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Market Forces, Corporate Policies Drive Shift To Clean Energy, Law360, December 18, 2019

In his article, published in Law360, Lou Tosi, partner and chair of the firm's Environmental practice group, expressed that 2019 continued to be an innovative and rapidly changing year for the energy/environmental landscape. His article discusses the legal and social forces which are causing emission reductions and fuel changes in the electric utility sector despite the Trump administration policies.

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In 2019, the energy sector continued to be a hotbed of innovation, with an ongoing shift toward energy production from natural gas and renewable sources, and reductions in carbon dioxide emissions driven by corporate social responsibility. These trends will continue to accelerate through the next decade, as domestic costs for energy from gas and renewables decline.

These declining costs have made it easier for corporations to adopt environmental, social and governance, or ESG, policies that commit to substantial CO2 reductions. Meanwhile, government policies in Europe and Asia also promote and subsidize renewable energy; investments in electric vehicle technology are at an all-time high partly in response to these policies.^[1]

However, the aspirations for greener sources of energy clash with the hard fact that coal and oil are abundant and highly efficient sources of energy. Although natural gas and renewables will be growing parts of the global and domestic energy market, coal and oil will remain an important part of the mix, primarily because of their natural advantage as efficient sources of energy.^[2] China, for instance, is the largest producer of solar cells, but is still building new coal plants to meet growing domestic power demand.^[3]

There has been rapid and significant change in the domestic energy market since the enactment of the Clean Power Plan over four years ago — even without reliance on command and control regulatory programs like the Clean Power Plan. Despite regulatory rollbacks from the Trump administration, the pace of energy innovation and related carbon reductions continues to increase — perhaps not at the rate demanded by NGOs, but significant nonetheless.

Energy policy will be a critical issue in the next election. Just as during the Obama administration, most of the critical changes to energy policy by the Trump administration have been through executive and administrative action. A virtual stalement in Congress on climate change and energy policy has intensified the phenomenon of effectively making law by regulatory policy.

This portends a continued seesawing of U.S energy policy, depending on the party in the White House. Some of the important environmental and energy issues at stake in the next election include the U.S. role in the Paris agreement; the repeal or continuance of the Affordable Clean Energy rule; the return, or not, of the Clean Power Plan; changes to the New Source Review program and its netting rules; revisiting several state implementation plan programs (including malfunction exemptions); and interstate pollution requirements.

Other critical issues such as grid reliability, electric rate setting, subsidies and generation mix will be impacted by appointments to the Federal Energy Regulatory Commission and individual state regulatory commissions, and by the makeup of state legislatures (e.g. state renewable portfolio standards, subsidies for or impediments to renewables, and state public utility commission rulings).

A tendency for regulatory trends to flip when control of the White House switches parties will make it more likely that the U.S. Supreme Court will apply more pressure on Chevron deference. In its last term, the court took a hard look at Auer deference, and agency deference is coming under more critical review. It seems apparent that the relevance of Chevron and Auer deference will be seriously questioned, as regulatory flip-flops become more common with each election.

But regardless of election-driven regulatory changes, there are economic and social forces in play that will sustain rapid progress in technical innovation and carbon reduction. Some of those are discussed below.

The Shift From Coal to Natural Gas and Renewables

The share of domestic electric generation from coal has continued to decline significantly. The U.S. Energy Information Administration reports that, since 2010, over 546 coal-fired power plants, with a total capacity of 102 gigawatts, have been retired.

While this decline is in part due to regulatory pressures — such as the Mercury MACT rule and new source review enforcement — the primary forces driving this decline are economic pressures on coal generation, from low natural gas prices and declining costs for renewables, and rising social preferences for green energy.^[4] The EIA reports that, while there has been a decline in the number of coal plants retired since 2015, recent coal-fired plant closings involve larger and younger units, suggesting a stable rate of coal-fired capacity reductions.

The shift away from coal has meant a continued decrease in energy-related CO2 emissions. The EIA predicts that 2019 will see "(t)he largest decrease in CO2 emissions from coal since 2015'' — despite increasing CO2 emissions from natural gas.

Worldwide natural gas prices are most likely to remain low or stable in the foreseeable future, and energy from renewables will progress at a fast rate.^[5]

The ESG Movement and Consumer Preferences

In the last five years, more corporations have made policy commitments to CO2 reduction as a part of sustainability efforts. The ESG movement has been widely embraced:

The total US-domiciled assets under management using [sustainable] strategies grew from 8.7 trillion as of 2016 to 12.0 trillion as of 2018, an increase of 38%. This represents 26%-or 1 in 4 dollars-of the 46.4 trillion in total US assets under profession management.^[6]

Several major U.S. electric utilities have announced commitments to reduce CO2 emissions. For example, DTE Energy Co. has committed to reduce carbon emissions by 30% by the early 2020s, 45% by 2030, 75% by 2040 and 80% by 2050.

DTE's strategy relies on retirement of coal units, the addition of 4,000 megawatts of renewables, the addition of 3,500 megawatts of natural gas generation, and continued investments in demand management and grid modernization.^[7] Similar proposals have been announced by electric utility companies around the United States.^[8]

Whither the Clean Power Plan?

The Clean Power Plan was one of the Obama administration's most important regulatory actions to reduce greenhouse gases, and was one of the most controversial programs of the Obama era. It proposed to reduce CO2 emissions to 32% below 2005 levels.

The plan gave the states the ability to meet these targets through efficiency improvements in existing power plants and increasing use of renewables and natural gas. It encouraged and allowed states to adopt conforming rules that required utilities to dispatch generation units based on CO2 emissions, rather than cost.

For its proponents, the plan was the normal outgrowth of U.S. Environmental Protection Agency authority to set technology-based limits on the electric generation sector, by virtue of Section 111(d) of the Clean Air Act. The plan's opponents viewed it as an unprecedented use of Section 111(d), and contended that it was indeed the promulgation of national energy policy by the EPA.

On June 19 of this year, the Trump administration repealed the Clean Power Plan and promulgated as a substitute the Affordable Clean Energy, or ACE, rule. ACE identifies heat rate improvements as the best system of CO2 emission reduction at an individual unit.

ACE eliminated reliance on renewables, and the dispatching of electric generation units based on low CO2 emissions. Challenges to the ACE rule are pending in the U.S. Court of Appeals for the District of Columbia Circuit.

What will happen to energy policy in 2020 is anyone's guess. If Donald Trump is replaced as president, it can be expected that a new administration would attempt to repeal ACE and repromulgate the CPP, or some newer and perhaps more stringent version. If Trump remains president, the D.C. Circuit could nonetheless reverse ACE in late 2020 or 2021, resulting in notice and comment procedures for several years.

The practical hurdles to adoption of a new Clean Power Plan will be significant, even with a change in administration. One reason is that the Clean Air Act and Administrative Procedure Act will require the formal repeal of ACE, followed by proposal of a new or modified CPP, resulting in a new and lengthy set of new rulemakings and judicial review.

These actions in turn would lead to controversy, and rekindle the original, substantial legal challenges to the CPP. Because five years have passed since the promulgation of the CPP, any new rulemaking will necessarily have to reconsider the original CPP's assumptions and their relevancy today.

For the states, a new CPP will open a Pandora's box of regulatory confusion. Many states are already undertaking programs to implement ACE. Repealing ACE, and proposing a new CPP, or something like it, would undo states efforts and lead to continued uncertainty during completion of rulemaking and judicial review

Of most practical importance is that many of the emission targets under the CPP have already been met or committed to by states and electric utilities, even without the CPP. Perhaps it is time to recognize that national energy policy and carbon reduction policy are better left to Congress, and not to the inevitable shifting administrative interpretations of the Clean Air Act.

The act was originally enacted against the backdrop of a 1970s industrial and energy base. It was intended to deal with the domestic industrial and energy infrastructure of that era. But without consensus in the current congress as to climate change and energy, it is doubtful that any policy based on elections will last longer than four years.

^[1] See, for instance,

https://www.reuters.com/article/us-usa-autos-investment/electric-pickup-batteries-included-in-gms-7-billion-p ledge-idUSKBN1W12SO;

https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/expanding-electric-vehicle-ado ption-despite-early-growing-pains.

^[2] See, generally, Power Density: A Key to Understanding Energy Sources and Uses, Smil, MIT Press (2015).

^[3] See https://www.carbonbrief.org/mapped-worlds-coal-power-plants for a mapping of countries that are closing coal-fired power plants and those who are still building them.

^[4] U.S. Energy Information Administration Annual Energy Outlook 2019 (Jan. 24, 2019).

^[5]See BP Energy Outlook 2019,

https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/energy-outlo ok/bp-energy-outlook-2019.pdf ("Natural gas grows robustly supported by broad based demand and the increasing availability of natural gas, and renewable energy is the fastest growing source of energy, contributing half of the growth in global energy supplies ... by 2040").

^[6] Report on US Sustainable, Responsible and Impact Investing Trends, US/SIF Foundation (2018), https://www.ussif.org/files/Trends/Trends%202018%20executive%20summary%20FINAL.pdf.

^[7]See https://empoweringmichigan.com/dte-impact/performance/. WEC Energy Group has adopted corporate CO2 reduction sustainability goals of 40% reduction by 2030 and 80% by 2050.

^[8] See, for instance, https://www.aepsustainability.com/,

https://www.southerncompany.com/content/dam/southern-company/pdf/corpresponsibility/2018_Corporate_ Responsibility_Report.pdf.

