Expert Insights—Clean/Renewable Energy M&A: Trends and Best Practices

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Unlike M&A deals in other industries, deals in the clean energy sector are often tied to the value of one or more long-term projects, the scope and future performance of which may not be completely knowable at closing. When working on clean energy deals, transactional attorneys must be able to anticipate issues that may arise long after closing and navigate the diversity of other stakeholders involved in the underlying project(s). This article discusses the current M&A landscape in clean energy and considerations for lawyers to be effective dealmakers in this space.

Clean Energy Investment Drivers

Although M&A deals are generally tallied quarterly, semi-annually, or annually, when servicing an industry it helps to adopt the perspective of that sector—and in the energy sector, that requires assessing trends over decades.

According to data from the U.S. Energy Information Administration (EIA), over the last quarter century, coal's share of U.S. electricity capacity has fallen from about 42% (1990) to 28% (2014). Over the same period, natural gas–fired generation capacity has jumped from 19% to 40%. Nuclear and hydro capacity have remained steady, but wind and solar have both seen notable increases, with wind scaling from 0.2% (1990) up to 6% (2014) and solar rising from near zero to 1% by 2014. Since then, wind and solar have seen further gains, together accounting for roughly 68% of all new U.S. capacity in 2015.

Looking ahead, electric power producers forecast significant capacity additions by 2020 from natural gas (56 gigawatts), nuclear (6 gigawatts), hydropower (1 gigawatt), wind (24 gigawatts), and utility-scale solar (15 gigawatts). To help conceptualize those amounts, the capacity in all of New York State is on the order of 40 gigawatts.

That growth in energy capacity translates into M&A activity as developers seek to finance or sell off projects, asset owners and service companies seek growth capital, utilities and independent power producers seek to diversify their power generation portfolios and service offerings, and financial investors seek to capitalize on the forecasted growth.

Clean energy M&A activity in the United States increased in 2015. A recent Deloitte study of 163 U.S. solar and wind deals in 2015 revealed a 42% increase in deal count relative to 2014, totaling 19.6 gigawatts. While solar racked up more deals in 2015 than wind, the fewer wind deals totaled more capacity than did solar. According to data from MergerMarket, through Q3 2016, deal count is down some for this year but not dramatically so.

Discussed below are several policy and market drivers underlying this shift in our nation's energy mix and the resulting trends in clean energy M&A activity. The future Trump administration will most likely push for a dramatic shift away from the environmental and energy priorities of the Obama administration—particularly on climate change and the general trend toward de-carbonization. As discussed below, however, federal climate policy is only one of several investment drivers and is by no means the most important factor affecting clean energy M&A activity.

Continued Retirement of Coal-Fired Generation

The trajectory of coal plant retirements continues to foster investment in new power generation. The EIA's most recent Annual Energy Outlook projects roughly 60 gigawatts of coal-fired generation being retired by 2030. That figure assumes that the U.S. Clean Power Plan (CPP) fails under a Trump presidency. If the CPP were upheld and implemented, the EIA estimates coal-fired retirements would be on the order of 92 gigawatts over the same time period. In the near term, the EIA anticipates 8.8 gigawatts of coal-fired units to be converted over to natural gas–fired generation. For a more detailed discussion of the CPP, see the below section entitled "Grim Future for U.S. Clean Power Plan."

Falling natural gas prices are the primary driver for our current transition away from coal. From a regulatory perspective, however, a suite of environmental regulations has increased the costs of maintaining and operating coal-fired plants and accelerated their retirement. The most costly of these environmental requirements are (1) the Cross-State Air Pollution Rule, which addresses the interstate transport of air emissions from power plants; (2) the Mercury & Air Toxics Standards, which target the emission of acid

gases, mercury and other toxics from coal-fired generators; (3) the Clean Water Act Section 316(b) rule, which requires power plants to address the impingement and entrainment of aquatic organisms in their cooling water systems; (4) the Electric Power Generating Effluent Guidelines and Standards, which address the wastewater discharges from power plants; and (5) the Coal Combustion Residual Rule, which imposes minimum criteria for landfills and impoundments used to dispose of coal ash.

Beyond those initiatives are the greenhouse gas regulations under the federal Clean Air Act affecting fossil fuel-fired generation. In addition to the CPP (addressed below), there are two such principal regulations. First, under the U.S. Environmental Protection Agency's (EPA) New Source Review permitting program, if a new or modified emission source (including a proposed power plant) will generate emissions above a certain threshold, then the source is required to obtain an air permit that may require the facility to employ the "best available control technology" to limit greenhouse gas emissions. This controversial permitting program was challenged in court and certain aspects of the original rulemaking were struck down, but in 2014 the U.S. Supreme Court upheld the application of these federal permitting requirements to greenhouse gas emissions. Utility Air Regulatory Group v. EPA, 134 S. Ct. 2427 (2014).

Second, under Section 111(b) of the Clean Air Act, the EPA has set carbon pollution standards for new fossil fuel–fired power plants. While these rules only apply prospectively to newly constructed plants, they require that any such plants must meet or exceed the carbon emission standards achieved by employing post-combustion partial carbon capture and storage. This performance standard is largely viewed as a technology-forcing regulation designed to foster investment in carbon capture and sequestration because the rule effectively prohibits the construction of new coal-fired plants unless they incorporate such technology. As a practical matter, this de facto moratorium has not been terribly important to investors because there is very little capital looking to construct new coal plants. (The standards also set minimum emission thresholds for natural gas–fired plants, but those are not as controversial because they are calibrated to the emissions output of a modern, well-maintained combined cycle unit.) Nonetheless, the same opponents challenging the CPP are also challenging these carbon pollution standards because the Section 111(b) standards serve as a regulatory prerequisite to the CPP and these standards may be unwound along with the CPP.

These pollution standards are in addition to the stringent state and federal regulations affecting coal mining itself, which continue to affect the economics and geography of the coal supply channels.

Fortunately, power plant retirements are relatively predictable. This transparency provides developers, regulators, and investors insight into where new power generation and infrastructure will be required over time. Just by way of example, ISO-New England is projecting the retirement of 6 gigawatts of coal- and oil-fired generation. To help compensate, Massachusetts has responded by requiring utilities to procure an aggregate 2,800 megawatts from clean energy sources, primarily baseload hydropower (which together with other onshore wind and solar resources makes up 1,600 megawatts of the mandate) and offshore wind (which has a specific mandate for 1,600 megawatts by 2027). The offshore wind mandate is particularly notable because it provides certainty to developers in that still-nascent U.S. subsector that there will be a market for power from offshore wind projects.

While the retirement of coal and other baseload generation creates opportunities for clean energy, there are efforts in the organized power markets to subsidize or otherwise support coal and nuclear baseload generation to help them compete with low-cost natural gas and renewables. In Ohio, First Energy and American Electric Power (AEP) both secured approvals from the state public utility commission allowing them to effectively sell power from their aging coal-fired plants into the wholesale market at cost. This subsidy would have extended the useful life of the plants and altered the forecasted generation in the region. In April, the Federal Energy Regulatory Commission issued an order that effectively blocked the attempt by rescinding the rights of the two power companies to purchase power from their subsidiary generators without a FERC-approved power purchase agreement. Subsequent to the order, AEP has reportedly launched a dual track process to either seek a state legislative solution (that would include the development of in-state solar power projects) or consider a sale process for its interest in the four coal-fired plants at issue. First Energy went back to Ohio regulators and secured over $200 million per year in additional revenue for grid modernization projects. Opponents, including several merchant plants and environmental groups, contend the grid modernization rider is a thinly veiled attempt to circumvent the FERC's order. More recently, First Energy has signaled a transition away from the competitive merchant power business to focus on regulated markets.

New York has also come under fire for implementing a high-value subsidy in the form of zero emissions credits to nuclear generation under its Clean Energy Standard. Illinois just passed a sweeping energy bill that provides a similar credit subsidy to support nuclear. Other less explicit measures are reportedly percolating in Michigan and elsewhere. Such regulatory initiatives underscore the importance of granular analysis when analyzing the potential M&A opportunities afforded by retiring generation.

Rise & Fall of Yieldco Appetite

The appetite of yieldcos to acquire operational assets buoyed clean energy M&A activity through Q3 2015. While there were some earlier movers, since mid-2013 (which marked the debut of NRG Yield), eight yieldcos entered the market raising an aggregate $3.8 billion. Yieldcos are publicly traded companies designed to hold operating energy assets, typically with long-term contracted revenues. They are often equated to master limited partnerships in the oil and gas sector (and other sectors), which similarly generate

predictable returns from relatively stable, long-term assets. Yieldcos typically have sponsor development companies that feed them operational projects. A yieldco's parent company sponsor constructs a renewable energy project and then—once operational—sells the project down to its yieldco, thereby efficiently recycling its development capital for the next project. Since the projects are operational by this point, with long-term offtake agreements in place, they are largely de-risked, which makes them attractive assets for the publicly held yieldcos.

Yieldcos rose to prominence on the promise of growth, and that made them very aggressive purchasers of new energy assets, which fueled still more M&A activity beyond their acquisition of projects from their developer sponsors.

That promise of growth was unsustainable and yieldco stocks plummeted in late 2015. As stock prices leveled off, the yieldcos could no longer achieve their dividend growth projections and lost their luster. The decline of the yieldcos made room for more traditional investors in the market, albeit at more conventional pricing. Following the burst of the yieldco bubble, commentators remain confident that the yieldco model is an efficient tool for providing low-cost capital to developers and for streamlining the process of divesting operational projects. Yieldcos have remained active buyers through 2016 (with deals announced recently by 8point3, NRG Yield, and NextEra Energy Partners) and, anecdotally, there remain several new yieldcos on the sidelines waiting for the right time to launch.

It is worth mentioning SunEdison, the sponsor of two yieldcos, which filed for Chapter 11 bankruptcy protection last April. Projects that ordinarily would have been developed by SunEdison and dropped down to one of SunEdison's two yieldcos are now coming to the market as SunEdison tees them up for sale. Before bankruptcy, SunEdison would have waited until the projects were operational to initiate a sale; in bankruptcy, however, it is marketing development-stage projects that still require investment and are subject to construction risk. SunEdison representatives report receiving over 100 indications of interest for assets across the company's portfolio. NRG alone has acquired almost 1.5 gigawatts of wind and solar assets through the SunEdison bankruptcy.

More recently, SunEdison's yieldcos, TerraForm Power and TerraForm Global, have signaled an intention to sell themselves. D.E. Shaw, Brookfield Asset Management, and Appaloosa all reportedly have made offers to acquire at least a controlling interest in TerraForm Power.

With the yieldco bubble burst and investor expectations properly recalibrated, conservative yieldcos that can deliver transparency to investors and efficiencies to developers, without taking on undue risk, will continue to enjoy a competitive advantage in sourcing and acquiring good assets.

Extended Horizon for Tax Equity

Tax equity has also long been an important buyer in the clean energy marketplace. To promote the development of renewable energy sources, the federal government offers two key tax credits: the production tax credit (mainly for wind) and the investment tax credit (mainly for solar). While these tax credits differ in structure, requirements, and eligible technologies, they offer significant value in proportion to the amount of capital invested in, or electricity produced by, the underlying renewable energy project.

Since most renewable energy developers lack the sizeable tax liabilities necessary to use those tax credits effectively, developers instead monetize those tax credits by granting them to so-called tax equity investors in exchange for the investors' monetary investment in the project. Typically these transactions take the form of partnership or lease structures that allow the tax equity investor to claim, in accordance with federal guidelines, the tax credits generated up to a specified time or stipulated return on investment.

In 2015, U.S. solar and wind reportedly attracted $11.5 billion in new tax equity investment. However, the tax credit policies that enable those buyers have undergone a cycle of expiration and extension, contributing to the boom and bust nature of renewable energy investment.

At the end of 2015, in a bi-partisan compromise that included lifting the 40-year old ban on oil exports, Congress extended the energy production tax credit and investment tax credit that were slated for expiration. In the case of wind, Congress retroactively extended the production tax credit through 2015, maintained the 2.3 cents/kWh credit through 2016, and then established a phaseout period beginning in 2017 and continuing through 2019. For other eligible technologies, the production tax credit was simply extended until January 1, 2017.

The investment tax credit had been slated to step down from 30% to 10% in 2015. With the extension, solar projects under construction before the end of 2019 will qualify for the 30% investment tax credit. Projects starting construction thereafter will qualify for a lower percentage of credits provided they start construction during 2021. After 2021, the commercial solar ITC steps back down to 10%.

(The late 2015 compromise did not include four so-called orphan tax credits, which proponents are trying to push through Congress this December. Those include tax credits for commercial and residential small wind turbines, geothermal energy pumps, fuel cells, and combined heat and power systems.)

The 2015 year-end extension of the tax credits was hailed as a boon for the renewable energy sector. However, in anticipation of that year-end expiration, many developers and investors accelerated their deals to initiate projects before the looming deadline. As

developers expedited their pipeline of near-term projects over the course of 2015, there were relatively fewer projects in the queue for 2016. With the additional breathing room afforded by the extension, developers have now slowed their race to execute on their development pipelines.

While 2016 may be slow, the tax credits have proven to be effective subsidies that draw tax equity investment into the sector. Now that both the investment tax credit and production tax credit have predictable glide paths, commentators expect there will be a reliable flow of tax equity into new wind and solar projects until the credits step down or sunset altogether.

The extension has also attracted new tax equity players to the market. For many tax equity investors, this is a well-trodden path and the extension just lengthens their investment window. For newcomers, the extension provides an opportunity to get up to speed on the transaction structures and capitalize on the tax equity strategy. One variable that could affect the mix of tax equity investors is the extent to which the Republican-controlled Congress will lower taxes, thereby reducing the tax liabilities that fuel tax equity investments. In aggregate, the tax credit extensions are projected to drive up to 53 gigawatts in incremental renewable energy capacity by 2020, according to a recent study by the National Renewable Energy Laboratory. Although limited in time, the tax credits are providing a relatively short-term boost for the sector—and perhaps a much-needed subsidy to buoy the sector until larger market drivers take hold by the mid-2020s, such as reduced costs and regulatory mandates.

Aggressive Renewable Energy Mandates

State mandates have also long provided support for energy technologies and projects, including renewable generation, energy efficiency, and, more recently, energy storage. Presently, 29 states and the District of Columbia have enforceable renewable portfolio standards or similar laws. Within those state programs exists a diversity of different requirements as each state is free to design its own criteria for renewable generation targets and eligible technologies. Most states are meeting or exceeding their required mandates, either through their own in-state generation or the purchase of renewable energy credits. As a result—on the whole—the renewable portfolio standards now provide less of a policy incentive than they once did.

To understand where these state policies continue to drive investment, however, one needs to look at specific state mandates. Some of the most rigorous examples include (1) California, which has ratcheted its renewable energy generation commitment up from 33% to 50% by 2030; (2) New York, which also set a 50% by 2030 goal when it adopted its Clean Energy Standard last August; and (3) Hawaii, which has imposed a 100% renewable generation standard by 2045—a big lift given that the state was at roughly 21% at the end of 2014. On the flip side, Ohio, West Virginia, and Kansas have all recently taken steps to weaken or repeal their mandatory renewable energy portfolio requirements.

State mandates can also support specific technologies. For example, California and Oregon have both set energy storage mandates—which have accelerated the pace of energy storage technologies, a critical advancement to compensate for the intermittent nature of wind and solar resources. New Jersey enjoys a robust market for solar energy in part because its mandate imposes a solar-specific procurement standard of 4.1% of sales by 2027–28. Maine has set three successive wind energy goals culminating in 8 gigawatts of installed capacity by 2030 (of which 5 gigawatts should be from offshore or coastal facilities). In its recent Clean Energy Standard, the New York Public Service Commission declined to set explicit requirements for energy storage or offshore wind, but recognized that both technologies would be critically important to achieving the state's "50% by 2030" renewable energy goal.

Energy efficiency mandates are also now either in effect or under development in a majority of states. By way of example, Connecticut has set a target for investor-owned electric utilities of 1.51% of electricity sales. In January 2016, Massachusetts set an energy savings target for electric utilities of 2.93% of projected sales—making it the highest electricity demand reduction target among state energy efficiency standards. Such energy efficiency standards continue to fuel investments in companies providing energy demand response, efficiency, and analytic technologies.

Increasingly Efficient Technologies

Since 2008, the costs of utility-scale solar installations have dropped approximately 60%. Over the same time, the levelized cost of wind has fallen by 40%. As development costs come down, the sector is becoming increasingly competitive, relying less on government-mandated demand. Continued improvements in the efficiency of photovoltaic solar and power coefficients of wind turbines, together with ever-increasing economies of scale, have dramatically improved the value of clean energy generation.

A recent study by the International Renewable Energy Agency projected the following potential declines in the global weighted average levelized cost of electricity by 2025: (1) solar PV, 59%; (2) concentrated solar, 43%; (3) onshore wind, 26%; and (4) offshore wind, 35%. Such aggregate global statistics obfuscate very important details and geographic differences but they help to illustrate the general trend toward cost reduction.

As equipment costs come down, pressure will continue to mount on other costs, namely balance of system costs, operation and maintenance costs, and cost of capital. As buyers identify project or developer investment opportunities, they need to be attuned to the relative impact of these secondary costs—some of which can be difficult to model at the outset of a project.

Corporate Procurement Fueling Projects

Large corporations across the board have set ambitious renewable energy goals primarily to reduce their carbon footprints and stabilize their power costs. According to Bloomberg New Energy Finance, 60% of Fortune 100 companies have climate or clean energy policies, and 83 companies worldwide have committed to procure 100% of their electricity from renewables.

Those corporations now have a tremendous appetite for renewable power from offsite projects. According to the Business Renewables Center *Deal Tracker*, from 2012 through 2015, corporate renewable energy deals grew massively year over year—reaching roughly 3.24 gigawatts in 2015. That trajectory has stalled in 2016 due to a variety of factors, including the extension of the tax credits discussed above, regulatory uncertainty, and (in a few instances) poor execution, but direct procurement is here to stay as a corporate sustainability strategy and several initiatives are underway to grow the market.

Amazon Web Services (AWS) and Microsoft have been the biggest players to date in 2016, and both are among those companies committed to source 100% of their electricity from renewables. AWS recently announced another five new solar farms in Virginia, which position it well to meet its interim goal of 50% renewable energy by the end of 2017. Other major corporate buyers in 2016 include Google (200 megawatts), Dow Chemical (150 megawatts), and 3M (120 megawatts).

Corporations are therefore providing a guaranteed customer base for clean energy projects, which then enable project developers to secure financing. However, from an M&A perspective, the introduction of a corporate buyer (instead of a utility) means the underlying project may face less predictability in terms of risk allocation, tenor, credit risk, transferability, and other key terms. As the market matures, these uncertainties will inevitably be ironed out but for now that element of unpredictability may require additional coordination when arranging tax equity and debt financing.

Looking ahead to a Trump administration, corporations may find other ways to support clean energy and climate policies. In November, some 365 businesses and investors, including more than a dozen Fortune 500 companies, issued an open letter to the president-elect and other global leaders urging support for the Paris climate agreement. Many international climate delegates are looking to corporations and private investors to fuel clean energy investments even in the absence of U.S. federal policy.

Scaling Up Distributed Generation

Under the traditional electric utility business model, large, centralized power-generating stations supply electricity to their surrounding communities. Several overlapping industry trends are challenging that model in favor of a more decentralized, distributed network of power generation and optimization assets. Increasingly, energy efficiency improvements, demand response, energy storage, residential solar, and other behind-the-meter generation are being used in tandem to improve the efficiency of our electrical system. Proponents of this distributed generation model are just as likely to tout the climate and energy efficiency benefits of such a modern grid as they are the enhanced reliability and resiliency that comes with it. The rapid growth of the distributed generation model has sparked robust debate about what exactly electric utilities should do (and be paid to do).

In the face of such existential questions, some utilities have proven open to investing in distributed generation to capitalize on anticipated growth in the sector. Recent examples include (1) AES' 2015 acquisition of Colorado-based Main Street Power, a distributed solar business (now known as AES Distributed Energy); (2) Duke Energy's 2015 investment in REC Solar, a California-based provider of commercial solar and energy solutions; and (3) Southern Company's 2016 acquisition of PowerSecure International, a leading provider of microgrid solutions based in North Carolina.

With the growth in distributed generation also comes the need for new business models to monitor and coordinate those disparate assets. As those businesses mature, they too become M&A targets. For example, in 2015, the energy monitoring company Genscape acquired Locus Energy, which provides data analytics and performance monitoring for distributed photovoltaic assets.

While still in the early stages, state energy reform is fostering growth in distributed generation. New York's Reforming the Energy Vision (REV) is perhaps the most ambitious of such policies. At its base, REV seeks to reform the utility business model such that the utility serves to coordinate a system of distributed energy resources provided to the grid by other third parties.

One demonstration project illustrates the potential efficiencies of REV. Utility ConEdison faced the potential need to invest $1.2 billion in a new substation upgrade to serve increased load in the New York City area. Under its Brooklyn-Queens Neighborhood Program, ConEd has postponed that expensive upgrade by instead procuring a combination of 52 megawatts of demand-side reductions and 17 megawatts of distributed resource investments.

Similar initiatives are underway in California, Hawaii, and Maryland. In all of these states, regulators are carefully evaluating how to adjust the utility business model to integrate more distributed and clean energy resources.

At the federal level, FERC recently proposed a draft regulation that would require the regional energy market operators to accommodate electricity storage and distributed energy resource aggregators as participants in the organized wholesale markets. If implemented, this could pave the way for such modern grid services to operate more effectively within a market framework.

Grim Future for U.S. Clean Power Plan

The EPA's CPP was published in October 2015 and subsequently stayed in February 2016 by the U.S. Supreme Court, pending the resolution of legal challenges. An en banc panel of the D.C. Circuit heard oral arguments on the merits in late September 2016, and if the challengers lose at the circuit court level they are sure to petition the U.S. Supreme Court for review.

The CPP is the primary climate regulation of the Obama administration, designed to reduce emissions from existing power plants. Following several failed attempts to pass climate legislation during the 2000s, the Obama administration worked within the framework of the existing Clean Air Act and applicable Supreme Court jurisprudence to require carbon reductions from the power sector. As widely reported, President-elect Trump has promised to overturn the CPP.

Under the CPP, the EPA has set state-by-state carbon reduction goals that represent what it expects each state can achieve using the "best system of emission reduction." That the EPA can regulate carbon under the Clean Air Act is settled law under recent Supreme Court rulings. What makes the CPP so controversial is that, rather than assessing what carbon emission reductions each individual fossil fuel-fired power plant can achieve on its own (hint: not much), it looked instead at the power system as a whole to calculate what emission reductions were possible. By looking "beyond the fence line" to the electric power system more broadly, the CPP goals were calculated based on three pretty simple assumptions: (1) that existing coal-fired plants could be run slightly more efficiently; (2) that natural gas-fired plants could be dispatched ahead of coal, in many cases serving as baseload (instead of peaking) generation; and (3) that renewables and other low-carbon sources could be relied on more heavily, using existing state renewable portfolio standards as a rough proxy for what level of renewable generation is feasible in the region.

While the goals are set for each state, the CPP does not dictate how states are to actually achieve those goals. Each state has the opportunity to design its own implementation plan, allowing it flexibility in how it will ultimately reduce carbon emissions. The general mandate toward low-carbon fuel sources would boost the development and deployment of renewable energy sources.

With Justice Scalia's vacancy still unfilled, if confronted with the CPP, the current eight-justice court would likely deadlock in a 4-4 opinion, the effect of which would be to uphold any future ruling of the D.C. Circuit. Once Trump appoints a conservative justice to the bench, however, opponents of the CPP will likely have the five-justice majority they would need to overturn the CPP.

Prior to the Supreme Court's stay of the CPP, momentum was building among industry and regulators alike at the state level to find novel ways to reduce carbon emissions from the electric sector. In those early days of compliance planning, the CPP served to bring together energy regulators, environmental agencies, and utilities for the first time to think critically about ways to reduce carbon emissions in the power system. Many U.S. utilities remain supportive of the CPP because it provides regulatory certainty around what they view as an inevitable, decades-long transition to lower carbon power generation—a transition that will span more than a few presidential election cycles.

There are many variables to watch in how the CPP plays out, but, if the rule survives until a hearing before the U.S. Supreme Court, then it will likely be struck down by a 5-4 conservative majority. With this one attempt at federal climate policy likely to fail, leadership on climate policy will shift back to the states, cities, and businesses. Much as they would have done so under the CPP, potential investors will need to watch for clean energy policy signals on a state-by-state basis. It is also possible that some states and utilities may build on their early compliance planning under the CPP to devise enhanced interstate carbon trading or other carbon reduction strategies.

The Importance of Long-Range Thinking

With all the policy and investment trends affecting M&A deals in clean and renewable energy, and the uncertainty inherent in many of these trends, it is essential for clean energy lawyers to take a long view when advising on M&A transactions. M&A lawyers new to the energy sector often approach targets like they would any other business—understand the company as it exists today and use customary deal protections to ensure that the full value is preserved until and delivered at closing. However, clean energy deals usually bear some nexus to a power generation project. Whether the target is a wind farm under construction, a portfolio of several operational wind farms, or a developer of new wind farms, the value of the business is likely tied in some way to the long-term success of one or more energy projects. For this reason, the full value of the investment is not necessarily delivered at closing. The purchase price paid likely reflects some assumptions about future project performance and—by extension—project risk. The best clean energy lawyers therefore bring all the tools of an M&A attorney but also the forward-looking perspective of a projects lawyer.

Employing this forward-looking perspective, clean energy deal lawyers are attuned not only to the risks in the business today but also the assumptions underlying the purchase price and the vulnerability of those assumptions to error. They can leverage their knowledge of project development when conducting diligence and think critically about risk areas in existing project contracts and counterparty relationships. How dependent is the wind farm business on renewing that aging offtake agreement, and are those contract terms still available in the marketplace? How will the injection of new capacity elsewhere in the regional power market adversely affect project revenues? What project risk will an engineering, procurement, and construction contractor need to absorb in order to stay competitive when bidding for new utility-scale projects?

While all companies have some degree of forward-looking financial risk, energy projects are especially susceptible to a mix of regulatory and project-specific risks. M&A attorneys do not need to necessarily solve every one of these risks—indeed, many of the risks may be inherent in a given investment. That said, the best deal advisors seek to understand these vulnerabilities and work collaboratively with their clients to make sure those risks are considered and, where appropriate, addressed through contractual protections, investment structures or contingencies in the financial model underlying the purchase price.

Deal Considerations

As deal advisors, attorneys can help investors think strategically about the various entry points to the clean energy marketplace. An investor seeking exposure to utility-scale wind could invest in a new wind farm under development, acquire a utility-scale wind developer, provide financing for a wind development platform, acquire a fully operational wind farm with an off-take agreement already in place, or acquire a contractor, supplier, or other service provider to the wind energy sector. The same diversity of options is available across other clean energy technologies—solar, geothermal, combined heat and power, energy efficiency, hydro, etc. These various targets all imply different transaction structures, diligence concerns, risk profiles, and ultimately returns.

Clean energy deals present all the same deal considerations inherent in any other M&A transaction—purchase price mechanics, change of control considerations, extent of indemnity protection, tax implications, employee issues, compliance and litigation risks, legacy liabilities, etc. Their nexus to energy project risks and susceptibility to industry-wide regulatory and market trends, however, raise several peculiarities.

Below are practical considerations for aspiring clean energy deal lawyers:

- **Understand the value of and rationale for the investment.** Within the power generation sector, investors target different opportunities, power markets, deal sizes, and technologies for a wide variety of reasons. Knowing how the client values the technology, the existing assets, the underlying financing and development relationships, the development pipeline, and the management team will help inform your approach in negotiations, including around employee benefit and retention issues, existing commercial arrangements, intellectual property, and expansion opportunities.

- **Identify what aspects of the investment are exposed to project risks.** The project risks are obvious in a greenfield project development, but even operational facilities may need to be upgraded, expanded, or refurbished to achieve projections. Similarly, a clean energy developer or asset manager may be party to construction contracts that allocate project development or operation and maintenance risks. Likewise, any change in control could expose a project to permitting approvals and third-party consents under the existing project documentation. Any of these scenarios could raise uncertainty with respect to counterparty risk, permitting, site acquisition, infrastructure connections, and other such development risks.

  Conventional M&A signing and closing protections are not well suited to protect against post-closing risks and, as a matter of fairness, no seller wants to retain risk for post-closing matters over which it lacks control. However, if future project risks are material to the transaction, then dealmakers can devise creative ways to help mitigate future risks. For asset deals, buyers may insist on conditions precedent to ensure replacement project contracts are negotiated on arms-length commercial terms. For management team acquisitions, the parties might use management equity or design earn-outs to incentivize desired performance without giving sellers a windfall if expectations are not met. Similarly, where third-party approvals are necessary to complete an expansion or transfer particular assets, the parties can agree to purchase price holdbacks conditioned on those approvals.

  Knowing whether to push for these contractual solutions often hinges on a judgment call regarding the underlying risk. In diligence, clean energy lawyers should draw on their project development expertise to evaluate the adequacy of existing project agreements and protections and feasibility of negotiating better terms.

- **Know what regulatory disclosures and approvals will be necessary.** Not all investments in the clean energy sector require prior approval by FERC or state public utility commissions, but if the target involves any direct or indirect interest (even a minority interest) in power generation, transmission (including interconnection facilities and step-up transformers), or wholesale sales, then you need to do the analysis to understand what will be required. Regulatory considerations can help inform the structure of the deal and, when triggered, often dictate the timeline for closing. And for a project still under development, you will need to anticipate what regulatory oversight and approvals will attach once the project becomes FERC jurisdictional. Even if no regulatory approvals are required under the Federal Power Act or state utility laws, the contracts governing the underlying project more often than not will have change-of-control rights that may be triggered depending on the transaction structure, and permit approvals could also be implicated.

- **Know the buyer's ownership structure and navigate any confidentiality or tax concerns.** Energy assets are heavily regulated and, in connection with a Federal Power Act (Section 203) or state corollary approval, the FERC or state public utility commissions may require extensive disclosure regarding the direct and indirect owners of the buyer. When advising clients

who are new to the energy space, take the time to counsel them through the extent to which such regulators can require disclosure not just about the direct investors but also indirect investors up the chain, as well as disclosure about their other energy holdings.

The identity of a buyer's investors can also be relevant for other reasons. Certain of the incentives afforded to renewable energy projects may be subject to recapture if the project is transferred to a tax exempt, governmental or other disqualified entity. If the target benefitted from a federal cash grant that has not yet fully vested, then a buyer should consider whether the acquisition of the target would trigger a recapture of any portion of the grant.

- **Understand what future regulatory developments could affect the value of the investment.** The same variability and change that may be creating M&A opportunities also give rise to significant uncertainty in the clean energy marketplace. Beyond the federal and state climate policies and tax subsidies, there are countless air and other regulatory measures that can increase capital costs, impose regulatory obligations, reduce revenues, or otherwise affect a given business.

  Some of these are logical consequences of other energy regulations. For example, when first issued, the New York Clean Energy Standard threatened to deprive behind-the-meter renewable energy project owners of the value of their renewable energy credits by effectively reallocating credit from those voluntary investments to the compliance markets. In response to industry pushback, the New York Public Service Commission has since clarified that those voluntary project installations will still count toward the state's 50% by 2030 renewable energy goal but will be backed out of the annual clean energy quota that load-serving entities are required to achieve.

  As another example, last summer the EPA expanded the number of municipal solid waste landfills required to install methane collection and control systems. Some of the affected landfills already had landfill gas-to-energy systems in place that sold voluntary emission reductions into the marketplace. Following the recent rule change, their carbon reductions may no longer qualify as voluntary and therefore may no longer have value in the market.

  Still other regulatory developments may be less intuitive and bear no nexus to other energy policies. For example, municipal fire and building codes continue to present a significant impediment to the growth of rooftop solar in cities.

  Such regulatory impediments are not readily addressed through contractual protections but can be carefully reviewed in the course of diligence to ensure they are appropriately factored into the deal.

- **Be mindful of transaction size.** The growth of smaller and distributed generation technologies has opened up compelling investment opportunities. However, as the valuations come down for these smaller projects, the transaction costs remain frustratingly high because, as dealmakers understand, these smaller deals are just as—if not more—complicated than their larger counterparts. Creative developers and dealmakers are constantly devising new ways to aggregate projects or otherwise structure investments to improve transaction efficiency. At the venture stage level, this has fueled some recent high-profile investments directly into small and distributed generation platforms, rather than pursuing individual asset deals.

To perform at the highest levels, clean energy deal lawyers need to draw on their experience representing developers, lenders, and investors. They should counsel clients on the project risks inherent in clean energy investments and think critically about project agreements and appropriate contractual provisions, management incentives, purchase price mechanisms, and investment structures to mitigate those risks.