Profitability and Bankability of Renewable Energy Projects

INCREASING OPPORTUNITIES USING INSURANCE

A WHITE PAPER BY clean energy pipeline
Introduction

This White Paper explores the ways in which the bankability of renewable energy projects can be improved through sophisticated risk management and insurance. It was written by Clean Energy Pipeline and was based on interviews with three executives at Beecher Carlson.

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Increasing opportunities using insurance

With questions of funding, technology soundness and an ever-evolving energy industry landscape, the potential benefits of project insurance take low priority and are often overshadowed by the many and consuming complexities of a project. Most renewable energy project developers and owners assume project insurance requirements are fixed or are too insignificant to impact premiums, coverage or, most importantly, the overall cost of the project. However, most renewable energy projects begin with already thin profit margins, and on-going insurance costs can account for 20%-30% of a project’s operating budget. In fact, project insurance can be the sole factor in tipping the profitability scale to deem a project commercially viable, especially when a project is deploying prototypical technology.

If initiated during the project planning phase, a sound risk management plan can provide renewable energy project developers and owners with the opportunity to significantly reduce insurance costs and increase overall bankability. Every project is unique in scope; however some projects have reduced project insurance costs up to 70% by implementing certain insurance initiatives. Based on interviews with three executives from Beecher Carlson, a risk management broker that focuses on industry and product specialization, the following white paper outlines a few of the potential measures that could significantly benefit renewable energy projects.

Due to the excess of contracts and agreements, most developers are unable to study the insurance and indemnification language of each contract in detail.
Project developers are often inundated with contracts, such as power purchase agreements, financing term sheets, credit agreements, EPC contracts, O&M contracts and interconnection agreements at the onset of a project. Many of these contracts have strict project insurance requirements relating to limits of liability and deductibles. Dependent upon the nature of the contract and how sophisticated the counterparties are, requirements vary and projects may be required to purchase prohibitively expensive insurance coverage in order to satisfy individual contracts.

Due to the excess of contracts and agreements, most developers are unable to study the insurance and indemnification language of each contract in detail. As a result, contract obligations oftentimes go unsatisfied or insurance costs become prohibitive and result in a delay at financial close. “More often than not, developers are out there scrambling to get certain agreements and they are not necessarily focusing on the insurance and indemnification sections,” explained Brenna Melvin, Managing Director at Beecher Carlson. “If our clients send us the contracts prior to execution, we create a contract matrix to ensure that there are no outliers and that each contract requires the same liability limits and deductibles when we purchase insurance. For example, we don’t want to have one contract that requires $50 million in liability limits when all the others require $15 million.”

“Many contract counterparties use standardized insurance language across contracts and, dependent upon the individual counterparty, are willing to amend the insurance requirements. Most utilities have very specific requirements, as do the lenders,” says Melvin. “However, for most other contracts you typically can make changes relatively easily. Utilities often have antiquated insurance departments and if we question a specific term or condition, we can encounter some resistance. Lender consultants, however, are keenly aware of the insurance marketplace and realize that the lender may be requiring something that is nearly impossible or very expensive to achieve. We are very skilled at bridging that gap.”
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MODEL A PROJECT’S EXPOSURE TO CATASTROPHIC EVENTS

Renewable energy projects located in regions exposed to catastrophic events such as earthquakes, hurricanes or floods are almost always required by lenders to secure catastrophic insurance coverage. Lenders will often impose universal requirements that force projects in these areas to purchase coverage with specified limits, dictated deductibles and at a certain percentage of the total value of the asset. The universality of these requirements can prove to be costly and result in excessive coverage. Many renewable energy projects span large geographic areas, which reduces the likelihood that a single catastrophic event would result in a total loss of the project. The key is to identify which specific areas within a project are most at risk and provide lenders with the necessary information to focus coverage requirements on those areas rather than the project as a whole.

One way to isolate these locations is through the use of sophisticated property modelling software which can pinpoint the precise location of each wind turbine or solar panel at any given project site. This process can extract the high-risk locations and demonstrate the probable maximum loss expected by a 250-year or 500-year catastrophic event. The modelling can provide well-defined data for a single location at a facility and help provide comfort to lenders.

“A $500 million wind farm with 140 turbines could be spread across 10,000 acres,” explained Erin Lynch, Senior Vice President at Beecher Carlson. “By plugging each turbine’s location into the model, it can reduce a 250-year event expected loss from $100 million to $10 million. We can then go to the insurance market and demonstrate that the exposure is actually a lot lower than it initially appeared and leverage that information in order to impact the premium. We can also go to banks and explain that while the knee-jerk reaction is to require 25% of the value of the facility to insure for California
In addition to large renewable energy projects, smaller and geographically-contained projects can also benefit from property modelling. Banks often require excess earthquake insurance coverage for all projects located in California, despite the fact that the probability of earthquakes is significantly less in certain regions of the state. By leveraging the modelling software, brokers can demonstrate the actual exposure of the particular region and convince banks that less coverage is adequate to mitigate the exposure of the individual project.

Earthquake, we have established a lower probable maximum loss at 10%. We are well-equipped to negotiate with this information and might be able settle some place in the middle; whereas without this modelling software we would be arguing in a vacuum.”

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OPPORTUNITY #3

DOES A MASTER INSURANCE PROGRAM MAKE SENSE?

There is a common misconception that insurance programs must be purchased for each individual insurance project in order to satisfy lender requirements. Considering that the scope and inherent characteristics of each project are vastly different, many developers and lenders assume that each project also requires different liability limits and, in turn, requires separate insurance programs. However, with the help of insurance brokers, many project developers and owners have saved significant premium dollars by developing master insurance programs that have the flexibility to simultaneously cover multiple projects with multiple technologies.

“Master insurance programs are advantageous as they allow developers to leverage their premium volume and the size of the portfolio,” says Erin Lynch. “Approaching the market with five projects, rather than one is usually more appealing to underwriters as it is less likely that a single insurable event will impact all five projects. We have seen premiums cut in half when we re-structure insurance as part of a master program.”

The advantages of employing these portfolio programs are significant; however asset owners must assess whether a master insurance program makes sense for their particular project. For example, it may not benefit a developer to wrap a California wind farm into a master program with a series of wind farms in non-earthquake prone areas as that single risk may affect the cost of insuring the entire portfolio. Similarly, if the cost of
insuring combined-cycle natural gas plants continues to increase in the market, it may be more cost effective to disaggregate them from a master program.

In certain circumstances, the cost of insuring particular technologies has changed so significantly that a master insurance program is no longer always the best option. “I have a client that owns 19 CCGT power plants, a $2 billion coal facility, two utility-scale solar projects and just bought 700 MW of hydro capacity,” explained Rob Bothwell, President of the National Energy Practice at Beecher Carlson. “Historically a master insurance program may have made sense for this client, but with the changes in the marketplace we can get much better rates by splitting the program. Most of our competitors disagree as they believe you are losing your buying power with the large asset base. I argue that our ability to break the portfolio up and separately market certain aspects of the program with a clear set of information on the individual technologies, enables us to get much better terms and conditions.”

It is critical to assess the benefits of multiple insurance program structures and determine what works best for each individual project. Determining the best solution can save significant premium dollars while decreasing expenses and potentially increasing project profits.
There are numerous opportunities for renewable energy developers and project owners to reduce insurance costs and improve the bankability of their projects. By engaging a specialized insurance broker at the onset of a project, developers can significantly benefit and achieve substantial cost savings. Whether it is introducing flexibility into contractual language, implementing modelling software or assessing different program structures, brokers can provide ample opportunities to ensure optimal insurance pricing and the ultimate success of renewable energy projects.
The Beecher Carlson National Energy Practice is committed to the highest level of service and deepest level of expertise in the power generation, renewable energy and utility sectors. Our goal is to consistently incorporate our brokerage skills with our proven expertise in energy risk management consulting, captive management and alternative risk financing. Our dedicated team provides you with un-matched capabilities and expertise and an understanding of your business and the risks associated with it. Our services range from creating and placing insurance programs that mitigate long-term warranty, extended defect and performance guarantee risk to developing master Builder’s Risk (BAR) and Operational Risk (OAR) insurance programs after careful review of your EPC, Power Purchase Agreement (PPA), Interconnection, Finance and Balance of Plant (BOP) contracts.

Our National Energy Practice has a proven track record and is proud of the long standing relationships we have built in the independent power, renewable energy and utility sectors.

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