FORTISBC INC. OTR PROJECT CPCN

EXHIBIT B-24

# Undertaking 1 - Transcript Volume 2, page: 159

MR. CAIRNS: Q: Could you clarify that for me, please? Because I read that over more than once, and I tried to find that Table 5 that refers to the federal ranking system and, at the end of it, I was not -- it didn't even come clear to me that -- I couldn't decide. Is California bighorn sheep a species at risk in this particular area? As far as this project is concerned? Or not? I just didn't get that. If you can't answer that now? MR. MACINTOSH: We'll take that as an undertaking. Information Request

### Response:

Transcript Volume 2, page 173, Exhibit B-20

MR. MACINTOSH: Mr. Chair, thank you. There are two undertakings outstanding from this morning's questioning, and I can respond to one of them now. It was to establish whether or not the bighorn sheep were on a protected species list. And the filing which will be Exhibit B-20, I understand, is the British Columbia government document which indicates that they are, and they are on Schedule 1 under the applicable legislation as shown on the second page.

# Undertaking 2, Volume 2, page 172

MR. CAIRNS: Q: All right. I'm going to ask that maybe a regulatory staff help out here a bit. So I'll read my question into the record, and we may have to get an answer later or tomorrow or whatever. If there were 500 ratepayers between Shuttleworth Creek and R.G. Anderson substation who shouldered that extra cost, that comes out to about \$10,000 each, amortized over 40 years, or \$250 a year, or approximately \$20 a month per ratepayer. Now, there's got to be some interest on that, but I've ignored that for the moment. Could you please have your regulatory staff calculate the additional cost per ratepayer if we assume there are 500 ratepayers who solely pay the extra cost of that \$5 million and the amortization period is 40 years? Proceeding Time 11:56 a.m. T37 MR. SAM: A: And so just confirmation of that. MR. CAIRNS: Q: Sure. MR. SAM: A: So we're looking at the 2012 route alternatives, not the 2010. And you've asked us to clarify between Option 1A and 2B, not 1B which is the cheaper solution on the existing right of way?

MR. CAIRNS: Q: Right, and I know, you gave me your apples and oranges view on that.

MR. SAM: A: Okay.

MR. CAIRNS: Q: But that's my question.

MR. SAM: A: Okay.

### Information Request

MR. CAIRNS: Q: If there are approximately 500 residents today, and over the ensuing years the Wiltse properties are built out, the additional cost per ratepayer would decline, would it not? And you can also bundle that into your answer tomorrow. Okay?

## **Response:**

The response to the first part of the undertaking calls for a comparison of

Alternatives 1A and 2B, assuming an in-service date of 2012 in both cases.

Calculations have been completed using an annual interest rate of 6.3 percent,

and an amortization period of 40 years.

Assuming that there are 500 ratepayers willing to pay the incremental costs of \$5.414 million, the annual payment required would be \$703 or \$62 monthly for the amortization period.

In responding to the second part of the undertaking, FortisBC has assumed an ultimate ratepayer base on the Wiltse property of 900, which when added to the existing 500, yields a total of 1,400 ratepayers.

Using the same financial assumptions as above, this would result in an annual payment of \$251, or \$22 monthly.

2012 In-service	Appuolly	Monthly	
(\$5.414 million)	Annually		
500 rate payers	\$703	\$62	
1,400 rate payers	\$251	\$22	

While the assumptions used in these scenarios serve to simplify the calculations, there are a number of considerations that must also be part of the examination.

FortisBC further believes that the comparison of both alternatives with a 2012 inservice date is an inaccurate characterization of the likely outcomes. The proposed Project solution is for Alternative 1A to be in service in 2010, as required by a consideration of project need. Should Alternative 1A be approved, this outcome would be realized. It follows therefore, that the correct comparison is between Alternative 1A with a 2010 in-service date and Alternative 2B, in service in 2012. The proposal by Mr. Cairns results in all other ratepayers having to bear the cost difference between 1A (2010) and 1A (2012).

Using the same financial parameters as in the previous cases, this would yield annual and monthly payments of \$2,063 and \$181 respectively with 500 ratepayers. Assuming 1,400 ratepayers, those amounts drop to \$737 and \$65.

Alternative 1A - 2010 In-service		
Alternative 2B - 2012 In-service	Annually	Monthly
(\$15.895 million)		
500 rate payers	\$2,063	\$181
1,400 rate payers	\$737	\$65

FortisBC has addressed the issue of incremental cost recovery in previous regulatory proceedings. Such discussions have confirmed the practical difficulties in attempting to isolate a group of customers and of the administrative burden and related costs of attempting to implement such as system.

In response to BCUC IR1 Q5.9, during the Black Mountain Substation Application process, with respect to the collection of incremental costs for enhanced screening and how the cost of the screening would be charged to this group of ratepayers, FortisBC responded,

"The Company would be concerned with consistency of application, fairness to local existing or new customers and the cost effectiveness of administration, and would recover from the applicants through a lump sum fee."

The only mechanism currently available to FortisBC is for the collection of a lump-sum payment pursuant to Schedule 74 of the Company's Electric Tariff. The situations are analogous in that both involve a change to a project at the request of a finite group of ratepayers, and that the change introduces additional costs not required to achieve the project objectives.

Schedule 74 allows the Company to finance a maximum of \$10,000 per Applicant, for a period of up to five years at a rate equivalent to the Company's weighted average cost of capital. A minimum down payment of 20% is required from each Applicant.

In practical terms, the collection of a localized rate rider for a period as long as 40

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years, as proposed in this instance, is subject to obstacles that are likely insurmountable. As a customer account will change or cease to exist as customers move within the FortisBC service area, or leave the system entirely, the obligation would necessarily need to be attached to the subject property or premise. As service points are either added to or removed from the system, FortisBC would require a means to flag or recognize accounts that should be affected by the rider. Apart from the administrative complexities, FortisBC does not believe that it has the ability to encumber a property in this manner.

It remains the Company's position that in order for a group of ratepayers to effect a change to a project that provides only a local benefit, and introduces incremental costs, that the group should be prepared to reduce the impact on the wider customer base to zero. This includes any capital cost increases to the project, as well as any costs associated with delay, and that payment for these costs be made in advance of project construction in accordance with the Company's filed Tariff.

# Undertaking 3, Volume 2, page 251

MR. FULTON: Q: Okay. Has Fortis prepared a table similar to 96.5A for the scenario of two capacitor banks now and an SVC in 2018/2019? MR. CHERNIKHOWSKY: A: No, it has not, again because the SVC was not requested as part of this project, and that will form part of a future CPCN application for that SVC. MR. FULTON: Q: Can you file a table that would show that alternative as an undertaking? MR. CHERNIKHOWSKY: A: Yes, we could. Information Request MR. FULTON: Q: Okay. If I could ask you to do that,

then, thank you.

#### **Response:**

Description	2008	2009	2010	2016	2017	2018	
30 Mvar capacitor at FA Lee	184	968	814				
30 Mvar capacitor at DG Bell	179	939	789				
150 Mvar SVC at DG Bell				2,930	15,089	15,542	
Total:	363	1,907	1,603	2,930	15,089	15,542	37,434
NPV	20,506						
Rate Impact	0.56%						
Max One Time Rate Impact	1.32%						

# Undertaking 4, Volume 2, page 251

MR. FULTON: Q: Okay. Is the cost premium for using Bunting conductor 6 percent of this number, or about 2.35 million? Do you want to take that as an undertaking? I'm trying to understand what the impact is of the premium for using the Bunting conductor in that total number. MR. DUFOUR: A: Yes, we will. Information Request MR. FULTON: Q: Thank you. And if it's not the 2.35 million, or 6 percent, if you could tell me what the number is? MR. DUFOUR: A: Yes, we will. Information Request Proceeding Time 3:26 p.m. T63 MR. FULTON: Q: And the percentage. Thank you.

Response:

Transcript Volume 2, page 441

MR. MACINTOSH: Mr. Chair, there is one undertaking I could respond to now. And it arises in yesterday's transcript, volume 2, at page 251, arising from a question Mr. Fulton put to the panel, beginning at line 8. And the question asked was whether the cost premium for using a certain type of conductor was 6 percent of another -- of a number, that number being 39.180 million. And the answer is, yes. So the undertaking is just to confirm the answer implicit in Mr. Fulton's question.

# Volume 3, page 373 - 373

MR. KAROW: Q: On the page 4, the same question, it is defined as table A-8. Please provide an extra column next to the each alternative of the percentage of magnetic and electric field reduction compared to the existing 161 kilovolt line typically around the Heritage Hill area. Could you incorporate that? MR. SHTOKALKO: A: Sorry, you're asking that at this time?

MR. KAROW: Q: The same page, yeah. IR 1, on page 4. It says Karow table A-8. If you could provide extra columns for each power line alternative, the reduction of the percentage reduction of the magnetic and electric field. Of the 161 kilovolt line typical around the Heritage Hills area. Am I -- I mean, for all the lines, which will be when the -- in the area of Heritage Hills.

### Proceeding Time 10:10 a.m. T23

MR. SHTOKALKO: A: The numerical values are provided in other responses to the Commission, but we can take those out separately and provide those calculations as an undertaking.

THE CHAIRPERSON: Thank you.

MR. SAM: A: So, just so I'm clear on the undertaking, you're asking us to compare a table for the electromagnetic fields, comparing to the existing 161 kV line and the percentage reductions of the alternatives that are shown in Table A-8. MR. KAROW: Q: Yeah, I want the other -- extra column

there, beside, yeah.

MR. SHTOKALKO: A: Yeah. We should point out, though, that that information, at least for the magnetic fields, is also provided graphically in 103.3 in the following tables, where you can see the difference between the existing line and the proposed alternatives. But if you want to see it numerically and a percentage, we can provide that as well. **Information Request** 

### Response:

	Alternative					
Feature	Existing 161kV Line	1A	1B	1C		
Conductor Name	477 kcmil, 26/7 ACSR "Hawk"	1192.5 kcmil, 45/7 ACSR "Bunting"	795 kcmil, 26/7 ACSR "Drake"	1590 kcmil 45/7 ACSR "Lapwing"		
Diameter	21.79 mm	33.08 mm	28.14 mm	38.20 mm		
Current Carriers (circuits)	1	2	2	1		
Current Carriers (wires)	3	6	6	3		
Other wires	ADSS fiber optic cable below	ADSS fiber optic cable below	ADSS fiber optic cable below	Continuous two wire 9 mm OD ground- wires, ADSS fiber optic cable below		
Spatial positions	Single circuit H- frame, refer drawing Karow IR8, Cross Section A	Double circuit mono-pole, refer to drawing Karow IR8 Cross Section C	Double circuit H-frame, refer to drawing Karow IR8, Cross Section E	Single circuit H-frame, refer to drawing Karow IR8, Cross Section F		
Maximum Case Line Amperes (A) per Circuit (*)	666A	699A	699A	1400A		
Average Case Line Amperes (A) per Circuit	229A	140A	140A	280A		
Magnetic Field Percentage	East edge of right of way 100%	28% to 44% (**)	91%	208%		
compared to Existing Line Average Case	West edge of right of way 100%	7% to 11% (**)	24%	54%		

# KAROW Table A8 - Including Magnetic Field Percentage compared to Existing Line

- (\*) A typical duration for the Maximum Case load with reference to Section
  4.7 of the CPCN Application (Exhibit B-1-1) for transmission system contingency events and would be about two hours.
- (\*\*) The range is based on mixed use of Braced Post and Davit Arm single structures. Refer to BCUC IR3 A103.3 f for the values used for the percent calculations in the table.