



Momentum Continues for America's Clean Power Plan: Power Sector Progress

At this dynamic moment in the power sector, companies across the country are moving full steam ahead to dramatically reduce carbon emissions from their generation fleet and to make big investments in zero-emission generation. For example:

- Of **American Electric Power's** generating capacity, [more than half](#)—60%—comes from coal; but even AEP is reducing emissions by replacing coal with renewables and natural gas. AEP has [already cut](#) carbon dioxide emissions 39% from 2000 levels. The company [plans](#) to add 5,500 MW of wind, 3,000 MW of solar, and 3,000 MW of natural gas in the coming years. CEO Nick Akins last year [noted](#) that the Clean Power Plan could be a “catalyst for the transformation that’s already occurring in our industry.”
- Iowa-based **MidAmerican Energy** has announced a goal to provide [100% renewable energy](#). MidAmerican’s [just approved](#) \$3.6 billion project to add 2,000 MW of wind—called the “largest wind energy project in US history”—will expand wind energy to become 85% of the company’s sales. Said [CEO Bill Fehrman](#): “Our customers want more renewable energy, and we couldn’t agree more.” Meanwhile, an executive of MidAmerican’s parent company, Berkshire Hathaway Energy, [had this to say](#) about the Supreme Court stay of the Clean Power Plan: “We wish that hadn’t happened...Rather than litigating, we are leading.”
- **Southern Company**, a major generator of coal-fired power, is expanding renewable energy development that would count towards Clean Power Plan compliance. Southern Company and its subsidiaries have [added or announced](#) more than 4 gigawatts (GW) of renewable generation since 2012 to its [44 GW fleet](#). Southern Company subsidiaries are challenging the Clean Power Plan in court.
- **Xcel Energy** [reported in a recent SEC filing](#) that its Integrated Resource Plan (IRP) for subsidiary NSP-Minnesota will “allow for a 60 percent reduction in carbon emissions from 2005 levels by 2030,” and that it “anticipated compliance with the [Clean Power Plan] while maintaining reasonable costs for customers.” In comparison, the Clean Power Plan will [reduce](#) carbon emissions from the power sector on average 32% below 2005 levels by 2030. Meanwhile, Xcel plans to expand renewables in Colorado, including [doubling the amount of solar capacity](#) the company owns in the state and [constructing](#) a \$1 billion, 600 MW wind project.
- **Westar Energy** (serving Kansas) is rapidly reducing emissions—even while it is challenging the Clean Power Plan in court. The company’s 2015 Annual

Report states that its fleet's carbon emissions will fall 36% below 2005 levels by 2017 ([see pg. 86](#))---already exceeding the national goal under the Clean Power Plan.

- Rural electric cooperative **Tri-state Generation** (serving CO, NE, NM, and WY) will shut down two coal plants with 527 megawatts of generating capacity by 2022 and 2025, respectively, and install pollution controls on two others. From Tristate's [statement](#) "The retirements of both Nucla Station and Craig Station Unit 1 will result in carbon dioxide emission reductions that the State of Colorado has set a goal to achieve and will help meet other proposed federal requirements."
- And **FirstEnergy Corp.**, which serves several states in the [Midwest and Mid-Atlantic](#), despite attempts to get consumers to bail them out for bad coal investments did note in a July 2016 SEC filing a [goal](#) to reduce carbon emissions 90% below 2005 levels by 2045. Making some progress towards this goal, the company [recently announced](#) plans to retire 856 MW of uneconomical coal capacity in Ohio

The following pages document the wealth of positive statements and actions by power companies that are moving forward towards Clean Power Plan compliance.

National / Multi-Regional Power Companies and Associations

American Electric Power

- AEP's subsidiary utilities serve nearly 5.4 million customers in 11 states: Arkansas, Indiana, Kentucky, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia and West Virginia.
- Generation mix: currently, 60% coal, 23% natural gas, 5% nuclear. 2026 projection: 45% coal, 33% natural gas. The company owns 31 GW of generating capacity
- Carbon emissions: AEP has [already cut](#) carbon dioxide emissions 39% from 2000 levels.

“AEP Ohio Requests Proposals for Renewable Energy Projects” (Press Release, Dec. 16, 2016)

“AEP Ohio, a unit of American Electric Power (NYSE: AEP), today issued two separate Requests for Proposal (RFPs) for wind and solar energy generation resources in Ohio.

“AEP Ohio is seeking proposals for up to 250 megawatts (MW) of wind energy resources and separate proposals for up to 100 MW of solar energy resources (each 10 MW or greater). Preference will be given to solar projects that are sited in Appalachian Ohio, create permanent manufacturing jobs in Appalachian Ohio and commit to hiring Ohio military veterans.

...

“AEP Ohio committed to develop 500 MW of new wind generation and 400 MW of solar generation in Ohio as part of a stipulated agreement approved by the Public Utilities Commission of Ohio (PUCO) Nov. 3, 2016. The renewable energy projects must be approved by the PUCO.”

“Cheap Gas Tests Trump’s Promise to Revive Coal” ([WSJ](#), Nov. 13, 2016)

“[American Electric Power](#) Co. of Columbus, Ohio, one of the nation’s biggest utility companies, has sold or retired half its fleet of coal-burning power plants in recent years. No matter who occupies the White House, ‘[coal’s] not coming back,’ said Nick Akins, AEP’s chief executive. ... ‘We’re moving to a cleaner-energy economy and we’re still getting pressure from investors to reduce carbon emissions,’ Mr. Akins said. ‘I don’t see that changing.’”

“Ohio regulators approve AEP plan to retire 1,500 MW of coal generation” ([UtilityDive](#), Nov. 11, 2016)

“Ohio regulators have approved a settlement reached late last year, providing for American Electric Power to decommission 1,500 MW of coal-fired capacity while building 900 MW of clean energy resources.”

“AEP chief says Clean Power Plan can be a 'catalyst' for transforming the industry” ([Columbus Business First](#), Nov. 11, 2015)

“Utility-scale solar can really address the needs of the Clean Power Plan and other objectives that we have,’ [CEO Nick] Akins said Tuesday at the Edison Electric Institute’s annual meeting.

...

“We believe that it can be, if done wisely and rationally, a catalyst for the transformation that’s already occurring in our industry,’ he said.

...

“The EPA plan, Akins said, gives the power company an opportunity to work on plans with the 11 states in which it operates. ‘That’s a great way for us to continue to invest in the resources of the future,’ he said.”

“Utilities shrug off court decision, say carbon-cutting plans are on track” ([The Washington Post](#), Feb. 12, 2016)

“For American Electric Power, an electricity provider and one of the country’s top coal users, the court case ‘doesn’t change our focus on the diversification of our generation fleet,’ said spokeswoman Melissa McHenry. Those diversification plans include more natural gas and renewables, she said.”

American Public Power Association

- Trade group for more than 2,000 publicly owned utilities throughout the U.S.
- APPA is challenging the CPP in court.

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“Asked what APPA would tell members about whether to continue to prepare for possible compliance with the rule, Joe Nipper, APPA's senior vice president for regulatory affairs and communications, said, ‘With the caveat that we don't 'advise' our members per se, but if asked, our suggestion would be to continue to participate in the state's process if they intend to continue with it.’”

Calpine Corporation

- Wholesale power generator focusing on natural gas and geothermal, with 84 plants and more than 27 GW of capacity

- Calpine is supporting the CPP in court.

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“Calpine Corp. spokesman Brett Kerr said the move wasn't something the market actually anticipated. ‘We'll continue to be supportive of the Clean Power Plan,’ he said, pointing to a ‘natural evolution of the market anyway’ away from less efficient coal plants. ‘So it won't really dictate us to change our strategy too much, which is to focus on being the premier operator of gas-fired plants in the United States.’”

Additional reaction to the stay ([SNL](#))

“Calpine Corp. expressed disappointment at the stay, as the company is participating in the litigation in support of the EPA. ‘The record was extremely voluminous and the fact that they issued a stay within a matter of essentially a weekend, that was surprising and certainly disappointing,’ said spokesman Brett Herr. ‘We, Calpine, have long-supported the EPA's Clean Power Plan and have done so publicly, throughout various court proceedings and things like that.’

“Herr noted that the Supreme Court decision did not address the merits of the underlying case, and said the company will continue to support the regulation. The stay will not change Calpine's strategy, nor is it likely to alter other companies' decisions, due to MATS and other factors, Herr said.”

FY2015 SEC Filing (dated Dec. 31, 2016)

“We believe that the Clean Power Plan...will impact our competitors who use other fossil fuels or older, less efficient technologies, providing us with a net competitive advantage.”

Q1 2016 SEC Filing (dated Mar. 31, 2016)

“Overall, we support the Clean Power Plan and believe we are well positioned to comply with its provisions. We expect the Clean Power Plan to be beneficial to Calpine.”

“Texas Power Players Sit Out Political Opposition To Clean Power Plan” ([NPR](#), Apr. 16, 2016)

“To be clear, we are not a public policy shop, and while we value environmental stewardship and that's one of our core principals, we also think it makes a lot of business sense for us.

...

“‘The Clean Power Plan is in the best interest of Calpine,’ Kerr says. ‘We believe it's also in the best interest of some of these other companies.’”

Edison Electric Institute

- Trade group representing all U.S. investor-owned electric utilities

“Utilities shrug off court decision, say carbon-cutting plans are on track”
([The Washington Post](#), Feb. 12, 2016)

“Electric utilities are investing in clean energy and pursuing energy efficiency,’ Tom Kuhn, president of the Edison Electric Institute, the largest trade association of electricity providers, told a gathering of Wall Street investors less than a day after the Supreme Court announced its stay on the Clean Power Plan.”

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“The Supreme Court action ‘doesn't really change anything,’ said Quin Shea, vice president for environment at the Edison Electric Institute, the lobby for investor-owned utilities.”

Exelon

- The six Exelon-owned utilities generated 32.7 GW of electricity in 2015 across the U.S.
- [Generation mix](#): 64% nuclear, 20% natural gas, 10% renewable

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“Exelon Corp., the nation's largest nuclear operator, said, ‘Regardless of this procedural development, the Supreme Court already has ruled that carbon is a pollutant the EPA must regulate. Our customers want reliable, clean and affordable electricity, and Exelon remains committed to helping drive the national transition to a low-carbon future.’”

Midcontinent Independent System Operator (MISO) & Southwest Power Pool (SPP)

- MISO is a regional transmission organization (RTO) that coordinates electric grid operations across the Midwest and South Central U.S.
- SPP is an RTO that coordinates grid operations in Kansas, Oklahoma, and parts of surrounding states.

“Grid operators assess low-carbon future, regardless of stay” ([EnergyWire](#), Mar. 10, 2016)

(Joint Statement)

“Southwest Power Pool (SPP) and the Midcontinent Independent System Operator (MISO) -- which spread across the middle section of the United States -- said during a joint meeting yesterday that they would keep up their individual number-crunching. They also will work together to send the same message to states looking to ensure against power outages and price hikes as they shift away from coal and toward lower-carbon electricity sources under the rule.”

Talen Energy Corporation

- Independent power producer operating more than 11 GW of generating capacity in the PJM and ERCOT (Texas) wholesale markets

“DEP pushes on, despite halted Clean Power Plan” ([YDR.com](#), Feb. 24, 2016)

“[Talen Energy] is taking a state-by-state approach to the Clean Power Plan, [spokesman Todd] Martin said. In states such as Pennsylvania, which have said they'll continue with implementation plans, Talen will continue to remain involved in discussions, he said.

“We will continue to focus on a plan that will ensure reliability, so to ensure that there's not an adverse economic impact or an increased cost for customers,' Martin said.”

Xcel Energy

- Xcel's four subsidiaries serve eight states: Colorado, Michigan, Minnesota, New Mexico, North Dakota, South Dakota, Texas, and Wisconsin

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“Xcel Energy Inc., which is retiring two older units at the 2,238-MW [Sherburne County Plant \(Sherco\)](#) in Minnesota, echoed comments offered by other generators.

“Regardless of the outcome of the election, Xcel Energy will continue pursuing energy and environmental strategies that appeal to policymakers across the political spectrum because we are focused on renewable and other infrastructure projects that will reduce carbon dioxide emissions without increasing prices or sacrificing reliability,' Frank Prager, Xcel Energy's vice president of policy and federal affairs, said in a written statement.”

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“While the Supreme Court's ruling is a significant development in this case, the merits of the case have not been decided and the legal proceedings will continue,' Minneapolis-based Xcel Energy Inc. said in a prepared statement.

“Regardless of the final outcome, Xcel said it will continue to work with states and stakeholders on plans ‘to create sustainable and affordable energy futures.’

“‘This approach will not only ensure compliance with existing and new regulations, but also take advantage of new technologies, recognize evolving customer needs and continue to drive improvements in how we produce and deliver energy,’ the Fortune 500 utility said.”

Q1 2016 SEC Filing (dated Mar. 31, 2016)

“In January 2015, NSP-Minnesota filed its 2016-2030 Integrated Resource Plan (the Plan) with the MPUC.

“In October 2015, NSP-Minnesota proposed revisions to the Plan. The revised proposal addressed stakeholder recommendations as well as the then final Clean Power Plan (CPP) issued by the EPA. The revised Plan is based on four primary elements: (1) accelerate the transition from coal energy to renewables, (2) preserve regional system reliability, (3) pursue energy efficiency gains and grid modernization, and (4) ensure customer benefits. The provisions included in the Plan would allow for a 60 percent reduction in carbon emissions from 2005 levels by 2030 and is expected to result in 63 percent of NSP System energy being carbon-free by 2030.

...

“In January 2016, NSP-Minnesota filed supplemental economic and technical information in support of its revised Plan. While the CPP was subsequently stayed, the filing demonstrated anticipated compliance with the CPP while maintaining reasonable costs for customers.

“Xcel reaches sweeping agreement on Colorado renewable energy, pricing” ([Denver Business Journal](#), Aug. 15, 2016)

“[Xcel Energy Inc.](#) says it has reached a sweeping settlement agreement on renewable energy and pricing that could change the way electricity is produced and paid for in Colorado — if state regulators sign off on it. The settlement covers three proposals the power utility has submitted to state regulators: One to change its customer rate structure, another to create a community solar program, and a third to add more renewable energy to its portfolio.

...

“‘The agreement will benefit Xcel Energy’s Colorado customers by allowing us to move forward with the ‘Our Energy Future’ initiative,’ said [Alice Jackson](#), Xcel’s regional vice president for rates and regulatory affairs. ‘It will allow us to meet our customers’ expectations by giving them more control over their energy choices. It will bring more renewable and carbon-free energy to Colorado through the use of new technologies, and it will be provide affordable and reliable energy to further power the state’s economy,’ Jackson said.”

“Colorado's biggest wind farm proposal gets big backing” ([Denver Business Journal](#), Sep. 6, 2016)

“A proposal to build Colorado’s biggest wind farm, a 600-megawatt behemoth that would sprawl across several eastern counties, has received major support from a dozen interested parties.

“We believe the settlement announced today, if approved, is a no regrets step towards more renewable energy for Xcel Energy customers and the state of Colorado,’ said David Eves, president of the Colorado division of Xcel Energy Inc., which in May asked the Colorado Public Utilities Commission (PUC) to approve the Rush Creek wind farm plus a 90-mile transmission line to carry the wind-generated power to the metro area.

“Eves said the Rush Creek wind farm ‘will provide low-cost energy to our customers, and it adds a clean, renewable generation resource to the state that will help us meet potential federal and state air quality mandates.”

CEO Ben Fowke on 600 MW Colorado Wind Farm ([RTO Insider](#), Aug. 8, 2016)

“You basically are buying wind at a price point less than you can lock in natural gas reserves,’ Fowke said. ‘So, that’s a pretty compelling story for customers and, I think, investors alike.”

“Xcel takes step to beef up Midwest wind portfolio” ([EnergyWire](#), Sep. 23, 2016)

“Xcel Energy Inc., which already owns the nation's largest utility wind portfolio, yesterday took a step toward expanding capacity in the Midwest by more than 60 percent by the end of the decade. Minneapolis-based Xcel issued requests for proposal for up to 1,500 megawatts of wind energy across the Upper Midwest — enough to power more than 750,000 homes. The addition is part of Xcel's previously announced plan to more than double its renewable portfolio and get nearly two-thirds of its energy from carbon-free fuels by 2030.

...

“It is the second multibillion-dollar wind energy investment in the region in recent months. In May, Warren Buffett's MidAmerican Energy Co. announced plans for a \$3.6 billion, 2,000 MW project that will consist of a half-dozen wind farms across Iowa. The project was approved by Iowa regulators last month.

...

“Clearly, wind is on sale right now,’ [vice president of strategic resource and business planning Jonathan] Adelman said in an interview, adding that the investment represents just part of a broader strategy over the next decade and a half to continue moving away from coal and toward carbon-free energy.

“This is one big step in a very big plan through 2030,’ he said.”

Northeast / Great Lakes Region

FirstEnergy

- FirstEnergy's 10 utility subsidiaries [serve](#) parts of Ohio, Pennsylvania, New Jersey, West Virginia, and Maryland
- [Generation mix](#): 56% coal, 24% nuclear, 8% natural gas, 11% renewable

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“FirstEnergy Corp. spokeswoman Stephanie Walton was short and to the point when asked if the company will re-evaluate its plans to [sell](#) or [shut down](#) coal units following Trump's election. ‘Our plans for those plants have not changed,’ Walton said.”

Reaction to the stay ([Cleveland.com](#), Feb. 10, 2016)

“FirstEnergy Corp. spokesman Todd Schneider said the company will continue working with states that are developing plans to comply while the court battle continues. ‘While the legal challenges are addressed, we will work with our states if they chose to continue development of their compliance plans,’ he said.”

Q1 2016 SEC Filing (dated Mar. 31, 2016)

“FirstEnergy has established a goal to reduce CO2 emissions by 90% below 2005 levels by 2045. There are a number of initiatives to reduce GHG emissions at the state, federal and international level. Certain northeastern states are participating in the RGGI and western states led by California, have implemented programs, primarily cap and trade mechanisms, to control emissions of certain GHGs. Additional policies reducing GHG emissions, such as demand reduction programs, renewable portfolio standards and renewable subsidies have been implemented across the nation.”

FirstEnergy to shutter two Ohio coal plants ([press release](#), July 22, 2016)

“AKRON, Ohio -- FirstEnergy Corp. announced today that its FirstEnergy Solutions subsidiary will make operational changes to coal-fired units at two of its Ohio plants [856 MW of generation, collectively] in response to challenging market conditions.

“‘We have taken a number of steps in recent years to reduce operating costs of our generation fleet,’ said FirstEnergy Generation President Jim Lash. ‘However, continued challenging market conditions have made it increasingly difficult for smaller units like Bay Shore and Sammis Units 1-4 to be competitive. It's no longer economically viable to operate these facilities.’”

National Grid

- Serves Massachusetts, New York, and Rhode Island
- National Grid is supporting the CPP in court.

“National Grid U.S. Continues Support for EPA's Clean Power Plan Despite Supreme Court Ruling” ([Press Release](#), Feb. 11, 2016)

“Despite the Supreme Court’s decision, National Grid still strongly supports EPA’s Clean Power Plan,’ said Dean Seavers, president of National Grid, U.S. ‘We stand by our belief that the CPP is not only reasonable and achievable, but imperative to meeting the nation’s greenhouse gas reduction commitment established at COP21.’

“As we continue to stress with our customers and industry partners, tomorrow’s power grid and energy supply chain must look different than today’s,’ Seavers went on to say. ‘Climate change is a global imperative, and we must find ways to transition our energy industry into a decarbonized future. That means every player—including system operators, generators, distributors, and policy makers—must collaborate at a level our country has never seen before.’”

Public Service Enterprise Group (PSEG)

- Serves New Jersey and New York (Long Island)
- [Generation mix](#) in FY2014: 40% nuclear, 25% coal, 20% natural gas, 10% wind and solar
- [Carbon emissions](#): “We have established and achieved a significant number of carbon reduction goals over the past two decades. In 2004, through EPA’s Climate Leaders Program, PSEG voluntarily pledged to reduce its GHG emissions intensity by 18% from 2000 levels by 2008. PSEG surpassed this goal by achieving a 31% reduction. Subsequently, we established a new goal to reduce our GHG emissions by 25% from 2005 levels by 2025. In 2011, PSEG met that goal 14 years ahead of schedule.”

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“PSEG ‘firmly believes that carbon emissions need to be reduced. We do believe that climate change is a serious issue; all the science points to that. It is real, and action needs to be taken; it’s not going to wait for us to get our legal or political act together.’”

“PSEG's Izzo discusses utility's investment plans following court stay” ([E&ETV](#), Feb. 16, 2016)

“[\[PSEG has\]](#) always been a leader in energy efficiency and various other things that try to balance the need for providing electricity in as environmentally benign a way as possible while paying attention to customer bills. So we'll continue down that path.

We've invested close to \$1 billion in solar energy as a company alone. In New Jersey we've invested over \$300 million in energy efficiency, just our company, and we'll just continue marching down that path.”

“PSEG to Retire Two New Jersey Coal Plants In 2017” ([Seeking Alpha](#), Oct. 5, 2016)

“PSEG announced today that its Hudson Generation Station in Jersey City, N.J., and its Mercer Generation Station in Hamilton Township, N.J., will be retired on June 1, 2017. ... ‘The plants have been infrequently called on to run and neither plant cleared the last two PJM capacity auctions,’ [said Bill Levis, president and CEO.] ‘The plants’ capacity payments have been critical to their profitability and PSEG’s ability to continue to invest in modernizing them.’

...

“PSEG has long been an advocate for fuel diversity, both in its generation fleet and in the PJM pool. With the announced closing of the coal plants, New Jersey’s energy now will be split almost evenly between nuclear and natural gas, with a small but growing amount of renewable energy. ‘We continue to believe that it is unwise for New Jersey to become too overly dependent on one source of energy,’ said Levis. ‘With the continued low cost of natural gas, it is important that we recognize and support the full value of non-carbon, non-polluting nuclear and renewable energy.’”

PJM Interconnection

- The regional operator coordinates the electric grid for 13 states and the District of Columbia.

“Largest U.S. grid operator plows ahead on rule planning” ([EnergyWire](#), Mar. 11, 2016)

“The Supreme Court’s stay of U.S. EPA’s Clean Power Plan is not altering plans by the nation’s largest power grid operator to move ahead with an analysis of compliance options for the 14 jurisdictions within its 243,417-square-mile footprint.

“States that are part of the PJM Interconnection are ‘still interested in hearing from us what our results show from this Clean Power Plan analysis,’ said Denise Foster, PJM’s vice president for state and member services.”

PJM analyzes CPP compliance options ([PJM report](#), Sep. 1, 2016)

A PJM report concluded the regional operator could comply with the CPP through all seven pathways its analysis explored, while maintaining grid reliability and with relatively low compliance costs.

Midwest

Allete, Inc. / Minnesota Power (Minnesota)

- Subsidiary Minnesota Power serves NE Minnesota
- [Generation mix](#): In 2005, Minnesota Power's generation mix was 95% coal, 5% renewable. In 2015, it was 75% coal, 25% renewable
- [Goal](#): Minnesota Power's goal is to generate. 33% coal, 33% natural gas, 33% renewable by 2030. It projects achieving a 30% reduction in CO2 emissions from 2005 levels by 2025
- CPP position: Minnesota Power is challenging the CPP in court.

Q4 2015 earnings call ([Yahoo! News](#), Feb. 18, 2016)

“We feel that our EnergyForward actions have positioned us very well for the CPP and other regulations.

...

“While the CPP was stayed last week in a decision by the US Supreme Court, we continue to work with stakeholders in shaping Minnesota's CPP state implementation plan, continue to monitor its legal status, and are taking necessary and prudent action to protect the value of our investment.

...

“ALLETE Clean Energies are going to continue to pursue acquisitions that make sense along all forms of the renewable space, so wind and solar and hydro, even clean natural gas projects that come up. We still think cleaner energy forms are in vogue.

“The CPP even [if] it's stay[ed], certainly, it's basis really is cleaner energy forms, as well. And so, we are going to continue to look. They are going to continue to look.”

Q2 2016 [SEC Filing](#) (dated June 30, 2016):

“Minnesota Power is implementing its *EnergyForward* strategic plan that provides for significant emission reductions and diversifying its electricity generation mix to include more renewable and natural gas energy.

...

“ALLETE Clean Energy believes the market for renewable energy in North America is robust, driven by several factors including environmental regulation, tax incentives, societal expectations and continual technology advances. The recent Clean Power Plan is an example of an environmental regulation that we believe will drive renewable energy development.”

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016):

“In Minnesota, where utilities began working with state regulators on compliance strategies more than a year ago, officials expressed surprise at the stay. But utilities also indicated they would continue working to meet carbon reduction targets even as EPA stands down on CPP enforcement.

“Minnesota Power seeks proposals for large-scale wind, solar energy, and customer-driven resources” ([Press release](#), July 26, 2016)

“Duluth, Minn. – Minnesota Power today is releasing the first in a series of Requests for Proposals as part of the company’s broad resource evaluation process to further its EnergyForward strategy. EnergyForward calls for a diversified power supply to meet customers’ needs reliably and cost effectively in an environmentally responsible manner.

...

“In the initial Request for Proposal, Minnesota Power...is seeking power supply proposals for up to 300 megawatts of wind generation beyond the 625 megawatts of wind it has on its system.

...

“Over the next several weeks, Minnesota Power also will issue formal Requests for Proposals for:

- Solar generation. Minnesota Power will be seeking economic power supply proposals for up to 300 MW of utility scale solar generation that qualifies under Minnesota’s Solar Energy Standard.”

Alliant Energy

- Serves Iowa and Wisconsin
- [Carbon emissions](#): “Since 2005, we’ve reduced carbon dioxide emissions by 22%. We are targeting reducing carbon dioxide emissions by 40% by 2030.”
- [Generation mix](#): In 2016, est. 30% coal, 35% natural gas, 15% renewables; in 2024, project 25% coal, 50% natural gas, 20% renewables

“Alliant Energy announces \$1 billion wind project to advance clean energy” ([Press release](#), July 27, 2016)

“CEDAR RAPIDS, Iowa – Earlier today, Alliant Energy CEO Patricia Kampling and Gov. Terry Branstad announced the utility will invest approximately \$1 billion to expand its wind energy operations in the state.

“Our customers expect low-cost, clean energy, which is exactly what this project will bring to the communities we serve,’ said Doug Kopp, president of Alliant Energy’s Iowa utility. ‘Wind has no fuel costs and zero emissions, making it a win-win for Iowans and the Iowa economy.’

“Alliant Energy’s Iowa utility is seeking regulatory approval to expand its Whispering Willow Wind Farm in Franklin County and possibly develop wind energy in other areas of the state. The five-year project will add up to 500 megawatts of clean energy to economically meet customer needs. The company is seeking approval now to maximize the value of renewable energy tax credits to benefit its customers.

“The new wind project is part of Alliant Energy’s vision for a clean energy future. From 2005 to 2030, Alliant Energy is targeting a 40% reduction in carbon dioxide emissions. In addition, the project will generate tens of millions of dollars in property taxes, and result in more than 1,500 jobs at the height of construction – boosting Iowa’s economy while supporting customers seeking to use more renewable energy.”

Ameren Corporation

- Serves Illinois and Missouri
- [2012 generation mix](#): 76% coal, 19% nuclear, 4% renewables

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“Ameren Corp. is already making the transition to a cleaner and more diverse generation portfolio in a responsible manner,’ Ajay Arora, Ameren's vice president of environmental services and generation resource planning, said in a statement.”

Consumers Energy

- Serves Michigan
- [Generation mix](#) in FY2015: 46% coal, 21% nuclear, 23% natural gas, 1.5% hydro, 4.5% wind, 3.4% other

On Michigan decision to pause CPP work ([Crain’s Detroit Business](#), Feb. 16, 2016)

“The company will continue moving forward with its transition to a cleaner energy portfolio that includes investments in cost-effective, customer-driven renewable energy and energy efficiency programs, and the retirement of seven of our older coal units.”

Q1 2016 SEC Filing (dated Mar. 31, 2016)

“Consumers believes that it is favorably positioned to deal with the impact of carbon regulation through its clean energy plan, its present carbon reduction target, and its emphasis on supply diversity.”

DTE Energy

- Serves Michigan
- [Generation mix](#) in 2013: 74% coal, 17% nuclear, 3.6% natural gas, 5% renewables

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“[DTE Energy Co.](#), meanwhile, is moving forward with plans to retire eight units at three coal-fired power plants between 2020 and 2023. These plans include [retiring](#) the [River Rouge](#), [Trenton Channel](#) and [St Clair](#) facilities, which have a combined operating coal-fired capacity of more than 2,200 MW. Regulators have not yet approved these retirements.

“Many of our coal plants are aging and need to be replaced with cleaner, modern generating technologies, which is what our customers are asking of us and we plan to continue working to achieve these goals,” DTE spokesman Brian Corbett said.”

DTE earnings call ([SNL](#), Feb. 10, 2016)

“Despite being surprised by the U.S. Supreme Court's Feb. 9 decision to stay the Clean Power Plan, DTE Energy Co. Chairman and CEO Gerry Anderson said in a Feb. 10 earnings call that he does not expect much to change in the short term for the company's DTE Electric Co. utility, which serves 2.1 million customers in southeastern Michigan...Anderson said the company is going full steam ahead on the investments to replace retiring plants, even with the stay of the EPA's Clean Power Plan. ‘There might be people who don't like the Clean Power Plan and say 'slow down, stop,' but [state Sen.] Mike Nofs won't be one of them, and neither will we,’ he said. Nofs is the primary advocate for the comprehensive energy reform in the state Legislature.”

Great River Energy

- Great River's 28 member cooperatives [serve 1.7 million people](#) in Minnesota.
- [Generation mix](#) in 2014: 67% coal, 13% hydro, 11% renewable (non-hydro)
- Goal: GRE's current Integrated Resource Plan [projects](#) a 28% reduction in carbon intensity by 2029 compared to 2012 levels.

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“Lancaster noted that Great River was not among the utilities challenging the CPP because it believed the rule is consistent with earlier Supreme Court rulings on EPA's standing to regulate carbon dioxide under the Clean Air Act. ‘It was not our point of view that the rulemaking was contrary to existing law, so we were a little surprised,’ he said.”

GRE continues to study CPP options (*Bismark Tribune*, Feb. 10, 2016)

“As far as work being done by utilities, Great River Energy has contracted with California-based nonprofit Electric Power Research Institute to study the economic affect the rule would have, said Vice President and Chief Generation Officer Rick Lancaster.

“Lancaster said GRE also has hired a Kansas City-based engineering firm to look for ways to make the company's power plants more efficient. ‘We’re still continuing those things... The stay is just a delay; it's not going to make the rule go away.’”

GRE shuts North Dakota coal plant (press release, July 15, 2016)

“Great River Energy has announced plans to retire the Stanton Station power plant [189 MW generating capacity] by May 2017 because the plant is no longer economic to operate with current low prices in the regional energy market.

...

“After careful consideration of several alternatives, it became clear that retiring the plant was in the best interest of our member cooperatives,’ [GRE President and CEO David] Saggau added. Recently, Stanton Station has been generating electricity on a limited basis due to economic conditions. During that time, it has often been more affordable to operate other plants or purchase power from the regional market.”

“700 years of N.D. coal vs. a climate rule” ([ClimateWire](#), Sep. 19, 2016)

“To be sure, some co-ops are greener than others. And co-op political philosophies vary based on the customers they represent. Great River Energy in Minnesota, for example, is neutral on the Clean Power Plan lawsuits. That's despite using coal for 72 percent of its power last year. In terms of Clean Power Plan compliance, GRE will benefit from coal plant closures and upgrades that have made other units more efficient.

“Those moves were intentional. Eric Olsen, GRE vice president and general counsel, said about three years ago, the co-op's board of directors saw carbon regulation coming and pivoted.

“We saw we had a business problem to solve there,’ Olsen said. ‘We had a heavy reliance on coal. Since then, we've been evolving our portfolio to rely less on coal and more on renewable energy and also, frankly, the market energy, as well.’

“Rather than fight the standards, GRE has been focused on ‘solving the business problem of how to achieve them if the Clean Power Plan becomes the law of the land,’ he said.”

MidAmerican Energy / Berkshire Hathaway, Inc.

- Berkshire Hathaway Energy subsidiary MidAmerican serves Iowa and parts of Illinois, Nebraska, and South Dakota.

- A 2,000 MW wind project under development would bring MidAmerican to 85% renewable generation. MidAmerican aims to reach 100% renewable generation.

“Buffett exec laments Clean Power Plan stay” (*ClimateWire*, Apr. 28, 2016)

“We kind of wish that [the stay] hadn't happened,’ said Cathy Woollums, chief environmental counsel at Berkshire Hathaway Energy Co., a division of billionaire Warren Buffett's business conglomerate.

“MidAmerican Energy Co., one of the company's utilities, based in Iowa, announced two weeks ago that it would invest \$3.6 billion in wind power in the state. The move would reinforce Iowa's position at the second-biggest, wind-power-generating states nationwide, behind Texas.

“Having the Clean Power Plan kind of be set aside for a temporary period of time creates that level of uncertainty... We have to a vision to go to 100 percent’ renewables for MidAmerican, Woollums said.”

“MidAmerican Energy announces \$3.6 billion investment in renewable energy” ([Press release](#), Apr. 14, 2016)

“DES MOINES, Iowa – (April 14, 2016) – Today, MidAmerican Energy Company announced a major project that will provide a cleaner energy future for Iowa. The announcement is a giant step toward realizing the company’s vision of 100 percent renewable energy for customers in the state.

“MidAmerican Energy is filing a request with the Iowa Utilities Board to build Wind XI, a project that will add up to 2,000 megawatts of wind generation in Iowa. The proposed \$3.6 billion project is the largest wind project MidAmerican Energy has ever undertaken, and it’s being done without asking for an increase in customer rates or financial assistance from the state to pay for it.

“We have a bold vision for our energy future,’ said Bill Fehrman, CEO and president of MidAmerican Energy. ‘We don’t know of another U.S. energy provider that has staked out this 100 percent position. Our customers want more renewable energy, and we couldn’t agree more. Once the project is complete, we will generate wind energy equal to 85 percent of our annual customer sales in Iowa, bringing us within striking distance of our 100 percent renewable vision.’

“The announcement came at a news conference attended by Gov. Terry Branstad and Debi Durham, director of the Iowa Economic Development Authority. The proposed \$3.6 billion Wind XI plan is the largest economic development project in the state’s history. The development of additional renewable generation puts MidAmerican Energy and the state of Iowa in a strong position to comply with carbon emissions limits and other regulatory requirements.”

Missouri River Energy Services

- Rural electric cooperative with 60 members in Iowa, Minnesota, North Dakota, and South Dakota
- 2010 generation mix: 42% coal, 24% diesel, 21% combustion turbines, 13% renewables

“We can't just sit by and twiddle our thumbs' — CEO on Clean Power Plan” ([EnergyWire](#), Sep. 6, 2016)

“CEO Tom Heller on the Clean Power Plan: MRES has ‘expressed our sympathies and support for states to challenge the Clean Power Plan,’ Heller said...

“But on the other hand, we can't just sit by and twiddle our thumbs and hope that the thing blows up,’ Heller said. ‘We do recognize that if it's not this, it's going to be something else, because the Supreme Court has given the EPA the jurisdiction to do something’ to control greenhouse gas emissions, he said.

“We've got to try to figure out how we can comply and put our customers and members in the best position if this thing does meet the legal challenges and move forward. And personally, I think it probably will,’ he said in a recent interview.”

Otter Tail Power Company

- Serves Minnesota, North Dakota, South Dakota

“How one Midwestern state is plowing ahead with climate rules” ([ClimateWire](#), Feb. 16, 2016)

“[Otter Tail] will remain at the negotiating table in Minnesota, since the current ‘planning process will form the foundation of future efforts -- regardless of whether the CPP ultimately moves forward.”

South / Southeast

Dominion Power

- Serves Virginia and North Carolina
- [Generation mix](#) in 2015: 30% nuclear, 26% coal, 23% natural gas, 3% renewable, 18% other
- Dominion's [carbon intensity](#) (emissions per unit of energy produced) have dropped 28% from 2000 levels
- [Goals](#): Dominion aims to achieve 15% renewable generation by 2025 in Virginia, and 12.5% renewable by 2021 in N.C.
- Dominion is supporting the CPP in court.

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“[Dominion Resources Inc.](#) also has no plans to back off the planned retirement of two older coal units at its [Yorktown](#) plant in the wake of Trump's victory and despite [challenges](#) tied to increased [transmission infrastructure needs](#) following the shutdown. Yorktown units 1 and 2, comprising 327 MW, are targeted to be shut down in 2017.

“Dominion Virginia Power spokeswoman Bonita Harris said the Yorktown units are ‘aging facilities’ that were built in the 1950s and do not meet current emissions limits. The U.S. EPA, in April, [granted](#) a one-year extension to exempt the Yorktown units from the Mercury and Air Toxics Standards for reliability and other critical reasons. Harris, however, said Dominion still needs to retire the two coal units in April 2017 when the EPA order expires.

“It's important to know that the MATS rule, which led to the closure of the coal units at Yorktown, is a final rule that has been in place for several year s,’ Harris said. ‘It would take several months if not a year or more for the EPA to propose revisions, accept comment, review and respond to comments, and adopt the final language. So a new administration couldn't just change it easily.’”

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

Dominion spokesman David Botkins, said "We will work constructively with the Commonwealth and other stakeholders on a compliance plan that has our customers as the first priority, ensures reliability, and maintains a diverse mix of electric generation."

Dominion defends rule's goals as 'feasible' ([ClimateWire](#), Apr. 6, 2016)

“Energy giant Dominion Resources Inc. is making a strong business case in favor of U.S. EPA’s Clean Power Plan, telling a federal appeals court that compliance with the rule to

curb carbon emission from power plants is ‘feasible’ and that ‘effects on power plants and customers can be successfully managed’ with market-based tools.

...

“[A Dominion spokesman said that the amicus] brief ‘endorses the widely held and long-standing view that the Clean Air Act allows and encourages the use of market-based programs.’”

Dominion Virginia Power moves ahead with CPP compliance ([SNL](#))

“Dominion Virginia Power spokeswoman Janell Hancock said her company will continue to move forward on the Clean Power Plan's original timetable despite uncertainty surrounding the rule's future.”

Duke Energy

- Duke Energy serves Florida, Indiana, North Carolina, Ohio, and South Carolina.
- The company owns 52.7 GW of generation capacity and supplies 7.4 million customers.
- [Generation mix](#): In 2011: 51% nuclear, 45% coal, 1% natural gas, 1% hydropower. In 2031 (projected): 52% nuclear, 29% coal, 9% natural gas, 6% hydro and renewables.
- [Carbon emissions](#): in 2015, Duke’s carbon emissions fell 28% below 2005 levels.

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“Duke Energy plans to retire two [Crystal River](#) coal units in Florida in 2018 and all five units at its [G.G. Allen](#) facility by 2028. The company is also retiring its 384-MW [Asheville](#) coal plant in North Carolina in 2019 and will [replace it](#) with the 560-MW [Asheville combined-cycle](#) gas plant.”

“Cheap Gas Tests Trump’s Promise to Revive Coal” ([WSJ](#), Nov. 13, 2016)

“The percentage of electricity Duke generates by burning coal has steadily dropped from 58% in 2005 to 35% in 2015, mirroring a nationwide trend. The company closed 40 coal plants in the last five years and expects its coal-fired power generation to keep dropping until it stabilizes at 23% in 2030.

...

“‘Markets are driving a lot of the behavior,’ said Tom Williams, a spokesman for Duke. ‘Regardless of what happens to the Clean Power Plan, we’ll continue to move toward a lower carbon energy mix.’”

“Clean Power Plan or not, Duke is moving on renewables – CEO”
([EnergyWire](#), Feb. 19, 2016)

“Duke Energy Corp. will continue on its five-year plan to transition to a cleaner electric and gas company regardless of what happens with the Obama administration's signature rule to cut greenhouse gas emissions, the company's chief executive officer said yesterday.

“Lynn Good laid out the company's plan to invest in renewable energy, natural gas and grid modernization during its 2015 earnings call with analysts. This multibillion-dollar plan -- designed to coincide with 4 to 6 percent earnings growth through 2020 -- will stay in place even if there's a possibility that U.S. EPA's Clean Power Plan does not.

“As I look at this five-year plan, whether there's a stay on the Clean Power Plan or not, we believe the plan that we're on is one that makes sense for our customers and our communities and our states,’ Good said, responding to an analyst's question about what the Supreme Court's ruling to halt the rule meant for Duke and the states it serves.

...

“The company will continue its transition away from coal toward natural gas and renewables. Last year, it installed 600 megawatts of wind and solar, and going forward it plans to spend \$3 billion to \$5 billion in its commercial renewable arm and in natural gas pipelines.

...

Any new generation likely will be in natural gas and renewables ‘as we continue to build an energy system for the future and reduce emissions even further,’ [CFO Steve] Young said.”

“Duke CEO Sees Coal Entirely Disappearing From Its Power Mix”
([Bloomberg](#), Sep. 28, 2016)

“CEO [Lynn Good] is setting up Duke for the day when coal is no longer part of the equation at the Charlotte, North Carolina-based company as policies to tackle climate change gain momentum.

...

“Duke’s shift away from coal mirrors the trend of the country at large. Since 2008, the utility’s slashed the fossil fuel’s share in its overall electricity generation from about 60 percent to roughly a third, Good said. Between 2011 and 2015, it shut coal-fired plants capable of generating about 4,760 megawatts of electricity and it plans to close still more by 2020, according to the company’s [website](#).”

Entergy Corporation

- Serves Arkansas, Louisiana, Mississippi, and Texas, and owns 10 additional nuclear plants in the Midwest, Northeast, and Southern U.S.
- Entergy is challenging the CPP in court.

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

"Entergy representatives will continue to engage with our states and stakeholders while we await the court's decision," said Chuck Barlow, vice president of environmental strategy and policy.

Reaction to the stay ([SNL](#), Feb. 22, 2016)

"Entergy Corp similarly said the Clean Power Plan stay does not change its commitment to maintaining CO2 emissions from its power plants and from controllable power purchases through 2020 at 20% below year-2000 levels."

Florida Power & Light Co.

- FPL serves more than 4.6 million customers in parts of Florida.
- FPL is a subsidiary of NextEra Energy.
- [Generation mix](#) in 2015: 69% natural gas, 22% nuclear, 4% coal, <1% solar, 5% purchased power.

"FPL shuts down Cedar Bay coal-fired power plant, helping the environment and saving customers more than \$70 million" ([Press Release](#), Dec. 21, 2016)

"Florida Power & Light Company (FPL) today announced plans to formally retire the Cedar Bay Generating Plant, a 250-megawatt coal-fired facility located in Jacksonville, Fla., on Dec. 31, 2016. FPL purchased the plant in 2015 with the intention of phasing it out of service in this time frame.

"Prior to the acquisition, FPL had been obligated to purchase power from the plant under a 1988 Power Purchase Agreement with the plant's previous owners. That agreement had become uneconomic because FPL generates far cleaner energy today at a much lower cost by investing heavily in modernizing its system.

"Buying and shutting down old, inefficient coal plants is unprecedented in America," said Eric Silagy, president and CEO of FPL. "I'm very proud of our employees for proposing this innovative approach that's environmentally beneficial and saves customers millions of dollars."

"In fact, FPL is cleaner today than the 2030 carbon emissions rate goal for Florida outlined by the U.S. Environmental Protection Agency's (EPA) Clean Power Plan. At the same time, FPL's typical residential customer bills are about 30 percent lower than the national average."

...

"FPL has also invested successfully to increase its use of zero-emissions solar power. In 2016, the company has installed more than 1 million new solar panels in Florida, and

plans to install significantly more solar every year through at least 2020. The new panels were installed at three new universal-scale solar energy centers, which together will provide approximately 224 megawatts of generating capacity, making them among the very largest solar facilities in the eastern U.S.”

Southern Company

- Southern Company’s electric utilities serve 4.4 million people in parts of Alabama, Florida, Georgia, and Mississippi.
- Wholesale energy subsidiary [Southern Power](#) owns or operates 12,300 MW of generating capacity in 11 states.
- Southern Co. [generation mix](#) in 2015: 47% natural gas, 33% coal, 16% nuclear, 4% renewables, hydropower, and other.

“Southern Company subsidiary announces strategic wind development agreement” ([Press Release](#), Dec. 30, 2016)

“As part of the company's renewable development strategy, Southern Company subsidiary Southern Power today announced a joint development agreement with Renewable Energy Systems Americas Inc. (RES) to develop and construct approximately 3,000 megawatts (MW) across 10 projects with commercial operation dates between 2018 and 2020. Additionally, Southern Power has signed agreements to purchase wind turbine equipment from both Siemens and Vestas for use at the facilities.

...

“Today, Southern Power owns more than 3,000 MW of renewable generation across 35 solar, wind and biomass facilities either announced, acquired or under construction. In total, the Southern Company system has added or announced more than 4,000 MW of renewable generation since 2012.”

“Electric utility leaders see no change in trajectory with Trump” ([EnergyWire](#), Dec. 19, 2016)

“[Southern Co. CEO Tom] Fanning is sanguine that a Trump administration will not try to influence the trajectory his company and others in the sector have chosen even when it comes to reducing carbon emissions. ‘This industry has the DNA to continue on that trajectory,’ [Fanning said].

...

“‘It's clear that the courts have given the EPA the right to deal with carbon in a certain way,’ Fanning said, referring to the 2007 Supreme Court decision in *Massachusetts v. EPA*.

...

“We've always had a point of view at Southern that there's a reasonable trajectory in which to move the portfolio of the United States to a lower carbon future. There's a way to transition the fleet now,' [Fanning] said.”

TECO Energy Inc.

- Serves Florida

TECO continues carbon reductions ([SNL](#))

“TECO Energy Inc. and subsidiary Tampa Electric Co. will continue to look at options to invest in reducing their carbon footprint.”

Tennessee Valley Authority

- TVA, a federally operated utility, serves 9 million people in Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina, and Virginia.
- Carbon emissions: TVA is projected to reduce carbon intensity by 40% from 2005 levels by 2020.
- Generation mix: TVA’s fossil-fuel generation decreased to 47% in FY2015 from 68% in FY2007. Estimated coal generation is 18% in FY2025.

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“Another utility staying the course is Tennessee Valley Authority, which said it has not changed plans to [retire](#) coal units at the [Johnsonville](#) and [Paradise](#) plants in 2017 as part of a [2011 agreement](#) with the EPA. The TVA also plans to retire its 750-MW [Thomas H Allen](#) coal plant in 2018.”

“Supreme Court delay of Clean Power Plan won't affect TVA” ([Times Free Press](#), Feb. 13, 2016)

“TVA President Bill Johnson said the court order Tuesday halting the Environmental Protection Agency's Clean Power Plan isn't changing plans to close more TVA coal plants. The federal utility plans to replace its coal-fired generation with lower carbon-emitting sources of power, including nuclear, natural gas, solar, hydro and wind.

“The stay of the Clean Power Plan will not affect our actions in any way,' Johnson said after a TVA board meeting in Chattanooga. ‘For us, we're probably as well positioned as anyone in the country to comply (with the EPA regulations) so I don't think this will change any of our actions or decision making. It really wasn't driving our decisions in the first place.’”

Q1 2016 SEC Filing (dated Mar. 31, 2016)

“TVA continues to support its goal of having a diversified, cleaner portfolio and responding to changing regulatory requirements including environmental regulations. Four coal-fired units at Colbert Fossil Plant were removed from service in March 2016 while construction is underway on new combined cycle natural-gas units at the Allen Fossil Plant and Paradise Fossil Plant sites and the installation of emission controls at the Gallatin Fossil Plant. The Watts Bar Nuclear Plant Unit 2 reactor is expected to reach initial criticality in May 2016 with commercial operation in summer 2016 at a total estimated project cost of \$4.7 billion. These initiatives are expected to provide more flexibility to meet demand under a variety of future scenarios. TVA continues to review the Clean Power Plan, and these actions, in conjunction with other initiatives already undertaken by TVA, have positioned TVA well in regards to carbon emission reductions.

West

Arizona Public Service (APS)

- APS serves about 1.2 million customers in central Arizona.
- Generation mix in 2017 (projected): 27% coal, 26% nuclear, 23% natural gas, 11% renewables. 2032 (projected): 36% natural gas, 14% coal, 18% renewable.

“APS Reaches Major Solar Milestone; Tops Gigawatt of Solar Energy” **([BusinessWire](#), Oct. 7, 2016)**

“This summer, APS surpassed one gigawatt of solar energy capacity, becoming the only utility outside of California to achieve this milestone.

...

“APS customers benefit from the fact that when you include energy from APS’s other renewable energy sources — wind, geothermal, biomass and biogas — and the Palo Verde Nuclear Generating Station, nearly half of all the power on APS’s system is carbon-free,” said [Tammy McLeod](#), APS Vice President of Resource Management. ‘A cleaner energy mix is a top priority for us, with solar playing an important role.’”

PacifiCorp / Rocky Mountain Power

- The Berkshire Hathaway subsidiary serves 1.8 million customers in six Western states
- Generation mix: In 2015, PacifiCorp’s generation mix was 61% coal, 14% natural gas, 6% hydro, and 9% non-hydro renewable. By 2030, PacifiCorp projects generating 36% coal, 35% natural gas, 13% demand-side management (energy efficiency), 10% non-hydro renewable, and 5% hydro.

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“[PacifiCorp](#) said the six-state utility has obligations to comply with multiple state laws and has fixed long-term schedules for capital costs, so nothing can change on short notice. PacifiCorp owns a stake in the Craig and [Colstrip](#) coal plants. Colstrip units 1 and 2 in Montana will retire in 2022, taking another 614 MW of coal capacity off the grid.”

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“We're still going to continue to look to ways to cost-effectively expand our commitment to renewable resources,” said Ry Schwark, a spokesman for PacifiCorp, which... intends to “continue to work with states as they develop their plans.”

Rocky Mountain Power reaction to the stay ([Inside Energy](#), Feb. 11, 2016)

“We've communicated pretty clear in recent years that we believe the transition away from coal is going to happen,’ said Dave Eskelsen, a spokesman for Rocky Mountain Power, Wyoming’s largest utility. All of the company’s recent power additions have been renewables or natural gas.”

(Rocky Mountain Power is one of two PacifiCorp utilities)

PNM Resources

- Serves New Mexico and Texas
- [Generation mix](#) in 2012: 62% coal, 22% nuclear, 10% natural gas, 6% wind and solar

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“Likewise, PNM Resources Inc. spokesman Pahl Shipley said the company has no change in plans for retiring two of the four units at the [San Juan](#) coal plant in New Mexico by the end of 2017, accounting for 837 MW of capacity. The [plans](#) were developed with the EPA and the New Mexico Environment Department to comply with regional haze regulations of the Clean Air Act, Shipley said.”

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“Pahl Shipley, director of corporate communications at New Mexico-based PNM Resources Inc., said the stay doesn't affect the company's plan to lower the use of coal significantly by retiring two units at the San Juan Generating Station. ‘We'll monitor developments and continue to work with the state, but regardless of the outcome the company is moving forward to cut carbon emissions and add cleaner resources to our portfolio, including solar and natural gas, Shipley said.”

Q1 2016 SEC Filing (dated Mar. 31, 2016)

“PNM estimates that implementation of the BART plan at SJGS that required the installation of SNCRs on Units 1 and 4 by early 2016, which has been completed, and the retirement of SJGS Units 2 and 3 by the end of 2017 as described in Note 11, should provide a significant step for New Mexico to meet its ultimate compliance with Section 111(d).

...

“PNM believes that implementation of the BART plan for SJGS (Note 11) should provide a significant step towards compliance with the Clean Power Plan, should it prevail, or other GHG reduction requirements.”

PG&E

- Serves the California Bay Area
- Generation mix in 2014: 24% natural gas, 21% nuclear, 27% renewable (non-hydro), 8% hydro
- PG&E is supporting the CPP in court.

“Statements from Companies and Investors in Support of EPA’s Clean Power Plan in Wake of Supreme Court Ruling” ([Ceres press release](#), Feb. 11, 2016)

“Pacific Gas and Electric Co. said it was ‘disappointed’ by the ruling. ‘We believe EPA has ample legal authority to pursue the Clean Power Plan,’ said Vice President of Federal Affairs and Policy Melissa Lavinson, calling EPA’s rule ‘measured and reasonable.’ ‘PG&E will continue to support the Clean Power Plan and will move forward with the many steps we are taking to support California’s commitments to reduce greenhouse gases.’

Portland General Electric

- [Serves](#) 45% of Oregon residents in and around the Portland region
- [Generation mix](#) in 2015: 25% natural gas, 22% coal, 16% hydropower, 11% wind and solar, 26% purchased power

2016 Integrated Resource Plan ([Nov. 2016](#))

“This IRP puts PGE on track for achieving the state’s carbon greenhouse gas reduction goals for the electric power sector through at least 2040, and ahead of schedule for integrating additional renewables.

...

“Under the law, 50% of the energy PGE delivers to customers must come from qualifying renewable resources by 2040. Today, about 15 percent of our energy comes from qualifying renewables. To meet this aggressive timeline for renewable power expansion, and to take advantage of production tax credits to keep costs lower for our customers, the plan calls for adding 175 average megawatts of new renewable resources, which is equivalent to 515 MW nameplate of new wind resources.

“The new law also transitions Oregon off coal-fired electricity. The Oregon Public Utility Commission (Commission) previously acknowledged PGE’s plans to stop burning coal at our Boardman Plant by year-end 2020. Under the new law, PGE will stop using any coal resources to serve our customers no later than 2035.”

Puget Sound Energy

- Serves parts of Washington state
- About 46% of PSE's energy comes from power plants it owns. 2014 [fuel mix for electricity delivered](#): 36% hydro, 35% coal, 24% natural gas, 3% wind

“Puget Sound Energy agreement to shut part of Montana coal- power plant” ([The Seattle Times](#), July 12, 2016)

“Puget Sound Energy has announced an agreement to close two of its Montana coal-power generating units by July 2022. The Colstrip Generating Station is considered one of the highest-polluting coal plants in the country.

“Under a settlement with the Sierra Club and Montana Environmental Information Center, PSE and Talen Energy will shut down the two oldest units of the [Colstrip Generating Station](#), which the companies co-own, by July 1, 2022.

“In return, the environmental organizations will drop their allegations that the plant has violated the federal Clean Air Act, which stem from a 2013 lawsuit filed with the U.S. District Court in Missoula.

...

“The station is considered one of the major polluting coal facilities in the country, according to studies by environmental-advocacy groups using government data. The settlement allows PSE to avoid potentially costly pollution controls at the two units in the future, as well as move toward energy that’s considered cleaner than coal.

“Our customers expect PSE to be good stewards of the environment and to keep energy costs reasonable,’ Kimberly Harris, PSE’s president and CEO, said in a written statement. ‘The eventual closure of Units 1 and 2 at Colstrip without the risk of further legal proceedings or additional significant investments in the units to meet regulatory requirements enables us to accomplish both of these goals.’”

Salt River Project

- The public utility serves Central Arizona, including most of the Phoenix area
- [Generation mix](#) in FY2013: 55% coal, 19% nuclear, 12% natural gas, 10% “sustainable” (includes renewable energy, biomass, landfill gas). By 2020, SRP aims to reach 20% “sustainable” generation.

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“While President-elect Trump has indicated a desire to address certain environmental regulations, it is much too early to make any assumptions and determine if that will indeed occur and what it would look like,’ Salt River Project spokesman Scott Harelson said by email. ‘Our current plans for future operations are not impacted by the election

results in the near-term; operations of our facilities and efforts to meet environmental regulations continue as planned.’

“Salt River has a stake in the [Craig](#) coal plant in Colorado, which will retire its 428-MW unit 1 in 2025.”

“SRP reduces power supply carbon intensity” ([The Arizona Republic](#), Sep. 29, 2016)

“The company reduced the carbon intensity of its power supply 23 percent from 2006 to 2014, and has plans to achieve a 40 percent reduction system-wide by 2043.

“Tom Cooper, director of resource planning and development, said SRP will evaluate which of the generators at the six coal plants SRP participates in need to close to meet that goal.

“As we look out to 2042, doing the math, it is pretty clear we can’t get there without closing some units from our coal plants,’ he said.”

Southern California Edison

- Serves Central and Southern California
- Generation mix in 2014: 27% natural gas, 24% renewable, 6% nuclear, 40% “unspecified”
- SCE is supporting the CPP in court.

Reaction to the stay ([EnergyWire](#), Feb. 11, 2016)

“Southern California Edison expressed disappointment in the court's ruling but added that ‘SCE supports the Clean Power Plan and will maintain an active role in supporting California's efforts to reduce greenhouse gas emissions, including support for renewable energy, transportation electrification, energy efficiency and innovative, clean energy technologies.’”

Tri-State Generation

- Rural electric cooperative serves Colorado, Nebraska, New Mexico, and Wyoming
- 2014 generation mix (p. 23): 59% coal, 24% renewable, 2% natural gas

“Trump election hasn't changed utilities' coal retirement plans” ([SNL](#), Nov. 21, 2016)

“Coal-heavy utility Tri-State Generation and Transmission Association Inc., which also owns a stake in the Craig plant, said it is bound to its decision to retire Craig unit 1 and its 100-MW [Nucla](#) coal plant by the EPA's regional haze rule, aimed at improving air quality in national parks and wilderness areas.

“This specific rule has withstood numerous legal and regulatory challenges. Tri-State...must continue to comply with the rule as long as it is in place,’ Tri-State spokesman Lee Boughy said. ‘We are moving forward with retirement activities and developing a transition plan for the employees and communities.’”

“More than 500 megawatts of coal-based power to be shut down in Colorado” (*Denver Business Journal*, Sep. 1, 2016)

“More than 500 megawatts of coal-based power produced at two power plants will be shuttered in Colorado over the next decade under an agreement announced Thursday by the state health department, the owners of the power plants and environmental groups.

“The announcement from the Colorado Department of Public Health and Environment said that the shutdown of the coal-based power plants will eliminate ‘millions of tons of air pollution,’ including pollutants that contribute to the formation of ozone, and emissions that cause the regional haze that obscures vistas in state and national parks and wilderness areas.

“The agreement calls for the shutdown of:

- The 100-megawatt, coal-fired Nucla Station, which is located in Nucla, Colorado, to be “retired” by December 31, 2022. The New Horizon Mine, which supplies coal to Nucla Station, also will shut down and halt mining when Nucla’s operations end.
- The 427-megawatt Craig Station Unit 1, which is part of a three-unit, coal-fired generating facility in Craig, will be shut down by December 31, 2025.”