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Q&A: A wind hedging tutorial with Benjamin Israel, partner with Bracewell & Giuliani

EXCLUSIVE

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Benjamin Israel, a partner with Bracewell & Giuliani LLP, coordinates the firm's renewable energy practice, and focuses his practice on transactional and regulatory aspects of utility and nonutility electric power generation. Israel spoke with SNL Energy on June 11 to provide an overview of wind hedging. An edited transcript of that conversation follows.

SNL: How does wind hedging work?

Benjamin Israel: A wind hedge is a financial instrument that allows an owner of a wind farm to hedge its individual power sales into the market by using a hedge provider to guarantee a minimum sales price. The owner and the hedge provider fix a term for the hedge, typically from seven to 10 years, which usually governs all of the output of the wind farm. With a minimum sales price, a strike price, the wind farm owner can sell its power into the local market knowing that there is a guaranteed minimum price. Revenues associated with power sales in excess of the strike price are transferred to the wind hedge provider. On the flip side, the wind hedge provider is obligated to cover the difference for sales made by the owner below that strike price, so each party has a minimum strike price with which it goes into the market and engages in power sales. If there are no power sales, there is no payment to be made by either party.

What are the benefits to a wind farm associated with hedging?

Hedging allows the owner of a wind farm to sell its power to more than one purchaser, and allows it to retain and separately sell its renewable energy credits. The market for RECs in certain states is vibrant and some of the larger wind farm owners are able to maximize the benefits associated with their wind farms by selling the RECs themselves into those markets. … Many markets, such as California, require all green attributes to be sold with the power from a wind farm under the state's renewable portfolio standard, so it's embedded in power purchase agreements. … There is no ability to segregate out those RECs. However, in other markets, such as New York and Texas, there is an opportunity to unbundle RECs.

Who in particular uses wind hedges?

Wind hedges are not appropriate for all wind farm developers. We've seen developers of either the large wind farms or owners of more than one wind farm who have the economies of scale engage in their own power sales into the local markets under short-term contracts or simply market sale arrangements that segregate the RECs.

Is there a minimum size for a wind farm to engage in hedging?

You need to have a certain minimum threshold to engage in a wind hedge transaction. I would suggest an absolute minimum of 10 MW, but we're seeing much larger numbers in the range of 50 MW to 100 MW. … You have to have enough power to sell into the market to maximize your value. If you only have a 5-MW wind farm, there is marginal value to the seller due to economies of scale in trying to establish a minimum guaranteed price. In fact, with a smaller farm, you're likely better off entering into a long-term PPA to guarantee full value over the long-term, rather than trying to maximize sales price in the near-term. But when you have economies of scale with either a large project or a number of projects, you have the opportunity to engage in a transaction with one or more market participants; it could be an energy trading firm that may not even be located in your market.

The wind farm location is also key to determining whether you're able to participate in a market where wind hedging makes sense. … In New York, the New York State Energy Research and Development Authority has a mandate to purchase RECs and they're purchasing the RECs separate and apart from renewable power purchases. The REC trading program in Texas also provides a fertile trading ground for wind farms that want to trade their RECs separate from their power. So in those two large markets, New York and Texas, we're seeing active wind hedge markets.

Who are the major players in the wind hedging markets?

There have only been a handful of wind hedges that have been publicly announced. … Unlike power sales, wind hedges are not regulated by the state public utility commissions, so it's difficult to determine who all the players are in the wind hedging markets. Fortis N.V. [unit Fortis Energy Marketing & Trading GP], Enel North America Inc., Credit Suisse (USA) Inc., an affiliate of Goldman Sachs Group Inc. and some other large energy trading firms. We have other clients engaged in hedging, but their transactions have not yet been publicly announced. [*Editor's note: Wind farm developers that have used wind hedging include Noble Environmental Power LLC, Airtricity Inc. and Invenergy LLC, according to the American Wind Energy Association.]*

Since it is not regulated, should there be any concerns about that?

No, quite the contrary. All you're doing is establishing minimum strike prices, which adds security to the market. The more wind hedges there are, the more it helps the market.

How long have these wind hedging markets been around?

Hedging in power markets has been around for a long time. The fact that it has expanded to wind markets is a recent phenomenon within the past couple of years.

Where are prices?

All over the place. It's largely a function of the local power markets themselves. There's typically a discount on power sales in the local markets and each market is very different.

What are the challenges associated with wind hedging?

To enter into a wind hedge isn't difficult; to execute power sales based upon the hedge and administering a tracking account can be administratively burdensome for any wind developer. The ones we're seeing engaging in wind hedges have relatively large trading operations, both for their power sales and their RECs.

How do you see wind hedging changing in the market in the coming years?

As I mentioned, one of the largest benefits associated with hedging is the ability to separately trade RECs, and there's a generally held view that the value of RECs, over time, is only going to increase, similar to CO_2. … However, some program could take out state-by-state or regional REC programs, such as the passage of a version of the Lieberman-Warner bill that includes a national cap-and-trade program. But it doesn't appear that Congress is ready to pass national energy legislation at this time. Most people don't think we're going to see that happen for another two years, so a vibrant market still exists for REC trading and hedging.

Any other comments?

We're seeing more wind farms being developed without a traditional PPA and that's good news for a number of wind developers who are trying to be creative in attracting tax equity and financing because it gives them another source of revenue rather than being beholden to the local utility's power purchase agreement.