PVEL

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PV PlantProtect Insurance Program

Integrating insurance and technical due diligence best practices to mitigate financial risk for utility-scale project developers

PV PlantProtect Benefits

- **Improves project economics with revenue protection** Provides developers with a revenue floor that protects their financial returns and increases debt sizing
- **Ties technical best practices to insurance benefits** Enables lower revenue insurance premiums for projects built with industry-leading technical best practices
- **Reduces revenue risk for all stakeholders in the project** Protects financial returns for all project stakeholders by improving the reliability of solar power plants

About PV PlantProtect

PV PlantProtect is a risk mitigation and insurance program with A-rated financial backing. The program includes technical best practices that improve solar power plant reliability while providing developers with revenue certainty as they build financial models. PV PlantProtect helps developers improve debt terms and project economics by guaranteeing revenue.

How PV PlantProtect Works

PVEL coordinates, oversees and executes the following technical and diligence steps for PV PlantProtect projects:

- Resource measurement and site characterization, including soiling
- PVEL Product Qualification Program (PQP) testing for modules and string inverters
- Equipment pre-production factory audit and production oversight
- Batch testing and factory acceptance test witness for key equipment
- Testing at commissioning, including cell microcrack baseline analysis
- Ongoing resource and performance monitoring

Developers gain insurance pricing visibility in the early stages of development as well as reduced premium costs. The insurance adds value to the project as they build their financial models by improving the debt-service coverage ratio.

The PV PlantProtect insurance program is available for utility-scale solar power plants in any market around the world, including systems with bifacial modules.

Understanding the Insurance Policy

The policy behind PV PlantProtect is a well-established, A-rated PV Power Outage insurance policy underwritten by Ariel RE, a syndicate of Lloyd's of London. The policy safeguards revenue losses due to system underperformance for the duration of the revenue contract, which is typically 15 years.

The policy can cover the following insured perils:

- Irradiance/excessive clouding
- Soiling
- Component performance and uptime
- Project design losses
- Specific O&M related losses

The specific coverage terms are negotiated on a project-by-project basis. The policy is brokered by Beecher Carlson, a leading insurance broker and risk management consultant for solar developers.

To find out more about how to participate, contact:
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Real-World Example

We worked with a major U.S.-based utility-scale project developer to create a hypothetical PV PlantProtect case study using these assumptions:

- Location: Texas
- System size: 170 MW DC
- PPA duration: 15 years
- Typical debt service coverage ratio (DSCR): 1.3 x P50 or 1.0 x P99

Key findings:

- PlantProtect enables DSCR drop to 1.15 x P50
- Debt proceeds increase by 3.7c USD/W-DC
- Cost of PV PlantProtect: +/- 1c USD/Wp-DC