average use per customer for those customers served by RS 30 and associated with FBC's introduction of LCIR.

**Response:**

FBC believes these questions are best addressed once it has some experience with the uptake of the program.

6.3 Please advise if FBC has estimates of impact on average use per customer for those customers served by RS 31 and associated with FBC's introduction of LCIR.

**Response:**

FBC believes these questions are best addressed once it has some experience with the uptake of the program.

**7. Reference: Exhibit B-1, PDF Page 14, Lines 14-23**

> With regard to the cap on the Mid-C price that factors into the Energy Charge for a particular customer, the Mid-C Price Cap would be nominated by the Customer based on its specific risk tolerance and operational needs. This is a departure from the final discussions held with customers and intervener groups during public engagement, where the cap was originally going to be a set number, common to all customers. A customer-specific cap was discussed, and was viewed positively by participants, but was dismissed due to what FBC saw as a high administrative burden at the time. However, upon further review, FBC now views a customer-specific cap as manageable and offering the most flexibility for customers to tailor the LCIR to their specific needs. The customer may nominate the Mid-C Price Cap monthly by providing FBC with the maximum Mid-C price it is willing to pay by the 20th day of the preceding month.

7.1 Please advise what factors may have played a role in changing FBC's perspective of the organizational 'burden' associated with administering of customer-specific caps from 'high' to 'manageable'.

**<u>Response:</u>**

Please refer to the response to BCUC IR1 9.5.

7.2 Please provide a description of the FBC organizational effort that maybe involved in providing a 'prior notice of pending or potential interruption' as part of its LCIR. What are the factors that would make the provision of such notice to all LCIR customers non-practical?

**<u>Response:</u>**

FBC has committed to endeavor to provide notice to affected Customers, where practicable. Provision of notice may be practicable when the Company is able to foresee, in sufficient time, a situation where a Customer may have its load reduced or curtailed. Some examples where such notice will not be practicable include:

- Unplanned loss of a FBC system element (transformer, transmission line);
- Declaration of provincial energy emergency; and
- Lack of available transmission or generation within the Western Interconnection.

These scenarios would happen quickly with little or no time to communicate through the established channels. The scenarios could also take place overnight or on a weekend when fewer support staff are available.

7.3 Please explain if the number and diversity of customers opting to receive service under the LCIR would have a bearing on FBC's administrative cost considerations.

**Response:**

FBC is not expecting an impact to FBC administrative cost considerations unless there is a high number of small LCIR Customers. If that were the case, then there could be an impact due to the sheer volume of work required. However, FBC notes that as long as these were new Customers, significant new revenue under the monthly charge is also being generated. This should be sufficient to offset any potential increase in administrative costs.

**8. Reference: Exhibit B-1, PDF 16, Lines 18-28**

> **e. For Hours where FortisBC reasonably expects that the Energy Charge will be based on the Mid-C Price Cap as described in part i) of the Energy Charge portion of this rate schedule, FortisBC may interrupt the Customer.**
>
> This category serves to mitigate the risk to other FBC customers that arises from the spread between the market price and price of energy charged to LCIR customers. These interruptions are not an automatic reaction to a pricing disparity, since FBC has operational flexibility regarding the resources utilized to serve load. FBC will optimize its overall system resources and as a result, even if the market price is above the Mid-C Price Cap, FBC may elect to maintain supply to the LCIR customer at an Energy Charge that reflects the Mid-C Price Cap. Nevertheless, FBC reserves the option to suspend service until it can again serve the load in an economic fashion.

8.1 Can FBC further elaborate on the upper ranges of ICE Mid-C prices that FBC anticipates it will be able to absorb into its system, in order to supply LCIR load, if such prices were to exceed customer-specific Mid-C price cap nominations?

**<u>Response:</u>**

Please refer to the response to BCUC IR1 9.1. The upper ranges of Mid-C Price Cap nominations are going to be related to credit limits, both between the LCIR Customer and FBC as well as between FBC and Powerex. FBC will not be purchasing Mid-C power above the Mid-C Price Cap to serve the LCIR Customer.

8.2 Can FBC further elaborate on the volumes of ICE Mid-C electricity purchases that FBC anticipates it will be able to absorb into its system, in order to supply LCIR load, if the prices for such purchases were to exceed customer-specific Mid-C price cap nominations?

**<u>Response:</u>**

FBC assumes this question is asking how much power FBC may be able to supply from other resources in the event that market prices exceed the customer-specific Mid-C Price Cap. This is difficult to determine as it will depend on many factors with one of the most critical being the level of the Mid-C Price Cap itself. In general, the LCIR Customer should not count on any supply from FBC if the market rate is above the Mid-C Price Cap.

8.3 Please explain what role FBC envisions the nominations of ICE Mid-C price caps by LCIR customers will play in its LCIR load interruption decisions, if pricing disparity was one of several (many) considerations.

**Response:**

FBC envisions the Mid-C Price Cap will be the critical consideration in regard to the ability to source power to meet LCIR load.

**9. Reference: Exhibit B-1, PDF 17, Lines 25-17**

> If, however, FBC is unable to attract firm load to consume the newly available capacity, the LCIR savings that result for the customer would be borne by other customers as discussed in Section 4 of this Application.

9.1 Please explain what FBC means in the statement: 'the LCIR savings that result for the customer would be borne by other customers'.

**Response:**

If overall revenues from serving an existing Customer that switches to RS 38 fall relative to the revenue that it would have provided under RS 31 (the rate schedule referred to in the example discussed in this portion of the Application), and there is no corresponding reduction in costs (and no additional Customers are added as a result), recovery of those costs will be through the rates of all customers (including Large Commercial Customers) through the normal rate setting process.

9.2 Please advise as to whether FBC expects that these 'other customers' may be other large commercial customers of FBC, or more broadly other FBC customers.

**Response:**

Please refer to the response to CEC IR1 9.1.

9.3 Please explain how FBC expects 'these LCIR savings' to be attributed as potential costs to 'other customers' (i.e. by what rate mechanism)?

**Response:**

Please refer to the response to CEC IR1 9.1.

**DISCUSSION**

**10. Reference: Exhibit B-1, PDF Page 18, Lines 34-35**

> In addition, there is also a load retention aspect to offering the LCIR at this time. That is, without some means of remaining competitive with the rates found in other jurisdictions, FBC is at risk of losing some load that is able to relocate. For example, when compared to traditional resource-based load, some emerging technology-based loads (e.g., data centres) are more mobile.

10.1 Please provide a discussion of the possible types and number of FBC customers presently receiving service under RS 30 and R S31, which in FBC's assessment may be considering relocating outside of the FBC jurisdiction.

10.1.1 Please indicate what portion, as percentage of FBC's total customer load currently served under RS 30 and RS 31, such customers would represent.

**Response:**

In the referenced passage, FBC notes that technology-based loads, such as data centres and cryptocurrency mining operations, are examples of loads that are typically more mobile. Indoor cannabis operations may also be less bound to location than some other industries such as forestry or mining operations. In the Application, FBC outlines the primary drivers for the LCIR. Load retention is not a primary consideration but is a factor that exists to some degree and that FBC has not researched in detail. FBC has not received any explicit indication from any Customer that it intends to leave the service area.

**11. Reference: Exhibit B-1, PDF Page 19, Lines 10-13**

> While it is not certain that additional load will avail itself of the additional capacity that results, FBC is proposing the LCIR as a direct result of expressions of interest from prospective customers that cannot be met under the current planning criteria as reflected in current rate structures. The Application acknowledges that there is a type of customer emerging that is willing to accept reduced reliability as a trade-off for reduced cost. These customers may not be well served by traditional rate making which assumes that all customers require reliable service as a given.

11.1 Please describe in more detail the emerging types of customers (including an indication of their primary business or industry sector), that may be willing to accept reduced reliability as a trade-off for reduced cost.

**<u>Response:</u>**

Please refer to the response to BCSEA IR1 10.4.

11.1.1 Please explain if such customers are already in FBC's interconnection queues for large commercial customers, and approximately what load size do they represent?

**<u>Response:</u>**

Yes, such Customers are already in FBC's interconnection queue. Please refer to the response to BCUC IR1 1.1 for approximate load sizes.

11.2 Please advise if such interconnection requests are primarily for d-connected service or t-connected service.

**<u>Response:</u>**

Please refer to the response to BCUC IR1 1.1.

In general, facilities drawing less than 5 MW are connected to FBC's distribution system, whereas facilities drawing 5 MW or more are transmission-connected.

## 12. Reference: Exhibit B-1, PDF Page 21, Table 5-1 (second row)

**Table 5-1: Bonbright Principles Assessment**

| Criterion | Assessment[12] | Comment |
|---|---|---|
| Recovery of the revenue requirement | Good | Interruptible service adds a potential revenue stream at minimal cost, utilizing existing assets while adding additional load. |
| Fair apportionment of costs among customers | Good | Incremental costs are minimal, while a benefit is delivered to non-participating customers. |
| Price signals that encourage efficient use and discourage inefficient use | Good | LCIR customers will receive direct price signals to which they can respond by controlling load. LCIR customers will not have access to embedded cost power when the cost of available supply exceeds rates. |

12.1 Please provide a summary discussion with quantification (where possible) of the incremental costs and benefits that would accrue to non-participating customers if the 50 MW LCIR uptake were to fully materialize.

**Response:**

Due to the high degree of variability in potential outcomes it is not possible to provide a summary analysis of general ratepayer impact. FBC has provided a number of responses to information requests that discuss ratepayer impact. Please refer to the responses to BCUC IR1 17 and 18 series for answers to specific questions posed on ratepayer impact.

12.2 Please provide a summary discussion with quantification (where possible) of the incremental costs and benefits that would accrue to non-participating customers if no LCIR customer materializes.

**Response:**

Please refer to the response to CEC IR1 12.1.

**13. Reference: Exhibit B-1, PDF 22, Table 5-1 (fifth row)**

| Criterion | Assessment[12] | Comment |
|---|---|---|
| Customer understanding and acceptance | Good | Interruptible service is relatively simple in form and has been designed with input from potential customers in the case of the LCIR. |
| Practical and cost-effective to implement | Fair | From an FBC perspective, there is minimal ongoing cost to administer the rates. Customers may face additional up-front infrastructure costs. |
| Rate stability | Fair | For the LCIR, the structure is set; however, the energy price is subject to fluctuation. |
| Revenue stability | Good | The rate is proposed to be permanent and should provide a consistent stream of additional revenue. |
| Avoidance of undue discrimination | Good | The rate is available to all Large Commercial customers on the same basis throughout the service area. Non-participating customers are insulated from risk by the terms and conditions, such as the initial 50 MW cap on uptake, and existing security provisions. |

13.1 Please provide a high-level cost estimate summary of the 'minimal ongoing costs to administer the rates', including one-time set-up costs and ongoing annual expenditure.

**Response:**

Please refer to the response to BCUC IR1 7.1.

13.2 If possible, please provide a breakdown of the annual costs to administer the rates by type of operating cost.

**Response:**

Please refer to the response to BCUC IR1 7.1.

## CUSTOMER ENGAGEMENT

**14. Reference: Exhibit B-1, PDF Page 24, lines 4-15**

> The LCIR requirement for customers to maintain an 80 percent load factor is an impediment for some facilities in terms of participating in the rate; however, it is an important element of the LCIR. The LCIR is based on day-ahead block market pricing rather than hourly real-time pricing. This is to ensure that there is sufficient time to communicate and confirm supply for LCIR customers and for LCIR customers to then make the necessary plans to manage their process. FBC expects to generally plan to obtain supply on a block basis and this needs to be matched by the corresponding load. FBC will closely monitor this over the initial implementation period to determine if the 80 percent required load factor is sufficient or if it must be increased to ensure that the power purchased for the LCIR customer is consumed by the LCIR customer.
>
> FBC may be willing to consider waiving the 80 percent requirement if warranted by individual customer circumstances and/or if LCIR customers are prepared to compensate FBC for losses associated with power purchased for, but not consumed by, LCIR customers

14.1 For purposes of maintaining an 80% Load Factor, please explain what methodology FBC will employ to establish the Load Factor for those potential LCIR customers that are not presently FBC customers (i.e. for new FBC customers).

**Response:**

Please refer to the response to BCUC IR1 25.1 and Attachment 25.1 provided in that response for revisions to RS 38 that address the 80 percent Load Factor requirement.

14.2 For purposes of maintaining an 80% Load Factor, please explain what methodology FBC will employ to establish the Load Factor for those potential LCIR customers who currently receive service under RS 30 and/or RS 31 and who would be electing to transition a part of their load into interruptible service.

**Response:**

Please refer to the response to BCUC IR1 25.1.

14.3 Please provide the criteria that FBC will follow to waive the 80% requirement as among the various customers who could potentially request service under the LCIR.

**Response:**

Please refer to the response to BCUC IR1 25.1.

14.4 Please provide a description of incremental resources that FBC plans to employ arising from its increased ICE Mid-C power purchasing activities associated with the administration of the LCIR.

**Response:**

FBC does not believe that incremental resources will be required to implement additional power purchasing activities associated with the LCIR. Please also refer to the response to BCUC IR1 7.1.

**15. Reference: Exhibit B-1, Appendix C, PDF Page 42**

> ## Eligible Customers
>
> The FBC LCIR will be available to:
>
> New or Existing Customers served under:
>
> - Large Commercial Primary – Rate Schedule 30;
> - Large Commercial Transmission – Rate Schedule 31.

15.1 Please provide a summary of FBC aggregate interconnection queue demand (in MW) for new customers requesting to receive service under RS 30.

**<u>Response:</u>**

Please refer to the response to BCUC IR1 1.1.

Aggregate interconnection queue demand for new Customers requesting to receive service under RS 30 is approximately 50 MW.

15.2 Please provide a summary of FBC aggregate interconnection queue demand (in MW) for new customers requesting to receive service under RS 31.

**<u>Response:</u>**

Please refer to the response to BCUC IR1 1.1.

Aggregate interconnection queue demand for new Customers requesting to receive service under RS 31 is approximately 1850 MW.

**16. Reference: Exhibit B-1, Appendix C, PDF Page 43**


16.1 Please explain how the introduction of LCIR will impact FBC's interconnection queue processes, specifically as it concerns consideration of existing customer load that may be transitioned to interruptible service.

**Response:**

Customers are added to the Interconnection Request queue once a deposit is provided by the Customer requesting FBC to begin the System Impact Study.

Existing Customers requesting interruptible service will generally follow the same queue process as those requesting firm service; however, the fact that the interconnection will not likely require facility additions or upgrades may result in a shorter timeline to receive interruptible service.

Firm capacity given up by Customers transitioning to interruptible service will be available to new Customers requesting firm capacity in the queue.

16.1.1 More specifically, will this (transitioned) load inform the planning for future capital additions in the form of transmission and/or primary distribution infrastructure? Once a load has transitioned (to interruptible service), will it still drive (if at all) the planning for new capital projects? Please explain.

**Response:**

Interruptible load will not be considered in capital planning.

Existing Customers transitioning to an interruptible rate may impact planned capital projects depending on their location within the system and the size of their load. This would need to be evaluated as individual Customers transition to RS 38.

**17. Reference: Exhibit B-1, Appendix C, PDF 58, LCIR Consultation Table**

| | | |
|---|---|---|
| 18 | What parts of the FBC system are seeing the most queries on capacity availability? | FBC has fielded expressions of interest for the connection of large commercial load across the entire service area. |
| 19 | Could a third party buy up firm transmission on the FBC system? | No, FBC reserves transmission capacity to serve native load and could accept reservations of transmission capacity for the purpose of third party wheeling. However, at the current time, point-to-point service can only be made available where the path is entirely within the FBC service area. |
| 20 | Will interruptions be automated on a RAS scheme? | Interruptions could be automatic and/or manual. The interruption criteria and design will be evaluated for each individual customer connection. |
| 21 | Where did the $40/MWh number for mid-c come from in the example? | The example Mid-C value used in the LCIR presentation was drawn from the forecast |

17.1 Please provide a summary of the fielded expressions of interest for the connection of large commercial load across the entire FBC service area and indicate which regions of the FBC system are seeing the most queries on capacity availability.

**<u>Response:</u>**

Please refer to the response to BCUC IR1 1.1.

In general, the Okanagan region is seeing the most queries on capacity availability. However, it should be noted that some Customers do not have a specific location, or even region, in mind when they initiate their request. Instead, they intend to select their location based on available capacity.

17.2 Please advise if FBC has identified any opportunities for system expansions associated with the expressions of interest, and whether (or how) such expressions of interest might influence FBC's decisions with respect to potential LCIR loads.

**<u>Response:</u>**

Relatively few expressions of interest have progressed to the stage of system study or beyond. Some of these are likely to require system upgrades, as identified in the associated system study.

For the remaining expressions of interest, FBC cannot confirm whether any would have required a system upgrade in order to serve the load since such information would be determined as part of a system impact study. It is, however, likely that in some cases a system upgrade would be required. Expressions of interest in connecting to the FBC system may prompt discussions around whether the load can be served on a firm or non-firm basis, but decisions with respect to the potential LCIR load additions are considered on their own merits