



A guide to Allied's due diligence Project Risk Platform

The purpose of this document is to set out the various stages of due diligence that is undertaken by Allied Project Services Ltd ('Allied') to provide a project with a bankable solution, where the lenders are reluctant to invest or where operational availability / guarantees are unavailable due to little or no operational track record or data.

The Objective - Is to support the project developer in reaching financial close

Typically, within every major capital project or large asset acquisition, there are three principle risks; financing, commercial, and operational. The project sponsor takes the financing risk, and the commercial risk of there being a market for the output of the investment and is remunerated accordingly.

However, what has caused issues and, in many cases, transactions to flounder, has been the issue of who should take the operational availability risk of any new project or asset acquisition.

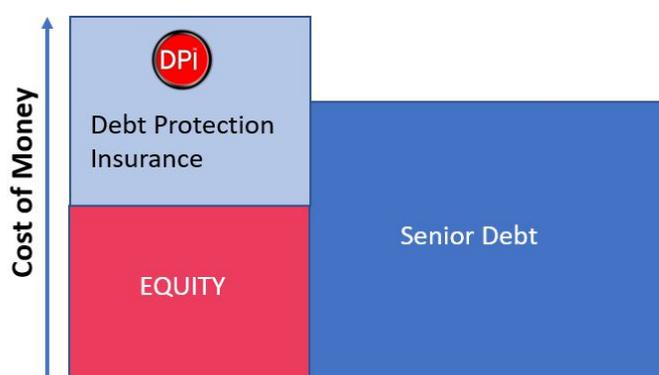
- Debt Providers offer less debt because of availability risk.
- Sponsors are committed to investing more equity

Allied has created a practical, targeted solution to facilitate innovation and commercial deployment, of clean energy efficient technologies in the energy and renewable energy markets and provide multiple benefits to the project developer that deploys the technology within their project.

These benefits include;

- **Access to better-rated capital, broader investor base and credit rating enhancement for the project.**
- **Improved terms; IRR protection.**
- **Insured agreed on energy production.**
- **Efficient support in financing new assets, refinancing, retrofits.**
- **O&M guarantee backstop.**

Benefit to the Project Developer



**With Debt Protection Insurance the Project Developer –
Reduces the Equity requirement, retain more profits and
Attracts a higher debt leverage to 80% and /or a lower debt rate.**



The entire due-diligence process has been broken into three stages, which allows for consultation and discussion with your project engineers and design team.

All times shown are estimated and will vary according to the robustness of your project data, including information supplied by your technology providers, and support documents. It is important therefore that Allied is provided with as much robust information as possible. All documents must be in English.

The Objective of the due diligence.

- ✓ **Proactively, identify the risk**
- ✓ **Assess the likelihood of an occurrence**
- ✓ **Determine actions**
- ✓ **Control risk on an ongoing basis**

Stage 1. – Desk Top Review – Know before you Pay

Under a specific appointment, an initial In-House desktop review is carried out **at no cost** providing it takes less than ten (10) working hours to complete. This initial review is to understand the technology, the process, its current status, the manufactures business plan and the possibility of reaching a successful financial close. Significant information will be required from the manufacturer and based on the robustness of the data and information provided; Allied will then write a report that summarises the availability risk in one of three final possible summary statements: -

1. Given the supplied information, the project and technology are not of interest and declined and therefore does not proceed to further Stages.
2. Given the supplied information and excluding possible fabrication and operational issues the project is unlikely to meet the clients stated target availability in its current state. However, if the recommended mitigation work is conducted then it might be possible to meet the clients stated availability targets.

Allied will discuss with the client the recommended mitigation work and agree on a fee for this service however they will **NOT** provide design advice but outline the changes recommended which should be referred to the clients own professional team for re-submission and review once completed.

This cost is borne by the prospective customer before Allied can continue its evaluation of the project under Allied's Terms and Conditions.

3. Given the supplied information and excluding possible fabrication and operational issues the design has a high likelihood of achieving the target availability. Allied will discuss with the client the level of information that must be provided and agree on a new contract to proceed to Stage 2.

At the end of the Desk Top Review, a meeting will be held with the client to discuss the cost, timelines and objectives etc. of Stage 2.



Stage 2 - Front End Engineering Design (FEED) Audit.

Technical due-diligence of the process proposed is carried out to arrive at the design stage and function of the plant. Any gaps or areas of concern identified in the FEED audit in design/development or implementation of the plant will be analysed and ranked for further consultation with the client.

Allied will not critique the output of the design process, only the robustness of the business process used to arrive at the design. To carry out this task, significant information will be required (drawings, test reports, design reviews etc.). Comprehensive information may reduce the 3rd stage (FMEA)

Allied will not be involved in the actual design of the plant but will limit their activity to providing opinion on the design and if applicable areas where this should be changed or could be improved.

Any change or improvement to be undertaken by the Clients own professional team for re-submission to Allied for further review once completed.

Non-Mechanical aspects of a project

Allied will provide relevant due-diligence surrounding the peripherals of the project (non-mechanical) that will have an impact on the Business Plan such as project management; planning; finance; process feedstock/inputs; process offtakes; EPC and Operation and Management. This can be carried out with the agreement of Allied by the Clients own Consultants or if already completed the report can be used, subject to Allied's acceptance.

Estimated Time 8-12 weeks.

At the end of this stage, a meeting will be held with the client to discuss the cost, timelines etc. of Stage 3. If the client accepts the report for Stage 2, then a new contract to continue to Stage 3 is agreed.

Stage 3

Design, Manufacturing, Failure Mode and Effects Analysis (FMEA)

Any gaps or areas of concern identified in Stage 2, in the design/development or implementation of the concept will be analysed and ranked for further discussion and consideration. This review may be performed retrospectively to highlight areas of technical risk. A two-stage approach is used with an analysis of the design as the first stage.

The second stage of the FMEA process examines the proposed manufacturing approach and questions its achievable quality and productivity. This stage will need active and significant input from the client's design and manufacturing engineers and the project sponsors chosen technology suppliers and contractors. It will involve understanding the fabrication of the key plant off the shelf components ensuring that the various elements are built to comply with any codes or industry best practice, both in terms of materials and manufacture.

Estimated Time: 10-14 weeks.



Risk Management System

Allied will generate a project level and risk management system which will follow the project/technology and their service providers (EPC and O&M) through all subsequent stages for the client. Input from FMEA activity will define the risk areas.

Estimated Time: 2-6 weeks.

Online Risk Based Inspection (RBI) “RiskWISE®.”

Allied will consolidate the information gathered from Stages 2 and 3 and develop with the client a bespoke Risk-Based protocol “RiskWISE®”. RiskWISE® software will be created and populated from the results of Stage 2 and 3 and be installed during the construction of the project.

RiskWISE® will be purchased as a licence by the client directly with TWI, who is the proprietary owner of the software and will provide a report for annual reconciliation regarding actually achieved availability written as a bespoke software package for the plant.

Estimated Time to populate: 12-18 weeks

Optional - Risk Assessment Population

Allied will lead a team consisting of its and the client’s engineers to identify and rank operational availability risks that are critical at the systems level.

Estimated Time: 3-5 weeks.

Optional - Manufacturing, Supply Chain Support (for developing technology or concept, provided by TWI)

TWI will optimise the manufacturing process design and help locate and vet a shortlist of potential fabricators or sub-contractors globally. Through confidential early engagement, TWI will present an impartial, technical and supply chain capability comparison of the potential supplier of the client’s selection.

Estimated Time: 10-25 weeks.