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Energy Transmission Across Wild and Scenic Rivers: Balancing Increased Access to Nontraditional Power Sources with Environmental Protection Policies

Robert L. Glicksman^{*}

ABSTRACT

Increases in the level of renewable energy production, spurred by climate change mitigation goals and regulatory programs such as state renewable energy portfolio standards, and in the level of fossil fuels extraction spurred by technological developments allowing access to previously unavailable natural gas supplies, have created a need for new energy transmission facilities. The new supplies are often located far from centers of high energy demand, requiring transportation over long distances. Some of the routes chosen for the new electric transmission lines and natural gas pipelines have already come into conflict with the environmental protections provided by the Wild and Scenic Rivers Act (WSRA). Other, similar conflicts are sure to follow. This article explores the clash between the policies that support increased production of and access to renewable energy and unconventional natural gas supplies and the preservationist impulse reflected in the WSRA. The parameters of this clash are difficult to discern, given the frustrating, obtuse, and rarely construed provisions of the Act that constrain federal assistance to and approval of energy-related facilities. This article identifies unresolved questions concerning the proper interpretation of these provisions and suggests how they should be resolved. Using the WSRA's application to energy transmission facilities as an example of traditional conflicts between energy and environmental policies, it suggests an approach to accommodation. That approach involves avoidance, mitigation, and careful creation of exemptions from WSRA constraints that promise to

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serve energy policy goals and contribute to climate change mitigation, while retaining key protections for the nation's most treasured river habitats.

I. INTRODUCTION

Changing patterns of U.S. energy production and transmission siting are creating conflicts with natural resources protection laws, including those that protect our nation's most treasured river habitats. In 2003, the Northeast and Midwest experienced a blackout triggered by a surge of electricity to western New York and Canada that overloaded the grid that provides electric service to the Northeast.¹ Officials in New York City, Cleveland, and Detroit shut off power to ward off an even more extensive blackout. Characterized at the time as the "worst blackout in North American history," the outage left about fifty million people without electricity in Michigan, Ohio, New York, New Jersey, Massachusetts, and Connecticut.² Although the New York City airports

^{1.} James Barron, *The Blackout of 2003: The Overview; The Surge Blacks out Northeast, Hitting Cities in 8 States and Canada; Midday Shutdowns Disrupt Millions,* http://www.nytimes.com/2003/08/15/nyregion/blackout-2003-overview-power-surge-blacks-northeast-hitting-cities-8-states.html?pagewanted=all&src=pm (Aug. 15, 2003).

^{2.} Debbie Swanstrom & Meredith M. Jolivert, DOE Transmission Corridor Designations and FERC Backstop Siting Authority: Has the Energy Policy Act of 2005 Succeeded in Stimulating the Development of New Transmission

remained open, air traffic was disrupted from coast to coast. Subway trains had to be evacuated in New York. Nine nuclear power plants shut down automatically in the wake of the outage. Traffic was snarled in cities such as Detroit. According to the North American Electric Reliability Council (NERC), which the utility industry formed to reduce cascading power failures after the blackouts of 1965, power problems were experienced throughout the entire eastern interconnection, covering most of the country east of the Mississippi River.³ A study later attributed nearly 100 deaths in New York City to the blackout as a result of accidents and disease.⁴

Congress responded to the 2003 blackout by including provisions in the Energy Policy Act of 2005⁵ that authorized NERC⁶ to develop mandatory standards "to provide for the reliable operation of the bulk power system."⁷ NERC's standards cover matters that include resource and demand balancing, critical infrastructure protection, emergency preparedness and operations, and interconnection reliability operations and coordination.⁸ Electric utilities that violate NERC standards are subject to monetary penalties.⁹

PJM Interconnection is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in the District of Columbia and thirteen states, including New Jersey and Pennsylvania.

Facilities?, 30 Energy L.J. 415, 423 (2009) (quoting 150 Cong. Rec. S3732 (daily ed. Apr. 5, 2004) (statement of Sen. Domenici)).

^{3.} Barron, *supra* n. 1.

^{4.} G. Brooke Anderson & Michelle L. Bell, Lights Out: Impact of the August 2003 Power Outage on Mortality in New York, NY, 23 Epidemiology 189 (2012).

^{5.} Pub. L. No. 109-58, 119 Stat. 594 (2005).

^{6.} North American Electric Reliability Corporation, *To Ensure the Reliability of the Bulk Power System*, http://www.nerc.com/ (accessed June 2, 2013) (NERC's "mission is to ensure the reliability of the North American bulk power system. NERC is the electric reliability organization (ERO) certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk power system.")

^{7.} Pub. L. No. 109-58, 119 Stat. at 941 (2005) (codified at 16 U.S.C. § 824o(a)(3),(d)).

^{8.} See North American Electric Reliability Corporation, *Reliability Standards for the Bulk Electric Systems of North America*, http://www.nerc.com/docs/standards/rs/Reliability_Standards_Complete_Set.pdf (updated March 12, 2013).

^{9. 16} U.S.C. § 8240(e) (2005).

PJM describes itself as the operator of a competitive wholesale electricity market that "manages the high-voltage electricity grid to ensure reliability for more than 60 million people."¹⁰ PJM determined that an upgrade was needed to electricity transmission facilities serving Pennsylvania and New Jersey to avoid violations of NERC's reliability standards. In particular, PJM concluded that an existing transmission system linking Berwick, Pennsylvania with Roseland, New Jersey needed to be strengthened.¹¹

Public Service Electric and Gas (PSE&G), a publicly owned utility serving customers in New Jersey,¹² proposed to upgrade facilities along an existing right-of-way by, among other things, replacing a 230 kV power line with a 500 kV line.¹³ The New Jersey portion of the project would extend 45 miles, passing through sixteen municipalities, several counties, and the Delaware Water Gap National Recreation Area operated by the National Park Service (NPS).¹⁴ PSE&G claimed that the project would provide significant benefits for its electric customers in the region, including the creation of capacity to meet increasing demand for electricity; improved reliability of the high-voltage electric delivery system in the region, reduction of the risk of a regional blackout like the one that occurred in 2003; and prevention of overloads on existing power

12. PSE&G is a combined gas and electric publicly owned utility that is New Jersey's "largest provider of gas and electric service, servicing 1.8 million gas customers and 2.2 million electric customers in more than 300 urban, suburban and rural communities, including New Jersey's six largest cities." Public Service Enterprise Group, *Our Family of Companies PSE&G*, http://www.pseg.com/family/pseandg/index.jsp (accessed June 2, 2013).

^{10.} PJM Interconnection, *Who We Are*, http://www.pjm.com/about-pjm/who-we-are.aspx/ (accessed June 2, 2013).

^{11.} See PJM Interconnection, Susquehanna-Roseland http://www.pjm.com/planning/rtep-upgrades-status/backbone-status/susquehannaroseland.aspx (accessed June 2, 2013) "(Need: Based on the PJM analysis of 2012, the Susquehanna – Roseland project is required to resolve reliability criteria violations starting June 1, 2012").

^{13.} Another utility, PPL Electric Utilities, based in Allentown, PA, would be responsible for building the Pennsylvania portion of the project. Public Service Enterprise Group, *Susquehanna-Roseland: An Electric Reliability Project*, http://www.pseg.com/family/pseandg/powerline/index.jsp/ (accessed June 2, 2013).

^{14.} In the Matter of the Petition of Pub. Serv. Elec. & Gas Co. (Susquehanna-Roseland Transmission Line), 2013 WL 490171, at *2 (N.J. Super. App. Div. Feb. 11, 2013) [hereinafter Susquehanna-Roseland Transmission Line]. A map of the route is available at http://www.pseg.com/family/pseandg/powerline/pdf/PSEG_Tile_Overview_7-30.pdf.

lines in the two states.¹⁵ To facilitate its ability to proceed with the project, PSE&G sought an order from the New Jersey Board of Public Utilities declaring that local land use regulations would not apply to the siting, installation, construction, or operation of the project. The Board granted the request, concluding that the project was "reasonably necessary . . . to enable PSE&G to continue to provide safe, adequate, and reliable service to its customers," and in particular, to avoid predicted violations of NERC's reliability standards that, if they occurred, would result in damaged infrastructure, brownouts, or blackouts.¹⁶

Several environmental groups challenged the Board's decision. They claimed that several Board findings were erroneous, including its conclusions that reliability violations would occur without the project, that no transmission or non-transmission alternatives (including demand response programs and energy efficiency measures) could adequately address the predicted reliability violations, that the project did not pose unacceptable health and safety risks,¹⁷ and that the upgrade was designed to provide an outlet for coal-generated electricity produced in states to the west and south of New Jersey, rather than to serve the interests of New Jersey electric consumers.¹⁸ The New Jersey trial court rejected each of the claims, finding sufficient evidence in the record to support each Board finding.¹⁹ PGS&G also obtained necessary approvals from the New Jersey Department of Environmental Protection, which issued permits to allow the portions of the project that would be located in flood hazard and wetlands areas.²⁰

These state agency approvals were not sufficient to allow the project to proceed, however. Because the proposed route for the upgraded facilities ran through lands in Pennsylvania and New Jersey managed by

^{15.}Public Service Enterprise Group, Susquehanna-Roseland: An Electric
ReliabilityProject,FactSheet,http://www.pseg.com/family/pseandg/powerline/pdf/factsheet.pdf(accessed June 2,
2013).

^{16.} Susquehanna-Roseland Transmission Line, 2013 WL 490171, at *1.

^{17.} *Id.* at *5. (Among other things, the groups contested the Board's finding that the project would create unsafe electromagnetic field that would adversely affect human health.)

^{18.} *Id.* at *6.

^{19.} *Id.* at **11-13.

^{20.} PJM Interconnection, *Susquehanna-Roseland*, http://www.pjm.com/planning/rtep-upgrades-status/backbone-status/susquehanna-roseland.aspx (accessed June 2, 2013).

the National Park Service (NPS) – the Appalachian National Scenic Trail, Delaware Water Gap National Recreation Area, and the Middle Delaware National Scenic and Recreational River – PSE&G also needed the NPS's approval. In October 2012, the NPS provided it, issuing a permit to grant a right-of-way and construction permit to the two utilities for the expansion of the transmission line to a new double circuit line that would traverse NPS-managed lands.²¹

This time, environmental groups sued the NPS in federal district court to halt construction of the Susquehanna-Roseland transmission line.²² The plaintiffs asserted that the NPS improperly approved a rightof-way and issued special use permits for a transmission line that would run through three national park units "renowned for spectacular scenery and home to unique and rare geological resources, ecological communities, and special-status species, including the bald eagle."23 They alleged violations of both the National Park Service Organic Act²⁴ and the Wild and Scenic Rivers Act (WSRA).²⁵ In 1978, Congress had designated a forty-mile segment of the Delaware River, the longest undammed river along the eastern seaboard, for inclusion in the National Wild and Scenic Rivers System (WSR System or the System).²⁶ According to the plaintiffs, the right-of-way for the transmission line approved by the NPS passes near the "most natural and least developed section of the [Middle Delaware Scenic and Recreational River]," crossing it "just downstream [from] a "unique river feature."²⁷ They argued that the NPS itself had acknowledged that the approved route "would result in significant long-term degradation of the scenic values for which the river was designated," in violation of the WSRA's mandate to protect and

^{21.} U.S. Dep't of the Interior, National Park Service, Susquehanna to Roseland 500-kV Transmission Line Right-of-Way and Special Use Permit Environmental Impact Statement, Record of Decision, http://parkplanning.nps.gov/document.cfm?parkID=220&projectID=25147&documen tID=49997 (Oct. 1, 2012).

^{22.} National Parks Conservation Association v. Salazar, Civ. No. 1:12-cv-01690-RWR (D.D.C., complaint filed Oct. 15, 2012), http://legalectric.org/f/2012/10/complaint.pdf [hereainafter cited as NCPA v. Salazar Complaint].

^{23.} *Id.* at ¶ 1.

^{24. 16} U.S.C. §§ 1 to 18f-3.

^{25. 16} U.S.C. §§ 1271-1287.

^{26.} NCPA v. Salazar Complaint, supra n. 22, at ¶ 29, 41.

^{27.} *Id.* at ¶ 49.

enhance the values which caused the river to be included in the System.²⁸ As a result, the NPS's approval of the right-of-way and special use permits for the upgraded transmission facilities was arbitrary and capricious and contrary to the NPS's responsibilities under the WSRA.²⁹

The pending litigation over the PSE&G project's location near a unit of the WSR System is not an isolated phenomenon. Proposed projects to increase access to renewable or newly accessible unconventional energy supplies have the potential to threaten protection of the nation's most beautiful and environmentally unique riverine habitats in various locations across the country.³⁰ The proposed New York Regional Interconnection, for example, would transport electric power along a 200-mile route from Utica to southeastern New York, about 75 miles of which would be located in the Upper Delaware Scenic and Recreational River corridor.³¹

The potential for energy transmission facilities to cross or be located adjacent to wild and scenic rivers seems particularly high in the western states. Many of the System's river segments are found in those states, as are sites with high potential for the generation of renewable energy are found.³² The Bureau of Land Management (BLM) has indicated that the Mountain States Transmission Intertie, an electric

31. See Delaware Riverkeeper, Power Lines Proposed to Travel Along the Wild and Scenic Delaware River, http://www.delawareriverkeeper.org/resources/Factsheets/Power%20Lines%20Propos ed%20to%20Travel%20Along%20the%20Wild%20and%20Scenic%20Delaware%20 River.pdf (2010). According to the Delaware Riverkeeper, the project poses a "clear and direct threat" to the River corridor. Id.

32. A map of the rivers that have been designated for protection under the WSRA is available at: National Wild and Scenic Rivers System, http://www.rivers.gov/rivers/map.php.

^{28.} *Id.* at ¶ 85.

^{29.} *Id.* at ¶¶ 103, 106.

^{30.} Proposals to build electric transmission facilities have even prompted efforts to add rivers to the WSR System to block such projects. *See e.g.*, National Park Service, *Questions and Answers about the Upper New River Wild and Scenic River Study*, 4, http://www.nps.gov/nero/rivers/uppernew/qanda.htm (accessed June 2, 2013) (stating that "one of the original reasons river advocates were interested in pursuing potential designation of the New River was to prevent a proposed electric transmission line from crossing the river in the heart of the study area"). Local opposition has emerged to the construction of other electricity transmission lines that may have an adverse impact on river water quality or visual landscapes. *See e.g.*, Barry Yeoman, *Rebel Towns*, The Nation (Jan. 16, 2013).

transmission line to run between southwestern Montana and southeastern Idaho, would be close to a creek that is eligible for designation as a wild and scenic river.³³ The Gateway West Transmission Line project, a proposed transmission line between southern Wyoming and southern Idaho, might affect the Salmon Falls Creek Wild and Scenic River.³⁴ Litigants have challenged the approval by Secretary of Interior Kenneth Salazar of rights-of-way over BLM lands for the North Steens Transmission Line Project, which would carry electric power generated at an industrial scale wind energy facility in Oregon. The Steens Mountain area includes nearly thirty miles of streams that are part of the WSR System.³⁵ Environmental groups also challenged the Interior Department's designation of nearly 1000 miles of energy corridors in eleven western states as well as an associated programmatic environmental impact statement prepared by the agency. In a settlement of that litigation, the Department agreed to engage in further review of the designations, along with the U.S. Forest Service and the Department of Energy (DOE). Among other things, the Department agreed to take into account the presence of wild and scenic rivers or river segments eligible for inclusion in the system in Washington, Oregon, Idaho, Montana, and Arizona both in reviewing the corridor designations and establishing mitigation requirements for energy projects within them.³⁰

The dispute over the legality of the NPS's decision to allow portions of the Susquehanna-Roseland project to run through the Delaware Water Gap manifests another front in the decades-old clash between

^{33.} BLM, Major Right-of-Way Projects, http://www.blm.gov/mt/st/en/prog/lands_realty/projects.html (updated May 3, 2013); see also Northwestern Energy, Mountain States Transmission Intertie: Environmental Report, at 3-102 (July 2008); see also Northwestern Energy, Mountain States Transmission Intertie: Environmental Report, 3-102, http://www.blm.gov/pgdata/etc/medialib/blm/mt/blm_programs/lands/msti.Par.70486. File.dat/chap3.pdf (July 2008).

^{34.} Gateway West Transmission Line Project, *Draft EIS*, ES-13, http://www.wy.blm.gov/nepa/cfodocs/gateway_west/draft_eis.html#download (July 29, 2011).

^{35.}Oregon Natural Desert Ass'n v. Salazar, No. 3:12-cv-596-__, 13 (D.Or.,complaintfiledMarchMarch5,2012),http://www.shb.com/newsletters/ECU/Etc/ONDAvBLM.pdf.

^{36.} Wilderness Soc'y v. U.S. Dep't of the Interior, No. 3:09-cv-03048 JW (N.D. Cal. 2012), Notice of Motion and Joint Motion to Dismiss Case Pursuant to Fed. R. Civ. P. 41(a), Exhibit A To Settlement Agreement, http://corridoreis.anl.gov/documents/docs/Settlement_Agreement_Package.pdf.

national energy and environmental protection and natural resource management policies in the United States.³⁷ The perception in the United States that environmental and energy policy objectives are at loggerheads with one another is longstanding.³⁸ Judge Patricia Wald noted at the end of the first decade of modern federal environmental regulation that "[n]o matter how appropriate and cost-effective our energy and environmental programs, there will remain some conflict between the demand for energy and environmental protection goals."³⁹ She urged "great caution" in "sacrificing environmental quality to expand energy supply, given the longer-run implications of such a policy."⁴⁰

More than thirty years later, observers continue to be moan the failure to coordinate and reconcile national energy and environmental policies,⁴¹ at least at the federal level.⁴² Efforts to ensure access to

38. See, e.g., Joseph P. Tomain, Ending Dirty Energy Policy: Preclude to Climate Change, 235-38 (2011) (referring to conflict and need to make tradeoffs between energy and environmental concerns); Richard J. Pierce, Jr., Environmental Regulation, Energy, and Market Entry, 15 Duke Envtl. L. & Pol'y F. 167, 183 (2005) (referring to "[t]he conflict between state and local environmental regulation of transmission lines and pursuit of national energy goals"); Sam Schwartz, A Comprehensive Transportation Policy for the 21st Century: A Case Study of Congestion Pricing in New York City, 17 N.Y.U. Envtl. L.J. 580, 587 (2010) ("Looking at the big picture, it appears that federal energy, environmental, and transportation policies are in conflict with each other.").

39. Swinomish Tribal Cmty. v. Federal Energy Regulatory Comm'n, 627 F.2d 499, 517 (D.C. Cir. 1980) (Wald. J., dissenting).

40. *Id*.

^{37.} Other recent examples of activities that generate potential conflicts between energy and environmental policy goals include expanded production of natural gas through hydraulic fracturing, which may reduce greenhouse gas emissions by substituting gas for coal, but which is associated with groundwater pollution risks, see e.g., Jesica Rivero Gilbert, Assessing the Risks and Benefits of Hydraulic Fracturing, 18 Mo. Envtl. L. & Pol'y Rev. 169, 172 (2011) (stating that "shale exploration by hydraulic fracing highlights the tension between our national energy and environmental policies"); Carolyn F. Burr et al., Water: The Fuel for Colorado Energy, 15 U. Denv. Water L. Rev. 275, 294-95 (2012); the construction of wind energy facilities, which have no carbon emissions but which may impair scenic vistas, see Ernest Smith, Wind Energy Siting Controversies and Rights in Wind, 1 Envtl. & Energy L. & Pol'y J. 281, 282-83 (2007); and the dedication of federal lands to industrial scale solar power production. See Robert L. Glicksman, Solar Energy Development on the Federal Public Lands: Environmental Trade-Offs on the Road to a Lower Carbon Future, 3 San Diego J. Energy & Climate Law 107 (2011-2012).

^{41.} See e.g., Lincoln Davies, Alternative Energy and the Energy-Environment Disconnect, 46, Idaho L. Rev. 473, 474 (2010) ("It is one of the most

abundant, secure, and affordable energy supplies routinely trigger environmental concerns. Coal is the most abundant domestic energy resource, for example, but it is inexpensive relative to other energy sources only if one ignores the external environmental costs (including carbon dioxide, sulfur dioxide, and particulate emissions) that result from its combustion.⁴³ Some energy sources avoid one set of environmental risks while creating others. The generation of nuclear power produces none of the greenhouse gases that contribute to climate change, but the process creates health risks associated with the release of radioactive substances⁴⁴ and the failure to develop and site a permanent nuclear waste disposal repository.⁴⁵ These issues feature prominently in debates over the appropriate management policies for lands owned by the federal

important and unspoken paradoxes of the modern American regulatory state: Energy law and environmental law rarely, if ever merge."); Sam Kalen, *Replacing a National Energy Policy with a National Resource Policy*, 19 Nat. Resources & Env't 9 (2005) (referring to "the historic failure to coordinate and integrate adequately environmental, public land, and natural resource goals and considerations into the development of energy policy"). But Kim Talus, Access to Gas Markets: A Comparative Study on Access to LNG Terminals in the European Union and the United States, 31 Hous J. Int'l L. 343, 345 (2009) ("Environmental concerns have finally been recognized and now form an integral part of national energy policy objectives.").

^{42.} See Alexandra B. Klass, *Climate Change and the Convergence of Environmental and Energy Law* (forthcoming) (on file with author) (noting increasing links between energy and environmental law at the state level, but arguing that "there remains little linkage between federal environmental and energy policy").

^{43.} See e.g., Jonas J. Monast et al., A Cooperative Federalism Framework for CCS Regulation, 7 Envtl. Energy L. Pol'y J. 1, 3 (2012) ("While coal is an abundant, low cost domestic energy resource, it is also the most carbon-intensive of all of the fossil fuels. In the United States, coal-fired power plants are the single greatest source of anthropogenic carbon dioxide (CO2), the most abundant greenhouse gas (GHG)."). Cf. Davies, *supra* n. 42, at 505 (footnote omitted) ("From an economic perspective, it is true that any environmental law which makes energy markets more accurately reflect social costs does not conflict with the goals of energy regulation. But law is not evaluated under economic theory alone, and any increase in energy costs is often seen as anathema.").

^{44.} See Debra J. Carfora, Building a Sustainable Energy Future: Offering a Solution to the Nuclear Waste Disposal Problem Through Reprocessing and the Rebirth of Yucca Mountain, 8 Tex. J. Oil Gas & Energy L. 143, 151-2 (2012-2013) (describing aftermath of earthquake and tsunami that disabled a nuclear reactor in Fukushima, Japan).

^{45.} See Nuclear Waste Policy Act of 1982, 42 U.S.C. § 10131(a)(3) ("Federal efforts during the past 30 years to devise a permanent solution to the problems of civilian radioactive waste disposal have not been adequate.").

government, which are home to enormous quantities of minerals from which energy can be derived⁴⁶ but also to other natural resources that provide ecosystem services of incalculable value.⁴⁷

This article explores the ongoing effort to meet the nation's energy needs at an acceptable environmental cost by focusing on the issues that arise when electric transmission lines and natural gas pipelines are located in wild and scenic river corridors that include lands owned by the federal government. Part II describes shifting energy transmission needs in the United States and government and industry responses that heighten the chances that new energy transmission facilities will encounter wild and scenic rivers and summarizes the roles of the states, federal energy regulators, and the federal land management agencies in siting transmission facilities. Part III provides a brief overview of the WSRA, focusing on provisions that govern management of designated rivers that cross federal lands. Part IV addresses the WSRA provisions that are most relevant to the construction and operation of energy transmission projects in proximity to WSR System components. It identifies and suggests resolutions for unresolved questions concerning the application of these provisions to transmission projects. The article then recommends a strategy to minimize conflicts between environmental policy goals and energy policy goals such as improved access and reliability and reduced congestion, and between conflicting environmental goals. It endorses selection of alternative routes that would locate energy transmission projects away from wild and scenic rivers, imposition of mitigation requirements on projects that cannot feasibly be rerouted, and the creation of limited exemptions from WSRA constraints on energy development for environmentally attractive renewable energy sources. Part V briefly concludes.

^{46.} See 1 George Cameron Coggins & Robert L. Glicksman, Public Natural Resources Law § 1:4 (2d ed. 2007).

^{47.} See J.B. Ruhl, *Ecosystem Services and Federal Public Lands: Startup Questions and Research Policy Needs*, 20 Duke Envtl. L. & Pol'y F. 275, 275 (2010) (stating that "it is clear the federal government has come to the realization that it is sitting on a potentially vast repository of economic value in the form of ecosystem services from federal public lands").

II. REGULATORY OVERSIGHT OF ENERGY TRANSMISSION

Even though the WSRA is 45 years old, the obstacles it poses to the location of energy transmission facilities have only recently come into sharp focus. The reasons for the increased salience of WSRA issues in connection with energy transmission include increased demand for energy and the development of renewable energy sources and non-renewable resources through newly available technologies at locations that are not in close proximity to the population centers that most need the energy. The government has taken steps to facilitate the development of these energy resources, resulting in numerous new energy transmission projects. This part reviews the developments that have created the need for new energy transmission facilities, the regulatory authority that federal and state agencies have over the siting of those projects, and the federal government's recent efforts to spur renewable and unconventional energy development that will require new transmission facilities.

A.Shifting Energy Transmission Needs

As Professor Alexandra Klass has noted, "[t]here is a general consensus that more transmission is needed in the United States to maintain grid reliability, meet growing demand, and integrate more renewable energy into the grid."⁴⁸ Demand for electricity in the U.S. is rising, having increased by 25 percent from 1990 to the early 2010s. During the same time, however, construction of transmission facilities fell by thirty percent. According to Professor Klass, "[t]his deficit of transmission capacity combined with the aging infrastructure is leading to an increase in blackouts and brownouts, costing the U.S. economy \$150 billion annually."⁴⁹ Demand for renewable energy is also being driven by state renewable portfolio standards (RPS) that require electricity providers

^{48.} Alexandra B. Klass, *Takings and Transmission*, 91 N.C. L. Rev. 1079, MS at 20-21 (forthcoming 2013) (on file with author) (2013), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2150288.

Id. at 3 (forthcoming 2013) (citing U.S. Dep't of Energy, Litos 49. Strategic Communication. The Smart Grid: An Introduction. http://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/DOE_SG_Book_Singl e_Pages%281%29.pdf (accessed June 2, 2013); American Soc'y of Civil Engineers, 2009 Report Card for America's Infrastructure, http://www.infrastructurereportcard.org/sites/default/files/RC2009_full_ report.pdf, 134 (updated Mar. 25, 2009).

to supply at least a specified minimum percentage of their output from renewable resources, whose production and consumption produces lower levels of greenhouse gas (GHG) emissions than fossil fuels.⁵⁰

To move energy from the place where it is produced to the place where it is consumed requires the creation of infrastructure such as electricity transmission facilities and natural gas pipelines. Although efforts to move energy have always given rise to practical and legal problems,⁵¹ recent shifts in the location of energy resources have created new challenges.

The development of new horizontal drilling and hydraulic fracturing technologies has provided affordable access to enormous quantities of oil and gas resources in the United States. Natural gas reserves in the U.S. increased by 75 percent between 2004 and 2011.⁵² The discovery of these reserves has prompted a need to build facilities capable of moving natural gas from extraction sites to the existing natural gas distribution network.⁵³ Projects such as the Constitution Pipeline have thus been proposed to move supplies from production locales such as northern Pennsylvania to areas of high demand such as New England.⁵⁴

^{50.} Klass, *supra* n. 48, MS at 4 (forthcoming 2013).

^{51.} See Steven Ferrey, Follow the Money! Article I and Article VI Constitutional Barriers to Renewable Energy in the U.S. Future, 17 Va. J. L. & Tech. 89, 139 (2012).

^{52.} Richard J. Pierce, Jr., *Natural Gas: A Long Bridge to a Promising Destination*, 32 Utah Envtl. L. Rev. 245, 246 (2012) (describing "remarkable change in conditions in the U.S. gas market"). The development of methane hydrate as an energy source would likely require transmission facilities that tie the coastal areas in which such deposits are found to the existing transmission network. *See* Charles C. Mann, *What if We Never Run Out of Oil?*, The Atlantic, Apr. 24, 2013, http://www.theatlantic.com/magazine/archive/2013/05/what-if-we-never-run-out-of-oil/309294/.

^{53.} See e.g., Holly Bannerman, Fracking, Eminent Domain, and the Need for Legal Reform in North Carolina: The Gap Left by the Clean Energy and Economic Security Act, 14 N.C. J.L. & Tech. On. 35, 45-46 (2012) (explaining that "the extraction of shale gas is only the first event in a multi-step process" and describing the impact on landowners "along the path from extraction to distribution" of developing infrastructure to move natural gas developed through fracking).

^{54.} See Constitution Pipeline Company, Constitution Pipeline, http://constitutionpipeline.com/ (accessed June 2, 2013) (describing "major transmission pipeline project to connect abundant Appalachian natural gas supplies in northern Pennsylvania with major northeastern markets by 2015"); Colin Sullivan, *The Constitution Pipeline: An Answer to New England's Price Woes or a Shale Bonanza in the Making?*, EnergyWire (Jan. 28, 2013).

Another proposal is to build a new natural gas pipeline from Pennsylvania to Houston, Texas.⁵⁵

Renewable resources such as wind and solar power are also often located in areas that are not close to traditional sources of centralized power or to electricity demand centers.⁵⁶ Wind resources, for example, are relatively scarce in some eastern states with high demand for electricity.⁵⁷ Many of the most attractive opportunities for solar power production exist in remote desert locales in the southwestern United States.⁵⁸ State laws that allow electricity providers to meet their RPS obligations by purchasing renewable energy credits from out-of-state suppliers are also contributing to increases in interstate transmission needs.⁵⁹ Traditional transmission-planning strategies, which relied on building transmission lines that linked large stationary power plants to nearby electricity demand centers, are not effective in integrating dispersed renewable energy sources into the transmission grid.⁶⁰

57. Ferrey, *supra* n. 51, at 139-40.

58. Uma Outka, *The Renewable Energy Footprint*, 30 Stan. Envtl. L.J. 241, 267 (2011).In March 2013, solar energy for the first time accounted for all utility generation capacity that was added to the grid. Meg Handley, *Solar Scores Big Gains in Electricity Generation*, U.S. News & World Reports, Apr. 12, 2013, http://www.usnews.com/news/articles/2013/04/12/report-solar-scores-big-gains-in-electricity-generation.

59. Klass, *supra* n. 48, MS at 22-23 (forthcoming 2013).

60. Alexandra B. Klass & Elizabeth J. Wilson, Interstate Transmission Challenges for Renewable Energy: a Federalism Mismatch, 65 Vand. L. Rev. 1801, 1802 (2012). See also Steven Ferrey, Alternative Energy in a Spaghetti Western: Clint Eastwood Confronts State Renewable Energy Policy, 32 Utah Envt. L. Rev. 279,

^{55.} See Energywire, New Pipelines Shuttle Pa. Gas Liquids to Gulf Coast, http://www.eenews.net/energywire/print/2013/03/27/9 (updated Mar. 27, 2013).

^{56.} See Ferrey, supra n. 51, at 140; Klass, supra n. 48, MS at 20-21 (forthcoming 2013) (noting that "the best sources of renewable energy are available in more sparsely populated parts of the country with underbuilt transmission resources"); Mary Anne Sullivan, *The Many Challenges of the "Full Portfolio" Approach: Utilities Prepare for Climate Change Regulation*, 2008 No. 3 RMMLF-Inst. Paper No. 15 (2008) ("There is no question that the transmission market is starting to respond to the special challenges of bringing renewable energy from the generally remote locations where renewables can be produced to load centers where it is needed and where it may ultimately displace fossil fuels."). As Professor Powers has explained, renewable energy development tends to occur in remote locations "because those locations have the best wind and solar resources, and because siting processes may often be less cumbersome in rural areas eager for additional development." Melissa Powers, *Small Is (Still) Beautiful: Designing U.S. Energy Policies to Increase Localized Renewable Energy Generation*, 30 Wis. Int'l L.J. 595, 610 (2012).

B.Government Authority to Site Transmission Facilities

1. Energy Regulatory Agency Authority

Part of the difficulty of transforming the nation's energy transmission infrastructure is the allocation of regulatory authority over energy transmission among multiple government overseers. For natural gas pipelines, authority over the siting of interstate pipelines is vested by the Natural Gas Act (NGA) in the federal government.⁶¹ FERC regulations require that activities involving ground disturbance be consistent with applicable laws, including the WSRA.⁶² For electricity transmission, the states have principal siting authority, although local governments in some states share the responsibility of approving such projects.⁶³ In response to blackouts like the 2003 event in the eastern United States and related concerns over grid congestion, Congress created limited federal siting authority over electric transmission facilities when it adopted the Energy Policy Act of 2005 to amend the Federal Power Act (FPA),⁶⁴ but the courts have interpreted that authority narrowly.⁶⁵ For

62. 10 C.F.R. § 157.206(b)(2)(ix).

63. Klass, *supra* n. 48, MS at 12-13 (forthcoming 2013); Outka, *supra* n. 58, at 259. The Court of Appeals for the Fourth Circuit accordingly described "the nation's transmission grid [as] an interconnected patchwork of state-authorized facilities." *Piedmont Envtl. Council v. FERC*, 558 F.3d 304, 310 (4th Cir. 2009).

64. *Energy Policy Act of 2005*, Pub. L. No. 109-58, § 1221, 119 Stat. 594 (2005) (adding § 216 to the Federal Power Act, 16 U.S.C. § 824p).

^{284 (2012) (&}quot;Transmission infrastructure must be constructed to bring renewable power from the generation source to the load center.").

^{61. 15} U.S.C. § 717 (declaring regulation of the transportation of natural gas in interstate commerce to be in the public interest) (2005). Pipeline operators cannot engage in the transportation of natural gas in interstate commerce without first receiving a certificate of public convenience and necessity from FERC. *Id.* § 717f(c)(1)(A); *see also* Robert R. Nordhaus & Emily Pitlick, *Carbon Dioxide Pipeline Regulation*, 30 Energy L.J. 85, 88-89 (2009).

^{65.} See Piedmont Envtl. Council, 558 F.3d at 315; Outka, supra n. 58, at 262. See also Klass & Wilson, supra n. 60, at 1814 (concluding that Congress's efforts to exercise more authority over transmission to increase reliability and foster growth in renewable energy "have had limited success"); *id.* at 1817 (characterizing the impact of the 2005 legislation on overcoming state roadblocks to transmission siting as "extremely limited to date"). For further discussion of the failures of the 2005 Act to strengthen federal authority over the siting of transmission lines, see Alexander K. Obrecht, Energy Policy Act of 2005: Pseudo-Fed for Transmission Congestion, 7 J. Envtl. & Pub. Health L. 159 (2012).

both forms of energy, federal authority is shared by energy regulators and the federal land management agencies for any facilities that cross lands owned by the federal government.

2. Federal Land Management Agency Authority

The siting of energy transmission facilities that cross federal lands also requires the approval of the federal agency responsible for managing the lands in question. The NPS has the authority to grant rights-of-way across units of the National Park System, including rights-of-way for pipelines and electric transmission lines.⁶⁶ The U.S. Fish and Wildlife Service issues and administers rights-of-way across the national wildlife refuges,⁶⁷ including rights-of-way for electric power transmission facilities⁶⁸ and natural gas pipelines.⁶⁹

The federal lands most likely to be affected by energy transmission facilities are the national forests managed by the U.S. Forest Service and the public lands under the jurisdiction of the BLM. The Federal Land Policy and Management Act of 1976 (FLPMA) authorizes the Secretaries of Agriculture (acting through the Forest Service) and Interior (acting through the BLM) to issue rights-of-way for systems for the transmission of electric energy, provided the applicant also complies with applicable requirements adopted by FERC under the FPA, thus creating a system of shared administration by energy and land management agencies.⁷⁰ Issuance by FERC of a permit for a transmission facility that would cross federal lands does not preclude the need to obtain a right-of-way authorization from the federal land management agency with jurisdiction over the affected land.⁷¹ The two land management agencies may only issue rights-of-way deemed necessary for the operation or maintenance of the project and necessary to protect the public safety.⁷²

- 67. 50 C.F.R. §§ 29.21-29.22 (2013).
- 68. *Id.* §§ 29.21-28.
- 69. *Id.* §§ 29.21-29.
- 70. 43 U.S.C. § 1761(a)(4) (2013).

71. Department of Energy, *National Electric Transmission Congestion Report*, 72 Fed. Reg. 56992, 57009 (Oct. 5, 2007) ("[N]either a National Corridor designation nor the issuance of a FERC permit controls a Federal or State land management agency's decision whether to grant or deny a right-of-way.").

72. In addition, no right-of-way may do unnecessary damage to the environment. 43 U.S.C. § 1764(a) (1996).

^{66. 16} U.S.C. § 5 (1976); 36 C.F.R. §§ 14.1-14.38, 14.70-14.78 (2013).

FLPMA rights-of-way are subject to whatever conditions the granting agency may prescribe concerning extent, duration, survey, location, construction, maintenance, transfer, and termination.⁷³

The granting agency for any right-of-way for a new project that may have a significant impact on the environment must require the applicant to submit a plan of construction, operation, and rehabilitation.⁷⁴ Each FLPMA right-of-way must include conditions to minimize damage to scenic and esthetic values and fish and wildlife habitat; to otherwise protect the environment; and to require compliance with any state standards for health and safety, environmental protection, and siting, construction, operation, and maintenance that are more stringent than applicable federal standards.⁷⁵ Rights-of-way must be located along a route that will cause the least amount of damage to the environment, taking into account feasibility, and to otherwise protect the public interest in the lands traversed by the right-of-way.⁷⁶

FLPMA withholds from the Forest Service and the BLM authority to issue rights-of-way for natural gas pipelines,⁷⁷ but the Mineral Leasing Act (MLA) authorizes the issuance rights-of-way over federal lands for those purposes, except in the national parks.⁷⁸ MLA rights-of-way are subject to regulation by the issuing land management agency concerning extent, duration, location, construction, operation, maintenance, use, and termination.⁷⁹ The issuing land management agency must require a right-of-way applicant to submit a plan of construction and operation and impose regulatory requirements to control and prevent damage to the environment or to public or private property.⁸⁰

Congress sought to coordinate the roles of energy regulators and the federal land management agencies in the Energy Policy Act of 2005. It required that by 2007 the Secretaries of Agriculture, Commerce, Defense, Energy, and Interior, in consultation with FERC and state, local, and tribal governments, designate corridors for oil and gas pipelines and electricity transmission facilities on federal lands in the eleven contiguous

- 75. Id. at § 1765(a).
- 76. *Id.* at § 1765(b).
- 77. *Id.* at § 1761(a)(2).
- 78. 30 U.S.C. § 185(a), (b)(1) (1995).
- 79. *Id.* at § 185(f).
- 80. *Id.* at § 185(h)(2).

^{73.} Id. at § 1764(c).

^{74.} *Id.* at § 1764(e).

western states, which the land management agencies would then incorporate into their land use plans.⁸¹ The Secretaries had to identify similar corridors on federal lands in other states by 2009.⁸² The Act also required the Secretaries, in consultation with FERC, to expedite applications to construct pipelines and electricity transmission and distribution facilities within the designated corridors.⁸³ For electricity transmission and distribution facilities, the goal was to improve reliability, relieve congestion, and enhance the capability of the national grid to deliver electricity.⁸⁴

Similarly, the 2005 legislation amended the FPA by requiring the DOE and the federal land management agencies to streamline the review and permitting of transmission facilities within transportation and utility right-of-way corridors designated under FLPMA.⁸⁵ The Act authorizes the President to override a land management agency's refusal to authorize such transmission facilities or failure to respond to a request for such authorization within regulatory deadlines, as long as that approval is consistent with federal land management and environmental laws,⁸⁶ except for facilities to be located in national parks, monuments, or wildlife refuges, wilderness areas, or the WSR System.⁸⁷

The 2005 statute also required the Secretary of Energy and the federal land management agencies to enter a memorandum of understanding (MOU) "to ensure the timely and coordinated review and permitting of electric transmission facilities."⁸⁸ In 2009, such a MOU was executed by the Departments of Agriculture and Interior (on behalf of the land management agencies), the DOE, FERC, and the Environmental Protection Agency, among others.⁸⁹ The MOU provides that the DOE

- 85. 16 U.S.C. § 824p(h)(5) (2005); 43 U.S.C. § 1763 (2013).
- 86. 16 U.S.C. § 824p(h)(6) (2005).
- 87. *Id.* at § 824p(j)(2).
- 88. *Id.* at § 824p(h)(7)(B)(i).

89. Memorandum of Understanding Among the U.S. Department of Agriculture, Department of Commerce, Department of Defense, Department of Energy, Environmental Protection Agency, the Council on Environmental Quality, the Federal Energy Regulatory Commission, the Advisory Council on Historic

^{81. 42} U.S.C. § 15926(a) (2005). The eleven states are Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

^{82.} Id. at § 15926(b).

^{83.} Id. at § 15926(c).

^{84.} Id. at § 15926(d).

will designate a lead agency for each high voltage transmission line project crossing jurisdictions administered by more than one participating agency. DOE will designate the agency with the most significant land management interests related to the project or the agency recommended by other participating agencies impacted by the project as the lead agency.⁹⁰

Despite the provisions of the Energy Policy Act of 2005 delegating some responsibility for the review of energy transmission facilities that cross federal lands to DOE and FERC, the federal land management statutes still largely govern the availability of federal lands for these energy-related projects. FERC, the states, and other siting authorities lack the power to override any federal laws that limit or prohibit construction of transmission facilities on federal lands.⁹¹ The primacy of federal land management laws, including the FLPMA, the MLA, and the WSRA, and the agencies that administer them, is particularly notable for the federal lands set aside primarily for preservation, recreational, or wildlife protection purposes, given the inapplicability of the presidential appeal process to transmission projects on those lands.⁹²

3. New Energy Production and Transmission Projects

Both Congress and the executive branch have recognized the need for new energy transmission infrastructure. In 2009, for example, Congress enacted the American Recovery and Reinvestment Act (ARRA), which made billions of dollars in federal loan guarantees and other financial incentives available to modernize the nation's transmission

Preservation, and Department of the Interior, Regarding Coordination in Federal Agency Review of Electric Transmission Facilities on Federal Land, http://www.whitehouse.gov/files/documents/ceq/Transmission%20Siting%20on%20F ederal%20Lands%20MOU.pdf (Oct. 23, 2009).

^{90.} *Id.* at 3. When DOE fails to designate a lead agency in this way, the participating agencies must consult and jointly determine a lead agency for a qualifying project. If DOE does not object, that agency will act as the lead agency. For projects that would cross lands managed by both the Interior and Agriculture Departments, those two must consult and jointly determine whether a sufficient land management interest exists to support their assumption of the lead agency role and, if so, which of the two agencies should assume that role. DOE has the authority to reject whatever designation the two land management agencies agree upon. *Id.*

^{91.} Department of Energy, *National Electric Transmission Congestion Report*, 72 Fed. Reg. 56992, 57009-10 (Oct. 5, 2007).

^{92. 16} U.S.C. § 824p(j)(2); *supra* nn. 86 to 87 and accompanying text.

grid.⁹³ The Act financed the construction of at least 3000 miles of new electricity transmission lines.⁹⁴ The Obama Administration created an Interagency Rapid Response Team for Transmission to promote the construction of electricity transmission infrastructure to help achieve "increased reliability, the greater integration of renewable sources of electricity into the grid," and a reduction in the need for new power plants.⁹⁵ The Team's functions include improved coordination in planning, statutory permitting, review, and consultation processes among federal and state agencies, and resolving interagency conflicts.⁹⁶ The Team announced that it would focus initially on seven pilot project transmission lines that would cross twelve states (Arizona, Colorado, Idaho, Minnesota, New Mexico, Nevada, Wyoming, Utah, New Jersey, Pennsylvania, Oregon, and Wisconsin) that were selected from lists compiled through ARRA-funded stakeholder processes.⁹⁷ At least two of these projects, the Gateway West transmission line and the Susquehanna-Roseland line that is the subject of the litigation described in the introduction, have been identified as having potential adverse effects on a unit of the WSR System.⁹⁸

Partly in response to these government initiatives, a variety of interstate transmission projects are at various stages of planning, construction, or operation. These include projects for a line between Connecticut and New York, a line from Alberta to Montana to carry wind power,⁹⁹ a line between Arizona and New Mexico to promote renewable

95. Counsel on Environmental Quality, Interagency Rapid Response Team for Transmission, http://www.whitehouse.gov/administration/eop/ceq/initiatives/interagency-rapid-

^{93.} Pub. L. No. 111-5, 123 Stat. 115 (2009) (codified at 16 U.S.C. §§ 16511-16516). See Danielle Changala & Paul Foley, The Legal Regime of Widespread Plug-in Hybrid Electric Vehicle Adoption: a Vermont Case Study, 32 Energy L.J. 99, 120 (2011); John A. Herrick, Federal Incentives for Clean Energy after Solyndra: a Post-Recovery Act Precipice, 87 N.D. L. Rev. 625, 659-60 (2011); Joseph P. Tomain, "Steel in the Ground": Greening the Grid with the Utility, 39 Envtl. L. 931, 936-37 & n. 27 (2009).

^{94.} Paul C. Lively, *Government Investment in Clean Technology*, 29 Rev. Banking & Fin. L. 381, 387 (2010).

response-team-for-transmission/ (accessed June 2, 2013).

^{96.} Id.

^{97.} *Id.* The projects are listed in Klass & Wilson, *supra* n. 60, at 1813.

^{98.} *See supra* n.s 11 to 36.

^{99.} Construction on the Montana portion of the line is already complete. Enbridge, Timeline, http://www.enbridge.com/MATL/Timeline.aspx (2012).

energy markets in those two states, a line between Iowa and Illinois and surrounding states that will facilitate the transmission of electricity generated through wind power, and a line within Texas completed in 2009 that carries wind power within the state.¹⁰⁰ Some of the transmission projects designed to spur the growth of renewable energy generation are located at least in part on federal lands. These include the SunZia line for the movement of wind and solar power across Arizona and New Mexico, as much as eighty percent of which may be located on federal lands, and the Zephyr Project line to carry wind power from Wyoming to California.¹⁰¹

Given the location of renewable energy projects on federal lands, the need for new transmission lines to transport energy long distances from remote locations is clear. As of early 2013, at least fourteen active solar production projects were being constructed or slated for construction on BLM public lands, including two in Arizona, four in Nevada, and eight in California.¹⁰² Six wind energy production facilities and three geothermal projects were also active on BLM lands in the same three states.¹⁰³ The Forest Service has also committed itself to authorize new private solar and wind energy facilities on National Forest System lands.¹⁰⁴

III. OVERVIEW OF THE WILD AND SCENIC RIVERS ACT

Despite the division of siting authority among federal and state agencies, the federal land management agencies retain the authority to disapprove or condition approval of energy transmission facilities that cross federal lands under their individual organic statutes. In addition, some federal land laws, including the WSRA, apply to lands within each of the principal federal land management systems. This part provides an overview of the WSRA.

^{100.} For a description of these projects, *see* Klass, *supra* n. 48, 9 N.C. L. Rev. ____, MS at 24-25 (forthcoming 2013).

^{101.} See Klass & Wilson, supra n. 60, at 1826-27.

^{102.} Bureau of Land Mgmt., *Active Renewable Energy Projects*, http://www.blm.gov/wo/st/en/prog/energy/renewable_energy/active_renewable_proje cts.html. (2013).

^{103.} *Id.*

^{104.} U.S. Forest Service, Strategic Energy Framework, 7 (Jan. 2011).

A. Purposes and Scope

The adoption of the WSRA shifted federal water policy away from comprehensive river development, as reflected in statutes such as the Reclamation Act of 1902 and the Federal Power Act.¹⁰⁵ The Act recognizes the need to complement dam construction with "a policy that would preserve . . . selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes."¹⁰⁶ In particular, the statute declares a policy of preserving rivers that "possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values . . . for the benefit of present and future generations."¹⁰⁷ Congress initially designated ten river segments as wild or scenic. ¹⁰⁸ By mid-2011, the WSR System had grown to encompass 12,598 miles of more than 200 rivers in 38 states and Puerto Rico, although these segments still accounted for less than one-quarter of one percent of the nation's rivers.

Congressionally designated river segments are managed by the federal land management agency with pre-existing jurisdiction over the area.¹¹⁰ The managing agency must classify each river segment as wild,

States. Nat'l Park Serv., Wild and Scenic Rivers Program, http://www.nature.nps.gov/water/Program_Briefs/WSR_programbrief_web.pdf

(accessed June 2, 2013). Rivers may be added to the System either by Congress or by states, with the Interior Secretary's concurrence. 16 U.S.C. § 1273(a).

110. 3 Coggins & Glicksman, *supra* n. 46, at § 26:2. Approval of a state designation results in the same level of protection as the statute affords congressionally designated rivers. The state administers such segments, but does not control management of river segments located on federal lands. *Id.* at § 26.3.

Although Congress sometimes establishes the boundaries for river segments, in other cases it delegates that task to the appropriate federal land management agency. The

^{105.} See Eric L. Hiser, *Piloting the Preservation/Development Balance on the Wild and Scenic Rivers*, 1988 Duke L.J. 1044, 1046. Cf. 43 U.S.C. § 620 (authorizing the Interior Secretary to construct dams, reservoirs, power plants, and transmission lines "to initiate the comprehensive development of the water resources of the Upper Colorado River Basin").

^{106. 16} U.S.C. § 1271.

^{107.} *Id.*

^{108. 3} Coggins & Glicksman, *supra* n. 46, at § 26:1.

^{109.} Nat'l Wild and Scenic Rivers System, *About the WSR Act*, http://www.rivers.gov/rivers/wsr-act.php (accessed March 25, 2013). The WSRA lists 207 components of the System. 16 U.S.C. § 1274(a). The NPS manages 38 rivers under the WSRA that flow more than 2,800 miles throughout the United

scenic, or recreational. Wild rivers, which receive the highest level of protection from development, "are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America."¹¹¹ Scenic rivers are also "free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."¹¹² Recreational rivers "are readily accessible by road or railroad . . . may have some development along their shorelines, and . . . may have undergone some impoundment or diversion in the past."¹¹³ The land management agency is responsible for determining which of the three river classifications best fits the river in question.

Some of the WSRA's protections apply to rivers being considered for inclusion in the System.¹¹⁵ The WSRA requires all federal agencies in planning for the use and development of water and related land resources to consider potential additions to the System.¹¹⁶ Public lands within a quarter mile of the bank of a potential addition to the System are withdrawn from entry, sale or disposition,¹¹⁷ and from appropriation under the mining laws (but not from mineral leasing).¹¹⁸ In addition, the WSRA bars FERC from licensing the construction and operation of transmission lines under the FPA on rivers that are potential additions to the System.¹¹⁹

- 111. 16 U.S.C. § 1273(b)(1).
- 112. *Id.* at § 1273(b)(2).
- 113. *Id.* at § 1273(b)(3).

114. *Id.* at § 1274(b). Agency discretion in establishing river boundaries is constrained by the values for which the river was chosen for the system. *See* Sokol v. Kennedy, 210 F.3d 876 (8th Cir. 2000); *In re Montana Wilderness Ass'n*, 807 F. Supp. 2d 990 (D. Mont. 2011).

115. Congress requires the Interior and Agriculture Secretaries to submit reports to the President on the suitability of rivers for inclusion in the System. The President transmits his recommendations to Congress. 16 U.S.C. § 1275(a). The statute lists river segments that are potential additions. *Id.* at § 1276(a).

- 116. *Id.* at § 1276(d)(1).
- 117. *Id.* at § 1279(b).
- 118. *Id.* at § 1280(b).
- 119. *Id.* at § 1278(b).

WSRA requires such an agency to establish detailed boundaries that include within a component of the System an average of no more than 320 acres of land per mile, measured from the ordinary high water mark on both sides of the river. 16 U.S.C. § 1274(b).

B. Management

The WSRA imposes system-wide constraints on development that may affect WSRA units, but legislation designating individual river segments may add to or detract from these constrains.¹²⁰ The Act requires that the land management agencies administer each component of the System "to protect and enhance the values which caused it to be included in [the System] without . . . limiting other uses that do not substantially interfere with public use and enjoyment of these values."¹²¹ Uses may be inconsistent with river values, and therefore prohibited, even if they do not substantially interfere with use or enjoyment of the river.¹²² The standard is flexible, however, and reflects the dual purposes of protection and development.¹²³ Agencies must place primary emphasis on protecting a river's esthetic, scenic, historic, archeological, and scientific features.¹²⁴

The agency with jurisdiction over a WSRA segment must prepare a comprehensive management plan that addresses resource protection, development of lands and facilities, user capacities, and other management practices that are necessary or desirable to achieve the WSRA's values.¹²⁵ The plan must be coordinated with, and may be incorporated into, resource management plan for adjacent federal lands.¹²⁶ Management plans may accommodate protection and development "based on the special attributes of the area."¹²⁷

Inclusion of a river segment in the WSR System triggers minimum restrictions on development in or near the segment. If a

123. See 3 Coggins & Glicksman, *supra* n. 46 at § 26:12 (analogizing WSRA protections to those that apply to the national wildlife refuges).

124. 16 U.S.C. § 1281(a).

125. There is support for the proposition that plans must prevent activities that interfere with river values, not just react to conditions (such as environmental degradation) after they occur. *See Friends of the Yosemite Valley v. Kempthorne*, 520 F.3d 1024, 1034 (9th Cir. 2008).

126. 16 U.S.C. § 1274(d). Plans need not cover federally controlled areas that lie outside but that may affect a designated river segment. *Newton County Wildlife Ass'n v. U.S. Forest Serv.*, 113 F.3d 110 (8th Cir. 1997). Accord *Sierra Club v. U.S.*, 23 F. Supp. 2d 1132 (N.D. Cal. 1998)

127. 16 U.S.C. § 1281(a).

^{120.} See Sierra Club v. FERC, 754 F.2d 1506, 1509 n.1 (9th Cir. 1985); Coal for Canyon Pres., Inc. v. Hazen, 788 F. Supp. 1522, 1529-30 (D. Mont. 1990).

^{121. 16} U.S.C. § 1281(a).

^{122.} Oregon Natural Desert Ass'n v. Singleton, 47 F. Supp. 2d 1182, 1195 (D. Or. 1998).

segment is also within a designated wilderness area, a national park, or a national wildlife refuge, the laws governing those protected areas trump the WSRA's provisions to the extent they are more restrictive than the WSRA provisions.¹²⁸ The Forest Service has discretionary authority to manage any component of the System in a national forest using authority under the National Forest Management Act and other legislation as it deems appropriate to promote the WSRA's purposes.¹²⁹

Classification affects management in at least two ways. First, lands within a quarter mile of the banks of wild, but not scenic or recreational, rivers have been withdrawn from operation of the mining and mineral leasing laws.¹³⁰ Second, as indicated above, each component of the System must be administered to protect the values that caused it to be included in the System.¹³¹ Those values are likely to differ depending on a segment's classification. In one case, for example, a court refused to allow the Forest Service to approve permanent hunting and fishing lodges in a wild river corridor within a national forest.¹³² That court rejected the Forest Service's contention that the lodges would promote the recreational values for which the river was designated as wild. The court reasoned that the presence of recreational values associated with the river did not allow the agency to ignore the clear statutory mandate that wild rivers remain "essentially primitive."

IV. APPLICATION OF THE WILD AND SCENIC RIVERS ACT TO ENERGY TRANSMISSION

The WSRA addresses specifically the approval of energy transmission facilities with the potential to affect WSR System components. Subpart A below summarizes the key provisions of the WSRA, describes their potential application to new energy transmission projects on federal lands, highlights ambiguities in the scope of those provisions, and suggests appropriate ways to resolve those ambiguities.

2000).

^{128.} *Id.* at § 1281(b)-(c).

^{129.} *Id.* at § 1281(d).

^{130.} Id. at § 1280(a)(iii).

^{131.} *Id.* at § 1281(a).

^{132.} Wilderness Watch v. U.S. Forest Serv., 143 F. Supp. 2d 1186 (D. Mont.

^{133.} Id. at 1207.

Subpart B creates a framework for applying the WSRA in ways that will promote important national energy policies without unduly sacrificing the environmental protection values reflected in the WSRA.

A. The WSRA's Constraints on Energy Transmission

Section 7 of the WSRA, a provision that at least one observer has called "the heart of the Act,"¹³⁴ is titled "Restrictions on water resources projects.",135 Section 7's restrictions are comprised of several elements. First, the statute bars FERC from licensing the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other "project works" under the FPA "on or directly affecting any component of the System."¹³⁶ Second, § 7 provides that no federal agency (including FERC)¹³⁷ "shall assist by loan, grant, license or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values" for which the river was designated as part of the System.¹³⁸ The determination whether a project will adversely affect river values is made by the federal land management agency with jurisdiction over the federal lands containing the affected river.¹³⁹ Third, the statute imposes the same prohibitions, albeit for a limited period of time, on projects on or directly affecting rivers that have been designated

^{134.} Peter M.K. Frost, *Protecting and Enhancing Wild and Scenic Rivers in the West*, Idaho L. Rev. 313, 324 (1992/1993).

^{135. 16} U.S.C. § 1278.

^{136.} Id. at § 1278(a). See generally Riette Van Laack, Comment, Protection of a Wild and Scenic River Against Nonfederally Funded, Nonpower Water Projects Reducing the Volume of Water Feeding Into that River, 72 Tenn. L. Rev. 875 (2005).

^{137.} See Swanson Mining Corp. v. FERC, 790 F.2d 96 (D.C. Cir. 1986).

^{138. 16} U.S.C. § 1278(a); see Merced Irrigation Dist. v. County of Mariposa, 2013 WL 796619, *3 (E.D. Cal. Mar. 4, 2013) ("When a water resources project is found to have a 'direct and adverse effect' on a wild and scenic river, the project cannot be authorized or funded absent congressional intervention."). An agency's request for congressional appropriations for a project, rather than an action that assists third parties in the construction of a water resources project, does not trigger this prohibition. Oregon Natural Res. Council v. Harrell, 52 F.3d 1499 (9th Cir. 1995).

^{139.} See High Country Res. v. Federal Energy Regulatory Comm'n, 255 F.3d 741, 743 (9th Cir. 2010) (Forest Service finding of adverse effects on vulnerable fish stocks).

as potential additions to the system.¹⁴⁰ Fourth, § 7 provides that the foregoing restrictions as applied to river segments that are already part of the System do not preclude "licensing of, or assistance to, developments below or above a wild, scenic or recreational river area . . . which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date" of the river's designation as part of the System.¹⁴¹

The impact of § 7 is not easy to ascertain, either generally or as it applies to projects that do not obviously affect the free-flowing character of a designated river. As the D.C. Circuit saw it, the 378-word portion of § 7(a) in question has poor syntax, confusing language, "and at first glance may seem inexplicable."¹⁴² Ten years later, the D.C. Circuit sought to clarify some of the confusion. It noted that the first restriction identified above (which appears as the first part of the first sentence of § 7(a)) applies only to FERC, while the second restriction (which appears in the second part of the first sentence of §7(a)) applies to FERC, but also to all other federal agencies.¹⁴³ It rejected the contention that FERC's authority to license a hydroelectric project applies only when the project has a direct and adverse impact on a wild and scenic river. The Act prohibits FERC from not only allowing construction "on or directly affecting" a designated river, but also construction having an adverse effect on scenic values.¹⁴⁴ Further, the court ruled that § 7(a) applies not merely to the licensing of an entire hydroelectric facility, but also to the licensing of any component of

^{140. 16} U.S.C. § 1278(b). This provision does not apply to a river segment proposed for inclusion by a state. *See North Carolina v. Federal Power Comm'n*, 533 F.2d 702 (D.C. Cir.), vacated and remanded, 429 U.S. 891 (1976).

^{141. 16} U.S.C. § 1278(a). See Brian E. Gray, No Holier Temples: Protecting the National Parks Through Wild and Scenic River Designation, 58 U. Colo. L. Rev. 551, 566 (1988) (arguing that nothing in § 7 "prevents the construction or operation of a water project located upstream of the boundaries of the park that diminishes the flow of water below the level needed to fulfill the purposes of the park"). Section 1278(b) contains a similar disclaimer for study rivers. Forest Service regulations implementing § 7 are at 36 C.F.R. §§ 297.4-297.5.

^{142.} North Carolina v. Federal Power Comm'n, 533 F.2d 702, 709 (D.C. Cir. 1976), vacated on other grounds, 429 U.S. 891 (1976). The issue in that case was whether Congress intended the protections for study rivers to apply only to those listed by Congress in § 5(a) of the WSRA, or also to state proposed rivers. The court held that § 7(b) applies only to proposed rivers listed in § 5(a).

^{143.} Swanson Mining Corp. v. Federal Energy Regulatory Comm'n, 790 F.2d 96, 102 (D.C. Cir. 1986).

^{144.} *Id.* at 103.

such a project (in that case, the installation of new transmission lines to an existing powerhouse): "The Wild and Scenic Rivers Act explicitly prohibits FERC from licensing the construction of such transmission lines."¹⁴⁵

These clarifications notwithstanding, the application of § 7(a)'s restrictions to electricity transmission lines and natural gas pipelines raises difficult questions. The first part of the first sentence of § 7(a) bars FERC from licensing the construction of "any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.) on or directly affecting" any component of the WSR System.¹⁴⁶ The second part of the first sentence prohibits any agency, including FERC, from assisting in the construction of "any water resources project that would have a direct and adverse effect on the values for which" a WSRA component is designated.¹⁴⁷ One obvious question is what the difference is between the facilities referred to in the first part of the sentence and the "water resources projects" referred to in the second part of the sentence. To make matters even more obtuse, the second sentence provides that nothing in the first sentence precludes "licensing of, or assistance to, developments above or below" a System component "which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area."¹⁴⁸ What is a "development"? Does it include all of the facilities referred to in the first part of the first sentence and the water resources projects referred to in the second part of that sentence (and only that combination of facilities)? Is it instead yet a third term, perhaps with broader coverage than the facilities covered by either part of the first sentence? The absence of a statutory definition of the terms "water resource project" or "development" makes the answers anything but apparent.

The Forest Service has sought to answer one of these questions, defining a "water resources project" to mean "any dam, water conduit, reservoir, powerhouse, transmission line, project works under the [FPA],

^{145.} *Id.* at 104. The provisions of § 7(a) continue to generate interpretational confusion. *See e.g., High Country Res. v. Federal Energy Regulatory Comm'n*, 255 F.3d 741, 745 (9th Cir. 2001) (describing conflicting interpretations of the parties).

^{146. 16} U.S.C. § 1278(a).

^{147.} *Id.*

^{148.} Id.

or other construction of developments which would affect the free-flowing characteristics of a Wild and Scenic River or Study River."¹⁴⁹ This definition renders the "water resources projects" covered by the second part of the first sentence of § 7 broader than the collection of facilities referred to in the first part of the sentence, which the Forest Service lists as only part of the definition of a water resources project.¹⁵⁰

The D.C. Circuit has offered a different approach, interpreting the term "water resources project" in the Swanson Mining case to refer to an "entire hydroelectric project" and the first part of the first sentence to cover "the separate components of such an endeavor."¹⁵¹ Under this definition, the restrictions in the first part of the first sentence might apply to FERC approval of a new transmission line at an existing hydropower facility, while the second part of the first sentence might only apply to licensing of or assistance to an entirely new hydropower project. Such a construction actually would make the scope of the second part of the first sentence narrower than the scope of the first part. The "developments" covered by the second sentence presumably would be broader than either the hydropower components or entire projects covered in the first sentence. It is also not clear whether the D.C. Circuit interpreted the first sentence as applying only to hydropower facilities, or couched its analysis in terms of hydropower facilities because that was the only type of project at issue in Swanson Mining.

Another portion of the court's analysis in *Swanson Mining* arguably supports the conclusion that the prohibitions in the first sentence of § 7(a) might not apply to energy transmission facilities licensed by FERC not associated with a hydropower facility. The court found that "[t]he congressional decision to impose added limitations on the powers of FERC [under the first part of the first sentence] makes good sense, as almost all of FERC's activities under Part I of the Federal Power Act will involve an adverse impact on the preservation of rivers in their natural

^{149. 36} C.F.R. § 297.3.

^{150.} The Forest Service's definition was apparently based on usage of the term by both the Interior and Agriculture Departments. Kenny Seale, *The Effect of the Wild and Scenic Rivers Act on Proposed Bridge Construction: Sierra Club North Star Chapter v. Pena*, 7 Wis. Envtl. L.J. 225, 251 n. 20 (2000).

^{151.} Swanson Mining Corp. v. Federal Energy Regulatory Comm'n, 790 F.2d 96, 102 (D.C. Cir. 1986). See also id. at 104 ("The Wild and Scenic Rivers Act prohibits not merely the licensing of construction of an entire hydroelectric facility but also the licensing of construction of any component of such a project.").

state."¹⁵² Part I of the FPA¹⁵³ deals with the "development of water power and resources."¹⁵⁴ The portion of the FPA that deals with the regulation of electric utility companies in interstate commerce that are not involved in hydropower production is Part II.¹⁵⁵ There is thus at least an argument that neither part of the first sentence of § 7(a) applies to electric transmission lines not connected to a hydropower plant. Even if that interpretation is too narrow, a natural gas pipeline would seem clearly to be outside the scope of the first part of the first sentence, because FERC licenses such facilities under the NGA, not the FPA.¹⁵⁶

Contrary arguments support the conclusion that the first sentence of § 7(a) applies more broadly than to just entire hydropower facilities and their components. First, the literal language of the first part of the first sentence bars FERC from licensing the construction of *any* transmission line under the FPA on or directly affecting a WSRA component, whether that transmission line is part of a hydropower project or not. Second, the overarching policy of the WSRA is to protect the "free-flowing condition" of System components.¹⁵⁷ While dams at hydropower facilities clearly affect such conditions, they are not necessarily the only facilities capable of doing so. Accordingly, the key terms in the first two sentences of § 7(a), including the terms "water resources project" in the first sentence and "development" in the second, arguably should be interpreted by reference to whether a facility has the capacity to interfere with that a river's free-flowing condition. If so, then an electric transmission line or natural gas pipeline with that capacity would be subject to § 7(a)'s restrictions. The

^{152.} Id. at 102.

^{153. 16} U.S.C. §§ 791a-823d.

^{154.} This is the language used in the title to Part I of the FPA. Statutory titles are relevant to the interpretation of an unclear statute. *See Brotherhood of R. R. Trainmen v. Baltimore & O. R. Co.*, 331 U.S. 519, 528-29 (1947) (referring to "the wise rule that the title of a statute and the heading of a section cannot limit the plain meaning of the text," and noting that "[f]or interpretative purposes, they are of use only when they shed light on some ambiguous word or phrase. They are but tools available for the resolution of a doubt. But they cannot undo or limit that which the text makes plain.").

^{155. 16} U.S.C. §§ 824-824w.

^{156.} A natural gas pipeline might still qualify as a "water resources project" under the second part of the first sentence if Swanson focused on hydropower facilities because those were the kinds of facilities at issue in that case, not because it construed water resources projects to be limited in all cases to hydropower facilities.

^{157. 16} U.S.C. § 1271.

statute defines "free-flowing" to mean "existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway."¹⁵⁸ That definition appears to focus primarily on structures that divert or restrict water flow or otherwise modify a waterway, as opposed to structures that merely cross a river without modifying it or affecting its flow.

The very limited judicial treatment of § 7(a) outside the context of hydropower facilities supports the broader interpretation of its scope. In one case, *Sierra Club North Star Chapter v. Pena*,¹⁵⁹ a state transportation agency challenged the NPS's determination that a proposed four-lane bridge over a designated river that separates Minnesota from Wisconsin would violate § 7(a) because it would have a direct and adverse effect on the values for which the river was included in the WSR System. Relying on the statutory purpose of the WSRA, the NPS concluded that the proposed bridge qualified as a "water resources project" because its construction would measurably alter the river's bed and banks of the river, thereby impacting its free-flow.¹⁶⁰ The court's analysis began with its determination that scope of § 7(a) is unclear because "[t]he term 'water resources project' is not defined in the WSRA and there is no case law directly on point."¹⁶¹ The court deemed the legislative history similarly silent on the issue.

The court in *Pena* noted an opinion of the Interior Department's Solicitor issued shortly after adoption of the WRSA that was relevant not only to the question of whether a bridge may qualify as a water resources project, but also to the applicability of § 7(a) to electric transmission lines and natural gas pipelines. Citing a Senate Committee Report, the Solicitor provided the following analysis of § 7:

^{158.} *Id.* at § 1286(b).

^{159.} Sierra Club N. Star Chapter v. Pena, 1 F. Supp. 2d 971 (D. Minn. 1998) [hereinafter Pena].

^{160.} *Id.* at 976.

^{161.} *Id.*

^{162.} The court found a brief reference in a Senate Committee Report comparing the WSRA with the Wilderness Act to be ambiguous on whether bridges that require modification of the bed and banks of a System river are properly considered "water resources projects" under the statute. *Id.* at 977. The court dismissed another statement that seemed more dispositive (against coverage of bridges) as irrelevant because it amounted to post-enactment legislative history. *Id.* at 977 n. 1.

The threshold inquiry in analyzing this section is the meaning of the term "water resource project." As illustrative of the issues confronting the Department in administering this section of the act, your memorandum questioned whether Corps of Engineers dredging and navigational servitude permits, transmission and gas line crossings, and highway and bridge crossings are water resource projects within the meaning of section 7.

There is no question, in our judgment, that section 7 was not intended to apply to transmission and gas line crossings or highway and bridge construction across section 3 [designated rivers] and section 5 [study] rivers. We do not view any of these activities as the construction of a water resources project.¹⁶³

Acknowledging that this statement supported the state agency's position that bridges do not qualify as water resources projects, the court nevertheless concluded that subsequent analysis in the Solicitor's Opinion undercut that position. The Solicitor noted that, in reporting on the bill that became the WSRA, the Interior Department had "stated that the term 'water resource project is a very broad term which includes sewage treatment plants.' . . . We find nothing in the House or Senate reports or the congressional debates which indicates that Congress considered the term other than in its broadest context."¹⁶⁴ The Solicitor ultimately concluded that, based on the WSRA's purpose provision and the definition of "free flowing,"

it is our judgment that a water resource project can best be defined as any type of construction which would result in any change in the free-flowing characteristics of a particular river. In this context, we consider Corps of Engineers dredge and fill permits as falling within the restrictions of section 7 of the act. To view the act otherwise could result in the complete frustration of the

^{163.} *Id.* at 977 (quoting Memorandum from Bernard R. Meyer, Associate Solicitor, Dep't of Interior, to the Director of the Bureau of Outdoor Recreation 4 (Feb. 7, 1969)).

^{164.} Id. at 978.

Congressional purpose behind this legislation which is to preserve certain rivers in their free-flowing natural condition unaffected by dredging, filling or other modification.¹⁶⁵

The district court concluded that neither Congress nor the Interior Department had directly addressed the narrow question before it. That question was whether a bridge that requires dredge and fill permits under the Clean Water Act¹⁶⁶ for its construction constitutes a "water resources project" within the meaning of the Act.¹⁶⁷ The NPS's interpretation of the term was therefore entitled to deference under step two of the *Chevron* case, as long as it was permissible.¹⁶⁸

The district court found the NPS's interpretation (and that of the Interior Department, including the Solicitor) to be permissible and entitled to deference. It reasoned that application of § 7 to projects that affect the free-flow of System rivers is necessary to avoid frustrating the WSRA's policy of preserving designated rivers in their free-flowing condition. The court noted that the Department had consistently deemed bridge projects that involve construction activity in the bed or on the banks of a wild and scenic river to be "water resource projects" because construction activity that requires a dredge and fill permit "inherently alters the free-flowing natural condition of the river and always triggers a Section 7 determination."¹⁶⁹ But the court also noted that, according to the agency, "bridges that do not require such permits and do not affect the free-flowing condition."

^{165.} *Id.*

^{166.} The Clean Water Act's dredge and fill permit program is governed by 33 U.S.C. § 1344.

^{167.} *Pena*, 1 F. Supp. 2d at 978.

^{168.} Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984). The Solicitor's interpretation might not trigger Chevron deference if reviewed today. The court in *Pena* noted that the NPS's interpretation of the term "water resources project" came in the form of an interpretive rule. *Pena*, 1 F. Supp. 2d at 979 n. 3. Interpretive rules are not entitled to *Chevron* deference under *U.S. v. Mead Corp.*, 533 U.S. 218 (2001), because they are not issued pursuant to the exercise of delegated authority to make rules carrying the force of law. Rather, such an interpretation is entitled to a lesser degree of deference under *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944). *See Gonzales v. Oregon*, 546 U.S. 243, 258 (2006) (stating that interpretive rules are not entitled to Chevron deference).

^{169.} Pena, 1 F. Supp. 2d at 979.

flowing characteristics of a river are not considered 'water resources projects' and do not trigger a Section 7 determination."¹⁷⁰

Under *Pena*, the only case to have explored the meaning of the term "water resources project" in any depth, there is no blanket answer to whether a natural gas pipeline or an electric transmission line not related to a hydroelectric power facility is subject to § 7(a)'s restrictions. If the project would interfere with the free flowing condition of the affected river, the second part of § 7(a)'s first sentence would apply. That result would be the all but certain conclusion if the project requires a dredge and fill permit, which involves activity that modifies the banks or bed of the river.¹⁷¹ Projects that merely cross a designated river without construction that physically alters the bed or banks or otherwise altering the river's flow, however, would not be covered. *Pena* is only one district court decision, however, that has never been cited on the relevant point, and therefore is not necessarily the last word on the scope of § 7(a)'s

^{170.} Id. The court went on to conclude that the NPS rationally concluded that the proposed bridge would have a direct and adverse effect on the values for which the river was included in the System based on its visual impact and interference with recreational values. Id. at 981-83. The Federal Highway Administration and the Minnesota and Wisconsin transportation agency later proposed construction of a taller and longer bridge about a mile south of the original proposed location. This time, the NPS found that the bridge would not have a direct and adverse impact on the Lower St. Croix's values. When the Sierra Club once again challenged the project as a violation of § 7, the federal and state agencies argued that changes in design, alignment, and location, the existence of fewer riverbed piers, and new proposed mitigation measures eliminated the project's objectionable impacts on the river. The court disagreed, holding that NPS's finding that the bridge would not have a direct and adverse impact on river values was arbitrary and capricious in light of its failure to even mention, no less convincingly distinguish, its contrary findings on the earlier iteration of the bridge. Sierra Club N. Star Chapter v. Pena, 693 F. Supp. 2d 958, 978 (D. Minn. 2010). Eventually, Congress passed a bill exempting the bridge from § 7. St. Croix River Crossing Project Authorization Act, Pub. L. No. 112-100, 126 Stat. 268 (2012) (discussed infra at n.s 210 to 213 and accompanying text).

^{171.} The Interior Department proposed regulations under the WSRA that would have defined a "water resources project," in part, to include "dredge and fill activity that requires a Federal permit, such as from the U.S. Army Corps of Engineers as required by Section 404 of the Clean Water Act." *Wild and Scenic Rivers*, 63 Fed. Reg. 67834, 67837 (Dec. 9, 1998) (proposed 43 C.F.R. § 39.2). The regulations were not adopted in final form. *See also Seale*, *supra* n. 150, at 255 ("The issuance of COE dredge and fill permits have traditionally triggered section 7 determinations when the permits pertain to water resources projects on designated rivers or study rivers.").

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restrictions.¹⁷² Given the statutory lack of clarity and the relatively consistent interpretation afforded the term "water resources project" by the Interior Department and the Forest Service, courts are likely to continue to endorse the approach upheld in *Pena*.

Yet another mystery is what, if anything, the second sentence adds to the restrictions codified in the first sentence of § 7(a).¹⁷³ The second sentence takes the form of a savings clause, providing that nothing in the first sentence "shall preclude licensing of, or assistance to, developments below or above" a designated river area, stream, or tributary "which will not invade the area or unreasonably diminish" the values present in that area on the date of a river's designation as a component of the WSR System.¹⁷⁴ The negative inference, of course, is that a development that would result in such an invasion or unreasonable diminution of river values is prohibited.¹⁷⁵ Like the second part of the first sentence, these constraints apply to all federal agencies, including FERC.

It is not clear, however, whether the constraints of the second sentence apply only to activities of the kind governed by the first sentence (i.e., (1) licensing of the construction of a dam, water conduit, or other structure referred to in the first part of the first sentence, or (2) assistance in the construction of a water resources project covered in the second part of the first sentence), or instead cover a broader range of activities, provided they invade the described areas or unreasonably diminish the relevant river values. The word "development," a term not defined by the statute, is arguably broad enough to encompass activities beyond those covered by the first sentence. On the other hand, the reason to restrict a

^{172.} Oregon Natural Desert Ass'n v. Green, 953 F. Supp. 1133 (D. Or. 1997), held that a river management plan adopted by the BLM violated the WSRA by failing to restrict cattle grazing in the public lands portion of the designated river area, but the court never cited § 7.

^{173.} One judge decided that the answer is nothing. *See High Country Res. v. Federal Energy Regulatory Comm'n*, 255 F.3d 741, 752 (9th Cir. 2001) (Reinhardt, J., concurring in the judgment) (concluding that § 7's "second sentence on its face reads as a clarification of the first" and "has no independent substantive content").

^{174. 16} U.S.C. § 1278(a).

^{175.} See High Country Res. v. Federal Energy Regulatory Comm'n, 255 F.3d 741, 748-49 (9th Cir. 2001) (Reinhardt, J., concurring in the judgment) ("As the second sentence of section 7(a) states, however, the Forest Service may assist a project that does not invade or unreasonably diminish those values for which the river was established. It follows from a careful reading of the two sentences that any project that does invade the river or that unreasonably diminishes certain of its values necessarily directly affects the river.").

broader range of activities above or below designated river areas (provided they involve the required invasion or substantial diminution) than the ones prohibited "on or directly affecting" a designated river is not apparent. Congress therefore may have intended "development" to be a generic term that covers only those activities subject to the restrictions of the first sentence of § 7. If so, then electric transmission lines would be subject to the second sentence only if the first part of the first sentence's reference to transmission lines is meant to cover lines not connected to a hydropower project or if the line affects the free-flowing condition of a designated river (and therefore qualifies as a water resource project for purposes of the second part of the first sentence) *and* causes the invasion or unreasonable diminution barred by the savings clause. The need for clarifying amendments to the provisions of § 7 is obvious.

B. Tradeoffs Between Clean Energy Production and Wild and Scenic River Protection

Concerns over the contributions to climate change that result from greenhouse gas emissions associated with fossil fuel use have prompted efforts to promote the development of renewable energy sources in the U.S. Among other things, Congress has created tax incentives and provided subsidies¹⁷⁶ for investments in renewable energy.¹⁷⁷ It also has sought to accelerate the production of renewable energy, particularly solar power, on federal lands.¹⁷⁸ In 2013, the President's Council of Advisors on Science and Technology urged the President to make efforts to "decarbonize" the economy, and to pursue policy initiatives to create "pathways to lower CO₂ emissions."¹⁷⁹ The Council also recommended

^{176.} See e.g., American Recovery and Reinvestment Act, Pub. L. No. 111-5, § 1603(a), (d)(3) (2009) (providing grants for clean energy projects).

^{177.} See Roberta Mann, Subsidies, Tax Policy, and Technological Innovation, Global Climate Change and U.S. Law 566-72, 577 (ABA Michael B. Gerrard ed., 2007); Alexandra B. Klass, Tax Benefits, Property Rights, and Mandates: Considering the Future of Government Support for Renewable Energy (forthcoming) (available at http://ssrn.com/abstract=2222987.).

^{178.} *See* Glicksman, *supra* n. 37, 3 San Diego J. of Climate & Energy L. at 129-42 (describing the fast-track approval process for the issuance of rights-of-way across BLM lands to facilitate the siting and operation of utility-scale solar power production facilities).

^{179.} Executive Office of the President, President's Council of Advisors on Science and Technology, Letter to President Obama from John Holdren et al., at 3,

efforts to "level the playing field for clean energy . . . by removing regulatory obstacles." 180

The land management agencies have responded to these efforts to promote renewable energy development and reduce GHG emissions by prioritizing approval of projects that devote federal lands to renewable energy production.¹⁸¹ The Interior Secretary has issued an order declaring the development of renewable energy as a Departmental priority and noted that renewable resources on the federal lands can help meet the nation's energy needs while providing significant environmental and economic benefits.¹⁸² The BLM has enunciated a policy of facilitating

180. *Id.* at 5.

181. This rationale for accommodating the siting of natural gas pipelines on federal lands is weaker than for solar and wind power projects because natural gas production and use generates GHG emissions that include CO2 and methane. Accommodating natural gas transportation across federal lands may still be a worthy objective, however, if it helps reduce the need for coal-fired power and does not create unacceptable environmental effects such as water pollution.

182. Secretarial Order No. 3285, Amendment No. 1, http://elips.doi.gov/elips/0/doc/151/Page1.aspx (Feb. 22, 1010). The Forest Service's position is somewhat more equivocal, or at least less well structured. In the land use planning rules it issued in 2012, the Forest Service made the following remarks about use of the national forests for renewable energy production:

[T]he Agency recognizes the growing demand for geothermal, wind, and solar energy development on NFS lands. Agency management of the renewable resources mandated by [the Multiple Use and Sustained Yield Act] recognizes ongoing and potential exploration and development while protecting and conserving these renewable resources... The final rule recognizes in § 219.10 that development of renewable and non-renewable energy resources are among the potential uses in a plan area. However, the final rule does not dictate the activities that may occur or not occur on administrative units of the NFS. Accordingly, the final rule does not have energy requirements or energy conservation potential.

National Forest System Land Management Planning, 77 Fed. Reg. 21162, 21257 (Apr. 9, 2012). The planning regulations do provide that "[i]n the assessment for plan development or revision, the responsible official shall identify and evaluate existing information relevant to the plan area for . . . [r]enewable and nonrenewable energy and mineral resources." 36 C.F.R. § 219.6(b)(10). See also id. at § 219.10(a)(2) (requiring consideration of renewable and non-renewable energy and mineral resources). Cf. U.S. Forest Serv., Strategic Energy Framework, supra n., 104, at 3 ("acknowledging the continuing value of fossil-based energy while providing an

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http://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_energy_a nd_climate_3-22-13_final.pdf (March 2013).

"environmentally responsible development of solar and wind energy projects on public lands" consistent with the Secretary's Order.¹⁸³ It has nevertheless created a screening process to help direct renewable energy development away from lands "with high conflict or sensitive resource values" in the process of issuing rights-of-way under FLPMA.¹⁸⁴ The agency has defined areas with high potential for conflict to include lands adjacent to wild and scenic rivers "if project development may have significant adverse effects on sensitive viewsheds, resources, and values."¹⁸⁵

The federal land management agencies have discretionary authority that may be used to facilitate or restrict the development of energy transmission facilities on federal lands. These facilities, for example, cannot be routed across federal lands absent issuance of rightsof-way by the land management agency with jurisdiction over the affected land. The WSRA may pose additional obstacles to the approval of energy transmission facilities on federal lands even if those facilities would be consistent with national energy policy goals and adequate authority exists for appropriate energy regulatory agencies to approve them under statutes such as the FPA and the NGA. Section 7 of the WSRA (a) prohibits FERC from licensing the construction of transmission lines on or directly affecting designated rivers; (b) prohibits all federal agencies from assisting, such as through the approval of rights-of-way, the construction of water resources projects that would have a direct and adverse effect on WSRA values; and (c) prohibits all federal agencies from licensing or assisting development above or below a designated river segment area which will invade the area or unreasonably diminish the river values that resulted in designation. As the analysis in Part IV A above indicates, the exact extent to which the WSRA imposes constraints on the land management agencies beyond the agencies' organic act provisions that

Agency framework that supports the development and production of new energy solutions [that] will integrate strategies for achieving land management objectives, mitigating and adapting to climate change, and providing goods and services").

^{183.} Bureau of Land Mgt., *Solar and Wind Energy Applications – Pre-Application and Screening*, 2800 (350) P, http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/nati onal_instruction/2011/IM_2011-061.html (Feb. 7, 2011).

^{184.} *Id.*

^{185.} Id.

govern licensing, permitting, and right-of-way decisions concerning energy transmission facilities is complicated and unclear.

Assuming the WSRA applies to the use of federal lands for energy transmission facilities, it is important to determine whether that statute restricts the ability of federal agencies to approve projects regarded as beneficial from an energy policy perspective. The federal land management agencies will often have the discretion to craft approvals of energy transmission facilities so as to avoid violating § 7 of the WSRA, and they may have a duty to do so even under their organic acts. FLPMA, for example, requires that a right-of-way be located along a route that will cause least damage to the environment, taking feasibility into account.¹⁸⁶ Similarly, the MLA affords broad discretionary authority to the Interior Secretary in ruling on applications for rights-of-way for natural gas pipelines.¹⁸⁷

Avoiding conflicts between the WSRA's natural resource protection goals and national energy goals such as increased reliability of electric service, reduced congestion, and increased access to renewables is the optimal solution. Accordingly, agencies such as the BLM and the Forest Service should begin by identifying routes for energy transmission facilities that do not cross designated rivers or adversely affect river values.¹⁸⁸ The BLM has taken similar steps in issuing rights-of-way for electric transmission lines under FLPMA to avoid protected areas such as national wildlife refuges.¹⁸⁹ It has engaged in a similar process in

189. See e.g., Bureau of Land Management, Record of Decision - North Steens 230k VTransmission Line Project, 23-24, http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS REALTY AND R ESOURCE PROTECTION /energy/priority projects.Par.63228.File.dat/rodEchanis Wind-NorthSteensTransmission.pdf (Dec. 2011) [hereinafter North Steens ROD] (choosing route for right-of-way for overhead transmission lines and access roads to transmit wind-driven power that was different from the one favored by project operator to minimize collision mortality for avian species found in a wildlife refuge). See also Glicksman, supra n. 37, at 152-54 (describing BLM efforts to create zones in which solar projects would not be allowed); Lee Paddock & Lea Colasuanno, Minimizing Species Disputes in Energy Siting: Utilizing Natural Heritage Inventories, 87 N.D. L. Rev. 603,614 (2011) (discussing state regulatory program for siting

^{186. 43} U.S.C. § 1765(b). *See also id.* at § 1764(c) (authorizing the BLM to prescribe terms concerning the location of rights-of-way).

^{187. 30} U.S.C. § 185(f). See Marathon Oil Co., 83 IBLA 137, 142 (1984).

^{188.} Federal land management agencies must consider alternatives that would avoid or minimize undesirable environmental effects under NEPA. 42 U.S.C. § 4332(2)(C)(iii), (E) (2013).

identifying portions of the public lands that would be unsuitable for utility-scale solar developments as well as lands on which the agency would prioritize approval of solar projects.¹⁹⁰

Information that may be useful in identifying routes for transmission projects that would adversely affect designated river values may already be available, as the organic statutes for the land management agencies require that they prepare and periodically update resource inventories that are likely to be relevant to transmission project location. FLPMA, for example, requires the BLM to "prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values (including, but not limited to, outdoor recreation and scenic values)."¹⁹¹ The NFMA requires the Forest Service to develop and maintain a comprehensive inventory of all of the national forests, which must be kept current "to reflect changes in conditions and identify new and emerging resources and values."¹⁹² States, especially in the West, also may have useful information at hand, including Natural Heritage Inventories of rare, threatened, and endangered species and their habitats.

If complete avoidance of designated rivers is not feasible, the land management agencies may still be able to foster energy policy goals without contravening the WSRA's preservation policies by imposing protective conditions on construction and operation of an energy transmission facility right-of-way. FLPMA vests the BLM and the Forest Service with broad discretionary authority to subject right-of-way approvals to protective conditions.¹⁹⁴ Applicants for rights-of-way associated with new projects that may have significant environmental impacts must submit a plan of operations for construction, operation, and rehabilitation that requires compliance with conditions that will, among other things, minimize damage to scenic and esthetic values and otherwise

193. See generally Paddock & Colasuonno, *supra* n. 189 (discussing use of Natural Heritage Inventories in energy facility siting decisions).

194. 43 U.S.C. § 1764(c) (authorizing the imposition of "such terms and conditions as the Secretary concerned may prescribe").

electric transmission lines that requires consideration of alternative sites to avoid significant impacts on areas with important natural, cultural, or historic resources).

^{190.} See Glicksman, *supra* n. 37, at 142-46, 150-54.

^{191. 43} U.S.C. § 1711(a).

^{192. 16} U.S.C. § 1603.

protect the environment.¹⁹⁵ The BLM has subjected rights-of-way for energy generation and transmission projects to these kinds of mitigating conditions.¹⁹⁶ Forest Service regulations under the WSRA also enable the Forest Service to recommend measures to eliminate adverse effects on river values, which may justify approval of developments that § 7 of the WSRA otherwise would prohibit.¹⁹⁷ The dual strategy of requiring allowing and mitigation if avoidance is impossible has long been a mainstay of environmental law.¹⁹⁸

If neither avoidance nor mitigation suffices, and the location of energy transmission facilities on federal lands would necessarily violate applicable § 7 prohibitions, it is worth considering whether river-specific statutory exemptions from § 7 are appropriate. Section 7 already recognizes the possibility that energy and environmental policy goals may conflict in connection with the siting of transmission lines or water resources projects near wild and scenic rivers. The statute reflects a decision by Congress that the WSRA's preservation goals should generally trump energy policy goals if energy development will cause unreasonable interference with WSRA values.

Increasingly, however, a project that is a desirable means of promoting energy goals such as reliability or security may create certain kinds of environmental risks while minimizing or avoiding others. The construction of a large solar energy facility in the habitat of an endangered species, for example, may facilitate a shift from fossil fuel production that generates high levels of GHGs to renewable energy production that does not. At the same time, the solar project may create risks to species and habitat preservation objectives such as the maintenance of biodiversity. Similarly, the location of a large offshore wind facility may be desirable as a means of reducing reliance on GHG-emitting energy production

^{195.} Id. §§ 1764(d)-(e), 1765(a).

^{196.} See e.g., North Steens ROD, supra n. 189, at 14-20 (imposing mitigation requirements to minimize adverse impacts on sage grouse habitat); Glicksman, supra n. 37, at 132-36.

^{197. 36} C.F.R. § 297.5(b).

^{198.} See e.g., 23 U.S.C. § 138(a) (prohibiting highway construction in public parks if avoidance is possible and mitigation of harm to recreational areas, wildlife, and historic sites if it is not); *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 411 (1971) (construing earlier version of this statute as "a plain and explicit bar to the use of federal funds for construction of highways through parks – only the most unusual situations are exempted"); 33 U.S.C. § 1344(c) (avoidance and mitigation requirements for Clean Water Act dredge and fill permits).

facilities that result from fossil fuel combustion, while creating objectionable interference with scenic vistas from the coast. In such situations, the issue is how best to resolve the resulting internal environmental policy conflicts.

Congress has exercised its authority to carve out exemptions from the restrictions on water resources projects otherwise imposed by § 7 in the course of adding individual river segments to the System. It has specifically provided that the designation of river segments will not prohibit the issuance of licenses or rights-of-way for transmission facilities associated with hydropower facilities.¹⁹⁹ It also has authorized the construction and operation of pipelines, notwithstanding § 7, to promote natural resource management policies such as assuring an adequate supply of water for owners of land adjacent to a designated river segment or for fish, wildlife, and recreational uses outside the river corridor.²⁰⁰ Congress has therefore been willing to accommodate policies that potentially conflict with the WSRA's policy of preserving rivers in their free flowing condition by reducing § 7's constraints on development. It should consider doing so for projects that would promote national energy objectives in ways that conform to environmental policy goals other than those reflected in the WSRA.²⁰¹

Congress could craft partial exemptions from WSRA § 7 restrictions for renewable energy projects that foster both climate change

^{199.} See e.g., Pub. L. No. 99-590, § 102, 100 Stat. 3331 (1986) (Cache la Poudre River); 16 U.S.C.A. § 1272(a)(116)(B) (Clark Fork River). Cf. S. 2286, 112th Cong. (2012), Lower Farmington River and Salmon Brook Wild and Scenic River Act, http://beta.congress.gov/bill/112th-congress/senate-bill/2286/text (bill that would preclude designation from prohibiting potential future licensing of dam at hydropower facility).

^{200.} See e.g., 16 U.S.C. 1274(a) (22) (Missouri River in Nebraska and South Dakota); 1274(a)(62)(B)(ii) (Merced River).

^{201.} It is not unusual for policymakers to be forced to choose between competing environmental protection policies. *See e.g.*, 3 Coggins & Glicksman, *supra* n. 46, at § 23:3 (describing conflicts between preservation and recreation objectives of national park management); Jan G. Laitos & Thomas A. Carr, *The Transformation on Public Lands*, 26 Ecology L.Q. 140, 144 (1999) (discussing "the looming conflict in public land law... between two former allies – recreation and preservation interests"); Sara Elizabeth Jensen, *Policy Tools for Wildland Fire Management: Principles, Incentives, and Conflicts*, 46 Nat. Resources J. 959, 999-1000 (2006) ("[E]nvironmental policies sometimes create conflicting incentives. For example, the Wilderness Act creates incentives for large-scale wildland fire use, but the Endangered Species Act and Clean Air Act can discourage such activities.").

mitigation goals and energy policy goals such as increased reliability and reduced dependence on unstable foreign energy supplies. By analogy, FERC has already recognized the value of taking actions that jointly promote congruent policy goals such as affordable energy and climate change mitigation. It has issued an order that prioritizes approval of transmission lines that will carry renewable energy, reasoning that transmission lines that facilitate achievement of state renewable energy standards provide public benefits that are relevant in planning and costallocation decisions.²⁰² Likewise, the Interior Department has established the development of renewable energy as a priority use of the lands it manages,²⁰³ and the BLM has declared a policy of facilitating environmentally responsible solar energy projects on public lands.²⁰⁴ Congress itself has already declared its "sense" in the Energy Policy Act of 2005 that the Interior Secretary within ten years should approve nonhydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity.²⁰⁵ It has also financed studies of the potential use of federal lands for the development of wind, solar, and geothermal energy.²⁰⁶ The availability of transmission capacity is essential to the success of these projects.

The WSRA exemptions for renewable energy transmission envisioned here could take one of three forms. First, Congress could amend § 7 of the WSRA to delegate authority to the land management agencies to approve projects that would otherwise violate § 7 if, on balance, the combined environmental and energy policy gains outweigh the negative environmental consequences. To avoid vesting the agencies with unacceptable levels of discretion, such an amendment to § 7 could require the agency to justify creating an exemption from § 7 by showing that a project would create significant environmental and policy gains, while imposing only minimal adverse effects on designated river areas and values. Congress has previously granted authority to the executive branch to issue waivers of statutory requirements to reconcile conflicting statutory

^{202.} See Klass & Wilson, *supra* n. 60, at 1823-24 (citing Order 1000, Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, 136 FERC P 61,051 (July 21, 2011).

^{203.} Secretarial Order No. 3285, *supra* n. 182 (citing as authority § 211 of the Energy Policy Act of 2005).

^{204.} See Glicksman, *supra* n. 37, at 122.

^{205.} Pub. L. No. 109-58, § 211, 199 Stat. 594, 660 (2005).

^{206.} *Id.* at § 1833.

policies, including conflicts between energy and environmental policies.²⁰⁷ It has allowed the President, for example, to suspend air pollution control requirements in the event of energy emergencies.²⁰⁸ Second, Congress could continue to adopt river-specific exemptions from § 7 for important energy transmission projects.

The first approach is likely to result in quicker resolution of energy-environmental policy conflicts given the often arduous process of adopting legislation, especially controversial environmental legislation. This approach, however, may pose too high a risk that the land management agencies will tip the scales too heavily toward energy production and against river preservation. That risk may be particularly troublesome if the agency has a history of preferring energy production projects to preservation.²⁰⁹ Some land management agencies have a tradition of prioritizing development at the expense of environmental values.

Under either of these approaches, Congress should specify that an exemption should be available, by statute or administrative decision, only if substantially all of the energy and environmental gains of a transmission project are not available by locating the project along a route that would not encroach on wild and scenic rivers or threaten to impair designated river values. In addition, an exemption should be available only if project approval is conditioned on the project operator's compliance with mitigating conditions that are designed to minimize adverse impacts on protected river habitat and values. Statutory or regulatory mechanisms should be created to facilitate compliance with mitigating conditions, both through ongoing monitoring and the imposition of sanctions on a finding of violation that are adequate to create an effective deterrent. One such

^{207.} See Robert L. Glicksman & Sidney A. Shapiro, *Improving Regulation through Incremental Adjustment*, 52 U. Kan. L. Rev.1179, 1213-14 (2004).

^{208. 42} U.S.C. § 7410(f)(1)(A)-(B). EPA regulations also have authorized regulatory variances to accommodate energy concerns. See, e.g., 40 C.F.R. § 125.85(a)(2) (providing for variances from cooling water intake structure requirements under the Clean Water Act if compliance would result in "significant adverse impacts on local energy markets").

^{209.} Cf. Joseph M. Feller, *What Is Wrong with the Reagan Administration's Management of Livestock Grazing on the Public Lands?*, 30 Idaho L. Rev. 555, 582 (1993/1994) ("The Reagan administration, which favored intensive development and extraction of economic resources from the public lands, substantially increased the BLM's budget for energy and minerals, while cutting the budget for range management.").

mechanism might be a prohibition for a considerable period of time on approval of additional rights-of-way across federal lands for similar projects proposed by the same operator. An approach weighted more heavily toward protecting wild and scenic rivers values, while still accommodating renewable energy development and integration into the transmission grid, would allow the land management agencies to grant exemptions only for new additions to the WSR System, or would prohibit altogether the issuance of exemptions for projects that interfere with wild (but not scenic or recreational) river values.

An example of what such legislation might look like is provided by a bill that exempted the bridge at issue in the *Pena* case discussed above²¹⁰ from § 7 of the WSRA.²¹¹ The statute conditions the exemption on compliance with a series of mitigation measures spelled out in a memorandum of understanding between the FHWA, the NPS, and Wisconsin and Minnesota environmental and transportation agencies.²¹² The agreement includes eight single-spaced pages of mitigation conditions, including removal of barge unloading facilities, the purchase of replacement lands to offset the impacts of the bridge on the river bluffs, bluffland restoration, reversion of a park to its natural state, the creation of a riverway interpretation program, construction of public boat access facilities, dedication by the two states of land to create a loop trail system, restoration of native vegetation, development of campsites, development of a comprehensive spill response plan, and ongoing monitoring and reporting requirements.²¹³ It should be possible to craft a set of mitigation conditions that appropriately minimizes the adverse effects on river values of energy transmission facilities.

^{210.} See supra n.s 159 to 172 and accompanying text.

^{211.} St. Croix River Crossing Project Authorization Act, Pub. L. No. 112-100, § 2, 126 Stat. 268 (2012). Minnesota Public Radio described the bill as the first exemption to the WSRA provided by Congress. Paul Tosto, Primer: St. Croix River http://minnesota.publicradio.org/display/web/2012/02/29/primer-stillwater-Bridge, bridge (Feb. 29, 2012). Construction of the bridge is scheduled to begin in 2014. Minnesota Public Radio, St. Croix Crossing Bridge Permit OK'd, http://minnesota.publicradio.org/display/web/2013/03/11/news/engineers-stillwaterbridge-permit (Mar. 11, 2013).

^{212.} St. Croix River Crossing Project, *Memorandum of Understanding For the Implementation of Riverway Mitigation Items* (2005), http://www.dot.state.mn.us/metro/projects/stcroix/pdfs/sfeis2006/Full%20Chapters/A ppendices/StCroixSFEIS_AppendixH.pdf (2005).

^{213.} Id. ¶ 9.

V. CONCLUSION

The technological developments that have spurred a revolution in the natural gas production industry and the quest for energy sources that reduce or avoid the production of GHGs that contribute to climate change have created a need for the construction of new energy transmission facilities. Because renewable energy resources and newly available natural gas supplies are often located far from the areas of highest energy demand, transmission lines that traverse long distances will be necessary to ensure access to the supplies. Inevitably, some of the routes considered for the transport of renewable energy and natural gas will cross or abut rivers that have been selected for preservation under the WSRA. Controversies that have already arisen over federal land management agency decisions to allow transmission projects to traverse portions of wild and scenic rivers located on federal lands presage a growing need to reconcile energy (and complementary environmental) goals with the protections Congress has chosen to afford some of the nation's most treasured riverine habitats.

This article has sketched out the legal issues that arise from placing energy transmission facilities near wild and scenic rivers. The frequency with which legal disputes of this kind are likely to arise is hard to predict, partly because of the inscrutability of § 7 of the WSRA, the statutory provision that addresses whether energy projects and river protection are compatible. The article nevertheless suggests the desirability of seeking to promote energy goals such as reliability and security and environmental goals such as effective climate change mitigation, while at the same time erecting safeguards against destruction or impairment of important river protection goals. It urges an approach based on conflict avoidance when it is possible through routing decisions, mitigation of adverse effects on river habitat when avoidance is impossible, and a careful balancing of energy and environmental policy goals to determine their compatibility and, in the event of incompatibility, their priority.