# Appendix 3.A

# Details of Corrections to Mr. Kaczmarek's Model

1. In an effort to reduce the possible disagreements regarding the alternative damages figures I present in my report, I have not created my own damages model. Rather, I have used Mr. Kaczmarek's spreadsheet model, which he provided as an appendix to his second expert report.<sup>1</sup> I have corrected his errors directly in his spreadsheet, indicating any changes I have made. This corrected model is attached to this report as a spreadsheet, labeled Appendix 3.B.<sup>2</sup> This appendix presents the details of how I implemented my corrections to his analysis.

## A. Study horizon

2. Mr. Kaczmarek calculated the value of Celgar's lost cash flows *ad infinitum* using a perpetuity formula based on the cash flows he assumes that Celgar would generate in 2020. To correct for his inclusion of highly speculative *in perpetuity* damages<sup>3</sup>, I adjusted Mr. Kaczmarek's calculation of the net present value of future cash flows to terminate in 2020.<sup>4</sup>

#### **B.** Discount rate

3. As I stated in Appendix 2, Section B.2 it is inappropriate in this case to use a WACC as a discount rate as the appropriate discount rate would be a cost of equity. Further, as discussed in Section B.3 of that appendix, the method that Mr. Kaczmarek has used to approximate a cost of equity for a hypothetical purchaser of Celgar is inapt, and the appropriate cost of equity specific to Celgar would range from

<sup>&</sup>lt;sup>1</sup> Kaczmarek Second Model, **NERA-79**.

<sup>&</sup>lt;sup>2</sup> I added a worksheet titled "Appendix 3.B - Cover Sheet" to the spreadsheet Appendix 3.B, which describes how my changes to Mr. Kaczmarek's model can be identified in that spreadsheet. Specifically, I applied my corrections to Mr. Kaczmarek's condensed model (worksheet "2\_Condensed Model" of his model), NERA-79.

<sup>&</sup>lt;sup>3</sup> See Section IV.C.2.iv of the text of my main report for details.

<sup>&</sup>lt;sup>4</sup> This correction can be seen in cell F127, of worksheet "Appendix 3.B.1 -Corrected Model" of Appendix 3.B.

the lower end of this range, **and a set of** in my calculations.<sup>5</sup> I calculated these cost of equity values as follows.

- The cost of equity values are set to the IRRs implied by EBITDA forecasts from presentations by CIBC and Pöyry presented to Mercer prior to its decision to buy Celgar.<sup>6</sup>
- The total initial acquisition price of Celgar by Mercer is conservatively considered to have been million.<sup>7</sup>
- I subtract CAPEX forecasts for Celgar from the forecasted EBITDA. These forecasts come from the and consider anticipated Project Blue Goose costs.
- I also subtract taxes following the data and method in the CIBC presentation.
- I considered investment payback periods of 20 and 30 years, but to be conservative I used a cost of equity figure that reflects a 20 year payback period.

For details, see worksheet "Appendix 3.B.6 - Acquisition IRR", of Appendix 3.B.

## C. Under-delivery penalties

4. As discussed in Appendix 2, Section B.4, Mr. Kaczmarek has erred in his But-For Scenario calculation by failing to account for all of the under-delivery penalties that Celgar would pay if it had a lower GBL. To correct for this in the model, I have set the required firm energy sales in each But-For Scenario to be:

<sup>&</sup>lt;sup>5</sup> As discussed in Appendix 2, Section B.3, the cost of equity range of **Section 1** represents the IRRs implied by various scenarios of earnings forecasts for Celgar presented to Mercer prior to its decision to purchase the mill, where these IRRs assume that Mercer undertook project Blue Goose. Forecasted IRRs that a company relies upon in making an investment decision reflects the return it expects, and demands, from the investment, and hence the IRRs are appropriate indicators of the cost of equity for that investment. My corrected cost of equity is found in cell C9 of worksheet "Appendix 3.B.4 - Model Inputs" of Appendix 3.B.

<sup>&</sup>lt;sup>6</sup> **NERA-93** and **NERA-94**.

<sup>&</sup>lt;sup>7</sup> This is the Adjusted Purchase Price stated in the **Solution** (NERA-93) (page 36), which represents the consideration for Celgar's assets plus its working capital which represents the net effect of employee post-retirement plan considerations at Celgar, according to the states on that page that it does not consider these post-retirement plan considerations in its value analysis, I do, to be conservative.

[Celgar's required firm energy sales in the Actual Scenario (238 GWh)] + [the difference between Celgar's GBL in the Actual Scenario (349 GWh) and the lower GBL that applies in the But-For Scenario (varies by scenario)] \* [100% - 1 line losses (6.08%)].<sup>8</sup>

Celgar's penalties are then equal to the amount of required energy in each scenario not delivered times the penalty per MWh:

[required energy - actual sales] \* penalty/MWh

## **D.** Transmission tariffs

5. As discussed in Appendix 2, Section B.5.i, Mr. Kaczmarek has failed to account for the transmission charges that Celgar pays FortisBC (under RS 103 and 104) for electricity that it sells to BCH (or to third parties). For 2009 to 2014, I rely on the historical tariff information provided by FortisBC for these tariffs.<sup>9</sup> For 2015-2020 I assume that these tariffs will increase at the same annual percentage rate as Mr. Kaczmarek assumes for the R.S. 31 energy charge. I added these tariffs to both Mr. Kaczmarek's Actual and But-For Scenarios, as he ignores them in both. However, I have not added these tariffs to the historical period (pre-June 30, 2014) in Mr. Kaczmarek's Actual Scenario. In this period, Mr. Kaczmarek's bases Celgar's cash flows on actual financial data from Celgar, which I assume already include these tariff charges.<sup>10</sup>

#### E. Interest calculation

6. Mr. Kaczmarek made multiple formula errors in his calculation of the interest that Celgar would have accrued on its purported losses due to reduced cash flows in the historic period (pre-June 30, 2014). This can be seen by looking at row 109 of worksheet

<sup>9</sup> NERA-87.

<sup>&</sup>lt;sup>8</sup> For example, if the GBL in a But-For scenario were 330 GWh, then the corrected firm energy sales requirement would be 256 GWh (= 238 GWh + (349 GWh - 330 GWh) \* [100% - 6.08%]). This correction can be seen in cell D64, of worksheet "Appendix 3.B.1 -Corrected Model" of Appendix 3.B. GBLs are multiplied by line losses in this formula as GBLs represent generation pre-losses. The line losses percentage and the required firm energy sales quantities in the Actual Scenario can be found Mr. Kaczmarek's Second Report Model (NERA-79), worksheet "3.A\_Model\_Actual", cells C68 and C77.

<sup>&</sup>lt;sup>10</sup> See rows 89 and 94 of worksheet "Appendix 3.B.1 -Corrected Model" of Appendix 3.B.

"2\_Condensed Model" in Mr. Kaczmarek's updated damages model.<sup>11</sup> Each cell of row 109 is intended to account for one additional year of interest accrued at the rates specified in row 108. However, the formula in column 'H' double counts interest.<sup>12</sup> Additionally Mr. Kaczmarek errs in his calculation of "half-year" interest in Column 'J' and (and half-year discounting in Column 'K').<sup>13</sup> Last, Mr. Kaczmarek has a small inconsistency in his formula in I109.<sup>14</sup>

#### F. Subtraction of historical sales in setting Celgar's GBL

7. As discussed in my report, under the hypothetical that Celgar's GBL was determined incorrectly, Mr. Kaczmarek has presented several damages scenarios that assume that *both* Celgar's GBL should be based on a different year and that its historical sales should have been subtracted from its generation to form its GBL (or equivalently that its historical purchases should have been subtracted from its load). However, he does not present scenarios that consider that the year for Celgar's GBL was incorrect, but it was *correct* to not subtract is sales (or purchases).<sup>15</sup>

<sup>14</sup> He uses a different method to calculate interest in this column than in prior columns. Appendix 3.B, Worksheet "Appendix 3.B.1 -Corrected Model", row 117 presents the corrected interest rate calculations.

<sup>&</sup>lt;sup>11</sup> Kaczmarek Second Model, NERA-79. Each cell in that row should represent cumulative interest from the various historical periods Mr. Kaczmarek models to 30-June-2014 (his date for assessing damages). Mr. Kaczmarek calculates cumulative interest by first calculating interest for the most recent historical period (the first half or 2014). He then steps backwards in time adding on the incremental interest from each historical year. For example, the interest he applies to cash flows from 2012 would equal: a) the interest from the first half of 2014 to the date of loss basement; times b) the incremental interest from year 2013; and times c) and the incremental interest from year 2012.

<sup>&</sup>lt;sup>12</sup> The formula should be "=(I109\*(1+H108))^((I1-H1)/365)" but it is "=(I109\*(1+H108))^((\$D\$113-H1)/365)". The reference to "I109" is the cumulative interest for column I. The reference to "(1+H108))^((I1-H1)/365" is the incremental interest for column H, which represents *one year of incremental interest*. But in his erroneous formula, instead of multiplying by the incremental interest for a single year, he multiples by interest covering a two-year period.

<sup>&</sup>lt;sup>13</sup> His formulas in these cells include a term that is 365/2, but this should be just 365 (without dividing by two). The half year nature of these rates is already accounted for because in his row 1 of the same worksheet he specifies dates in Columns "J" and "K" that correspond to half years.

<sup>&</sup>lt;sup>15</sup> See Section V.A.3 of my main report. My model is programmed for the possibility of these scenarios. Specifically, I have included *additional* scenarios that adjust Mr. Kaczmarek's But-For Scenarios' GBLs to be based on Celgar's historical generation rather than its historical generation minus sales.<sup>15</sup> As I discussed in my report, I have not included the results of these scenarios in my main report, to avoid the potential distraction of presenting too many scenarios.