

Apr 17, 2020 - - [Taryana Odayar](#)

Standalone Batteries: "More Smoke than Fire"

A coterie of developers, project finance lenders and equity investors have been jockeying for position on the front line of a widely-tipped tidal wave of standalone battery storage deals for years, but with the exception of a few high profile deals, there has so far been more talk than action. **Taryana Odayar** investigates.

The limiting factor is not the availability of capital, but a lack of projects with a combination of attractive cash flow profiles and scale, say deal watchers, though the dearth of opportunities is not for want of innovation on the part of developers and financiers.

"From a financing perspective, the uptake over the last few years in capital deployed is not at the level I would have expected when predicting three to five years ago," says **Dan Cary**, senior vice president at **Macquarie Capital's Green Investment Group**, who worked on one of the first standalone battery storage project finance deals in the U.S.

The deal, which financed Macquarie's 63 MW/340 MWh Electrodes portfolio in California, initially closed three years ago and has since been refinanced and expanded several times ([PFR, 3/27/17](#)).

Cash flows in that case came from a 10-year capacity contract with **Southern California Edison** and separate deals with clients that hosted the distributed battery projects.

"Any project with 20-year availability on contract will have a long list of bidders keen to invest, but there aren't that many of those," adds **Chris Archer**, Macquarie's head of clean energy in North America. "Those with shorter or merchant contract periods will be limited by the number of investors who have mandates to do those kinds of deals."

Earlier this year, **esVolta** closed a \$140 million financing for a 136 MW/480 MWh portfolio of large-scale projects with a combination of utility and non-utility contracts ([PFR, 2/27, 2/24](#)).

"You really have to look at projects' or portfolios' cash flow profile and customize it to make it palatable to the lending community," says **Krish Koomar**, esVolta's CFO. "There is no one size fits all."

Besides the Macquarie and esVolta transactions, announcements of project finance transactions for standalone battery storage have been few and far between. "For standalone storage, there is a lot more smoke than fire," says **Santosh Raikar**, head of renewables at private equity firm **Silverpeak**.

Although the costs of the battery storage systems themselves and the price of debt have come down, generating an appropriate return on equity remains a challenge.

"You talk to banks who want to finance their projects, but when you put the financing cost into your pricing spreadsheet it doesn't work," says Raikar.

The situation will only become more difficult if the availability of credit and the margins on project finance loans do not return to pre-Covid-19 levels.

"U.S. dollar funding has become scarcer, so there will be flight to quality in terms of transactions, and also a flight to support existing clients, so I think it will be more challenging for some of these sponsors in the space to access efficient cost of capital," says **Claus Hertel**, managing director at **Rabobank**, one of the handful of firms that have participated in standalone battery storage project finance deals to date.

CIT Bank led on Macquarie and esVolta's deals and other participating lenders have included **Siemens Financial Services, CoBank, KeyBanc Capital Markets, Sumitomo Mitsui Banking Corp.** and **ING Capital**.

"I see probably a select group of maybe five to eight institutions who have a strong interest in this space and have done transactions," says Hertel. "Some of the large European banks and specialized P.F. lenders including ourselves work on deals that are maybe a little bit smaller, in the \$30 million-to-\$50 million range, which may be off the radar screen of others."

Where next?

The Macquarie and esVolta portfolios were both located in California, and deal watchers pick out states like New York and Massachusetts, where unique incentives exist, as the best prospects for the next wave of deals. New York's program is Value of Distributed Energy Resources (VDER), while storage projects in Massachusetts can avail themselves of the Solar Massachusetts Renewable Target (SMART) scheme.

Syncarpha Capital tapped into the SMART program for a 19 MW/ 38 MWh portfolio of six solar-plus-storage projects in Massachusetts last year, while contracting with **Engie Storage** to operate the assets.

Engie pays Syncarpha for the right to operate the projects, providing an additional revenue stream "which meets the financial and risk requirements of tax equity investors and lenders," said **Cliff Chapman**, Syncarpha's CEO, in a statement last year.

Other states, such as Arizona, Nevada, New Mexico and Colorado, have seen increased renewables-plus-storage requirements in requests for proposals.

Nevada has become the sixth state to pass a storage procurement goal, namely 1 GW by 2030. "New rulings can also be expected throughout 2020," says **Izzet Bensusan**, managing partner and founder of **Captona**.

As battery storage expands into new states, revenue contracts are likely to become more complex and tailored, predicts Macquarie's Cary, who points to an innovative procurement by **NV Energy** last year as an example ([PFR, 6/25/19](#)).

"[It] was effectively procuring power in the summer evening peaks from solar-plus-storage assets at a premium price," explains his colleague, Archer. "It was structured with many of the penalties you see in a peaking power contract for a failure to deliver in that window."

Hedge providers are also showing more interest in standalone projects, says esVolta's Koomar, who cites a tolling contract his company recently signed with a non-utility counterparty for its 30 MW/60 MWh Santa Paula project in California.

"The way I like to think about all this, is that wind is where natural gas was ten years ago, and solar is where wind was ten years ago, and battery is where solar was ten years ago," says Raikar. "Back in the day, these were all 4 MW or 5 MW solar projects and that was a huge pat on your back, so it's a similar thing for batteries."