

Unlikely Allies: Oil and Gas Companies Embrace Renewables and Battery Storage to Meet Global Climate Commitments

Article

April 27, 2023 | *NAPE Magazine* | 6 minute read

Renewable energy has taken center stage in the national energy discussion. Technology and innovation are continuing to progress in the energy sector, and traditional oil and gas companies are embracing clean energy alternatives to assist in powering O&G operations. The potential alliances between O&G players and renewable developers across sectors along with innovative technology creates an exciting time to be immersed in this industry.

With emerging partnership opportunities, the anticipated growth in the battery storage sector and clean energy tax credits available under the Inflation Reduction Act of 2022, there is greater optimism than ever that clean energy and reliability goals will be met across multiple sectors of the energy industry. O&G companies are committed to reducing their greenhouse gas emissions and making progress toward global corporate sustainability goals, as well as finding reliable sources of clean energy to power their increasingly electrified operations. This article provides a backdrop of how these common goals are bringing different sectors of the industry together.

Strategic Partnerships

Hydrocarbon-based polymers and other products made from crude oil are integral to the renewables supply chain. In its 2022 World Oil Outlook, OPEC maintained that world demand for oil will plateau after 2035. Other experts have shorter-term predictions, but the fact remains that these operations are needed for the future of renewables. The industry is here to stay, but investors are demanding environmental, social and governance stewardship. There is no dispute that renewable energy can help O&G companies meet ESG standards through a number of products.

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Virtual power purchase agreements: In contrast to a traditional power purchase agreement, a virtual PPA — or VPPA — does not involve the sale of the physical electricity. Instead, a buyer agrees to pay a fixed price for the electricity and the developer sells the physical energy to the market. The contract settles based on the difference between the agreed upon fixed price and floating price settled with the market. The incentive to enter into VPPAs for corporate buyers is the renewable energy credits. While the corporate buyer does not take title to the physical energy, it does receive the renewable energy credit associated with the generation of the physical energy from the renewable facility. Revenues from these VPPAs can help finance the construction of renewable generation facilities, and associated RECs can be retired to offset reportable emissions or monetized by the buyer.

Behind-the-meter PPAs: In these more traditional purchase agreements between energy consumers and renewable energy companies, there is a physical connection between the renewable energy-generating asset and the assets using the energy. These partnerships can reduce reliance on local distribution infrastructure buildout and scope 3 emissions, but they operate at scale and require large-load sources.

Surface acreage leases: O&G producers are distinctively positioned to benefit from the implementation and utilization of battery storage systems and renewable technologies like wind and solar at all stages of their recovery operations. Land and location, for example, are valuable assets for renewable developers. Exploration and production companies with large surface acreage ownership can lease that land to wind and solar companies to generate royalty revenue.

There are strategic advantages to combining behind-the-meter PPAs with surface acreage leases, including markedly reducing energy costs for O&G companies while also reducing reportable emissions. But before proceeding, there are important considerations to weigh when choosing a renewable energy partner. For instance, solar requires a larger permanent footprint than wind, whereas wind power can impact O&G operations during construction.

Battery Storage for ‘Rainy Days’

Another opportunity to optimize clean energy usage is through battery storage. The energy output of intermittent renewable resources, such as wind and solar generation facilities, varies as a function of the weather conditions at any given moment. As a result, continuous 24/7 generation capacity is not possible, as is the case with traditional fossil fuel or nuclear generation. Battery storage systems, however, allow oil and gas producers a more reliable source of consistent energy by storing energy produced from an intermittent renewable resource during times when there is more supply than demand, and then

utilizing that stored energy when supply from the intermittent renewable resource is unavailable.

Renewable Electricity Tax Credits

The optimism surrounding clean energy and meeting reliability goals was bolstered on Aug. 16, 2022, when President Joe Biden signed into law the IRA, which represents the single-largest investment in climate and energy in American history. Among other incentives, the IRA significantly expanded the clean energy tax credits for electric generation projects. These credits, which represent a dollar-for-dollar offset to a taxpayer's federal income tax liability, can reduce the net costs of project development to sponsors and developers and, therefore, are expected to encourage increased investment in and accelerated deployment of clean electricity projects.

Investment tax credit for electricity generation: The IRA extends the ITC for projects placed in service until at least 2033. Initially, taxpayers will be eligible for the ITC for generation technologies that were creditable before the IRA, including solar, wind, fuel cell and geothermal. For projects placed in service during or after 2025, taxpayers will be eligible for the ITC regardless of the nature of the generation technology, as long as the project has a greenhouse gas emissions rate of zero or below. The IRA also creates a stand-alone ITC for energy storage projects, including battery storage.

Under the IRA, a taxpayer's ITC for a taxable year generally will equal the product of the tax basis of eligible projects placed in service during the year and a 30% rate, which is subject to an 80% reduction if a project fails to satisfy either the prevailing wage requirements or the apprenticeship requirements under the IRA.

The IRA also created additional bonus credits for projects produced with qualifying amounts of domestic content (maximum of 10 percentage points); projects located in high fossil fuel employment areas, referred to as "energy communities" (maximum 10 percentage points); and for small solar and wind projects located in low-income communities (maximum 20 percentage points). Accordingly, the typical ITC-eligible project may qualify for a 50% ITC while small solar and wind projects may be able to attain a maximum 70% rate.

Production tax credit for electricity generation: The IRA extends the PTC for projects placed in service until at least 2033. Taxpayers are eligible for the PTC for generation technologies that were creditable before the IRA, including wind, biomass, landfill gas and hydropower. The IRA also reinstates the solar PTC, which had phased out in 2006.

The PTC is available for the first 10 years after a generation facility is placed in service at a rate of 1.5 cents (as adjusted for inflation, 2.75 cents) per kilowatt hour of electricity that the taxpayer produces from solar, wind, geothermal or

closed-loop biomass facilities and sells to unrelated parties, although this rate is subject to an 80% reduction if a project fails to satisfy either the prevailing wage requirements or the apprenticeship requirements.

Like the ITC, the PTC generally will become technology neutral for projects placed into service during or after 2025, provided that the facility has a greenhouse gas emissions rate of zero or below.

A PTC-eligible project generally qualifies for additional bonus credits if the project is produced with qualifying amounts of domestic content (10% increase to base credit) or located in an energy community (additional 10% increase on the base credit).

Monetization of Clean Energy Tax Credits

The typical sponsors or developers of electric generation projects may not have sufficient taxable income capacity to utilize clean energy tax credits efficiently. Prior to the IRA, sponsors and developers in this position often would seek special investors, referred to as tax equity investors, that have sufficient taxable income to utilize a project's tax credits in the year in which they arise. Tax equity investors typically contribute cash capital to a project holding company in exchange for a preferred equity interest, the economic return of which is comprised of a small cash return and a non-pro rata allocation of the tax credits and accelerated depreciation deductions from the project. The tax equity investor is willing, in part, to accept tax attributes rather than cash as its economic return, and, from the perspective of the sponsor/developer, the tax equity investor represents relatively inexpensive financing.

Tax equity investments, however, bring significant complexity and additional costs to an electric generation project.

The IRA permits taxpayers to sell clean energy tax credits to unrelated third parties for cash, which arguably presents a less complex and more efficient way for a sponsor or developer to unlock the value of clean energy tax credits. Although the market for credit transfers is in its infancy, the current price per credit typically ranges from 88 cents to 92 cents per dollar of credit, meaning that the credit buyer should recognize an economic spread, before transaction expenses, between 8% and 12% on the typical credit purchase. Credit buyers usually require the same suite of protections from a credit seller that a tax equity investor would require from a sponsor/developer, including an opinion of counsel confirming the validity of the purchased credits and an indemnity for recaptured or disallowed credits, backstopped by a tax credit insurance policy.

Conclusion

Partnerships that seemed unlikely a few years ago have forged ahead, as common goals are bringing different sectors of the energy industry together. O&G producers are distinctively positioned to benefit from the implementation and utilization of battery storage systems and renewable technologies to power their operations at all stages of oil and gas recovery. There is a growing anticipation of continued development of hybrid facilities and growth in the battery storage sector with the opportunity to benefit from certain tax incentives. Optimism has flourished for renewables and battery storage as O&G companies embrace these unlikely partners in meeting global climate commitments.

Article originally published in the Spring 2023 edition of NAPE Magazine.