

**BC Hydro Fiscal 2020 to Fiscal 2021
Revenue Requirements Application**

BC HYDRO UNDERTAKING NO. 35

HEARING DATE: February 28, 2020

REQUESTOR: AMPC Mr. M. Keen

TRANSCRIPT REFERENCE: Volume 12, Page 2120, line 15 to Page 2121, line 10 and Page 2123 line 8 to Page 2125 line 4.

TRANSCRIPT EXCERPT:

MR. KEEN: Q All right, I guess Mr. Kumar then, if I could ask you to undertake to provide us with a description of how those labour rates are derived? I understand that there are labour rates and they vary by level. But if you could explain how those are derived in written form I would appreciate that.

MR. KUMAR: A We can do that.

MR. KEEN: Q And then Ms. Holland, I don't know if this is an undertaking for Mr. Kumar or for yourself. In any event, if you could undertake to provide how the overhead amount that you've referred to is calculated?

MS. HOLLAND: A If Ms. Daschuk is in agreement, I think what we would like to do is combine the undertaking where we would discuss the rates, the internal rates, and the mark-up, and I would propose we would do it all in one undertaking.

MS. DASCHUK: A I would agree.

MR. KEEN: Q And just to be clear, not lost on that, if you could break out and show the level of loading for that overhead amount?

MS. HOLLAND: A Understood.

MR. KUMAR: A Yeah, so the study cost would be driven by the actual resources that are working on the study. So if it is a Hydro resource working on the study, it will be reflective of the cost that hydro resources are charging. And if it is an external service provider then it will be a flow-through of what those costs are.

THE CHAIRPERSON: Thank you.

MR. KEEN: Q Are those third party costs a pure flow-through? Or are they loaded when they reach the customer? And by loaded I mean do you have a BC Hydro overhead applied to those third party costs that the customer then sees?

MR. KUMAR: A We will provide that answer as part of the undertaking.

**BC Hydro Fiscal 2020 to Fiscal 2021
Revenue Requirements Application**

MR. KEEN: Q And in terms of proportions, when you are dealing with a system impact study, what proportion right now in calendar year 2020, would you expect would be undertaken by third party engineering firms?

MR. KUMAR: A This is an estimate based on what my understanding is of the studies. I would say almost 95 to 98 percent of the studies I have done internally for system impact statements. So very rarely do we outsource a system impact study, unless it is an area that we don't have expertise when we have to do some transient analysis or some of the large loads LNG related, we may undertake to engage with some boutique technical firms but generally a system impact is done all internally.

MR. KEEN: Q And has that been the case over the past five years?

MR. KUMAR: A Yes.

MR. KEEN: Q And, Ms. Holland, turning to facility studies, is there any divergence from what we've heard about system impact studies?

MS. HOLLAND: A There is a divergence. We do have a number of facility studies that are undertaking either one or -- we have two service providers that do work on our load interconnection facilities studies. I do not know what the breakdown is as between the work that is done internally and by those service providers but I would say it's certainly more than 5 percent goes external.

MR. KEEN: Q If you could undertake to provide that estimate in terms of current practices and what the practice has been over the past five years, we would appreciate that.

QUESTION:

Please provide the following:

- Please explain how the labour rates applied to interconnection studies are calculated and how loading (overhead) costs are assigned, including whether loading costs are assigned to external service provider rates. Further, please provide the percentage of facility studies done internally versus externally over the last five years.
- the percentage of facility studies done internally versus externally over the last five years.
- details on whether BC Hydro loading costs are attached to external service provider rates.

**BC Hydro Fiscal 2020 to Fiscal 2021
Revenue Requirements Application**

RESPONSE:

The labour costs associated with interconnection studies are based on the total hours worked on the study, multiplied by BC Hydro's standard labour rates. There are standard labour rates for each job level within the three affiliations (Management and Professional, IBEW and MoveUp). Standard labour rates are developed each year as part of the annual budgeting process, as described further in BC Hydro's response to BCUC IR 1.42.2. The weighted average standard labour rates by affiliation are provided in Table 5-15 of Chapter 5 of the Application.

Overhead loading costs are applied to these base rates to include both direct costs (e.g., tools and supplies, training, travel, office supplies, direct management and administrative support) and indirect costs (e.g., management and administrative support functions such as human resources and finance, safety, information technology and properties). Interconnection studies primarily involve planning and engineering functions and internal labour for those functions has an overhead loading rate of 57 per cent.

BC Hydro also applies an overhead loading rate of 10 per cent to external service provider rates to recover administration costs related to procurement and accounts payable support functions.

Over the past five years, 33 per cent of Facility Studies have been completed internally and 67 per cent have been completed by external service providers.

**BC Hydro Fiscal 2020 to Fiscal 2021
Revenue Requirements Application**

BC HYDRO UNDERTAKING NO. 46

HEARING DATE: February 28, 2020

REQUESTOR: BCOAPO, Ms. L. Worth

TRANSCRIPT REFERENCE: Volume 12, Page 2293, line 13 to Page 2294 line 7.

TRANSCRIPT EXCERPT:

MR. WORTH: Q Okay. Thank you. So now I'd like to move on to page 5 of our witness aid, please. And that's BC Hydro's response to BCUC IR 117.1 as found in Exhibit B-5. So BC Hydro's response to this IR explains why the property purchase and substation construction of the new Westend Substation are two separate projects. And if you take a look at page 6, which is a continuation, it is a notation from Appendix I, it's page 4 of 10 from Exhibit B-1. I'm referring specifically to line 2 there. We notice that it shows the property purchase in service in fiscal 2021 with an approved cost of 80.7 million. However the in service date for the substation which is shown on page 4, line 8, is indicated as TBD. So is the cost of the property purchase included as an in-service asset for fiscal 2021 such that the revenue requirement actually includes the associated purchase costs?

MR. LEONARD: A I believe this is the undertaking that I had agreed to with Mr. Keen.

QUESTION:

Is the cost of the property purchase of the land for the West End Substation Project included as an in-service asset for fiscal 2021 such that the revenue requirement actually includes the associated purchase costs?

RESPONSE:

There are two components to the DVES: West End Strategic Property Purchase project: the purchase of the subsurface land at Lord Roberts Annex school and the acquisition of the distribution and transmission statutory rights-of-way through Nelson Park. Both are included as in-service capital additions in the test period.

Please refer to BC Hydro's response to BCUC IRs 2.249.2 and 2.249.2.1 where we explain that neither of these components are amortized for accounting purposes. Accordingly, there is no resulting amortization included in the test period.