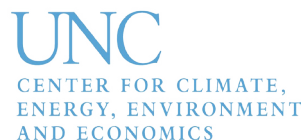


Illuminating the Energy Policy Agenda: Electricity Sector Issues Facing the Next Administration

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Part 5: Economic Development



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Review

The work reported in this publication benefited from review from experts in the field. The preliminary analysis was shared with external parties, and this publication reflects their feedback. However, this publication has not undergone a formal review process due to the timely nature of its contents.

SUMMARY

The next president will take office during a period of rapid market and regulatory change for the U.S. electricity sector. Due to statutory deadlines, pending lawsuits, and agency rulemakings—if not by choice—the next president will tackle energy policy. To prepare policy makers for what promises to be a dynamic period in electricity law and policy, this report provides an overview of each of six key areas of federal policy and, for each area, identifies the decision points—in time or circumstances—that will force the next administration to make choices that shape the future of the grid. For each decision point, the report explores the next president's options and the federal agencies and authorities that he or she could deploy.

Part 5 of this report on electricity sector issues facing the next U.S. presidential administration focuses on the economic development implications of the changing electricity sector. U.S.-based manufacturing sectors are benefitting from low natural gas prices and employment in renewable-energy-related fields continues to expand. Although these trends are having positive economic impacts in many parts of the United States, the pace and scope of the nation's energy transition is resulting in rapid job losses in many communities dependent on coal-related jobs. The federal government has numerous job creation and workforce training programs designed to assist communities and states facing economic hardship. The next administration will determine whether and how to deploy these resources to address job losses related to coal production, transport, and use.

ECONOMIC DEVELOPMENT

At a Glance

Federal Actors: U.S. Department of Agriculture (USDA), Employment and Training Administration (ETA), Economic Development Administration (EDA), U.S. Department of Labor (DoL), U.S. Department of Commerce (DoC), Dislocated Workers National Reserve, Appalachian Regional Commission, Economic Development Assistance Programs, Environmental Protection Agency (EPA).

Appointments: The next president will appoint the heads of the EPA, USDA, DoL, and DoC as well as directors in other agencies that oversee economic development programs.

Legal Authorities: Numerous authorizing statutes and budgetary provisions.

Decision Points:

- How to implement the \$9 billion Power+ Program, if Congress allocates funding to the program for FY 2017.
- How to implement workforce development provisions of the omnibus energy bill, if enacted.

Rapid changes in the electricity sector have altered the economic landscape in many parts of the country. U.S.-based manufacturing sectors, particularly energy-intensive sectors and sectors relying on natural gas as a feedstock, are benefitting from low natural gas prices.¹ Employment in renewable-energy-related fields continues to expand.² Although these trends are having a positive impact in many parts of the United States, the pace and scope of the nation's energy transition is resulting in rapid job losses in many communities dependent on coal-related jobs. The next administration will face decisions related to economic development in these communities.

Background

Job losses are not new to the coal extraction sector. Mining jobs have declined for decades while production remained relatively constant, particularly in the Appalachian region.³ However, the current job losses extend throughout the coal value chain due to the retirement of aging coal-fired power plants.⁴ According to the Bureau of Labor Statistics, 14,700 coal mining jobs were lost between 2009 and 2015.⁵ During the same period, 4,450 jobs were lost in petroleum and coal products manufacturing; 10,270 jobs were lost in electric power generation, transmission, and distribution; and 11,260 jobs were lost in rail transportation.⁶

The federal government has numerous job creation and workforce training programs designed to assist communities and states facing economic hardship due to the changes in the nation's electricity generation mix. These programs range from tax benefits, loans, grants, and education to assist with job training and incentivize business development at the local, state, and regional levels.⁷

In 2015, the Obama Administration launched the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative—an effort to provide a more coordinated federal response

to communities experiencing coal-related job losses.⁸ This executive branch initiative involves 10 federal agencies and relies on discretionary funding available through existing agency budgets. The POWER Initiative is the economic development component of the Obama Administration’s broader “POWER+ Plan” to revitalize communities affected by the ongoing energy transition, to provide health and retirement benefits to former mineworkers, and to support development of clean coal technologies.⁹

Decision Points

Future of the POWER+ Plan

The Obama Administration’s FY 2017 budget requested more than \$9 billion to fund the POWER+ Plan.¹⁰ If Congress allocates funding to the program, agencies will need to decide how to administer millions of dollars in competitive grants and loans to communities affected by changes in the coal industry. Table 1 summarizes POWER+ Plan initiatives included in the FY 2017 budget and identifies the degree of discretion provided to implementing agencies. Within the bounds described, federal agencies will decide how to implement programs, where to focus their efforts, and what types of activities to support.

Table 1. POWER+ plan administration decisions, FY2017

Program	Initiatives	FY2017 budget allocation	Limitations
Department of Labor, Dislocated Workers National Reserve	Provides grants for re-employment services, job training, subsidized employment, and supportive services from funds for dislocated workers from coal mines and coal-fired power plants	\$20 million	Project must respond to a mass layoff or plant closing in the coal industry
Appalachian Regional Commission	Provides grants in the Appalachian region to support entrepreneurship and infrastructure in communities affected by changes in the coal industry	\$50 million	Project must target an economically-distressed community in 1 of 13 Appalachian states
Department of Commerce, Economic Development Assistance Programs	Coordinates the POWER Initiative with communities and federal agencies; provides grants to economically distressed communities for job creation and economic growth	\$215 million	Funding is no longer reserved for projects specific to coal communities
Environmental Protection Agency, Brownfields Program	Provides grants for communities to assess and clean up brownfield sites related to retirement of coal-fired power plants	\$5 million	Project must target a brownfield related to the changing coal economy with a comprehensive mitigation strategy
Department of Agriculture, Rural Economic	Provides grants and loans for rural utilities that will create and retain employment in rural areas where	\$97 million	Funding is not reserved for projects specific to coal communities

Program	Initiatives	FY2017 budget allocation	Limitations
Development Loan and Grant Program	changes in the coal industry are causing economic distress		
Department of the Interior, Abandoned Mine Reclamation Fund	Funds mine reclamation projects specifically designed to create jobs and revitalize coal mine communities	\$200 million per year for five years	Allocations based on states' historic coal production

Source: Office of Management and Budget, "Investing in Coal Communities, Workers, and Technology: The Power+ Plan," https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/fact_sheets/Investing%20in%20Coal%20%20Communities.pdf.

Energy Bill Provisions

The U.S. House of Representatives and the U.S. Senate each passed versions of a comprehensive energy bill in 2016.¹¹ Although it is unclear whether Congress will successfully consolidate and pass the bill into law, this legislation contains examples of energy workforce development programs being considered by the federal government.

The Senate version of the bill proposes three workforce training initiatives to be managed by the DOE. A 21st Century Workforce Advisory Board would develop a strategy for meeting current and future energy sector needs through the support and development of a skilled workforce. A pilot program would award competitive grants to job training programs that result in industry credentials. And finally, the DOE would provide grants to training programs that certify students in the installation of energy-efficient building technologies.

The House version of the bill creates no funding initiatives for energy workforce development, but it states that energy and manufacturing job training is a priority for the nation. It also establishes a DOE clearinghouse to disseminate information about existing workforce development programs.

If these provisions become law, either through the bill pending before the current Congress or through action by the next Congress, the next administration may face many choices as it considers how to implement the new workforce initiatives. If Congress fails to resolve the differences in the competing versions of the bill, then the next administration must determine the degree to which it wishes to target existing job training and economic development programs to assist communities facing economic hardship due to the changes under way in the electricity sector.

ENDNOTES

¹ See, e.g., Michael E. Porter et al., *America's Unconventional Energy Opportunity*, Harvard Business School and the Boston Consulting Group, at 20-21, June 2015, <http://www.hbs.edu/competitiveness/Documents/america-unconventional-energy-opportunity.pdf>; Catherine Hausman & Ryan Kellogg, *Welfare and Distributional Implications of Shale Gas*, Brookings Papers on Economic Activity, Mar. 2015, at 26-33, https://www.brookings.edu/wp-content/uploads/2016/07/2015a_hausman.pdf; William R. Melick, *The Energy Boom and Manufacturing in the United States*, Board of Governors of the Federal Reserve System International Finance Discussion Papers No. 1108, June 2014, <https://www.federalreserve.gov/pubs/ifdp/2014/1108/ifdp1108.pdf> (estimating that “the fall in the price of natural gas since 2006 is associated with a 2 to 3 percent increase in activity for the entire manufacturing sector, with much larger effects of 30 percent or more for the most energy intensive industries.”).

² See, e.g., Katie Fehrenbacher, *Solar Jobs Boom in the U.S., While Oil, Coal Struggle*, FORTUNE, Jan. 12, 2016, <http://fortune.com/2016/01/12/solar-jobs-boom/>; B.W. RESEARCH, U.S. ENERGY AND EMPLOYMENT REPORT 28–29 (2015) (report prepared for the U.S. DOE); U.S. EIA, *Power Sector Employment Declines, except for Renewable Electricity Generators*, TODAY IN ENERGY, Dec. 19, 2014, <http://www.eia.gov/todayinenergy/detail.cfm?id=19271>.

³ For example, coal employment in Kentucky and West Virginia dropped by nearly half from 1983 to 2011, while output dropped just 2%. Patrick Reis, *Coal Country's Decline has a Long History*, *The Atlantic*, Oct. 31, 2013 (citing Mine Safety and Health Administration data, available at <http://arlweb.msha.gov/OpenGovernmentData/OGIMSHA.asp>). See also SUE TIERNEY, ANALYSIS GROUP, *THE U.S. COAL INDUSTRY: CHALLENGING TRANSITIONS IN THE 21ST CENTURY* (2016) at 4.

⁴ A Duke University study of jobs throughout the entire coal value chain (including mining, transport, electricity generation, and related services) between 2008 and 2012 estimates that more than 49,000 jobs were lost—a 12% reduction nationwide. Drew Haerer & Lincoln Pratson, *Employment trends in the U.S. Electricity Sector, 2008–2012*, 82 ENERGY POL'Y 85, 85 (2015). This figure does not include construction, installation, and manufacture jobs or induced jobs.

⁵ BUREAU LABOR STATS., U.S. DEP'T OF LABOR, OCCUPATIONAL EMPLOYMENT STATISTICS, MAY 2009– MAY 2015 (Mar. 30, 2016), <http://www.bls.gov/oes/tables.htm>.

⁶ *Id.* The Bureau of Labor Statistics notes that these data may not be ideal for making comparisons over time due to changes in how data is collected and classified.

⁷ See, e.g., U.S. DEP'T OF LABOR, EMP'T AND TRAINING ADMIN., *About ETA*, <https://www.doleta.gov/etainfo/> (last visited June 27, 2016); U.S. DEP'T OF AGRIC., FY 2015: BUDGET SUMMARY AND ANNUAL PERFORMANCE PLAN (2015), 1, 17; Press Release, Appalachian Reg'l Comm'n, Obama Administration Announces \$65.8 Million Available for Economic and Workforce Development in Coal-Impacted Communities (Mar. 17, 2016), <https://www.eda.gov/news/press-releases/2016/03/17/power.htm>; U.S. DOE, Federal Energy and Manufacturing Workforce Training Programs <http://energy.gov/eere/education/federal-energy-and-manufacturing-workforce-training-programs>.

⁸ White House, *Fact Sheet: Administration Announces New Economic and Workforce Development Resources for Coal Communities through POWER Initiative*, Aug. 24, 2016, <https://www.whitehouse.gov/the-press-office/2016/08/24/fact-sheet-administration-announces-new-economic-and-workforce>.

⁹ OMB, *INVESTING IN COAL COMMUNITIES, WORKERS, AND TECHNOLOGY: THE POWER+ PLAN*, https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/fact_sheets/Investing%20in%20Coal%20Communities.pdf (last visited June 23, 2016).

¹⁰ *Id.*

¹¹ Energy Policy Modernization Act of 2016, S. 2012, 114th Cong. (2016) (passed by Senate, Apr. 20, 2016; Engrossed Amendment as Agreed to by House passed May 25, 2016).

Nicholas Institute for Environmental Policy Solutions

The Nicholas Institute for Environmental Policy Solutions at Duke University is a nonpartisan institute founded in 2005 to help decision makers in government, the private sector, and the nonprofit community address critical environmental challenges. The Nicholas Institute responds to the demand for high-quality and timely data and acts as an “honest broker” in policy debates by convening and fostering open, ongoing dialogue between stakeholders on all sides of the issues and providing policy-relevant analysis based on academic research. The Nicholas Institute’s leadership and staff leverage the broad expertise of Duke University as well as public and private partners worldwide. Since its inception, the Nicholas Institute has earned a distinguished reputation for its innovative approach to developing multilateral, nonpartisan, and economically viable solutions to pressing environmental challenges. www.nicholasinstitute.duke.edu

Center for Climate, Energy, Environment, and Economics (CE3)

CE3 at the UNC School of Law exists to provide advanced student education and policy and legal examination of issues surrounding the law of climate, energy, environment, and economic development, with particular attention to the intersection of these issues. Addressing this intersection requires engaging in (1) the holistic needs of communities; (2) the role of innovative technologies, finance, and the private sector in protecting our environment and providing for development; and (3) protecting the environment and climate systems upon which humanity relies. www.law.unc.edu/centers/ce3

Environmental Law Program (ELP)

ELP at Harvard Law School features dedicated students, innovative clinical instruction, and renowned professors with real-world expertise and passion for teaching. Together, we employ rigorous legal analysis and policy savvy to tackle today’s most pressing environmental challenges. At ELP, students have the opportunity to explore cutting-edge environmental issues in the classroom, engage with experts at our special events and programs, and practice environmental law for real clients in the Emmett Environmental Law and Policy Clinic. With the establishment of the ELP Policy Initiative in 2012, ELP now offers a comprehensive approach to environmental problem-solving. www.environment.law.harvard.edu

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