

## IPP Selects Ascend Analytics EnSurance



An Independent Power Producer (IPP) worked with Ascend Analytics to develop four standalone battery energy storage systems (BESS) tailored to support reliable, clean, and low-cost electricity for Texas power consumers. Ascend Analytics helped the IPP identify optimal battery installation locations within ERCOT, optimizing these siting specifications based on revenue forecasts and asset valuation.

To commit the \$50 million of capital cost, the IPP needed to secure minimum revenues from ERCOT market participation. The IPP owner-operator sought to protect against financial losses in a year that fell short of expected revenue while maintaining upside revenue potential. Amidst the inherent volatility of the ERCOT power market, Ascend Analytics' EnSurance solution enabled the project to clear investment hurdles, support more efficient financing, and achieve higher expected rates of return.

### Signed Accretive Revenue Risk Transfer Agreement via EnSurance

After a rigorous evaluation process, Ascend Analytics' EnSurance was selected to execute an accretive revenue risk transfer agreement, allowing the IPP to mitigate downside risk while retaining its upside exposure. Ascend furnished valuations with actuarial uncertainty for insuring partners, enabling risk-takers to offer competitive terms for revenue protection aligned with the IPP's risk appetite. EnSurance risk-taking partners delivered a competitive agreement providing the IPP with long-term minimum quarterly revenues. Operating revenues are realized by SmartBidder, Ascend's real-time dispatch bid optimization platform.



### EnSurance Protects Against Downside While Retaining Revenue Upside

The Ascend Analytics' EnSurance team assessed the value of the revenue floor as compared to (1) operating and financing the projects with full exposure to ERCOT merchant market uncertainty retained; or (2) entering into a tolling agreement and financing the project based on the fixed tolling income.

In addition to being at odds with the IPP's investment mandate, **merchant exposure** prohibited low-risk lenders from participating in financing the portfolio, with costly debt terms hurting expected sponsor returns. In this scenario, 'sponsor leverage' which is the fraction of the installed cost that the asset owner does not capitalize, came to 66% (leverage is calculated inclusive of tax credit monetization throughout). **Toll financing** increased debt efficiency and sponsor leverage to 67%, but the transfer of merchant upside to the tolling counterparty prevented the IPP from earning attractive upside returns.

## Analytics to Power the Energy Transition

With an **EnSurance revenue floor**, structured for a five-year term, the IPP transfers the risk of unrealized minimum revenues to creditworthy risk-takers. The EnSurance revenue floor enabled the project owner to bring in low-cost debt to finance the project costs, while still benefiting from upside to lucrative conditions of market volatility. As a result, the IPP increased sponsor leverage to 71% and increased their levered return in upside market conditions.

With the retained upside, the IPP also has the option to source a competitive **preferred equity investment** to enable a step-up in the Investment

Tax Credit value of the project. A preferred equity (or “pref”) partner structured an investment that was recovered through a share of the cash flow available after debt service - cash flow which was otherwise unavailable in merchant (due to lender sweep rights) or toll financing where the upside is owned by the toller. This scenario enabled the IPP to increase sponsor leverage to 80%.

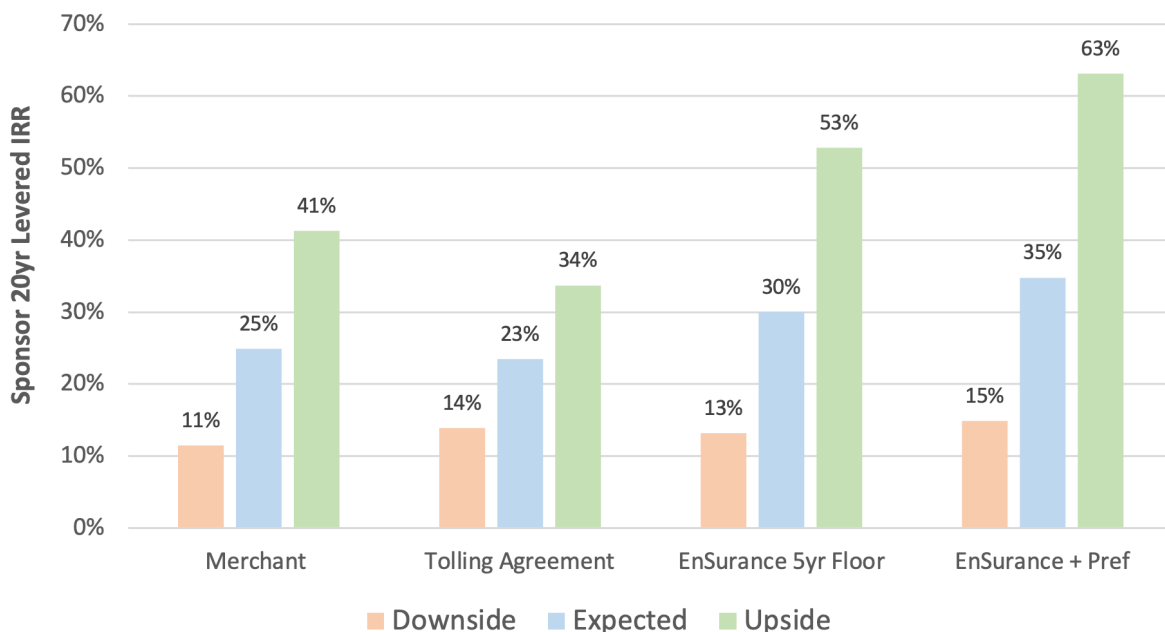
**Table 1** summarizes the sponsor leverage outcomes, highlighting the ability for EnSurance to enable to project owner to preserve their capital for deployment in additional assets.

**Table 1:** Sponsor leverage outcomes for stand-alone BESS project in ERCOT

	Full Merchant Financing	Toll Financing	EnSurance Five-yr. Floor	EnSurance + Preferred Equity
Sponsor Leverage	66%	67%	71%	80%

**Figure 1** illustrates the 20-year Internal Rate of Return (“IRR”) in downside, expected, and upside market conditions under each of these risk-transfer and financing frameworks, emphasizing EnSurance’s combined value of increased leverage and retained upside exposure.

**Figure 1:** Comparing the financial outcomes of Merchant Financing, Toll Financing, EnSurance five-year floor, and EnSurance with Preferred Equity.



### Efficiently Deploying Capital and Accelerating Development

Amid the prevailing regulatory uncertainty in the Texas power market, EnSurance helped the IPP ensure that critical battery projects earn minimum returns, facilitating asset deployment and thus furthering the transition to reliable clean energy in the region.

“EnSurance helps our customers create sustained value for their projects amidst changing economics. In this case, within the shifting landscape of ERCOT, we created a revenue floor that enabled the IPP to confidently deploy capital, accelerate development, and ultimately finance the portfolio more efficiently,” stated Adam Hise, Managing Director of Storage Risk Solutions at Ascend Analytics.

### Ready to Learn More?

EnSurance offers a holistic solution tailored for investors across all risk appetites. From high-risk investors targeting significant returns to the more conservative ones like pension funds or insurers seeking a stake in the energy transition while demanding assured returns. EnSurance proves an invaluable asset in clean energy investments. Email [info@ascendanalytics.com](mailto:info@ascendanalytics.com) to request a meeting.

Ascend Analytics, an innovative leader at the forefront of the energy transition, offers advanced software and consulting services that capture the evolving and real-time dynamics of energy markets. Unlike any other solution providers in the renewable energy industry, Ascend Analytics provides its customers with optimized and comprehensive decision analysis that covers everything from long-term planning to real-time operations in the electric power supply industry.

Leveraging its proprietary software and more than 20 years of expertise mapping physical conditions with financial outcomes, the company provides critical insights to steward capital investments and manage operations, making it an invaluable and key partner to utilities, developers, financiers, and corporate off-takers in managing the complexities of energy portfolios and markets. The company's unique ecosystem - which includes planning, valuation, risk management, and ISO operations - is trusted by more than 150 leading-edge businesses and is the platform-of-choice that fuels more than \$6 billion in independent economic assessments.

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