

Differences in Methodologies for Quantifying Business Interruption and DSU Losses

Introduction

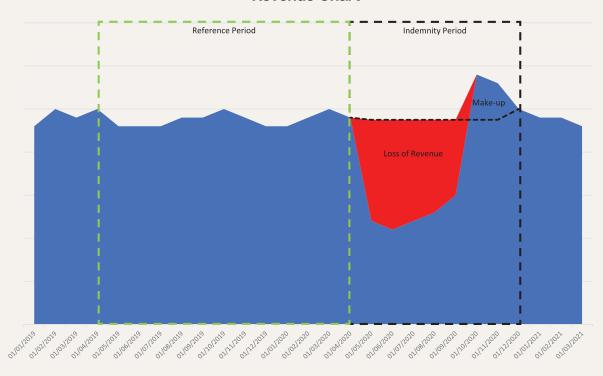
Both Operational and Construction Insurance PD Policies can be supplemented with the ability to have the consequential Loss of Profit (as defined in Policy wording) indemnified. Within an Operational Policy this is regarded as Business Interruption (BI) and within a Construction Policy this is regarded as Delay in Start-up (DSU / ALOP). Both types of insurance seek to return the Insured back to the financial position they would have been had the Insured Event not taken place. Although the underlying general principles are the same, the methodology of quantification is different. This is mainly due to the data that is available for each type of loss as well as the considerations that are required for both the Indemnity Period and the treatment of non-insured events.

In this article we seek to consider the differences between the valuation methodologies of operational BI claims and construction DSU losses.

Operational (Business Interruption)

Under an Operational Policy an Insured Event will trigger coverage for the consequential Loss of Profit and, if applicable, Increased Cost of Working (ICOW) / Extra Expense clauses. The Indemnity Period is well defined within the Policy and starts at the date of loss and continues until the Insured has reached certain criteria depending on the Policy wording. Examples of the criteria include the Insured revenue returning to pre-loss levels or a maximum time period. The following chart illustrates a typical BI loss profile, which includes periods of depressed revenue followed by increased sales (make-up). The latter period is due to a build-up in demand and the facility being able to run at increased capacity and only exists when the facility has spare capacity during normal operations.

Revenue Chart



The basic principle of the methodology used to calculate the indefinable BI claim is that the facility would continue to operate as it did prior to the Insured Event. Historical performance data is readily available to assess revenue drivers which allows for a 'but for loss' revenue level to be calculated. During this process, the calculation will consider items such as trends (trends / adjustment clause), seasonality and exceptional non-reoccurring items. Historical Cost data is available which allows for the consideration of any fixed cost savings as well as an accurate assessment of the Gross Profit percentage.

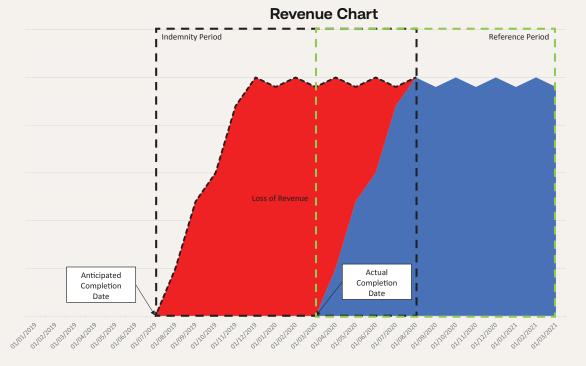
Although there are many intricacies within the quantification of BI claims, the ability to base the calculation on historical analysis allows for a robust and accurate model. Consequences of non-insurable events are clearly defined and calculated as a percentage of the total quantified loss of profit.



Construction (Delay in Start-Up)

Under a Construction Policy an Insured Event will trigger coverage under the DSU clause if it causes a delay to the project which cannot be mitigated during the remaining lifespan of the project, and results in a loss of profit. Although the event may occur at any time during the construction process the DSU clauses will only be triggered once the insured (scheduled) completion date has elapsed. During the construction process, delays may have accumulated for various reasons and coverage of loss of profits only exists for the period specifically related to the delay caused by the Insured Event(s).

The Indemnity Period therefore starts at the 'Anticipated Completion Date' had the Insured Event not occurred and finishes at the point where the project has actually been completed. This process is complex and consists of a detailed analysis of the remaining construction tasks and critical path of the project. Project delays caused by non-insurable events are excluded and a theoretical completion date based only on insurable events is established. This matches the indemnity period to the delay caused by indemnifiable events as per the Policy wording. The following chart illustrates a typical DSU loss profile.



Although there are various methodologies available to calculated the loss of profits associated with a DSU claim such as utilising internal or external business units as proxies, or budgets / market forecasts, this article concentrates on the use of post loss actual financial and operational statistics. The basic principle for this methodology is the Insured would have achieved the same operational performance irrespective of when the facility is completed. Only the timing of the results will be impacted.

Therefore, for non-seasonal production and base load power generation facilities, the estimated 'but for loss' revenue level for the indemnity period is the revenue actually achieved transposed to start at the anticipated completion date. This is due to the revenue drivers being independent of the point of time they are achieved.

For seasonally impacted production facilities and non-base load power generation facilities (including renewables power plants) revenue drivers are time dependent and fluctuate based on market demand. The calculation model would then seek to assess the 'but for loss' scenario by applying trend analysis to adjust the post completion actual results based on the revenue drivers of the period at which the revenue would have been achieved.

In order to complete the calculation, the timeframe of the production / generation data that needs to be analysed corresponds to the actual delay plus the length of the calculated indemnity period. Post-completion cost data will be analysed in order to

restate the cost inside the indemnity period had the incident not happened.

Conclusion

Bl claim valuation methodologies analyse historical facility performance to estimate the expected loss of profit and non-indemnifiable losses are analysed within a defined indemnity period.

As historical performance statistics are unavailable for a DSU valuation, alternative sources of data are used to estimate 'but for loss' revenue levels and analysis of non-indemnifiable events are used to define the indemnity period.



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