Tilting at windmills

Corporate America's rush to renewables collides with power market reality, writes Lucas Bifera

While consumer goods from M&M's to iPhones can now claim to be produced in part using renewable energy, corporate America's effort to reduce greenhouse gas emissions is starting to clash with the uglier reality of pricing dynamics in US competitive power markets.

Fortune 500 corporations have increasingly begun opting into financial contracts to purchase renewable energy to justify sustainability claims and hedging their energy expenses as a long-term fixed cost. The RE100 campaign, which represents a collection of global corporations pledging to power 100% of their operations with renewable energy, now boasts 111 members worldwide, with the most recent joiners including investment banks Citigroup Inc. and Morgan Stanley.

But a persistent issue for corporate clean energy buyers continues to be the notion of basis risk, a phenomenon in competitive power markets where the price of power supplied by an asset contracted by corporate buyers, as settled at a major trading hub, varies materially from the nodal price where the power is initially dispatched into the grid.

The proliferation of basis risk has apparently caused some headaches for energy procurement teams managing the first wave of power purchase agreements, or PPAs, signed in recent years.

Loss leader?

Corporations have publicly announced roughly 9,000 MW of renewable capacity originating out of corporate PPAs, according to the Rocky Mountain Center's Business Renewables Center as of Sept. 19. Of that, nearly 2,100 MW of new capacity has been announced in 2017 alone on the back of new PPAs, initiated by top blue-chip firms including Apple Inc., General Motors Co., Anheuser-Busch InBev, JPMorgan Chase & Co. and Goldman Sachs Group Inc., to name a few.

But for the sector's pioneers, the pursuit of renewable power represents a trade-off between environmental altruism and what increasingly appears to be a cash-losing endeavor. As a result, new corporate entrants seek to avoid entering into contracts that could incite additional capacity builds in markets where legacy generation assets are resisting retirement, transmission is constrained and the threat of basis risk is most acute.

"We don't see these as money-making deals, we see these as money-losing deals," a senior energy strategist at a major technology company said at IJ Global's North American Energy Finance Forum on Sept. 19. "We should not facilitate buildin g new generation in areas where the market is screaming at us 'no new generation.'" Speakers at the conference, which was held under Chatham House rules, cannot be identified.

Across the country, one senior executive at Microsoft Corp. gave a similar message to a crowd at the Verge 2017 conference in Santa Clara, Calif., on Sept. 21, pointing to many existing PPAs as potentially imprudent investments given the downward trend of wholesale prices in recent years.

"Most are underwater. With wholesale prices so low, there's just no way around that," Microsoft General Manager of Energy Brian Janous said. "More corporates are starting to realize that as their PPAs are starting to settle, they're going 'wait a minute, these prices are so low.' Most deals were struck a couple of years ago when prices were a little higher, so they had unrealistic expectations around forward price curves and where prices were going, especially on the back end of those deals ... so it's a real problem that I don't think enough people are addressing and thinking about." As PPA structures begin to evolve and smaller buyers are aggregated into buying pools organized by companies like Edison International's Altenex LLC or Shell Energy North America's MP2 Energy LLC subsidiaries, buyers must grapple with the prospect that their energy expense may actually increase overall, as the financial contracts are layered on top of the physical commodities contracts that exist with electric utilities, absent a localized generation asset.

New markets

For companies that have made pledges toward 100% renewable procurement, the onus is on energy managers to find projects that provide cost savings that can be relayed back to investment committees. But some developers and advisers suggest that companies might be better served by looking beyond traditional markets like the Electric Reliability Council of Texas and Southwest Power Pool, where transmission constraints may hinder the ability of buyers to escape basis risk.

"The cheap price corporates want is in areas that are already built out heavily with wind and have major congestion issues," a senior origination executive at a large renewable developer said, pointing to ERCOT and SPP. "Until we clear up this situation of existing stranded assets, transmission lines won't get built quick enough to sustain what the corporate needs are." In the meantime, companies may have to confront the reality that buying renewable power can be more expensive than it was in the recent past, helping to mitigate basis risk by doing multiple smaller procurements in areas of the grid with weaker renewable resources overall but less competing capacity.

"Most companies don't have energy or power as a high percent of annual expenses," one market consultant to major corporations said, urging clients to consider deals that may be more expensive in the short term, but more stable long term. "It's a solid deal when it's done as portfolio risk management, but doing 100% renewables and making money is going to be a tough combo in the foreseeable future." ■