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State and Local Governments Address the Twin Challenges of Climate Change and Energy Alternatives

Irma S. Russell
University of Montana School of Law, irma.russell@umontana.edu

Jeffery S. Dennis

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Lawmakers, regulators, and the world all face a perfect storm of energy and climate challenges, and that storm is converging on traditional electricity policy. The cost of electricity to consumers is rising at an alarming rate. At the same time, news of global climate change and of the United States' role in it has focused all levels of government on the issue of greenhouse gas (GHG) emissions, particularly from the energy sector. The increasing scientific and public consensus regarding the threat of climate change, and the contribution of our energy use to that threat, have moved consumers and policymakers alike to demand alternatives to fossil fuel sources of generation.

However, with an aging infrastructure and dwindling electricity supply, new facilities are needed to bring alternative energy supplies. The twin challenges of increasing demand and fears of global climate change converge on the electric utility sector, with the result that lawmakers and regulators at all government levels face new dimensions to the competing priorities of encouraging the introduction of alternative sources of supply, addressing the problem of climate change, and maintaining cheap and reliable energy.

In the absence of a comprehensive federal framework, states, local governments, and regional groups have embarked on a number of new programs and initiatives to address these complex issues. The developments of the last few years show that state and local governments and regional bodies have a place as regulators in the climate change arena. Indeed, regional bodies and state and local governments have moved to the forefront in carbon regulation. Nevertheless, federal legislation currently under consideration does not include an explicit role for these governments. "Six comprehensive climate change bills are now pending in Congress, and all are focused predominately on the role of the federal government." Robert B. McKinstry, John C. Dernbach, Thomas D. Peterson, *Federal Climate Change Legislation as if the States Matter*, 22 NATURAL RES. & ENV'T 3 (Winter 2008).

Ms. Russell is NELPI Professor of Law at the University of Tulsa College of Law, and Mr. Dennis is an attorney with the Federal Energy Regulatory Commission. The views expressed in this article represent those of the authors and do not necessarily represent the views of the Federal Energy Regulatory Commission. They may be reached at irma-russell@utulsa.edu and jeffery.dennis@ferc.gov.

Given the combined pressures of climate change and rising energy prices, and the absence of comprehensive federal action, state and local governments—as they often have in the past—are once again "laboratories" for testing new policies and regulatory approaches. Policymakers at these levels of government are instituting programs to combat climate change. At the same time, both as a result of new climate change policies and in response to higher electricity costs and enhanced need for new sources of electricity supply, state lawmakers and regulators are enacting new energy policies, and in many respects are moving into the forefront in this area as well. The actions they take now are changing electricity policy in significant ways, and putting new pressure on traditional methods of electricity regulation.

Traditional Regulation Under Pressure

The traditional model used by states to regulate electric utilities was centered on a relatively simple "cost of service" approach. This cost-based system of regulation required that the utilities make the most cost-effective (usually, least expensive) and prudent investments. State regulators monitored the utilities, overseeing utility service and approving the investments. The rates for electric service approved by regulators and paid by consumers allowed utilities to recover the cost of those investments, plus a reasonable rate of return. Under this system, one incentive dominated in utility decision making: sell more electricity, and make more money. As the utility served increasing customer demand, it earned a higher return. Even in states that attempted to restructure their electricity industries and introduce competition, the same incentives continue to dominate.

This regulatory model (and its resulting incentives) becomes problematic, however, when the least expensive sources of electricity supply from a monetary perspective cannot be viewed as prudent in light of their contribution to GHG emissions. Moreover, the best alternative may not be building a new supply source to serve increased demand, but actually reducing demand and, thus, reducing the need for that supply source. The traditional model's incentive to expand usage, and thereby increase profits for the utility, encourages ever-increasing demand and discourages actions that could curb demand. In light of the fact that GHG emissions result from combustion of biofuels as well as fossil fuels, the volume-based incentive of the traditional model undermines the goal of reducing GHG production—whatever the source of combustion utilized.

The federal government's measure of carbon intensity, which folds production levels into the measure, exacerbates this problem by making it impossible to evaluate progress toward actual reduction of GHG emissions. Deduction of GHG in relation to production (intensity) continues the incentives for production of goods (and carbon) without regard to the need (or absence of need) for the goods produced. The carbon emissions' measure of intensity improves as long as the ratio of production to carbon improves. A rise in the level of production shows a benefit in the carbon intensity measure if production rises and carbon emission levels remain the same. In fact, even when the absolute level of carbon increases, the intensity measure nevertheless shows improvement if the production level rises more than the emissions level. Thus, the intensity measure used does not reveal whether carbon emissions are reduced. Likewise, the utility of the good is not a factor for consideration. Even factoring into the equation the costs associated with GHG emissions would not mean that the regulatory mechanisms based on the quantity-profit model would correct for such costs.

The strain on the traditional mode of regulating utility service at the state level has become more pronounced as state and local governments and regional organizations have adopted measures aimed at combating global climate change. Scientists estimate that approximately 55 percent of global climate change is attributable to carbon dioxide emissions from coal and petroleum use. *See* www.powerscorecard.org/sc_details.cfm (last visited Jan. 2, 2007). The Environmental Protection Agency (EPA) and other entities have also recognized the link between climate change and energy use, particularly with regard to transportation and power plants. *See* 2006–2011 EPA Strategic Plan, presented to Congress September 29, 2006, at www.epa.gov/ocfo/plan/plan.htm.

As a result of the link between power plants and climate change, electricity generators are a central target of efforts to address climate change at the state, local, and regional levels. For example, the initial phase of the Regional Greenhouse Gas Initiative (RGGI), a well-documented agreement among nine northeastern states to limit GHG emissions, is entirely directed at "stabilizing and then reducing" carbon dioxide emissions from fossil-fueled power plants larger than 25 megawatts. *See* Regional Greenhouse Gas Initiative, Memorandum of Understanding (Dec. 20, 2005). Recent climate change legislation in Washington State is also directed entirely at electric utilities, establishing emissions performance standards for certain power plants. 2007 Wash. Sess. Laws Ch. 307. California public utility regulators have also established interim power plant emissions performance standards as part of their implementation of that state's climate change program. *See In re* Integration of Greenhouse Gas Emissions Standards, 2007 Cal. PUC LEXIS 66 (Jan. 25, 2007). An executive order issued in July 2007 by Governor Charlie Christ of Florida provides another example, specifically requiring the development of rules to limit utility sector emissions. Fla. Gov. Exec. Order No. 07-127 (July 13, 2007).

Local governments are also acting in ways that will impact electricity. By the end of 2007, over 710 cities had signed the U.S. Mayors Climate Protection Agreement, pledging to take steps to reduce the emissions of greenhouse gases. The agreement was initiated by Mayor Greg Nickels of Seattle, Washington, on February 16, 2005, the day the Kyoto Protocol took effect in the 141 nations that ratified it. On June 13, 2005, the Mayors Climate Protection Agreement was formally adopted by the U.S. Conference of Mayors. The nonbinding agreement pledges that the city will strive to meet or exceed the reduction of emissions to 7 percent below the 1990 level by the year 2012. Under the agreement, participating cities pledge to strive to achieve the Kyoto Protocol targets in their communities. The cities also have urged state governments and the federal government to enact policies to meet the GHG reduction targets suggested for the United States in the Kyoto Protocol of 7 percent reduction from 1990 levels by 2012. *See* U.S. Mayors Climate Protection Agreement, www.seattle.gov/mayor/climate (last visited Feb. 26, 2008).

The efforts of the city of Austin, Texas, provide an example of some of the ambitious initiatives at the local level that impact electricity production. Its plug-in partner campaign encourages people to sign petitions for "soft orders" of electric hybrid cars. Austin Energy, the city-owned utility, provides 214 megawatts of wind energy from West Texas wind farms and generates 13 megawatts from methane at local landfills. Austin requires all new city buildings to meet the LEED silver rating. Austin has committed to make all city facilities, operations, and fleets carbon-neutral by 2020. To accomplish this goal, Austin pledged the following measures: powering 100 percent of city facilities with renewable energy by 2012; saving 700 megawatts through energy efficiency by 2020 and with 30 percent of all energy provided by renewable resources by that year; making all new single-family homes zero net-energy capable by 2015 and increasing all new construction energy efficiency by 75 percent by that same year; taking an inventory of communitywide greenhouse gas emissions; and work with stakeholders to create a plan for reductions. *See* Press Release, City of Austin, National Coalition Launches Campaign to Urge Automakers to Produce Plug-In Hybrid Vehicles (Jan. 24, 2006), www.ci.austin.tx.us/news/2006/ae_plugin_partners.htm; Austin Energy, Power Plants, www.austinenergy.com/About%20Us/Company%20Profile/powerPlants.htm (last visited July 8, 2008); City Council of the City of Austin, Resolution No. 000608-43 (June 8, 2000), www.cityofaustin.org/edims/document.cfm?id=59126; Press Release, City of Austin, Wynn Announces Austin Climate Protection Plan (Feb. 7, 2007), www.ci.austin.tx.us/council/mw_acpp_release.htm.

Many other cities have taken comparable steps in response to the problem of global warming. *See, e.g.*, ICLEI Local Governments for Sustainability, www.iclei-usa.org/ (last visited Mar. 15, 2008). Even before state and local governments and regional bodies began addressing climate change and the contributions of energy production to GHG emissions, costs for electricity service were on the rise. As a result, electricity prices have steadily—and in some cases, dramatically—increased. According to the most recent statistics compiled by the Energy Information Administration (EIA), the average retail price for electricity increased 9.3 percent from 2005 to 2006. The EIA also reports that in fourteen states and the District of Columbia, prices rose by more than 10 percent

during this period. Additionally, the EIA reported that, since 2000, prices for all sectors have increased approximately 30 percent. In a few of the states that passed laws to introduce competition into their retail electric markets, the expiration of legislatively mandated rate caps have produced dramatic rate increases. U.S. ENERGY INFORMATION ADMINISTRATION, ELECTRIC POWER ANNUAL REPORT 2006 at 9, 57 (Nov. 2007) (hereinafter EIA).

Much of the increase in costs—and as a result, prices—can be attributed to the rising cost of fossil fuels used to generate electric power. The rise in the price of natural gas has been particularly notable. According to EIA, most of the new electric generation capacity placed in service since 1999 has been natural-gas fired, and such plants now represent 20 percent of total generation capacity. Prices for natural gas delivered as fuel to power plants, meanwhile, increased almost 95 percent between 2002 and 2006. While this increase is dramatic, costs for other fossil fuels have also increased significantly. For example, coal prices have increased about 40 percent since 2000. *See* EIA at 2–3, 7.

In the past, the environmental externalities of electricity generating technologies were more easily quantified within the traditional cost-based regulatory model described above. The costs of mitigating such externalities, by installing new scrubbers or other pollution control equipment, for example, were readily identifiable and utilities simply added such costs to the other costs of operating a power plant (such as fuel and maintenance). Utilities were permitted to recover those costs in their service rates. As a result, utility planners and regulators have a measure of confidence in assessing the cost of meeting environmental protection requirements and determining what fuel source would be the most prudent investment.

It is far more difficult to readily identify a monetary cost of mitigating the impact of climate change from a particular type of generation resource. At this point, there is no common system of GHG regulation, and no commonly accepted method of valuing the impact that limits on GHG emissions could have on the costs of operating various types of power plants. Despite the absence of a common trading platform for emissions credits, some movement in the direction of a unified method of valuing emissions traded on the market appears to be emerging. While emissions credits trading markets are beginning to emerge, until a unified valuation method fully develops, however, utilities will not have the same measure of confidence in assessing costs.

Coal-fired power plants (which make up almost 50 percent of total electric generation capacity) are more impacted by this problem than other plants. Even with the recent price increases, coal is still significantly cheaper than other fossil fuel sources used for electricity generation. *See* EIA at 3. As noted above, however, coal-fired power plants are also one of the biggest contributors to GHG emissions (as well as mercury and sulfur). Accordingly, while the exact extent cannot be accurately predicted today, the costs to operate such plants are likely to be significantly affected by any future system of GHG regulation.

Recognizing the impact of coal-fired power plants on climate change, some states are taking actions to either prohibit the construction of such plants or limit their use. For example, in 2006 Idaho enacted a two-year moratorium on the permitting of certain coal-fired power plants to allow for the study of the impacts of such plants on air and water quality. 2006 Idaho Sess. Laws 367. In 2007, Kansas environmental and health regulators became the first in the country to deny air quality permits to a coal-fired power plant based on its potential to contribute to climate change. *See, e.g.*, Bob Matyi, *Citing Climate Change, Kansas Environment Official Denies Sunflower Permit*, PLATTS COAL TRADER, Oct. 19, 2007 at 1.

Other states have legislatively set stringent emission limitations for new power plants or power supply arrangements that will impact coal plants more directly. Recent legislation passed in Montana, for example, prevents state regulators from approving any acquisition or lease of a coal-based generating resource unless it captures and sequesters at least 50 percent of its carbon dioxide emissions. H.B. 25, 60th MT Legis. Minnesota passed a similar law in 2007 that prohibits the construction of new large generating facilities (other than peaking plants fueled by natural gas) that would contribute to statewide GHG emissions. The Minnesota law also forbids long-term power purchase agreements or the importing of energy from facilities that would increase statewide emissions. These prohibitions do not apply, however, if the subject party offsets the emissions. *See* MINN. STAT. § 216H (2007). Measures like these appear intended to force the development of new emissions-limiting coal-fired power plant technologies, like carbon sequestration, creating a more active market for them.

Still, many states continue to see coal-fired generators as necessary to maintain reliable service and control rising electricity rates. Proposals to construct new coal-fired generators are meeting with approval—albeit not without controversy—in many areas, particularly in the Southeast, where utilities argue that they have less access to viable renewable resources like wind power. Kansas, in fact, provides a good example of the dilemma of coal-fired power: even after its regulators rejected a coal-fired power plant out of concern for its impact on climate change, the Kansas legislature moved to override that decision and allow the project to proceed. David Klepper, *Kansas Senate Sends Coal Plant Bill to Sebelius*, KANSAS CITY STAR (Mar. 7, 2008).

States are also recognizing the shortcomings of traditional cost-based regulation in assigning a monetary value to GHG emissions from generating sources when assessing utility supply plans and the resulting customer rates. Without a commonly accepted method for establishing the value of carbon emissions from power plants, state regulators face difficulty assessing the actual cost and potential rate impacts of utility supply proposals. One fix to this problem is to enact legislation specifically requiring utility regulators to set a value for GHG emissions to be used in considering utility supply proposals. Minnesota did just this in 2007. *See* MINN. STAT. § 216H.06 (2007). Utility regulators in other states, including California and Colorado, have developed similar "carbon adders" for use in assessing utility supply plans. For information on these and similar efforts, *see What's Being Done in the States*, Pew Center on Global Climate Change, at www.pewclimate.org/what_s_being_done/in_the_states.

Efforts to Encourage Fossil-Fuel Alternatives

Given the problems of fossil-fuel generation in the face of climate change and the uncertainty of the true costs (both monetary and environmental) of such generation, state legislators and regulators are actively seeking to move away from relying on GHG-emitting supply sources. A new emphasis on renewable power has emerged.

The best example is wind power. Although it has been only a small part of the energy picture in the United States, wind power's role is growing because of the current economics of fossil fuels and new enthusiasm for alternatives to fossil fuel. In fact, the United States recently overtook Spain as the world's second-largest wind power market, after Germany, with $9 billion invested last year. Clifford Krauss, *Move Over, Oil, There's Money in Texas Wind*, N.Y. TIMES, Feb. 23, 2008, at B1 *available at* www.nytimes.com/2008/02/23/business/23wind.html?scp=1st=cse.

States are considering whether wind could play a more significant role in the future. For example, last year the Oklahoma legislature created the Oklahoma Electric Power Transmission Task Force to study the feasibility of wind generation in the Oklahoma Panhandle. *See State to Get Free Wind Power Study this April*, J. REC. (Jan. 11, 2008). Since then, Southwest Power Pool (SPP), a regional transmission organization, has agreed to finance a study on the feasibility of wind power in Oklahoma, calling Oklahoma the "Saudi Arabia of Wind." *Id.* "As part of a 10-year, $1.4 billion transmission expansion plan for the region, SPP is working on a project known as the X Plan, which will build wind generation capacity throughout the Central and South Plains area in the shape of an 'x,' taking in much of Oklahoma's northwestern panhandle. . . . The Oklahoma Panhandle alone has the potential to house more than 8,400 megawatts of wind-generated capacity." *Id.* Wind is intermittent and thus not reliable as an energy source in all areas. That fact has not foreclosed investment in wind power, however. "A recent study by Emerging Energy Research, a consulting firm in Cambridge, Mass., projected $65 billion in investment from 2007 to 2015." *See* Krauss, *supra*.

The most common mechanism adopted by states to push the development of renewable energy has been Renewable Portfolio Standards (RPS). Generally speaking, an RPS requires that each electric utility procure a certain percentage of the energy it supplies to customers from renewable sources such as wind, solar, and geothermal power plants. RPS laws are becoming more numerous and more aggressive, requiring ever-increasing percentages of renewable energy. Such mechanisms are also becoming more complex, and whether these mandates will actually be met remains an open question.

Minnesota and New Mexico are among states that have recently enacted significant increases in the level of their RPS. Minnesota law now requires that by 2025, utilities must provide 25 percent of their total energy from renewable resources, while New Mexico now requires 20 percent by 2020. 2007 Minn. Laws ch. 3; 2007 N.M. Laws ch. 4.

As for states adding increased complexity to their RPS laws, Colorado, for example, recently enacted legislation that gives greater weight to energy generated by solar-powered projects and small, local "community-based" projects for purposes of calculating a utility's compliance with the RPS. Colo. H.B. 07-1281, 2007 Legislature (signed Mar. 27, 2007). New Hampshire's RPS, also one of the most recent, provides an excellent example of the increasing specificity and complexity of what on the surface appear to be relatively straightforward mandates. New Hampshire's law requires its utilities to meet individual percentage requirements in each of four classes, with each class corresponding to different renewable energy technologies (or sets of such technologies). N.H. STAT. ANN. § 362-F (2008). Such laws requiring a minimum percentage come from specific technologies, seek to "push" the development of new renewable generating technologies, and encourage the development of renewable energy industries.

One barrier to satisfying an RPS and encouraging expanded use of renewable and alternative energy is transmitting electricity from remote areas where renewable generating sources are available to consumers in cities and suburbs. The transmission infrastructure is aging and in recent years has become severely congested in certain areas. New transmission facilities are costly, and siting them through environmentally sensitive or populated areas is difficult and sometimes impossible.

State governments and regional bodies are beginning to step in here as well. New Mexico, North Dakota, and Wyoming, for example, all have similar statutes creating state-run transmission authorities, which are tasked with facilitating the development of new transmission facilities. 2007 N.M. Laws ch. 3; N.D. CENT. CODE § 17-05 (2008); WYO. STAT. ANN. § 37-5-301 (2008). These authorities have significant powers to advance construction of transmission lines (including, for example, eminent domain authority). In some cases they are authorized to own and operate transmission facilities in the event that no other entity steps forward to construct lines proposed by the authority. Each state created its authority with an eye toward developing particular resources within its borders: for example, New Mexico's authority is directed to the development of renewable energy, North Dakota's statute explicitly notes its abundant coal and wind resources, and Wyoming's authority has an expressed purpose of facilitating advanced coal technologies.

Rather than creating new state agencies and becoming owners of transmission facilities, some states are attempting to ease the burdens of construction of new transmission lines by creating new regulatory schemes, including laws that guarantee that utilities will recover the costs they incur in developing the transmission infrastructure. Colorado provides one example: recent legislation there entitles utilities to more quickly recover the costs for transmission facilities they construct in areas where transmission constraints restrict delivery of energy to consumers or prevent the construction of new generation facilities. Colo. S.B. 07-100, 2007 Legislature (signed Mar. 27, 2007).

States are also making efforts to capitalize on what has often been called the "low-hanging fruit" that can begin to solve today's energy and climate challenges: energy efficiency and distributed generation. These efforts represent, as discussed

above, a move away from the old regulatory model whereby utilities make more money by selling more energy. While state initiatives in this area are too numerous to detail here, some of the most important efforts relate to "decoupling"—that is, changing the method of regulation to separate utility profits from the volume of electricity and natural gas sold. For example, Connecticut has legislatively mandated that regulators implement decoupling, while Maryland regulators have ordered decoupling in individual utility rate proceedings. 2007 Conn. Acts 07-242; *In re Application of Potomac Electric Power Co.*, 2007 Md. PSC LEXIS 13 (July 19, 2007). Many states are also implementing advanced "smart" metering programs. In addition to measuring usage, smart meters are capable of two-way communications and real-time pricing of electricity, i.e., charging different prices at different times of day to reflect demand and encourage customers to use less energy at peak periods. For a comprehensive list of recent state efforts in this area, *see* FEDERAL ENERGY REGULATORY COMMISSION, 2007 ASSESSMENT OF DEMAND RESPONSE AND ADVANCED METERING, *at* www.ferc.gov/legal/staff-reports/09-07-demand-response.pdf.

Some jurisdictions are struggling with how to appropriately compensate utilities for meeting efficiency and demand reduction goals. California regulators have adopted an incentive mechanism that utilizes a "carrot and stick" approach. The carrot component of this approach allows utilities to share in the financial benefits achieved through reducing use by avoiding the costs of adding new supply sources when they achieve 85 percent of their energy savings goal (with the share of benefits the utility may keep increasing when the utility reaches 100 percent of the savings goal and above). The stick aspect of the approach means that utilities incur financial penalties if they fail to achieve at least 65 percent of their goal. *In re Energy Efficiency Policies*, 2007 Cal. PUC LEXIS 451 (Sept. 20, 2007). New Mexico passed legislation requiring utilities to meet certain energy efficiency goals—specifically, a reduction in demand of 5 percent by 2014 and 10 percent by 2020. That measure also directs state regulators to consider what regulatory barriers to energy efficiency exist, and to ensure that utilities have the opportunity to earn a profit on energy efficiency programs. 2008 N.M. Laws ch. 24.

Even with an increased focus on saving energy, new generating facilities will no doubt be required. The ability of utilities to recover the costs of investment is an unavoidable issue when seeking to encourage new capital-intensive infrastructure upgrades and generating projects. Several states have implemented advanced cost recovery mechanisms, cost-recovery guarantees, and tax incentives. These measures have been aimed particularly at encouraging new nuclear plants, as well as coal-fired power plants using new technologies such as carbon sequestration and capture. With regard to new nuclear plants, legislative and regulatory provisions passed in many states (mostly in the Southeast) allow utilities to seek review of the costs incurred in developing a nuclear plant even before it is completed, and guarantee that such costs may be recovered in utility rates even if the plant is never completed. *See* NUCLEAR ENERGY INSTITUTE, STATUS REPORT: STATE LEGISLATION AND REGULATIONS SUPPORTING NUCLEAR PLANT CONSTRUCTION (Oct. 2007), *available at* www.nei.org. Kentucky legislation passed in 2007 includes a wide variety of tax and other incentives aimed at attracting the development of advanced energy technologies, particularly those utilizing coal resources (including carbon capture and sequestration). 2007 Ky. Acts 1.

Unanswered Questions Remain

Taken together, this flurry of new energy policies (and other actions not described here) creates an increasingly complex system of regulation that puts pressure on the traditional model of regulating utility service. Assessing utility revenues becomes more than just a simple matter of approving the most prudent (i.e., cheapest) investments and adding to the costs of those investments a reasonable rate of return. The competing priorities of an RPS requirement, a legislative mandate to encourage energy efficiency or other alternatives, or other policies enacted in response to climate change and rising prices add new considerations for regulators. The significant challenge to traditional regulation presented by energy efficiency mandates and "decoupling" is just one example. Regulators must decide how best to structure financial incentives to encourage utilities to meet energy efficiency goals, which would otherwise run counter to the traditional notion of selling more electricity to make more money. This shift leads to a host of questions: At some point do the financial rewards become too great? Do those financial rewards (such as sharing in savings, as in California) inappropriately put the incentive with the utility, rather than the ultimate consumers of electricity? States are still struggling to answer these questions.

State efforts to develop new transmission facilities to bring alternative energy to consumers also raise questions about federalism: Will such state-by-state and regional efforts bear real fruit? Or will states continue to focus on parochial interests, requiring federal intervention? The federal government only recently gained limited authority to intervene to site transmission lines under the Energy Policy Act of 2005, which gives federal regulators permission to site transmission lines in certain corridors if state regulators have previously not granted such lines. *See* 16 U.S.C. § 824p. States continue to be leery of such federal authority, opposing it in the courts and Congress. Regional agreements among governors of the midwestern and western states to cooperate on developing transmission infrastructure represent encouraging signs that states may be seeking to work together.

Structuring RPS laws, and the regulations that implement them, also presents challenges. While more complex RPS laws like those described above may be one means of pushing the development of a variety of renewable energy generating technologies, placing too much emphasis on new and untested technologies that may ultimately prove infeasible creates a risk of failing to develop enough renewable energy to meet the goals of combating climate change and moderating prices. Moreover, whether renewable energy resources can be developed fast enough to meet RPS mandates remains an open question. In Nevada, in fact, state regulators recently found that utilities had failed to comply with portions of that state's RPS. *See Nevada Power's Failure to*

Buy Renewable Energy May Spur Regulatory Changes, PLATTS ELEC. UTIL. WK., OCT. 29, 2007, at 9. Overseas, the United Kingdom has experienced difficulty achieving full compliance with its version of an RPS. *See, e.g.*, Peter M. Connor, *The UK Renewables Obligation*, in SWITCHING TO RENEWABLE POWER: A FRAMEWORK FOR THE 21ST CENTURY (Volkmar Lauber ed., 2005).

Ultimately, advanced cost recovery measures may be the most important step governments can take to ensure that alternatives come to fruition. For example, the first wave of nuclear plants were ten years and hundreds of millions of dollars in the making, and ultimately states did not permit their utilities to recover their costs when nuclear power fell out of public favor in the wake of Three Mile Island and economic changes in the costs of other power sources. *See* Richard J. Pierce Jr., Will We Revive the Nuclear Option?, American Bar Association Section of Energy, Environment and Resources 15th Section Fall Meeting (Sept. 2007). The advanced cost-recovery measures noted above appear to recognize this history. Nevertheless, allowing for the recovery of costs for generating resources that ultimately are not built presents political and economic risks.

These initiatives and others cropping up around the country raise a fundamental question for the future: what is the guiding principle of regulation? The Federal Power Act regulates wholesale electricity, but applies standards that are analogous to the standards applied under most state rate regulation statutes—namely, that service be in the "public interest" and that rates be "just and reasonable." The Supreme Court has described these standards as requiring regulators to "ensur[e] plentiful supplies of electricity . . . at just and reasonable prices." *NAACP v. FPC*, 425 U.S. 662 (1976). "Plentiful" supplies may no longer be a favored approach given the new understanding of the impact of generating those supplies on the climate. And as noted elsewhere, the generating resource with the lowest cost may not always be the most prudent investment in light of global warming.

Will State Efforts Be Overtaken by Federal Action?

The glaring question with regard to climate change broadly, and perhaps even with regard to the new energy policies born out of the problem of climate change, is whether the federal government will embrace the state and local actions that have already been initiated. Previously, in other policy areas the federal government has embraced the prior efforts made by the state "laboratories" (and in some cases chosen only to supplement them). The federal government may choose to continue the tradition of cooperative federalism by including a role for state government in addressing GHG issues. As former U.S. Senator Timothy Wirth (now president of the United Nations Foundation) recently noted, efforts to address climate change at the state level may come to mirror the other important policy changes that were originally initiated in the states, such as consumer safety laws or civil rights advances: "None of those started in Washington; they started out in the country." Jim Efstathiou Jr. and Adam Satariano, *Climate Plans by New York, Florida Prod U.S. on Global Warming* (Jan. 30, 2008), available at www.bloomberg.com/apps/news?pid=email_en&refer=&sid=aaNOeTfdMAK8. Part II of the Federal Power Act (establishing regulation of wholesale sales and transmission of electricity in interstate commerce) provides an example. That statute was passed to fill the gap left by state regulation of electric utilities following the Supreme Court's decision in *Public Utils. Comm'n v. Attleboro Steam & Elec. Co.*, 273 U.S. 83 (1927).

California's recent attempt to implement its own motor vehicle emissions standards in response to climate change provides a cautionary note to those hoping that cooperative federalism will continue. On February 29, 2008, the Environmental Protection Agency denied a request by California for a waiver of the Clean Air Act's (CAA) prohibitions to allow it to implement its own State Motor Vehicle Pollution Control Standards, which would have provided more stringent protections against GHG. *See* www.epa.gov/otaq/ca-waiver.htm (last visited Mar. 15, 2008). Section 209 of the Clean Air Act requires that EPA grant a waiver for California standards unless EPA finds that California "was arbitrary and capricious in its finding that its standards are in the aggregate at least as protective of public health and welfare as applicable federal standards; does not need such standards to meet compelling and extraordinary conditions; or has proposed standards not consistent with Section 202(a) of the Clean Air Act." 42 U.S.C. § 7543. Employing a comparative analysis that judged the threat of global climate change to be as significant in the entire country as it is in California, the EPA based its denial on a finding that "California does not need its greenhouse gas standards for new motor vehicles to meet compelling and extraordinary conditions." 73 Fed. Reg. 12,156–169 (Mar. 6, 2008).

Although EPA noted the "serious challenge" of global climate change, it concluded that section 209(b)(1)(B) was "intended to allow California to promulgate state standards applicable to emissions from new motor vehicles to address pollution problems that are local or regional" and not to "allow California to promulgate state standards for emissions from new motor vehicles designed to address global climate change problems." *Id.* EPA's analysis relied on a finding that the effects of climate change for California are not "compelling and extraordinary compared to the effects in the rest of the country." EPA expressly declined to address whether the criteria for denial of a waiver were met under CAA section 209(b)(1)(A) and (C). Provision (A) provides a basis for a denial of California's requested waiver if EPA finds that California was "arbitrary and capricious in its finding that its standards are in the aggregate at least as protective of public health and welfare as applicable federal standards." Provision (C) provides a basis for denial of a requested waiver if California's proposed standards are "not consistent with Section 202(a) of the Clean Air Act."

EPA's denial of California's waiver request suggests that the current administration believes a comprehensive approach to climate change is necessary. If Congress accepts this rationale and chooses to address climate change with a comprehensive federal system, preemption of state and local efforts to combat climate change is a real possibility. Congress, in fact, is considering this and other issues concerning the relationship between existing state efforts and possible federal legislation. *See* House Committee on Energy and

continued on page 55

agency action. Judicial statutory interpretation, however, quickly clarified (or transformed, depending on your perspective) that the seemingly docile procedural requirement in fact contained a formidable substantive mandate of the Act. This provision is more commonly, and perhaps more appropriately, referred to as the "no jeopardy" provision, and even as amended retains substantive bite.

A second stealth provision resides in section 8a of the ESA. Modestly titled "Convention implementation," the name suggests little more than administrative direction. However, closer inspection reveals that the provision potentially packs more than procedural minutia. With escalating species losses worldwide, there seems little doubt that future litigants will look to apply this provision in aid of biodiversity and species concentration. At such time, the federal courts will be forced to grapple, yet again, with the scope and meaning of an ESA stealth provision.

The objective of the article is "to identify an approach to statutory interpretation of such ESA stealth provisions worthy of application in these endeavors—an interpretive approach that allows rational and just results or at least avoids perverse pernicious ones." Part I of the article reviews prevailing theories of statutory interpretation, examining in turn legislative intent, textualism, dynamic statutory interpretation, and administrative agency deference. In Part II, the author provides a short history of the ESA, beginning with ESA precursors and adoption of the ESA in 1973, and includes brief descriptions of ESA sections 7 and 8a. In Part III, the author examines

a vast array of approaches used to interpret just one of the ESA's stealth provisions in just one case before the federal courts. The provision is section 7. The statutory interpretations arise in none other than the legendary *Tennessee Valley Authority v. Hill* (*TVA v. Hill*) case, and its associated lower court rulings, where, as the story goes, a few tiny fish blocked the opening of the mighty Tellico Dam (at least for a short while).

In Part IV, the author suggests "the least bad approach" for statutory challenges of ESA stealth provisions, which she summarizes at the beginning of Part IV as follows:

As noted in the general discussion of statutory interpretation approaches in Part I, there is no perfect approach; all are indeterminate to some degree and each has certain other weaknesses vis-à-vis the democratic process, and pragmatic criteria against which they are typically judged. Further, the dramatic array of interpretations of section 7's consultation requirement described in Part III reflect the confounding nature of stealth provisions and the apparent theoretical disarray absent a common or preferred approach for attacking this interpretive conundrum. Recognizing these inherent limits and situational realities, this Part offers a least bad approach for interpretation of stealth ESA provisions.

The proposed least bad approach for interpreting ESA stealth provisions relies on plain language interpretation grounded in purposivism and informed by contemporary contextual considerations. The touchstone for interpreting ESA stealth provisions, as with all statutory provisions, must remain the plain language of the law. But . . . the plain language cannot "stand alone." This is a soft, not new, textualism approach. It calls for contextual reinforcement based on the reason for and the spirit of the ESA. Additionally, in a nod to pragmatism, the least bad approach acknowledges temporal socio-cultural-political changes and advances in scientific knowledge and methodology.

Climate Change and Energy Alternatives

(continued from page 14)

Commerce Staff, Climate Change Legislation Design White Paper: Appropriate Roles for Different Levels of Government (Feb. 2008). Whether federal preemption would cause states to also reassess the energy policies they have enacted in response to climate change is an open question. The answer to that question may depend in part on how "comprehensive" the federal program ultimately is—for example, will it include a national RPS, or national standards for energy efficiency? Federal legislation seeking to establish such measures on a national level has failed previously.

Energy is intertwined with every facet of the modern economy, and the production and use of energy are recognized as a key contributor to the problem of climate change. Affordable and reliable energy provides important benefits to the economy, but also profound risks of both an economic and environmental nature. U.S. leadership in this area is of crucial importance in terms of both the effects on the environment and the influence on other nations. Other countries look to the United States, as the world's largest consumer of energy, to develop a leadership role in energy policy—whether that policy is developed at the state or national level.

The flurry of state and local activity in the area of climate change and energy in recent years recognizes the importance and risks of energy use. The measures they are taking now may be just the beginning of fundamental changes in electricity policy and regulation to address these challenges. If the federal government continues to stay on the sidelines, whether these new regulatory structures and initiatives succeed or die of their own complexity will ultimately determine how the United States responds to both global climate change and the challenges of providing affordable energy supply. While some of the state electricity policy efforts noted here are peculiar to state regulatory jurisdiction, others (notably the RPS) could be adopted on a national level. Moreover, many questions produced by the recent landslide of state and local policy initiatives, and the interaction of those initiatives with possible comprehensive federal policy, cannot be answered at this stage. Nevertheless, state and local governments are moving to the forefront of energy policy, much as they have in carbon regulation. These efforts demand close attention and analysis.