CAC Specialty

NATURAL RESOURCES

ENSURE THE RESILIENCE OF ENERGY PROJECTS IN A CHANGING WORLD

CAC SPECIALTY NATURAL RESOURCES 2023 YEAR END REVIEW

2023 continued the trend of increasing severe weather events, with 25 confirmed U.S. weather or climate disasters with losses exceeding \$1 billion each (as of December 8). Growth in the renewable energy sector continues to be one of the most important ways of addressing the climate crisis, and renewable insurance markets are working overtime to adjust not only to climate-driven claim events, but also to the ever-increasing speed of technological innovation and emerging risks.

Throughout 2023, CAC Specialty has issued a four-part whitepaper series, in which we have provided essential information regarding key issues facing renewable energy and insurance. Previous topics included:

- An overview of renewable energy insurance why it is critical, what makes it challenging, and why there is a mismatch between what project stakeholders want in their insurance program and what insurers are willing to provide.
- A case study on the insurance market for battery energy storage technologies as a proxy for how the market navigates new technologies overall, including a playbook for the roles that each party, including brokers, sponsors, OEMs, insurers, and the financing community, can play to ensure insurance coverage is available for new risks.
- A peek behind the curtain at how insurance programs are structured and sublimits are determined for natural catastrophe coverage, and how this process can be improved upon.

In this final whitepaper, we offer key advice on how to ensure only the most resilient energy projects are developed, as more complex projects, increased natural catastrophe exposure, and new technologies converge. Insurance provides pivotal services for this once-in-ageneration moment in the energy transition. When used to its maximum potential, the insurer community can assist in all elements of risk management, relying on important lessons learned to inform future development, borrowing ideas from other industries, and providing important pricing signals that can encourage or discourage development in certain areas or technologies. Despite this, we are well aware that the thought of insurance often invokes a shudder in people who need to buy it – we have heard countless complaints such as that it is too expensive, doesn't respond in a claim, and when it does respond, is too slow.

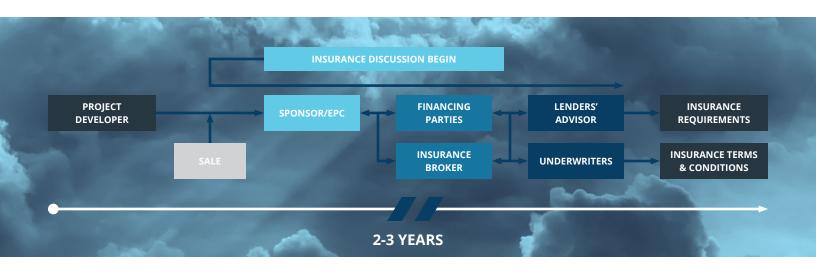
However, insurance companies are full of dedicated professionals who are doing their best to diligently deploy their capacity in measured, thoughtful ways. We all have a vested interest in ensuring that insurance markets can expand to address new risks as the renewables industry continues to innovate, and as such, CAC Specialty views insurance carriers as valued partners to project sponsors.

In practical terms, this means that project sponsors have a responsibility to build the most resilient projects possible if we expect to find meaningful support from the insurance community. When insurers are not willing to take on a risk fully, we must ask the important questions, what does that tell us about the nature of that risk? Is the technology unproven, a technology with a poor track record, or in a location with a history of natural catastrophes that exceeds risk tolerance. We can challenge the underwriter community to be more transparent and specific about what mitigations measures, if any, they would accept. All of this is instructive for the ultimate owners of projects – if the insurance community is not comfortable with a risk, what steps can be taken to mitigate or avoid hazards for the benefit of all stakeholders?

Fundamentally, not all projects are the same when it comes to risk management and resilience. How can our industry continue to incorporate the lessons of the past, often revealed through insurance claims, to ensure that as we are building more projects, we are also building better projects? The answer is to consider insurability issues early and often in the project development process. Development decisions play a significant role in how the insurance community will ultimately view a project, but these decisions are typically made years before the insurers have even heard of the project. When insurance is not considered in the earliest stages of project development, this can lead to negative outcomes during project finance and/or when bringing a project to the insurance market. **The underwriting viewpoint needs to be moved up in time so that it can be acted upon by project developmers**.

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The current state of the renewable energy market with respect to insurance is composed of entities with interconnected interests but minimal direct communication. There is a limited feedback loop from insurers to the project development community, where decisions that impact insurability – site selection, design, equipment choice – are made in a vacuum of insurance guidance. The typical process looks something like this:

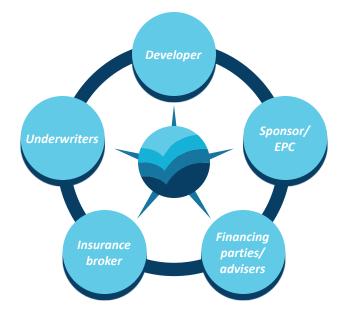


Cirrus Advisers was created by a team of seasoned renewable energy insurance experts to bridge these interests in the spirit of improving project resilience, in order to help the industry more accurately project and plan for insurability considerations and enable a faster and more profitable global energy transition. Cirrus connects all of the interests so that there is a more robust feedback loop, **as illustrated to the right**:

The Cirrus consulting platform provides renewable energy projects with analytics, modeling, risk mitigation, and insurance market intelligence tools all under one roof to better inform critical project and portfolio-level insurance and risk management decisions. The Cirrus team brings a holistic view to the development process that can't be replicated by engineering, lender consulting, or natural catastrophe modeling offerings alone.

An upfront investment in due diligence and risk management focused on insurability can streamline development, lower costs, mitigate risk, and ultimately increase project profitability. Cirrus does this by offering the following key benefits:

- Critical insight into project-specific natural catastrophe exposures associated with the project's intended location to guide siting decisions.
- Technology and loss-control mitigation advice that can lead to significant insurance cost savings.
- Accurate insurance cost projections and program structure analysis based on project-specific risk profiles and up-to-date market conditions.



- Depth and scope of review related to insurance issues that are not provided by other types of project development advisers.
- Option to update the report to reflect project status in preparation for due diligence documentation submission to lenders.
- Information needed to avoid delays in the financing process and mitigate counterparty demands for overly conservative and expensive insurance program structures.

Moreover, projects that make this kind of investment in informing their development decisions signal to the broader market – both financing and insurance – that they value risk management as a discipline, and are seeking to build best-in-class projects. Two recent case studies illustrate the value of early consideration of insurability:

CASE STUDY

An August 2022 Cirrus Flood Risk Engineering Report for a development project in central Indiana compared flood Probable Maximum Loss ("PML") results for 100- and 500-year floods using a conservative vs. a traditional design approach. The difference in the 500year PML between the conservative and traditional design was over \$30 million, and the anticipated insurance premium savings is over \$700,000. Thanks to the Cirrus analysis the client could clearly see the value proposition in investing in the more robust flood mitigation design.

CASE STUDY

An August 2022 Cirrus Risk and Insurability Report for a development project near the Gulf Coast of Texas identified very high Named Windstorm and Inland Flood exposures. Cirrus estimated insurance costs at more than \$4 million dollars annually. On this basis, the client opted not to pursue investment in the project. They consider the investment in the Cirrus report a key part of their diligence in helping to better allocate their resources.

Fundamentally, projects that make an up front investment in informing their development decisions signal to the broader market – both financing and insurance – that they value risk management as a discipline, and are seeking to build best-in-class projects. This inures the benefit of all parties participating in project finance for renewable energy projects.

WHERE DO WE GO FROM HERE?

The theme throughout our broader whitepaper series is the imperative of considering insurance decisions early and often in project development, as insurance is key to successful project deployment. At CAC, we have the expertise to bring advanced insurance solutions to the market as the landscape of energy transition technologies changes and expands. We are specialists with a long track record of insurance placement and innovation. We are grateful for the trust our clients place in us each day to help them navigate the insurance markets and bring to bear best-in-class solutions. Contact us to learn more.

CAC Specialty's Power and Renewables Team Is Here To Assist

As a specialty property and casualty insurance brokerage firm, we spend our days speaking with owners and operators of renewable energy assets about what they can expect out of the insurance market in terms of coverage and cost during both construction and operations. Our role is to find the most competitive insurance program for these assets that balances breadth of coverage with expense. We are a team of professionals that includes former risk managers from both renewable energy and traditional power companies, a former lenders' advisor at one of the preeminent lenders' advisory firms, loss control engineers, investment professionals and some of the most tenacious, dedicated insurance brokers in the business, who have spent their careers successfully navigating the insurance market for all types of power generating assets. In many cases, we act as outsourced risk managers to our clients who do not have dedicated insurance professionals on their teams, and we pride ourselves on our hands-on approach to helping our clients in all aspects of the insurance transaction, especially as it intersects with their project finance efforts.

We help our clients determine appropriate coverages, place those coverages in a constantly evolving insurance marketplace, and negotiate insurance concerns with their stakeholders. In parallel, we look to educate insurers about evolving areas of risk that our clients are facing and develop new tools to give the industry a clearer view of risk. Our work puts us across the table from underwriters with the goal of obtaining the best possible policy coverage, terms, and conditions for our clients' current and future projects. We also interact with financiers, typically via their insurance advisors, where we work on behalf of our clients to negotiate reasonable and customary insurance requirements for non-recourse project financings.

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