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March 20, 2018

Catalyst Paper Corporation
2nd Floor, 3600 Lysander Lane
Richmond, BC
V7B 1C3

Attention: Mr. Jouni Martiskainen, Energy Specialist

Dear Mr. Martiskainen:

**Re: FortisBC Energy Inc. (FEI)**

**Project No. 3698899**

**2016 Rate Design Application (the Application)**

**Response to Catalyst Paper Corporation (Catalyst) Information Request (IR) No. 3**

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On December 19, 2016, FEI filed the Application referenced above. In accordance with the British Columbia Utilities Commission Order G-5-18 setting out the remainder of the Regulatory Timetable for the review of the Application, FEI respectfully submits the attached response to Catalyst IR No. 3.

If further information is required, please contact the undersigned.

Sincerely,

**FORTISBC ENERGY INC.**

***Original signed:***

Diane Roy

Attachments

cc (email only): Commission Secretary
Registered Parties

**Topic 1: Cost Comparison of Proposed RS22 and VIGJV Contract**

In FEI's Application Table 9-27, shown below, summarizes, "… the revenue, change in revenue and change in rates for RS 22 and the VIGJV." [1] It appears that the second last row in the table, "VIGJV Revenue (including System Gas)", is calculated by taking the daily firm volume of 13,000 GJ/day and multiplying it by 365 days/year and $ 0.97/GJ for Current Rate and Option 1 for a total of $ 4,588,000. However, the revenue FEI collects from the VIGJV includes interruptible volume as well. Moreover, the row description states that "System Gas" cost is included, however the simple calculation above indicates the System Gas cost is not included.

**Table 9-27: Summary of Change in Revenue and Change in Rates for RS 22 and VIGJV**

| | Current Rate | Option 1 | Option 2 | Difference | |
|---|---|---|---|---|---|
| | | | | Option 1 vs Current Rate | Option 2 vs Current Rate |
| RS Demand Charge $ / Month / DTQ | N / A | $13.528 | $25.000 | | |
| Firm MTQ $ / GJ | N / A | $0.887 | $0.150 | | |
| Interruptible MTQ $ / GJ | $0.982 | $1.332 | $0.972 | 35.6% | (1.0%) |
| VIGJV Firm $ / Day / DTQ | $0.967 | N / A | N / A | | |
| | | | | | |
| RS 22 Revenue ($000s) | $14,235 | $18,640 | $14,109 | 30.9% | (0.9%) |
| VIGJV Revenue (including System Gas) | $4,588 | $4,588 | $4,420 | 0.0% | (3.7%) |
| **Total** | **$18,823** | **$23,228** | **$18,529** | **23.4%** | **(1.6%)** |

**1. Please confirm that the "VIGJV Revenue (including System Gas)" values shown in the table include the value of the System Gas.**

**Response:**

The responses to Catalyst-FEI IRs 3.1 through 3.4 are included in this response.

The values in the referenced table are VIGJV firm revenues only, not including interruptible, system gas, or revenue for balancing charges. A revised table is provided below, including revenue from interruptible gas based on 2016 volumes and system gas charges as described in the response to BCUC IR 3.96.2. FEI is unable to include Balancing Charges in the table as Balancing Charges are incurred due to not having sufficient gas supply delivered to FEI from a Gas Marketer to cover off their customer's consumption. Balancing Charges do not need to be incurred if the Gas Marketer delivers sufficient quantities of gas and has resources that can manage un-forecast changes in their customer's consumption.

**Table 9-27: Summary of Change in Revenue and Change in Rates for RS 22 and VIGJV**

| | Current Rate | Option 1 | Option 2 | Difference: Option 1 vs Current Rate | Difference: Option 2 vs Current Rate |
|---|---|---|---|---|---|
| RS Demand Charge $ / Month / DTQ | N / A | $13.528 | $25.000 | | |
| Firm MTQ $ / GJ | N / A | $0.887 | $0.150 | | |
| Interruptible MTQ $ / GJ | $0.982 | $1.332 | $0.972 | 35.6% | (1.0%) |
| VIGJV Firm $ / Day / DTQ | $0.967 | N / A | N / A | | |
| | | | | | |
| RS 22 Revenue ($000s)<br>(Estimated System Gas Cost) | $14,235<br>N / A | $18,640<br>N / A | $14,109<br>N / A | 30.9% | (0.9%) |
| | | | | | |
| VIGJV Revenue ($000s)<br>Firm Revenue<br>IT Revenue<br>(Estimated System Gas Cost) | $4,599<br>$2,570<br>$972 | $4,599<br>$2570<br>$972 | $4,659<br>$2,653<br>$0 | 0.0% | (10.7%) |
| | | | | | |
| **Total before System Gas** | **$21,404** | **$25,809** | **$21,421** | **20.6%** | **(0.1%)** |
| **Total including Estimated System Gas Cost** | **$22,376** | **$26,781** | **$21,421** | **19.7%** | **(4.5%)** |

FEI noticed an error in the referenced table for the VIGJV Revenue under Option 2, which FEI has corrected in the table above.

**2. Please confirm that Table 9-27 only represents the firm revenue and does not include any interruptible revenue.**

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

Please refer to the response to Catalyst-FEI IR 3.1.

**3. Please confirm that the "VIGJV Revenue (including System Gas)" dollar value for Option 2 does not include FEI revenue collected for balancing charges. If it does include balancing charges, please state the balancing volume and balancing revenue.**

**Response:**

Please refer to the response to Catalyst-FEI IR 3.1.

**4. Please update Table 9-27 to include separate rows for: Interruptible Revenue, System Gas, and Balancing Charges.**

**Response:**

Please refer to the response to Catalyst-FEI IR 3.1.

In FEI's response to BCUC-FEI IR 1.35.1 [2], FEI supplied the following table showing total revenue and costs for the VIGJV,

**Table 1**

| $000<br>Customer | Column 1<br>Total Revenue | Column 2<br>Cost of Gas | Column 3<br>Allocated Costs | Column 4<br>R:C ratio | Column 5<br>M:C Ratio |
|---|---|---|---|---|---|
| BC Hydro IG | 13,097 | 0 | 14,530 | 90.1% | 90.1% |
| Joint Venture | 7,106 | 0 | 5,837 | 121.7% | 121.7% |
| Creative Energy | 1,648 | 15 | 654 | 246.3% | 249.7% |

**5. Please confirm that the Total Revenue shown for Joint Venture does not include the value of any System Gas supplied by VIGJV to FEI.**

**Response:**

Confirmed. The table does not include system gas in either the Total Revenue column or in the Allocated Costs column, i.e., system gas is not affecting the R:C ratios. Please also refer to the response to Catalyst-FEI IR 3.7.

**6. Please confirm that the Allocated Costs shown for Joint Venture includes an appropriate debit for System Gas supplied by VIGJV to FEI.**

**Response:**

Not confirmed. The allocated costs shown for the VIGJV do not include system gas supplied by the VIGJV to FEI. The cost allocation is based on VIGJV Firm contract demand 13 TJ per day for allocating demand-related costs and the firm annual volumes for allocating energy-related costs, and VIGJV weighted customer count is used to allocate customer-related costs.

Please also refer to the responses to Catalyst-FEI IRs 3.7 and 3.10.

**7. Please state the dollar value of System Gas used in the data for this table for each customer. If System Gas is not represented in this table, please state the dollar value of System Gas for each customer applicable for the time frame represented in table.**

**Response:**

The table in the preamble uses 2016 Volumes and Actual Revenues under the 2016 rates and the cost allocation from the COSA. System Gas was not included in the table for either BC Hydro IG or the VIGJV. Because Creative Energy is an RS22 customer, they are not responsible to provide system gas and the Lower Mainland system currently has no compressor fuel requirements, so there is also no system gas included for Creative Energy.

The estimated value of the system gas in 2016 provided by the VIGJV was approximately $972 thousand, while BC Hydro was estimated to be approximately $58 thousand. As the BC Hydro IG facility is dispatchable, it is only responsible to provide system gas on days when the facility is operated. As system gas is provided as fuel in kind to FEI, FEI can only estimate the potential cost of system gas.

**8. Please confirm whether a specific System Gas charge is applicable to other large industrial firm transportation customers within FEI's service area. Specifically, for**

**customers taking firm service under RS22, RS22A, and RS22B, what is the dollar value of the System Gas charge?**

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

There is no specific System Gas charge applicable to RS 22, RS 22A and RS 22B.

In the Application FEI states [3],

> ***9.8.2.3 Large Industrial Contract Customers***
>
> As shown in Table 9-23, the rate structures for the VIGJV and BC Hydro agreements are similar. The rate structure for these two customers currently does not have a Basic Charge or Administration Charge per month like RS 22, RS 22A and RS 22B. The rate structure is comprised of a firm demand toll expressed in dollars per GJ of contract demand per day and the interruptible rates are expressed in dollars per GJ on any volumes consumed on a daily basis over their firm daily contracted capacity or contract demand per day. In addition to their delivery charges, the VIGJV and BC Hydro IG are responsible for a portion of system gas, which includes line heater fuel, compressor fuel and unaccounted for gas, associated with transporting gas to Vancouver Island and the Sunshine Coast. The VIGJV and BC Hydro IG are also charged a commodity toll for odorant and motor fuel tax.

**9. Please disclose the "portion of system gas" covered by the VIGJV as a percentage of the total system gas required for VIGJV's service.**

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

Under its current contract, the VIGJV provides 100 percent of their allocated portion of system gas required for the VIGJV's service.

**10. Please detail and explain where BCH IG and VIGJV System Gas received by FEI is accounted for in the financial schedules in the Application.**

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

The system gas provided by BC Hydro IG and VIGJV is not accounted for in the financial schedules in the Application. FEI does not forecast the cost BC Hydro IG and VIGJV pay for purchasing any system gas. In addition, any taxes such as the carbon tax and motor fuel tax associated with any system gas provided as fuel in kind that is collected from the two customers is credited to the respective Taxes Payable accounts; as such they would not be included in the utility's cost of service.

**Topic 2: Treatment of VIGJV's Contribution To RRDA/RSDA in Rate Design**

In Catalyst's IR No. 2, FEI was asked to supply the annual contributions from the VIGJV to the RRDA, RSA, and 2009 Surplus Account, Catalyst-FEI IR 2.24 [4]. In response, FEI stated, "… it is not possible to know how much of the revenue from any of FEVI's rate schedules, prior to amalgamation, contributed to the accumulated deficiency in the Revenue Deficiency Deferral Account (RDDA), contributed to paying off the accumulated deficiency in the RDDA or contributed to the surplus in the RSDA." [4]. Please refer to financial schedule 34B-10 below, which Catalyst Paper has previously submitted during this RDA [5], which shows the Utility, prior to amalgamation, accounting for contributions to the RDDA by class and by customer (VIGJV). This appears inconsistent to FEI's initial response to Catalyst-FEI IR 2.17.

**TERASEN GAS (VANCOUVER ISLAND) INC.** Schedule 34B-10
2010 TGVI RATE DESIGN *June 29, 2009 Filing of TGVI Rate Design*
REVENUE, SURPLUS and R/C RATIO'S AT PROPOSED RATES

| Line No. | Rate Class | Volume (GJ) | Proposed Revenue | Effective Proposed Rate | Allocated COS (LNG) | Allocated COS (Transmission) | Allocated COS (Distribution) | Allocated COS (Total) | RSDA** Surplus (Gross) | Tax on RSDA Surplus | RSDA Surplus (net-of-Tax) | R/C Ratio @ Proposed Rate |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | RGS | 4,891,762 | $ 81,286,270 | $ 16.617 | $ 194,290 | $ 10,550,398 | $ 70,284,639 | $ 81,029,327 | $ 256,943 | $ 73,208 | $ 183,735 | 1.00 |
| 2 | AGS | 1,110,284 | 14,159,981 | $ 12.753 | $ 35,880 | $ 1,999,523 | $ 7,404,988 | $ 9,440,391 | $ 4,719,590 | $ 1,344,709 | $ 3,374,881 | 1.50 |
| 3 | SCS-1 | 406,152 | 7,461,421 | $ 18.371 | $ 17,319 | $ 952,634 | $ 4,935,767 | $ 5,905,720 | $ 1,555,701 | $ 443,252 | $ 1,112,449 | 1.26 |
| 4 | SCS-2 | 483,663 | 8,518,453 | $ 17.612 | $ 18,784 | $ 1,047,429 | $ 3,803,267 | $ 4,869,479 | $ 3,648,974 | $ 1,039,669 | $ 2,609,305 | 1.75 |
| 6 | LCS-1 | 1,329,403 | 18,743,809 | $ 14.099 | $ 45,398 | $ 2,532,326 | $ 9,106,736 | $ 11,684,460 | $ 7,059,349 | $ 2,011,355 | $ 5,047,994 | 1.60 |
| 7 | LCS-2 | 1,383,519 | 17,645,541 | $ 12.754 | $ 40,989 | $ 2,280,993 | $ 8,812,253 | $ 11,134,235 | $ 6,511,306 | $ 1,855,206 | $ 4,656,099 | 1.58 |
| 8 | LCS-3 | 2,383,517 | 28,930,548 | $ 12.138 | $ 73,249 | $ 4,083,264 | $ 14,974,221 | $ 19,130,734 | $ 9,799,814 | $ 2,792,171 | $ 7,007,643 | 1.51 |
| 9 | HLF | 132,366 | 1,458,772 | $ 11.021 | $ 1,571 | $ 83,990 | $ 715,099 | $ 800,661 | $ 658,111 | $ 187,510 | $ 470,602 | 1.82 |
| 10 | ILF | 120,496 | 1,240,648 | $ 10.296 | $ 611 | $ 29,598 | $ 613,923 | $ 644,132 | $ 596,517 | $ 169,960 | $ 426,557 | 1.93 |
| 11 | | | | | | | | | | | | |
| 12 | Total Core | 12,241,162 | $ 179,445,444 | $ 14.659 | $ 428,091 | $ 23,560,155 | $ 120,650,893 | $ 144,639,139 | $ 34,806,304 | $ 9,917,040 | $ 24,889,264 | 1.24 |
| 13 | | | | | | | | | | | | |
| 14 | BC Hydro | 18,250,000 | $ 15,853,147 | $ 0.869 | $ 259,484 | $ 13,031,280 | $ - | $ 13,290,764 | $ 2,562,383 | $ 730,076 | $ 1,832,307 | 1.19 |
| 15 | VIGJV | 2,920,000 | 2,728,153 | $ 0.934 | $ 41,517 | $ 2,388,501 | $ - | $ 2,430,018 | $ 298,135 * | $ 84,945 | $ 213,190 | 1.12 |
| 16 | TGI (Squamish) | 413,300 | 434,049 | $ 1.050 | $ 21,075 | $ 1,068,386 | $ - | $ 1,089,461 | $ (655,412) * | $ (186,741) | $ (468,672) | 0.40 |
| 17 | TGW | 2,536,750 | 2,479,038 | $ 0.977 | $ 36,068 | $ 2,055,649 | $ - | $ 2,091,717 | $ 387,321 | $ 110,356 | $ 276,965 | 1.19 |
| 18 | | | | | | | | | | | | |
| 19 | Firm Service | 24,120,130 | $ 21,494,387 | $ 0.891 | $ 358,144 | $ 18,543,815 | $ - | $ 18,901,960 | $ 2,592,427 | $ 738,636 | $ 1,853,791 | 1.14 |
| 20 | | | | | | | | | | | | |
| 25 | Total System | 36,361,292 | $ 200,939,831 | $ 5.526 | $ 786,236 | $ 42,103,971 | $ 120,650,893 | $ 163,541,099 | $ 37,398,731 | $ 10,655,677 | $ 26,743,055 | 1.23 |

* The revenue collection from the VIGJV and TGI (Squamish) is established by the tolls set out in their respective long-term Transportation Service Agreements.
** RSDA: Rate Stabilization Deferral Account

**11. Please summarize the contributions that the VIGJV made to the RDDA, RSDA, and 2009 Surplus Account in the table below.**

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VIGJV Firm Revenue Actual ('$000,000s) | | | | | | | | | | | | | | | |
| VIGJV Firm Revnue Surplus to RRDA,2009 Surplus Account, or RSDA | | | | | | | | | | | | | | | |
| VIGJV IT Revenue Actual ('$000,000s) | | | | | | | | | | | | | | | |
| VIGJV IT Revenue Surplus to RRDA, 2009 Surplus Account, or RSDA | | | | | | | | | | | | | | | |
| VIGJV IT allocated to other | | | | | | | | | | | | | | | |

**Response:**

Please refer to the response to Catalyst-FEI IR 2.24 where FEI provided the firm and interruptible revenue for the years requested.

As per Commission Order G-42-03 and the 2002 Rate Design Decision (Page 37) dated June 5, 2003, FEI and its predecessor companies related to FEVI have credited VIGJV IT revenue to the respective RDDA / RSDA accounts.

As stated in the response to Catalyst IR 2.24, it is not possible to provide actual values for how much of the Firm Revenues would have been credited to the RDDA / RSDA accounts.

In Catalyst-FEI IR 2.32 [6], Catalyst asked,

> 32. Please confirm whether the VIGJV has received any benefit from its contribution to the former Vancouver Island utility's RDDA, 2009 Surplus Account, or RSDA.

and FEI's response was [6],

> "Please refer to the responses to Catalyst-FEI IRs 2.24 and 2.26. The VIGJV has received the benefit of reliable natural gas delivery service at Commission-approved contract-based rates prior to and after the amalgamation of the three natural gas utilities that now make up FEI."

12. The former Vancouver Island Utility's core customers received reliable natural gas delivery service at Commission approved rates prior to and after the amalgamation of the three natural gas utilities as did the VIGJV. The core customers received an additional benefit of a 38 % rate reduction for their contribution to the $ 99 M RRDA/RSDA surplus that was distributed to FEI customers [7]. **Did VIGJV receive a similar additional benefit for its contribution to the $ 99 M surplus that was distributed to FEI customers? If not, please explain.**

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

It is incorrect to say that the core customers of FEVI, the former Vancouver Island utility, received a 38 percent rate decrease because of their contribution to the $99 million RSDA surplus. The core customers of FEVI received a decrease (phased in over three years) because the Commission approved amalgamation and postage stamp rates with FEI. The RSDA balance was streamed to FEI Mainland customers only to mitigate the rate impacts of amalgamation. It did not go to Vancouver Island core customers.

As far as industrial rates are concerned, the VIGJV and BC Hydro IG already had comparable rates to the Lower Mainland RS 22 customers, so after applying postage stamp principles to these customers as a group, there was not a large difference between the proposed RS 22 firm rates and the VIGJV's (or BC Hydro IG's) pre-amalgamation contract rates. Please refer also to the responses to Catalyst-FEI IRs 2.24 and 2.26.

Please also refer to the response to BCUC-FEI IR 3.96.2 regarding the current firm rate for VIGJV and the system gas cost savings VIGJV would experience from FEI's RS 22 proposal.

In the Commission's original decision to allocate the VIGJV's IT revenue to the RDDA, the Commission stated (emphasis added) [8],

> **In certain situations IT revenues may be credited to the customer cost of service, but due to the added ratemaking complexity under Centra's circumstances, the Commission finds that a different approach is appropriate. While recognizing that interruptible transmission capacity is often available because of the lower load factor of the CDS, the Commission finds that it is acceptable to credit the interruptible revenue to the RDDA balance at this time. The reduction to the RDDA balance will substantially benefit the CDS and other HPTS customers over time. Further, the Commission determines that BC Hydro should receive a direct credit for the IT revenues associated with the additional provision of IT capacity above the level of 145 TJ/day. Also recognizing that circumstances change, the Commission directs Centra to review the allocation mechanism in its next Rate Design Application.**

13. It appears that the Commission's intent was that both the CDS (Centra Distribution System) customers and HPTS (High Pressure Transmission System) customers, core and VIGJV customers respectively, would "substantially benefit" from the RDDA balance reduction, which turned into an RSDA surplus. The CDS customers received a 38 % rate reduction for their contributions to the RDDA/RSDA [7]. **Please confirm the rate impact for HPTS customers associated with their contributions to the RDDA/RSDA.**

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

As explained in response to Catalyst-FEI IR 3.12, core customers of the former Vancouver Island gas utility (FEVI) did not receive a 38 percent reduction for their contributions to the RDDA/RSDA.

FEI is unable to confirm the rate impact for HPTS customers associated with their contribution to the RDDA/RSDA. The RDDA/RSDA booked the difference in the utility revenues less the utility cost of service cumulatively for all customers, not by individual class of customers. However, as highlighted in the preamble to the IR, the interruptible revenues from the VIGJV and BC Hydro IG were credited to the RDDA/RSDA deferral accounts. The cumulative balance in the RSDA account was used to hold customers' rates constant at the time when the Royalty Revenues ceased at the end of 2011 and until amalgamation. The purpose of the RSDA was to accumulate revenue that would later be used to offset the loss of Royalty Revenues and mitigate the impact of forecasted rate increases to all customers. In the FEU 2012-2013 RRA, it was proposed to continue with rates remaining unchanged to ensure continued rate stability for

Vancouver Island customers, and to allow sufficient time to implement an appropriate longer term solution to protect Vancouver Island customers against potential future rate increases.

**Topic 3: Treatment of VIGJV's IT Revenue**

In the Commission's original decision to allocate the VIGJV's IT revenue to the RDDA, the Commission stated (emphasis added) [8]

> **In certain situations IT revenues may be credited to the customer cost of service, but due to the added ratemaking complexity under Centra's circumstances, the Commission finds that a different approach is appropriate. While recognizing that interruptible transmission capacity is often available because of the lower load factor of the CDS, the Commission finds that it is acceptable to credit the interruptible revenue to the RDDA balance at this time. The reduction to the RDDA balance will substantially benefit the CDS and other HPTS customers over time. Further, the Commission determines that BC Hydro should receive a direct credit for the IT revenues associated with the additional provision of IT capacity above the level of 145 TJ/day. Also recognizing that circumstances change, the Commission directs Centra to review the allocation mechanism in its next Rate Design Application.**

In the TGVI 2010 – 2011 Revenue Requirements proceeding in response BC Hydro IR No.2.1.1, a question with respect to treatment of IT revenue, FEI stated [9] ,

> An alternative approach would be to allocate some estimate of forecast IT revenues to the transmission cost of service on a test year basis. As the RDDA mechanism continues to be in effect, and as the Company expects that IT revenues in the 2010 – 2011 Forecast Period will be relatively low as compared to historical experience, TGVI is of the view that it would be premature to allocate IT revenue to transmission cost of service for the forecast period. As such, TGVI is of the view that continuing to treat IT revenues consistent with what it has done in the past is fair, reasonable and appropriate for the 2010 – 2011 Forecast Period.

In this response, FEI seems to acknowledge that the original 2003 Commission decision to direct IT revenue to the RDDA "at this time" is nearing its end.

**14. Since the RDDA mechanism is not currently in effect, is FEI still of the view that it is premature to allocate IT revenue to the transmission cost of service?**

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

As described in the responses to Catalyst-FEI IRs 2.7, 2.1 and 2.18, FEI does not have a transmission service nor a transmission cost of service in its COSA. The transmission cost of service referred to in the preamble existed for FEVI prior to amalgamation. FEI does include a transmission function in its COSA study and those costs are allocated based on peak demand.

Consistent with past practice, since the Commission's 2003 FEVI Rate Design Decision, FEI has not forecasted VIGJV IT revenue. Post-amalgamation, the RDDA / RSDA mechanism is not in effect and, under the current PBR plan, VIGJV's IT revenue is included in FEI's Flow Through Deferral Account.

In response to Catalyst-FEI IR 2.29 [10], shown below, FEI stated,

> **29. What is FEI's best estimate for the cost of interruptible transmission service on a $/GJ basis?**
>
> **<u>Response:</u>**
>
> The incremental cost of providing interruptible service to large industrial customers is very low and would typically consist of volumetric costs such as fuel gas, odorant and minor incremental operating and maintenance costs arising from the additional system throughput from the interruptible load.
>
> FEI treats interruptible load as a zero peak load in its system planning. Consequently, FEI does not incur system capital costs to provide interruptible service. Interruptible service is provided on a capacity available basis that is not required to meet the requirements of firm service customers. In the COSA study, the interruptible load is assigned a zero value for allocating demand-related costs as the interruptible load does not cause demand-related costs.

For further clarity;

**15. Please disclose FEI's best estimate for the cost of interruptible transmission service on a $/GJ basis.**

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

FEI has estimated the cost of providing interruptible service to RS 22 Non-Bypass customers by using the allocated cost to RS 22 Non-Bypass from Exhibit B-1, Appendix 6-4, Schedule 1, Line 8 of $1,073 thousand, divided by the interruptible throughput for RS 22 Non-Bypass from Exhibit B-1, Appendix 6-4, Schedule 7, Line 3 of 13,189 TJ, which equals $0.08/GJ.

As described in Section 9.8.2.1, FEI has set the Delivery Charge for the interruptible RS 22 as a discount to firm service in order to have interruptible customers contribute to the recovery of Transmission and Distribution Mains-related costs. As discussed in response to BCUC-FEI IR 1.32.5, FEI considers that setting the Delivery Charge in this manner is appropriate in that it ensures interruptible customers do not become “free riders” on FEI’s Transmission and Distribution Mains system. Pricing for interruptible service is based on a value-of-service to contribute to the cost of service for the utilization of capacity that is available. The cost causation of the FEI system capacity is the firm peak day demand; however, the load profile of firm customers allows FEI to provide interruptible service.

**16. Please confirm whether FEI’s net variable cost of interruptible service for VIGJV is positive. In other words, please confirm that the VIGJV pays for less than 100 % of the required System Gas (fuel gas, system gas, odorant, and UAC).**

**Response:**

Please refer to the response to Catalyst-FEI IR 3.9.

**17. In this Application, FEI has stated that RS22 Service (almost entirely interruptible) has a R:C ratio of 1425 % [11], indicating FEI can estimate the R:C ratio of interruptible service. Please disclose the R:C ratio for VIGJV’s Interruptible Service.**

**Response:**

There is no R:C ratio for VIGJV’s interruptible service. As explained in Section 6.5.2, page 6-35 of the Application, interruptible rates do not drive system capacity additions and consequently are not allocated any demand-related costs. The COSA study therefore does not allocate any demand-related costs or include any allocated cost of service related to VIGJV’s interruptible volume.

To derive the R:C ratio of 1425% for RS 22, FEI used the revenues from RS 22, which are based on a value for service (a discount from firm service), and divided it by the allocated costs, which are low because RS 22 has low firm demand and attracts very little demand-related costs. This means that the 1425% R:C ratio is not meaningful as a measure of rate fairness.

In response to Catalyst-FEI IR 2.30 [12], shown below, FEI stated,

> **30. Why does FEI not forecast interruptible revenue from VIGJV and does forecast interruptible revenue for RS22 and RS22B?**
>
> **<u>Response:</u>**
>
> In its Annual Reviews for rates under the PBR Plan, FEI has maintained consistency with past practice regarding the inclusion or non-inclusion of interruptible (IT) revenue in the annual revenue deficiency or surplus calculations.
>
> The COSA costs and revenues are based on the latest approved revenue requirement decision, before making adjustments for known and measurable changes. The 2016 Test Year Annual Review did not include interruptible revenue (IT revenue) from the VIGJV. During the PBR period (2014 – 2019) any VIGJV IT revenues that occur are recorded in the Flow Through deferral account and are subsequently credited against revenue requirements in the next annual review. Recognition of IT revenue from the VIGJV is a matter of timing and how it happens.
>
> Prior to the current PBR and amalgamation, IT revenue was not forecast in the FEVI revenue requirements and IT revenue that did occur was credited to the RDDA / RSDA deferral accounts in accordance with Commission orders. (Exhibit B-3, Terasen Gas (Vancouver Island) Inc., 2010-2011 Revenue Requirements and Rate Design, Response to BC Hydro IR Number 1, 2.7, Page 4, August 28, 2009.) Part of the rationale for this was:

**18. Please confirm the basis or approval for allocating VIGJV IT Revenue to the RSDA in TGVI's 2010-2011 Revenue Requirements and Rate Design application.**

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

Please refer to the response to Catalyst-FEI IR 2.30.

In the 2010 – 2011 Revenue Requirement Application (RRA) and Rate Design Application (RDA) Negotiated Settlement Process (NSP) approved by Order G-140-09, Item 21 states: "The Commission approved the creation of a 2009 Revenue Surplus Account in Order No. G-84-09". Item 22 of the Negotiated Settlement Agreement (NSA) states,

> The parties agree that TGVI will establish a RSDA to capture:
>
> (a) Differences in 2010 and 2011 between:
>
> i) The net revenues received; and
>
> ii) The actual, "trued-up", cost of service, excluding O&M variances from forecast stated in Item 14; and
>
> (b) Any Accumulated Revenue Deficiency in the RDDA after December 31, 2009.

In the NSA the parties agreed "that it would be appropriate to defer a full scale rate design at this time". Consequently, the treatment of VIGJV revenues has remained unchanged from the Commission's 2003 Rate Design Decision. The treatment of VIGJV IT revenues is consistent with Commission Order G-42-03 and accompanying Decision in the 2003 Rate Design (Page 37). Further, if the interruptible revenue had been included in the FEVI's revenues, it would have contributed to the utility's surplus, which would have been captured in the RSDA account in any case.

**19. Aside from the 2003 Commission Determination [13], please reference the explicit decision(s) and/or determination(s) that pertain to VIGJV's IT service and revenue.**

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

The following is the list of Commission Orders approving FEI's (and predecessor FEVI) revenue requirements and rates. While some orders may not necessarily cause any change to VIGJV rates, they do pertain to VIGJV IT service and revenue as the IT revenue would have impacted the determination of the RDDA, RSDA or Flow Through deferral balance.

1. G-42-03,
2. G-113-04,
3. G-126-05,
4. G-161-06,
5. G-154-07,
6. G-192-08,
7. G-140-09,
8. G-65-14,
9. G-86-15,
10. G-193-15,
11. G-182-16, and
12. G-196-17.

**Topic 4: Proposed VIGJV Cost Allocation**

In response to Catalyst-FEI IR 2.1 [14], shown below, FEI states, “The above cost allocation is also inappropriate because it is inconsistent with FEI’s customer segmentation”.

> 1. **What is the current R:C ratio for the VIGJV, calculated as per the past practice of other utilities that have served the VIGJV (namely exclusion of distribution plant costs for the VIGJV)?** In your response please use the current amalgamated utility cost of transmission service, not the regional cost of transmission service.
>
> **Response:**
>
> While FEI disagrees with the premise that the cost allocation in the question is appropriate, the R:C ratios for the VIGJV and BC Hydro IG with distribution plant costs excluded are presented below.

| | Revenue ($000) | Allocated Costs ($000) | R:C Ratio |
|---|---|---|---|
| **VIGJV** | 4,572 | 2,794 | 163.6% |
| **BCH** | 15,735 | 8,591 | 183.2% |

> It is important to note that VIGJV does not take gas at transmission pressure, rather the VIGJV facilities take gas at distribution pressure or intermediate pressure and, like other customers, FEI has facilities in place to step down the pressure at the various VIGJV sites to serve them and the surrounding businesses and communities.
>
> The above cost allocation is also inappropriate because it is inconsistent with FEI’s customer segmentation. FEI does not segregate its customers based on the pressure of gas it delivers, and therefore has no distribution pressure or transmission pressure service. Rather, FEI segregates its customers based on load characteristics of annual consumption and load factor (i.e., how much the customer consumes on average as compared to its peak demand) and nature of the service (i.e., sales or transportation). Based on FEI’s customer segmentation, the VIGJV is similar to other large industrial customers served by FEI under Rate Schedule 22 and should be allocated distribution costs similarly.
>
> The question also assumes that the VIGJV will be eligible to carry on taking service as a single entity going forward. However, in order for the individual mills in the VIGJV to be treated like all other industrial customers of FEI, it would be necessary to disaggregate the group into five separate customers after the current VIGJV agreement ends, each of which would have to have an individual transportation agreement with FEI with individual firm service contract quantities.

**20. Since the VIGJV and BCH are not part of any FEI rate schedule, please clarify how the above cost allocation can be inconsistent with FEI’s customer segmentation?**

**Response:**

As described in the response to Catalyst-FEI IR 2.1, FEI segregates customers based on load characteristics of annual consumption and load factor. The VIGJV and BC Hydro IG have similar characteristics to other large industrial customers served by FEI. Therefore, FEI has grouped the VIGJV and BC Hydro IG with similar large industrial customers (RS 22) for cost allocation purposes. This group of customers is served from distribution facilities which include distribution related costs. Therefore, not allocating distribution-related costs to this group of customers is inconsistent with the fairness principle (Principle 2: Fair apportionment of costs among customers) of sharing in the related embedded costs of distribution facilities.

**21. Since the above cost allocation methodology, just using transmission system costs, has been used throughout the history of the VIGJV why does FEI believe the cost allocation is inappropriate?**

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

As explained in the response to Catalyst-FEI IR 2.6, comparing VIGJV's historical (pre-2012) allocated cost of service or cost allocation methodology with the cost allocation methodology in this Application is inappropriate. This is because historical COSAs were based on FEVI prior to amalgamation and so are not readily comparable, because the utility rate base, cost of service, total consumption, peak day demand and total customers are materially different between FEVI as a standalone utility and as part of the amalgamated utility.

As explained in the response to Catalyst-FEI IR 2.5 and Section 9.8.5.2 of the Application, establishing postage stamp rates for large industrial customers as proposed in the Application is consistent with the rate design principles of fair apportionment of costs and avoidance of undue discrimination among similar types of customers. Similar treatment of all large industrial customers is also consistent with government policy in favor of postage stamp rates.

**22. Since the above cost allocation is identical to the cost allocation for 14 large, industrial firm transportation customers in RS22A and RS22B, how can the cost allocation be inconsistent with FEI's customer's segmentation?**

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

As explained in FEI's Final submission on COSA and revenue to cost ratios[1], FEI's treatment of Rate Schedules 22A and 22B in FEI's COSA is consistent with the Commission determination to close these rate schedules in its 1993 Phase B Rate Design Decision[2]. RS 22A and RS 22B

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[1] Page 13, Part Two: COSA Studies
[2] Exhibit B-1, Application, p. 9-38. In the 1993 Phase B Rate Design Decision, the Commission concluded: "In considering the matter of closing Schedules 22A and 22B, the Commission is aware of

are grandfathered with respect to their terms and conditions of service and also with respect to how FEI generally allocates costs to them in the COSA [3]. Consistent with how the rates for these customers were originally derived, FEI did allocate a portion of distribution costs to RS 22A and 22B as a direct assignment for industrial customer stations and service lines.

As explained in the response to Catalyst-FEI IR 2.39, similar types of customers (i.e., customers with similar customer load and service characteristics [load factors, volume, types of end use]), should be grouped together in the COSA model for cost allocation purposes. Consequently, FEI consolidated RS22, VIGJV and BC Hydro IG to derive firm rates based on cost of service allocation results.

**23. Does FEI not consider 13,000 GJ/day of firm demand relative to 0 GJ/Day of firm demand (RS22) a significant "dissimilar characteristic"?**

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

FEI disagrees with the premise of the question.

The 13,000 GJ/d of firm demand referred to in the question is the total firm demand from 5 VIGJV mills, for an average of 2,600 GJ/d per mill. Similarly, Creative Energy is an RS 22 customer with a firm demand of 2,000 GJ/d, which FEI has used in the cost allocations for RS 22, along with the VIGJV and BC Hydro IG firm demand. Further, the amount of firm demand is not the only consideration for segmenting/segregating customers. As explained in the response to Catalyst-FEI IR 2.7 and as indicated in the response to BCUC-FEI IRs 1.34.3 and 1.34.4, the VIGJV mills have similar characteristics to other FEI industrial customers; accordingly, these customers are treated as one group in the COSA and allocated costs based on the costs caused by the entire group of customers.

In response to Catalyst-FEI IR 2.3 [15], shown below, FEI states, "… VIGJV attracts distribution costs based on their firm demand of 13 TJ/Day and based on 5 customers (5 mills). Overall, this amounts to approximately 1.27 percent of Distribution demand-related costs and 0.58 percent of the Distribution customer-related costs totaling $ 2.2 million and $ 1.7 million."

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the many special circumstances and negotiated agreements underlying the existing rates for these interior customers. … The Commission therefore approves the closing of Schedules 22A and 22B …" (Commission Order G-101-93 and Decision dated October 25, 1993, pages 44, 45.)

[3] Transcript Volume 5, p. 487-488.

> **3. Please confirm that VIGJV's current and proposed RS22 rates have benefitted from FEI's amalgamation.**
>
> FEI's proposed firm RS 22 rate of $0.972/GJ is only slightly lower than he VIGJV attracts distribution costs based on their firm demand of 13 TJ/Day and based on 5 customers (5 mills). Overall, this amounts to approximately 1.27 percent of Distribution demand-related costs and 0.58 percent of the Distribution customer-related costs totaling $2.2 million and $1.7 million, respectively.

In previous COSA led by the Utility and EES Consulting (2002, 2010), it was perfectly appropriate for the VIGJV to attract zero distribution costs [5,13]. EES Consulting also led the COSA in this current application.

**24. Please explain how the Utility/EES Consulting can deem it appropriate for the VIGJV to attract zero distribution costs in previous COSA [5,13], and then propose full distribution cost allocation for the exact same customers (VIGJV and BCH IG) in this current Application.**

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

Footnotes 5 and 13 in the question refer to the COSA studies that were done by FEI's predecessor companies TGVI and Centra Gas British Columbia ("CGBC") prior to when FEVI was amalgamated into FEI. The 2002 COSA was approved by the Commission as a fair and reasonable cost allocation for what was then just the Vancouver Island / Sunshine Coast system. The rate design in the 2010–2011 Revenue Requirement Application & Rate Design Application from the Negotiated Settlement Agreement (NSA) was effectively withdrawn. The NSA states on page 14, "The Parties agree …, that it would be appropriate to defer a full scale rate design at this time". The NSA states that the Parties did not agree on various cost allocation principles.

Post-amalgamation, FEI has filed a COSA study to fairly allocate the utility's cost of service to a significantly larger group of customers than what was included in CGBC in 2002. In doing so, FEI has grouped similar customers based on the type of customer (e.g. residential, commercial or industrial), size of load and load profile.

Consequently, how costs may have been allocated to a customer or group of customers in 2002 will be different from what is done now due to the changed circumstances and costs. In addition, there is a change in the assumptions and judgments that will affect how the COSA is done.

**25. In order to justify FEI's claim that the VIGJV attracts, "1.27 percent of Distribution demand-related costs and 0.58 percent of the Distribution customer-related costs**

**totaling $ 2.2 million and $ 1.7 million," [15 ] please fill in the table below, specifying the quantity of distribution pipe allocated to the VIGJV, BCH IG, RS22A, RS22B, and RS1-7,22-27. For reference, FEI's Distribution Mains summary from the Application [16], is shown below.**

**FEI Distribution Mains (< 450 psi)**

| | Pipe Diameter (D)<br>≤ 60 mm<br>Pipe Length (km) | Pipe Diameter (D)<br>60 < D ≤ 101 mm<br>Pipe Length (km) | Pipe Diameter (D)<br>101 < D ≤ 273 mm<br>Pipe Length (km) | Pipe Diameter (D)<br>273 mm < D<br>Pipe Length (km) |
|---|---|---|---|---|
| VIGJV | | | | |
| BCH IG | | | | |
| RS22A | | | | |
| RS22B | | | | |
| RS1-7,22-27 | | | | |
| | | | | |
| FEI Total (km) | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | |
| VIGJV % of Total | | | | |
| BCH IG % of Total | | | | |
| RS22A % of Total | | | | |
| RS22B % of Total | | | | |
| RS1-7,22-27 % of Total | | | | |

| | |
|---|---|
| FEI's allocation of VIGJV % of Distribution Costs | |
| FEI's allocation of BCH IG % of Distribution Costs | |
| FEI's allocation of RS22A % of Distribution Costs | |
| FEI's allocation of RS22B % of Distribution Costs | |
| FEI's allocation of RS1-7,22-27 % of Dist. Costs | |

**Table 1: Minimum System Results for All Mains**

**COMBINED STEEL & PLASTIC MAINS**

| Line No. | Diameter Inches | Diameter mm | Length in Meters | Unit Cost / Length ($/m) | Weighted Cost | Minimum Size Cost (All Pipe Valued at 60mm PE) |
|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| 1 | 0.6 | 15 | 201,739 | $ 57.55 | $ 11,610,076 | $ 11,233,200 |
| 2 | 0.8 | 21 | 38,914 | $ 149.85 | $ 5,831,225 | $ 2,166,832 |
| 3 | 1.0 | 26 | 1,491,415 | $ 122.19 | $ 182,236,170 | $ 83,044,874 |
| 4 | 1.3 | 33 | 17,750 | $ 149.61 | $ 2,655,635 | $ 988,357 |
| 5 | 1.7 | 42 | 8,176,149 | $ 81.16 | $ 663,565,704 | $ 455,263,903 |
| 6 | 1.9 | 48 | 41,693 | $ 150.18 | $ 6,261,307 | $ 2,321,558 |
| 7 | 2.4 | 60 | 9,344,973 | $ 103.43 | $ 966,547,294 | $ 520,346,273 |
| 8 | 0.6 | 15.0 | 0 | | $ - | $ - |
| 9 | 0.8 | 21.0 | 200 | $ 150.34 | $ 30,058 | $ 11,132 |
| 10 | 1.0 | 26.0 | 2,303 | $ 150.34 | $ 346,222 | $ 128,230 |
| 11 | 1.3 | 33.0 | 2 | $ 150.34 | $ 345 | $ 128 |
| 12 | 1.7 | 42.0 | 9,481 | $ 150.34 | $ 1,425,364 | $ 527,913 |
| 13 | 1.9 | 48.0 | 0 | | $ - | $ - |
| 14 | 2.4 | 60.0 | 48,205 | $ 150.34 | $ 7,247,235 | $ 2,684,161 |
| 15 | 2.9 | 73 | 585 | $ 274.33 | $ 160,579 | $ 32,594 |
| 16 | 3.5 | 88 | 1,629,167 | $ 167.72 | $ 273,236,425 | $ 90,715,168 |
| 17 | 4.0 | 101 | 592 | $ 275.56 | $ 163,058 | $ 32,949 |
| 18 | 4.5 | 114 | 2,714,754 | $ 208.66 | $ 566,447,291 | $ 151,162,769 |
| 19 | 6.6 | 168 | 1,190,799 | $ 449.10 | $ 534,788,514 | $ 66,306,001 |
| 20 | 8.6 | 219 | 292,284 | $ 1,876.21 | $ 548,386,780 | $ 16,274,967 |
| 21 | 10.7 | 273 | 49,070 | $ 2,274.10 | $ 111,590,603 | $ 2,732,323 |
| 22 | 12.7 | 323 | 125,597 | $ 2,274.19 | $ 285,631,012 | $ 6,993,472 |
| 23 | 16.0 | 406 | 33,359 | $ 2,274.22 | $ 75,866,002 | $ 1,857,498 |
| 24 | 18.0 | 457 | 1,947 | $ 2,274.22 | $ 4,428,391 | $ 108,424 |
| 25 | 20.0 | 508 | 57,658 | $ 6,171.01 | $ 355,805,428 | $ 3,210,485 |
| 26 | 24.0 | 609 | 1,466 | $ 6,171.01 | $ 9,045,949 | $ 81,623 |
| 27 | 30.0 | 762 | 11,779 | $ 6,171.01 | $ 72,687,404 | $ 655,869 |
| 28 | 36.0 | 914 | 0 | | $ - | $ - |
| 29 | 42.0 | 1066 | 0 | | $ - | $ - |
| 32 | **TOTAL** | | **25,481,880** | | **$ 4,685,994,070** | **$ 1,418,880,702** |
| 33 | | | | | | |
| 34 | **Customer Related Component** | | | Line 32, Column (6) / Line 32, Column (5) | | **30%** |
| 35 | **Demand Related Component** | | | 1 - Line 34, Column (6) | | **70%** |

**Response:**

FEI does not allocate quantities of pipe. FEI allocates costs based on a customer group's contribution to specific allocators. As described in Section 6.2 of the Application, in VIGJV's case, its firm demand of 13 TJ is used to allocate transmission function and distribution function demand-related costs. VIGJV's contribution to the weighted number of customers is used to allocate distribution customer-related costs. VIGJV's total firm throughput is used to allocate energy-related costs. The Minimum System study referenced above is only used to disaggregate mains costs into demand-related and customer-related components. The minimum system study is not used to allocate pipe size by length to various customer rate schedules.

In reviewing the responses to Catalyst-FEI IR2, it has come to FEI's attention that the response to Catalyst-FEI IR 2.4 was inadvertently omitted from Exhibit B-24. FEI is filing an erratum to correct this, concurrent with the filing of these IR responses. FEI reproduces the question and response to Catalyst-FEI IR 2.4 below also:

Using disclosed information, Catalyst Paper estimates that the current R:C ratio for the VIGJV under amalgamation (existing firm revenue compared to fairly allocated amalgamated service area transmission costs) is 163 % based on [4] and [5]. In a rate design process to combine certain customers into groups it is essential to know the starting point for each customer in terms of R:C ratio in the amalgamated service area as well as the proposed Final COSA R:C ratios.

**4. Please submit FEI's estimate for VIGJV's current R:C ratio detailing how the cost allocation is performed with respect to distribution costs and definition of transmission service area.**

**Response:**

VIGJV's current R:C ratio is 76.5 percent.

Because the VIGJV facilities take gas at a distribution pressure (not transmission pressure), FEI has facilities in place to step down the pressure at the various VIGJV sites, just as FEI has for other distribution pressure customers. The VIGJV attracts distribution costs based on their firm demand of 13 TJ/Day and based on 5 customers (5 mills). Overall, this amounts to approximately 1.27 percent of Distribution demand-related costs and 0.58 percent of the Distribution customer-related costs totaling $2.2 million and $1.7 million, respectively.

FEI does not define a separate transmission service area or rate.

In response to Catalyst-FEI IR 2.6 [17], shown below, FEI states,

> **6. Please confirm that the VIGJV's current cost of service on a volumetric basis is less than it has been in historical COSA such as footnote [2]. If this is not the case, please explain.**
>
> **Response:**
>
> Not confirmed. The VIGJV's volumetric allocated cost of service from Schedule 34B-10 included in Exhibit B-1-0 in TGVI's Application for Approval of 2010 and 2011 Revenue Requirements equals $0.832 per GJ ($2,430,018 / 2,920,000 GJ). The VIGJV does not have a separately allocated cost of service in this Application, as the VIGJV is included as a customer in RS 22 Firm whose volumetric allocated cost of service is $0.978 per GJ ($21,429[1] thousand/ 21,900[2] TJ).
>
> In the Common Rates Application, referenced in the footnote included in the preamble, FEI treated VIGJV revenues (among other customers' revenues) as credits to the cost of service; therefore no costs were allocated to the VIGJV in that application.
>
> Comparing VIGJV's historical (pre-2012) allocated cost of service with the allocated cost of service in this Application is inappropriate. Historical COSAs were based on FEVI prior to amalgamation and so are not readily comparable, as the utility rate base, cost of service, total consumption, peak day demand and total customers are materially different between FEVI as a standalone utility and as part of the amalgamated utility.

**26. Please explain why FEI thinks comparing VIGJV's historical (pre-2012) allocated cost of service with the proposed cost of service in this Application is inappropriate?**

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

As explained in the response to Catalyst-FEI IR 2.6 and in the preamble to this question, it is inappropriate to compare historical COSAs for FEVI prior to amalgamation to COSAs for post-amalgamation FEI. The circumstances have radically changed from a COSA for FEVI, which served only Vancouver Island and the Sunshine Coast and approximately 100,000 customers. The FEVI COSA was developed when FEVI had a Revenue Deficiency Deferral Account (RDDA) due to revenues collected being lower than the cost to provide service. The pre-2012 rate design and COSA for FEVI was undertaken to address competitive issues and cost of service, while giving consideration to unique aspects of the FEVI cost of service, such as expiring provincial royalty credits and government loan repayments.

Post amalgamation, the COSA for FEI is the embedded cost allocation study for the entire customer base of approximately 1 million customers, with customers from the previously separate FEVI and FEW merged into the applicable FEI rate schedules. FEI has no RDDA, no royalty credits and no government loan repayments. Consequently, there will be changes in how industrial customers are treated and grouped for cost allocation purposes.

**27. Please list the most recent COSA that included the VIGJV.**

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

The most recent COSA prior to the 2016 rate design application that included the VIGJV was the FEI 2012 Amalgamation and Rate Design Application. In the 2012 application the revenues from the contract customers (VIGJV and BC Hydro IG), and Large Industrial revenues were allocated as credits to the cost of service to all other customers such that no cost of service or revenue to cost ratio was calculated for VIGJV in that COSA study.

Prior to 2012, FEVI's COSA studies included the VIGJV. The most recent COSA study filed prior to 2012 was part of the FEVI 2010 – 2011 Revenue Requirements and Rate Design Application which was subject to an Negotiated Settlement Agreement which did not approve a specific COSA or rate design.

In response to Catalyst-FEI IR 2.45 [18], shown below, FEI states,

> **45. Please detail the distribution demand cost allocation for each customer in the table.**
>
> **<u>Response:</u>**
>
> Please refer to Attachment 45, Schedules 3 and 4 for details of the allocated rate base and cost of service to BCH IG and VIGJV. Because FEI does not allocate costs to customers individually,

Unfortunately, FEI's response and Attachment 45, Schedule 3 and 4 fail to answer the question in detailing the distribution demand cost allocation for each customer. FEI's answer appears to detail total demand cost allocation (transmission and distribution), but fails to show distribution demand cost allocation by customer as per the question.

**28. Please supply the distribution demand cost allocation for each customer in the table as requested.**

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

The distribution demand cost of service allocation for BC Hydro IG, VIGJV and Creative Energy is provided in the table below:

| Customer | Distribution Demand Cost of Service Allocation ($000) |
|---|---|
| BCH IG | $7,393 |
| VIGJV | $2,136 |
| Creative Energy | $328 |

In Catalyst-FEI IR 2.18 [19], shown below, FEI shows the Allocation Cost of Service from Catalyst-FEI IR Response 2.16, which represents FEI's amalgamated utility transmission cost of service.

**18. Please summarize in a table the variance between the cost of service calculated in (17) and the cost of service for each of RS22A, RS22B, VIGJV, and BCH IG.**

| Rate Schedule | Customers | Firm Demand | Interruptible Demand | Total Annual Demand |
|---|---|---|---|---|
| RS 22 | 26 | 732 | 12,457 | 13,189 |
| RS 22A | 9 | 10,878 | 0 | 9,030 |
| RS 22B | 5 | 4,215 | 1,061 | 5,277 |
| **Subtotal** | **40** | **15,825** | **13,518** | **27,496** |
| Joint Venture | 1 | 4,758 | 0 | 4,758 |
| BC Hydro IG | 1 | 16,425 | 0 | 16,425 |
| **Total** | **42** | **37,008** | **13,518** | **48,679** |

*Units in the Demand Columns are all in TJ*

**Response:**

FEI does not have a transmission service, a transmission rate nor a transmission region and does not agree that rates calculated on the basis proposed in the question are appropriate. However, FEI has provided the requested information below. FEI cannot produce a separate allocated cost of service for BCH IG, VIGJV and RS 22 Firm from Exhibit B-1, Appendix 12, pages 1771-1781 as the customers were grouped together for cost allocation purposes. FEI has included a total column for comparison.

| Rate Schedule | Allocated Cost of Service from Catalyst-FEI IR Response 2.16 ($000) | Allocated Cost of Service from Exhibit B-1 ($000) | Variance ($000) |
|---|---|---|---|
| **RS 22A** | 6,717 | 6,977 | (260) |
| **RS 22B** | 2,556 | 2,415 | 141 |
| | | | |
| BCH IG | 8,591 | | |
| VIGJV | 2,794 | | |
| RS 22 Firm | 768 | | |
| Total | 12,153 | 22,183 | (10,030) |

In BCUC-FEI IR 1.35 [20], FEI provided the following table which included Transmission and Distribution costs and total revenue,

**Table 1**

| $000<br>Customer | Column 1<br>Total Revenue | Column 2<br>Cost of Gas | Column 3<br>Allocated Costs | Column 4<br>R:C ratio | Column 5<br>M:C Ratio |
|---|---|---|---|---|---|
| BC Hydro IG | 13,097 | 0 | 14,530 | 90.1% | 90.1% |
| Joint Venture | 7,106 | 0 | 5,837 | 121.7% | 121.7% |
| Creative Energy | 1,648 | 15 | 654 | 246.3% | 249.7% |

When combining the above 2 tables, shown below, the data shows that the cost differential for using a common transmission cost allocation vs. FEI's proposal is minimal for RS22A and RS22B, but is significant for BCH IG and VIGJV. The data in the table is not exact, but the material impact of allocating distribution costs only to VIGJV and BCH IG is clear.

| Rate Schedule | Allocated Cost of Service from Catalyst-FEI IR Response 2.16 ($000) | Allocated Cost of Service from Exhibit B-1 ($000) | Variance ($000) |
|---|---|---|---|
| RS 22A | 6,717 | 6,977 | (260) |
| RS 22B | 2,556 | 2,415 | 141 |
| | | | |
| BCH IG | 8,591 | 14,530 | (5,939) |
| VIGJV | 2,794 | 5,837 | (3,043) |
| RS 22 Firm | 768 | 654 | (114) |
| **Total** | **12,153** | **22,183** | **(10,030)** |

**29. Please format the data in the above table to enable the reader to accurately compare the allocated costs for customers using past practice methodology (exclusion of distribution costs for all customers in RS22A, RS22B, VIGJV, and BCH IG) vs. FEI's proposal (adding distribution costs only to the VIGJV and BCH IG).**

**Response:**

FEI disagrees that column 2 (Allocated Cost of Service from Catalyst IR Response 2.16 ($000)) as described in the preamble represents FEI's amalgamated utility transmission cost of service. The results of this column are derived by excluding an allocation of distribution related costs from VIGJV, BCH IG and RS 22 Firm. As described in the response to Catalyst-FEI IR 2.18, FEI does not have a transmission service, a transmission rate nor a transmission region.

It is important to note that VIGJV does not take gas at transmission pressure; rather the VIGJV facilities take gas at distribution pressure or intermediate pressure and, like other customers, FEI has facilities in place to step down the pressure at the various VIGJV sites to serve them and the surrounding businesses and communities.

The cost allocation used for column 2 (Allocated Cost of Service from Catalyst-FEI IR Response 2.16 ($000)) in the table is also inappropriate because it is inconsistent with FEI's customer segmentation. FEI does not segregate its customers based on the pressure of gas it delivers, and therefore has no distribution pressure or transmission pressure service. Rather, FEI segregates its customers based on load characteristics of annual consumption and load factor (i.e., how much the customer consumes on average as compared to its peak demand) and nature of the service (i.e., sales or transportation). Based on FEI's customer segmentation, the VIGJV is similar to other large industrial customers served by FEI under Rate Schedule 22 and should be allocated distribution costs similarly.

Nonetheless, FEI formatted the table as requested. In response to BCUC IR 1.35, FEI used the initial COSA from Exhibit B-1 and not the final COSA to derive the allocated costs, accounting for the slight difference in the total.

| Rate Schedule | Allocated Cost of Service from Catalyst-FEI IR Response 2.16 ($000) | Allocated Cost of Service from Exhibit B-1 ($000) | Variance ($000) |
|---|---|---|---|
| **RS 22A** | 6,717 | 6,977 | (260) |
| **RS 22B** | 2,556 | 2,415 | 141 |
| | | | |
| **BCH IG** | 8,591 | 14,530 | (5,939) |
| **VIGJV** | 2,794 | 5,837 | (3,043) |
| **RS 22 Firm** | 768 | 654 | (114) |
| **Total** | **12,153** | **21,021** | **(9,215)** |

**Topic 5: Customer Segmentation and Grouping**

In Catalyst-FEI IR 2, shown below, FEI states, [21]

> The above cost allocation is also inappropriate because it is inconsistent with FEI's customer segmentation. FEI does not segregate its customers based on the pressure of gas it delivers, and therefore has no distribution pressure or transmission pressure service. Rather, FEI segregates its customers based on load characteristics of annual consumption and load factor (i.e., how much the customer consumes on average as compared to its peak demand) and nature of the service (i.e., sales or transportation). Based on FEI's customer segmentation, the VIGJV is similar to other large industrial customers served by FEI under Rate Schedule 22 and should be allocated distribution costs similarly.

> FEI supports similar treatment of RS 22, VIGJV and BCH IG under amalgamation in the manner proposed in the Application. As explained in Section 9.8.5.2 of the Application, FEI supports establishing a postage stamp, cost of service-based firm rate for large industrial customers under amalgamation. FEI has proposed that RS 22, VIGJV and BC Hydro IG be grouped together to derive firm rates based on the allocated cost of service results. FEI believes that this option is consistent with the rate design principles of fair apportionment of costs and avoidance of undue discrimination among similar types of customers. Similar treatment of all large industrial customers is also consistent with government policy in favor of postage stamp rates.

> As indicated in response to BCUC IRs 1.34.3 and BCUC 1.34.4, the VIGJV mills have similar characteristics to other FEI industrial customers; accordingly, these customers are treated as one group in the COSA and allocated costs based on the costs caused by the entire group of customers.

> As identified in the Application, if the closed RS 22A and RS 22B were not grandfathered, they would also be grouped with the VIGJV, BCHydro IG and RS 22 customers into one customer group and be allocated costs based on cost causation, which would include distribution-related costs.

> As explained in FEI's written reply argument on COSA and revenue to cost ratios (refer to PART Two, page 13), FEI's treatment of RS 22A and RS 22B customers is consistent with the Commission determination to close these rate schedules in its 1993 Phase B Rate Design Decision. Therefore, RS 22A and RS 22B are grandfathered with respect to their terms and conditions of service and how FEI allocates costs to them in COSA.

FEI's theme appears to be that VIGJV, RS22A, RS22B customers that all have significant firm demand, should be grouped together with the interruptible customers within RS22. FEI also states that its treatment of RS22A and RS22B "is consistent with the Commission determination to close these rate schedules in its 1993 Phase B Rate Design Decision"[21].

The Commission in its 1993 Phase B Rate Design Decision explicitly stated, [22] 10.2.2 Large Volume Firm Rates: Schedules 22, 22A and 22B

BCGUL proposed that existing large volume transportation customers in the Inland and Columbia service areas ("interior customers") maintain their existing rates, but generally adopt terms and conditions similar to those in Schedule 22. These existing rates would not be available to new interior customers or for significant load increases by existing interior customers. BCGUL proposed that the tariffs be named Schedules 22A (Inland) and 22B (Columbia) to indicate the similarity to Schedule 22. The rationale was that since virtually all of these interior customers moved their direct purchase gas on firm service, and used only small amounts of interruptible gas, they differed significantly from Lower Mainland large volume customers, who had historically been interruptible sales or service customers only and had no firm gas sales or transportation. Under these circumstances, considering that most of these interior customers had either individually negotiated rates (Inland by-pass customers) or a uniquely linked rate design (Columbia customers) and few if any were likely to be requiring load increases, closed rates were argued to be appropriate. BCGUL also proposed that any new customers requiring firm transportation could

Since the rationale for separating RS22A and RS22B from RS22 and closing rate schedules 22A and 22B was based on the fact that, " … all of these interior customers moved their direct purchase gas on firm service," and, " … they differed from Lower Mainland large volume customers, who had historically been interruptible sales …", FEI's statement that it is currently appropriate to bundle the firm service of the VIGJV and BCH IG with the interruptible service of RS22 seems odd.

**30. Please confirm that VIGJV, RS22A, and RS22B customers all have significant firm demand.**

**Response:**

FEI confirms that the VIGJV, RS22A and RS22B as well as Creative Energy and BC Hydro IG are all examples of Large Industrial customers that have firm demand which means they currently have a portion of their capacity on a firm basis with the remaining requirements met on an interruptible basis.

FEI's large Industrial customers are currently served under rate schedules or special contracts that can provide a combination of firm and interruptible service or just interruptible service. FEI's RS 22 proposal is to provide similar service to similar customers across FEI's service territory. Today, the firm service rates in the table of charges of RS 22 state that they are subject to negotiation and prior approval from the BCUC, and Creative Energy is currently an RS 22 customer with a tariff supplement regarding firm service. Some of FEI's other RS 22 customers that are currently receiving interruptible service have expressed an interest in having a portion of their capacity available to them on a firm basis. FEI's RS 22 proposal would enable firm service to all RS 22 customers subject to the availability of capacity, so that FEI can provide a similar type of service to similar customers across its service territory.

**31. Please confirm that RS 22 customers, except for Creative Energy, have no firm demand.**

**Response:**

Confirmed. However, as discussed in the response to Catalyst-FEI IR 3.30, FEI has received inquiries from existing RS 22 customers, as well as potential new industrial customers, about having a combination of firm and interruptible service. Similar customers across FEI's service territory should have access to similar service offerings, which is achieved by FEI's RS 22 proposal.

**32. Please clarify FEI's justification for the proposed grouping of RS22 Interruptible Service customers with the firm service customers of the VIGJV and BCH IG.**

**Response:**

Please refer to the responses to Catalyst-FEI IRs 3.22 and 3.31. Similar types of customers (i.e., customers with similar customer load and service characteristics [load factors, volume, types of end use]) should be grouped together in the COSA model for cost allocation purposes. Consequently, FEI has consolidated RS 22, VIGJV and BC Hydro IG to derive firm rates based on cost of service allocation results.

**33. Please clarify FEI's justification for suggesting that RS22A and RS22B firm service should also be grouped with RS22 Interruptible Service customers if they were not grandfathered.**

**Response:**

It is necessary to make a correction to the wording in the question. RS 22 is **not** an Interruptible Service offering. RS 22 is a Large Volume Transportation service offering in which customers can choose to take firm transportation service only, interruptible service only, or a combination of firm and interruptible transportation service. All new customers wishing to take service under Large Volume Transportation Service can only do so under RS 22; it does not matter where the customer is located, whether they wish to take predominantly firm service with a small amount of interruptible or just interruptible service. If the customers currently being served under RS 22A and RS 22B were to stop service under those rate schedules and restart later, they would become new RS 22 customers as per the 1993 Phase B Decision.

**34. Please explain FEI's understanding of how this grouping would be "consistent with the Commission decisions to close these rate schedules in its 1993 Phase B Rate Design Decision."**

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

Please refer to the response to Catalyst-FEI IR 3.22, which provides FEI's reasons for the treatment of RS 22A, RS 22B, RS 22 and other industrial customers for cost allocation purposes as proposed in the Application.

**35. Please confirm that the Utility segregated customers in RS22A and RS22B from RS22 based on the presence or absence of firm demand, as supported by the 1993 Phase B Rate Design Decision.**

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

FEI has not segregated customers in RS 22A and RS 22B from RS 22 based on presence or absence of firm demand. As described in Section 9.8.2.2 of the Application, RS 22A and RS 22B are closed service offerings for new entrants since 1993 as supported by the 1993 Phase B Rate Design Decision and the RS 22B Decision that followed shortly after.

As discussed in the response to Catalyst-FEI IR 2.39, FEI has continued to retain the grandfathered status approved in the past for RS 22A and RS 22B and has continued to allocate costs for these rate schedules similarly to past practise. If the closed RS 22A and RS 22B were not grandfathered, they would also be grouped with the VIGJV, BC Hydro IG and RS 22 customers into one customer group for cost allocation purposes.

**36. Since RS22A and RS22B were separated from RS22 based on Lower Mainland RS22 customers having no firm demand, and nothing has changed in that respect since 1993, then why is FEI suggesting these customers should be grouped together again?**

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

Please refer to the responses to Catalyst-FEI IRs 3.22 and 3.23.

**37. Please reconcile FEI's current proposal to group firm service customers (VIGJV/BCH IG) with interruptible service customers (RS22) with the Commission's 1993 Phase B Rate Design Decision to segregate RS22A and RS22B from RS22.**

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

RS 22 is not composed of only interruptible service customers.

The Commission's Decision in the Phase B Rate Design in 1993 segregated the large industrial customers in the Inland Division and Columbia Division and closed the service offering for RS 22A and 22B. All new large industrial customers have to take service under RS 22 regardless of their location and whether they were primarily firm service with a small amount of interruptible or whether they were entirely interruptible service.

Please also refer to the response to Catalyst-FEI IR 3.35.

**Topic 6: VIGJV and BCH IG Customer Classification**

Prior to Amalgamation, VIGJV and BCH IG were considered Transmission customers by the Utility. During the FEU Common Rates, Amalgamation and Rate Design Application, the Utility referred to VIGJV/BCH IG as distinct customers, as shown below, [23]. Here the Utility clearly makes the distinction that LCS-13 Transportation Service is provided via the "distribution system", while VIGJV/BCH IG are "two transmission customers … who are served off the transmission pipeline". It follows that the Utility stated that VIGJV/BCH IG do not receive service via the distribution system.

> - FEVI Rate Schedule LCS-13: Transportation Service – FEVI Rate Schedule LCS-13 is available to customers served off the distribution system with a minimum annual consumption of 6,000 GJ. To date no customers have elected service under this rate schedule[152].
>
> [152] FEVI also provides Transportation Service to two transmission customers, BC Hydro and the VIGJV, who are served off the transmission pipeline.

Also, in FEU Common Rates, Amalgamation and Rate Design Application, [24], shown below, FEI made a commitment to "continue to provide the transmission transportation service offering upon amalgamation", emphasis added, for VIGJV and BCH IG.

> 5. Currently, FEVI's Standard Terms and Conditions contain provisions relating to a transmission transportation service offering. After amalgamation, these services are required to be maintained to facilitate the continued provision of service to FEVI's two significant transmission transportation customers, the Vancouver Island Gas Joint Venture and BC Hydro.171 An addition to the proposed GT&Cs is thus necessary for FEI Amalco to continue to provide the transmission transportation service offering upon amalgamation.

In response to Catalyst-FEI IR 2.9 [25], shown below, FEI states,

> **9. Please confirm that FEI acknowledges the existence of transmission customers within the amalgamated utility.**
>
> **Response:**
>
> Not confirmed. As explained in response to Catalyst-FEI IR 2.1, FEI does not have a transmission pressure service nor a distribution pressure service.

In FEU Common Rates, Amalgamation and Rate Design Application, [26,27], shown below, FEI explicitly states that Amalgamation has no affect on VIGJV and their common rates proposal does not impact VIGJV and BCH IG,

> The rates for special contract and large industrial customers, including the FEVI large industrials (VIGJV and BC Hydro), Lower Mainland region Rate Schedule 22 customers, Inland region Rate Schedule 22A and bypass contract customers, and Columbia region Rate Schedule 22B customers will also be unaffected by the amalgamation. The large industrial and special contract customers have specific rate structures and operating conditions appropriate for their regions in the Province and history of service. The FEU believe that these specific rates, rate structures and tariffs are still appropriate for the Company's large industrial customers. Treatment of special contract and large industrial customers is discussed in Section 9.

**40. Since the Utility stated that amalgamation and common rates had no affect on and gave no consideration to VIGJV/BCH IG, RS22A, and RS22B why is FEI now proposing to selectively apply common distribution rates to just VIGJV and BCH IG?**

**Response:**

FEI disagrees with the premise in the question that "FEI is proposing to selectively apply common distribution rates to just VIGJV and BC Hydro IG".

As explained in the response to Catalyst-FEI IR 2.1, FEI does not segregate its customers based on distribution or transmission pressure service. Based on FEI's customer segmentation, the VIGJV is similar to other large industrial customers served by FEI under RS 22 and should be allocated distribution costs similarly. In the Phase B Decision in 1993 the Commission closed the service offering of RS 22A and RS 22B to any new customers; all new large industrial customers were expected to take service under RS 22.

Please refer to the responses to Catalyst-FEI IRs 2.3 and IR 2.5, which provide the history prior to filing the amalgamation/common rates application and explain why FEI believes that its proposal to apply a postage stamp cost of service-based rate is appropriate for large industrial customers at this time.

**41. Please reconcile FEI's proposal to apply a common distribution rate to VIGJV and BCH IG after amalgamation with FEI's stated intentions given to the Commission as noted above.**

**Response:**

Please refer to the response to Catalyst-FEI IR 3.40 as to why FEI disagrees with the premise of the question that FEI is proposing to apply a common distribution rate.

At the time of filing the Common Rates, Amalgamation and Rate Design Application on April 11, 2012, FEI did not include the large industrials in its common rate proposals. However, in the Commission's Decision and Order G-21-14 dated February 26, 2014, the Commission directed FEI to include industrial and other special contract customer's in its rate design application (at page 22 of the Decision):

> Accordingly, the Commission Panel directs the FEU to file a Rate Design Application for the amalgamated entity no later than two years after the effective date of the amalgamation of the FEU and Terasen Gas Holdings Inc. The Rate Design Application should include industrial and other special contract customers as recommended by CEC in the Original Application.

Therefore, FEI has considered potential options and included its rate design proposal to derive rates for contract customers such as VIGJV, BC Hydro IG and RS 22 customers, including using the COSA to derive firm and interruptible rates for this group of customers.