
NOTE

FERC and USACE: The Necessity of Coordination in Implementation of the Hydropower Regulatory Efficiency Act

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In late 2013, Congress passed the Hydropower Regulatory Efficiency Act (“HREA”) to help meet rising energy demands by expediting the hydropower licensing process for non-federal dams. Environmental concerns regarding climate change have also increased the nation’s desire to produce energy in a manner that does not emit greenhouse gases. Hydropower has significant potential for meeting these goals: the Department of Energy estimates that hydropower generators could produce approximately 15% more energy than their current levels if the nation were to install generators on 600 existing dams. Such increased production of hydroelectric power would not emit greenhouse gases.

The HREA promotes hydroelectric power production and prompts Federal Energy Regulatory Commission (“FERC”) to streamline the permitting and licensing process, both of which are necessary to achieve greater source of energy production while decreasing greenhouse gas emissions. This Note argues that FERC and the U.S. Army Corps of Engineers (“USACE”) should implement the HREA by acting simultaneously, with FERC issuing licenses and USACE authorizing permits and dam operation. Both agencies are statutorily required to

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participate in the non-federal dam licensing process, but the agencies can work together to avoid duplicative regulation while maintaining the purpose of licensing.

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INTRODUCTION

The “hydro boom” in the United States exploded in the early twentieth century, with its peak in the 1920s and 1930s following the construction of the historic Niagara Falls, Grand Coulee, and Hoover Dams.¹ Hydroelectric power generators produced approximately 40% of the nation’s energy at their peak.² The boom died down in the 1980s and 1990s as the environmentalism movement expanded and Congress required more stringent environmental standards under the National Environmental Policy Act (“NEPA”) and other federal statutes.³ Dams suddenly became unappealing, primarily due to ecosystem destruction.⁴ Fossil fuels became the king of power production.⁵

Today, public perception surrounding dams has begun to shift due to the need for clean, efficient energy.⁶ Hydropower is entering a “mini boom” that is quite different from the 1920s boom.⁷ Large-scale construction does not define this boom. Instead, companies are either installing generators on existing dams or building small hydropower projects.⁸

¹ See Lea Kosnik, *The Potential of Water Power in the Fight Against Global Warming in the US*, 36 ENERGY POL’Y 3252, 3253 (2008) [hereinafter *Potential of Water Power*] (asserting that water power is a clean, untapped source of potential energy that will make a comeback in the near future).

² See *id.*

³ See David Pitt, *Hydroelectric Power Makes Big Comeback at US Dams*, ASSOCIATED PRESS (Sept. 12, 2013, 2:11 AM EDT), <http://bigstory.ap.org/article/hydroelectric-power-makes-big-comeback-us-dams> (demonstrating the revival of large hydroelectric power projects and showing examples of successful permitting). For examples of the federal statutes that created more stringent standards, see Endangered Species Act (ESA) of 1973, 16 U.S.C. §§ 1531–1544 (2012); Clean Water Act (CWA), 33 U.S.C. §§ 1251–1388 (2012); National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §§ 4321–4370 (2012); and Clean Air Act (CAA) of 1963, 42 U.S.C. §§ 7401–7431 (2012).

⁴ Kosnik, *Potential of Water Power*, *supra* note 1, at 3254 (describing the ecological impact of large dams); see *Hydropower and Climate Change*, AM. RIVERS, <http://www.americanrivers.org/initiatives/dams/hydropower/climate/> (last visited Sept. 9, 2013).

⁵ See *Fossil Energy*, AM. PHYSICAL SOC’Y, <http://www.aps.org/policy/reports/popa-reports/energy/fossil.cfm> (last visited Oct. 10, 2013) (policy report discussing the dominance of fossil fuels, most apparent in the 1970s).

⁶ See Kosnik, *Potential of Water Power*, *supra* note 1, at 3264 (noting that an overwhelming majority of Americans view hydroelectric power positively).

⁷ See *generally id.* (discussing the history of hydropower from the late nineteenth century to the present).

⁸ See Kosnik, *Potential of Water Power*, *supra* note 1, at 3253, 3256; see, e.g., Pitt, *supra* note 3 (describing three hydroelectric projects under consideration by the

Hydropower has significant potential for increased energy production. Of the approximate 80,000 existing dams, only about 3% — or 2,500 dams — produce hydroelectric power today.⁹ The Department of Energy estimates that hydropower generators could produce approximately 15% more energy than their current levels if the nation were to install generators on 600 existing dams.¹⁰ Energy production has gained increasing national attention because of the necessity of electricity, the environmental concerns relating to fossil fuels, and the desire for independent energy production.¹¹

Hydropower facilities must increase capacity to contribute to electricity production.¹² In order to build and maintain a hydropower facility at a non-federal dam, the operator must obtain a Federal Energy Regulatory Commission (“FERC”) license.¹³ In addition, the project must gain United States Army Corps of Engineers (“USACE”) permits under the Clean Water Act (“CWA”) and the Rivers and Harbors Act (“RHA”).¹⁴

Mississippi River Energy Services). The Department of Energy explains that “upgrading existing hydropower facilities can add decades to their life spans, reduce environmental impacts and generate even more clean energy for their communities.” Mike Reed, *Investments in Existing Hydropower Unlock More Clean Energy*, U.S. DEP’T OF ENERGY (Aug. 14, 2013, 2:21 PM), <http://energy.gov/articles/investments-existing-hydropower-unlock-more-clean-energy> (describing the potential of hydropower at existing dams and giving examples from around the country).

⁹ See Pitt, *supra* note 3 (demonstrating the revival of large hydroelectric power projects and showing examples of successful permitting).

¹⁰ Pitt, *supra* note 3.

¹¹ See *id.*

¹² See *id.*; Reed, *supra* note 8.

¹³ See Federal Power Act (FPA), 16 U.S.C. § 797(e) (2012) (designating FERC as the authority for non-federal dam licensing); KIRBY GILBERT, HYDROPOWER REFORM COAL., REGULATORY CONSIDERATIONS IN THE USE OF THE ILP IN DEVELOPING NEW HYDROELECTRIC PROJECTS 3-5 (2009), available at http://www.hydroreform.org/sites/default/files/Gilbert_Regulatory_Considerations_in_ILP.pdf (describing USACE as a “key stakeholder in the licensing phase”).

¹⁴ Rivers and Harbors Act (RHA) of 1899 §§ 9, 10, 33 U.S.C. §§ 401, 403 (2012) (prohibiting construction and obstruction of navigable water without USACE permit); Clean Water Act (CWA) § 404, 33 U.S.C. § 1344 (2012) (authorizes USACE to issue permits for “dredged or fill material”). Other federal and state agencies are often involved in the hydropower licensing or relicensing process. In order to provide a narrow scope, this Note focuses solely on the two big players, FERC and USACE. See, e.g., Tracy Warner, *Licensing Dams Needs a Dose of Common Sense*, WENATCHEE WORLD, May 11, 2001, available at https://www.chelanpud.org/relicense/glance/newsclip/5840_1.pdf (discussing the impact of numerous other federal agencies on the licensing process, such as the National Marine Fisheries Service).

Project licensing has become notoriously protracted due to uncoordinated and segmented agency involvement.¹⁵ In an effort to expedite the process, Congress recently passed the Hydropower Regulatory Efficiency Act (“HREA”).¹⁶ This statute promotes hydroelectric power production generally.¹⁷ In addition, the HREA prompts FERC to streamline the permitting and licensing process.¹⁸

This Note argues that FERC and USACE should implement the HREA by acting simultaneously.¹⁹ Both agencies are statutorily required to participate in the non-federal dam licensing process.²⁰ FERC must issue licenses while USACE must authorize permits and dam operation.²¹ If FERC begins the process before USACE, there are duplicative steps and the timeframe may be extended by years.²² This Note supports the legislative trend of streamlining the licensing process by conjoining the regulation of both FERC and USACE.²³ First, FERC should be the primary agency with authority to delegate

¹⁵ See Lea-Rachel D. Kosnik, *Sources of Bureaucratic Delay: A Case Study of FERC Dam Relicensing*, 22 J.L. ECON. & ORG. 258, 259 (2005) [hereinafter *Bureaucratic Delay*], available at <http://www.umsl.edu/~kosnikl/Duration.pdf> (discussing the regulatory hurdles of dam relicensing and stating that environmental groups are one of the main slow-downs in the process); see also Kirsten H. Engel, *Harnessing the Benefits of Dynamic Federalism in Environmental Law*, 56 EMORY L.J. 159, 161 (2006) (advocating coordination in agency action at the state and federal level).

¹⁶ Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, 127 Stat. 493 (codified in scattered sections of 16 U.S.C.). This legislation amended PURPA and the FPA to promote hydroelectric power in the United States. *Id.* §§ 3–5, 127 Stat. at 493-95 (2013).

¹⁷ See generally *id.* §§ 1–6, 127 Stat. 493-96 (2013) (promoting, *inter alia*, small hydroelectric power projects and conduit hydropower projects).

¹⁸ *Id.* § 5, 127 Stat. at 495.

¹⁹ See *infra* Parts III.A–C.

²⁰ Federal Power Act (FPA) § 4, 16 U.S.C. § 797(e) (2012); Rivers and Harbors Act (RHA) §§ 9, 10, 33 U.S.C. §§ 401, 403 (2012) (prohibiting construction and obstruction of navigable water without USACE permit); Clean Water Act (CWA) § 404, 33 U.S.C. § 1344 (2012) (authorizes USACE to issue permits for “dredged or fill material”).

²¹ 16 U.S.C. §§ 791–828 (2012); 33 U.S.C. §§ 401, 403; 33 U.S.C. § 1344; see also *Obtain a Permit*, U.S. ARMY CORPS OF ENG’RS., <http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/ObtainPermit.aspx> (last visited Feb. 25, 2015).

²² AM. MUN. POWER, INC. & OHIO MUN. ELEC. ASS’N, STREAMLINING HYDRO DEVELOPMENT 2 (Mar. 2012), available at http://www.amppartners.org/docs/default-source/regulatory-legislative-comments/legislative/2012/dc-rally/2012_d-c-rally_white_papers_hydro_development.pdf (stating that “processes can be duplicative, and the agencies do not have a strong track record of coordinating the decision-making process”).

²³ See *infra* Part III.A–C.

and lead the process.²⁴ Second, USACE should approve the project under the Federal Power Act (“FPA”), issue permits under the CWA, and maintain operation of the hydropower facility.²⁵ Third, FERC should implement the two-year licensing period as suggested by HREA section 6.²⁶

I. BACKGROUND

A. Hydropower

Hydroelectric power, or hydropower, is the general term for the movement of water to produce energy, primarily electricity.²⁷ As water moves from an area of higher elevation to an area of lower elevation, water gains gravitational energy.²⁸ Gravitational energy of water translates into both the kinetic energy and the potential energy that can generate electricity.²⁹ Hydropower produces approximately 7% of the energy in the United States today.³⁰

Traditionally, dams were necessary to construct hydroelectric projects, with the dam sitting in the river and the hydroelectric power generator fit on or within it.³¹ The dam impounds the water and provides the leverage for the storage and movement of water.³² Dams remain the primary structures for harnessing water power, with approximately 79,000 dams currently standing in the United States.³³ Today, new technologies have also expanded hydropower generators

²⁴ See *infra* Part III.A.

²⁵ See *infra* Part III.B.

²⁶ See *infra* Part III.C.

²⁷ *Glossary*, FED. ENERGY REGULATORY COMM’N, <http://www.ferc.gov/help/glossary.asp#H> (last updated Aug. 20, 2013) (defining “hydropower”).

²⁸ See *Hydroelectric Power: How It Works*, U.S. GEOLOGICAL SURVEY, <http://water.usgs.gov/edu/hyhowworks.html> (last modified May 2, 2014) (providing general facts about hydroelectric power production).

²⁹ See FRED BOSSELMAN ET AL., *ENERGY, ECONOMICS AND THE ENVIRONMENT: CASES AND MATERIALS* 117, 124 (3d ed. 2010) (presenting a history and overview of hydroelectric regulations while pointing to positives and negatives of legislation).

³⁰ *Hydroelectric Power Water Use*, U.S. GEOLOGICAL SURVEY, <http://ga.water.usgs.gov/edu/wuhy.html> (last modified Mar. 17, 2014) (providing general facts about hydroelectric power production).

³¹ See, e.g., Pitt, *supra* note 3 (describing the construction of a hydroelectric plant on a dam on the Des Moines River).

³² See *Frequently Asked Questions*, AM. RIVERS, <http://www.americanrivers.org/initiatives/dams/faqs/> (last visited Sept. 24, 2013).

³³ See *id.*

to smaller structures including conduits and hydrokinetics, which produce energy from waves or water channels.³⁴

Hydropower has three attractive characteristics: efficient energy production, economic benefit, and environmental conservation.³⁵ Hydropower is an efficient source of energy if operators build and maintain the facility optimally, using updated technology and prudent management practices.³⁶ This is because hydropower uses relatively few resource inputs to generate a large quantity of electricity.³⁷ Hydropower can be “dispatched,” meaning that operators can transport energy directly from a dam to a home.³⁸ In addition, “hydropower provides a reliable source of baseload [energy] capacity,” meaning that hydro is not an intermittent energy source.³⁹

Hydropower is an inexpensive source of energy generation because the industry will directly and indirectly create jobs.⁴⁰ The initial cost of building a dam may be high, but adding a hydroelectric generator to a dam is usually not cost prohibitive.⁴¹ Operation and maintenance costs remain minimal for the dam’s lifespan, which averages fifty years

³⁴ See *Hydrokinetic Projects*, FED. ENERGY REGULATORY COMM’N, <http://www.ferc.gov/industries/hydropower/gen-info/licensing/hydrokinetics.asp> (last updated Dec. 10, 2014) (giving information about hydrokinetic projects and showing how licensing and permitting requirements differ from large hydro); *Small/Low-Impact Hydropower Projects*, FED. ENERGY REGULATORY COMM’N, <http://www.ferc.gov/industries/hydropower/gen-info/licensing/small-low-impact/prepare-application/process-overview/info-gathering.asp> (last updated June 17, 2013).

³⁵ See Kosnik, *Potential of Water Power*, *supra* note 1, at 3255, 3264. See generally EXEC. OFFICE OF THE PRESIDENT, THE PRESIDENT’S CLIMATE ACTION PLAN 4-5, 7 (2013), available at <http://www.whitehouse.gov/sites/default/files/image/president27sclimateactionplan.pdf> (presenting three pillars for reversing the effects of climate change in the United States and noting that hydroelectric power should be utilized as a clean energy source).

³⁶ See *Hydropower and Climate Change*, *supra* note 4.

³⁷ Professor Kosnik states that “efficiency improvements at existing dams, or what is called ‘uprating,’ has the potential to increase hydropower production by as much as 50%.” Kosnik, *Potential of Water Power*, *supra* note 1, at 3255. Another source states that hydropower is a low-cost source of energy and requires no fuel, a major resource input. *Hydroelectric*, INST. FOR ENERGY RES., <http://www.instituteforenergyresearch.org/energy-overview/hydroelectric> (last visited June 26, 2013).

³⁸ See BOSSELMAN ET AL., *supra* note 29, at 581-82 (explaining transmission and distribution of electricity); see also PowerPoint Presentation for Energy Law Class Lecture, John McKinsey, Adjunct Professor, Univ. of Cal. Davis Sch. of Law (Sept. 30, 2013) (on file with author) (discussing renewable energy in an Energy Law class).

³⁹ See AM. MUN. POWER, INC. & OHIO MUN. ELEC. ASS’N, *supra* note 22, at 1; BOSSELMAN ET AL., *supra* note 29, at 581-82.

⁴⁰ See EXEC. OFFICE OF THE PRESIDENT, *supra* note 35, at 7.

⁴¹ See Kosnik, *Potential of Water Power*, *supra* note 1, at 3263.

for most dams.⁴² Cleaning and mechanical updates are the primary maintenance costs, but are rarely needed.⁴³ In addition, the federal government estimates that hydropower could create upwards of 700,000 new jobs by 2025 as a result of project development, construction, maintenance, and other necessary components.⁴⁴

Hydropower is also environmentally beneficial. A hydropower generator does not require combustion of fossil fuels, produces no greenhouse gas emissions, and thus reduces the potential for global warming.⁴⁵ Hydropower is a renewable source of energy because it does not use finite resources.⁴⁶ However, halting a river to build a dam can cause catastrophic ecological destruction.⁴⁷ In many cases, the destruction caused by dam removal would not return the river to its natural state.⁴⁸ By contrast, installing new hydroelectric generators on existing dams is not harmful to the environment because the river stream has already been altered.⁴⁹ It is logical, therefore, to make use of existing hydropower facilities.

⁴² *Id.*

⁴³ *See id.*

⁴⁴ *The Hydropower Regulatory Efficiency Act (H.R. 5892)*, ENERGY & COMMERCE COMM., U.S. HOUSE OF REPRESENTATIVES (July 9, 2012), <http://energycommerce.house.gov/fact-sheet/hydropower-regulatory-efficiency-act-hr-5892> (presenting background of the precursor to H.R. 267 with a description of the legislation's goals).

⁴⁵ *See Kosnik, Potential of Water Power*, *supra* note 1, at 3264. Some scientists estimate that hydropower may reduce greenhouse gas emissions between 8.5% and 50% of 2003 emission levels. *Id.*

⁴⁶ *See Hydroelectric Power Water Use*, *supra* note 30.

⁴⁷ *See Hydropower and Climate Change*, *supra* note 4.

⁴⁸ Removal of dams should only occur where the environmental, economic, and safety costs outweigh the dam's benefits. *See Hydropower and Climate Change*, *supra* note 4. Often, an existing dam can be repaired to work more efficiently with no additional environmental impact. *Id.* A commenter for American Rivers also states: "[I]n many cases, keeping a working hydropower dam in place makes sense. And with some upgrades to the dam and its operations, we can make hydropower safer for rivers." Amy Souers Kober, *Video: Improving Hydropower Dams Benefits Rivers*, AM. RIVERS BLOG (Aug. 12, 2013), <http://www.americanrivers.org/blog/improving-hydropower-dams-benefits-rivers>.

⁴⁹ *See Kosnik, Potential of Water Power*, *supra* note 1, at 3256.

B. *Legal Framework for Hydropower Regulation in the United States*

1. Statutes

a. *Federal Power Act*

The early twentieth century “hydro boom” culminated in 1920 with Congress passing the Federal Water Power Act, later known as the Federal Power Act.⁵⁰ Hydropower regulation has its roots in the Rivers and Harbors Act of 1899.⁵¹ This Act was the first to require a license in order to dam a river.⁵² In 1920, Congress codified hydropower permitting and licensing requirements in the Federal Water Power Act.⁵³ The FPA further developed the concept of a federal hydropower license because it laid out requirements for hydropower project licensing and preliminary permits.⁵⁴ Congress has amended the FPA many times since its passage in 1920, most recently by sections four and five of the HREA.⁵⁵ Congress also named the Federal Power Commission (“FPC”) — the predecessor to FERC — as the agency responsible for hydropower permitting.⁵⁶

b. *Public Utilities Regulatory Policy Act*

Congress enacted the Public Utilities Regulatory Policy Act (“PURPA”) in 1978 to promote investment in and use of renewable energy.⁵⁷ This was the first statute of the National Energy Act of

⁵⁰ Cf. *id.* at 3253 (noting the diminishing importance of hydropower in the U.S. and connecting this to the increasingly stringent federal regulation of hydropower). See generally Federal Power Act (FPA), 16 U.S.C. §§ 791–828 (2012) (regulating hydroelectric power).

⁵¹ Rivers and Harbors Act (RHA) of 1899, ch. 425, 30 Stat. 1151 (codified as amended in scattered sections of 33 U.S.C.); see AM. RIVERS, A CITIZEN’S GUIDE TO THE CORPS OF ENGINEERS 7 (2009), available at <http://www.americanrivers.org/assets/pdfs/reports-and-publications/citizens-guide-to-the-corp.pdf> (stating that the RHA is the first legislation requiring a license for federal dams).

⁵² See generally RHA, 33 U.S.C. §§ 401, 403, 404–409, 411–415, 418 (2012) (describing licensing requirements); AM. RIVERS, *supra* note 51, at 7 (stating that the Rivers and Harbor Act is the first legislation requiring a license for federal dams).

⁵³ FPA § 4(e)–(f), 16 U.S.C. § 797(e)–(f).

⁵⁴ *Id.* (discussing licensing requirements).

⁵⁵ Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 4, 127 Stat. 493, 494-95 (amending FPA sections 5 and 30). See generally 16 U.S.C. §§ 791–828 (showing that some sections of the FPA have been repealed or amended).

⁵⁶ See 42 U.S.C. § 7172 (2012).

⁵⁷ Public Utilities Regulatory Policy Act (PURPA) of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (regulating and encouraging renewable energy sources).

1978.⁵⁸ PURPA was also the first legislation to create a market for renewable energy because it forced electric utility companies to purchase power from cleaner and more efficient sources.⁵⁹ This incentivized a free-market approach and encouraged industries to invest in renewable energy sources.⁶⁰ Further, this caused the renewable energy market to become more financially stable and attracted advancing technology.⁶¹ Section 3 of the HREA amends section 405(d) of PURPA, changing the definition of “small hydroelectric power projects” by increasing their capacity.⁶²

c. Energy Policy Act

In 2005, Congress enacted the Energy Policy Act.⁶³ The Energy Policy Act promotes renewable energy development — specifically hydropower — by removing some significant permitting requirements.⁶⁴ Namely, Congress waived NEPA review for small

⁵⁸ The National Energy Act of 1978 cumulatively refers to five statutes that were enacted on November 9, 1978: PURPA, 92 Stat. 3117; Energy Tax Act (ETA) of 1978, Pub. L. No. 95-618, 92 Stat. 3174 (codified in scattered sections of 23 U.S.C., 26 U.S.C., and 42 U.S.C.); National Energy Conservation Policy Act (NECPA), Pub. L. No. 95-619, 92 Stat. 3206 (1978) (codified in scattered sections of 12 U.S.C., 15 U.S.C., 23 U.S.C., 26 U.S.C., 40 U.S.C., and 42 U.S.C.); Powerplant and Industrial Fuel Use Act (PIFUA) of 1978, Pub. L. No. 95-620, 92 Stat. 3289 (codified in scattered sections of 15 U.S.C., 33 U.S.C., 42 U.S.C., 45 U.S.C., and 49 U.S.C.); and Natural Gas Policy Act (NGPA) of 1978, Pub. L. No. 95-621, 92 Stat. 3350 (codified in scattered sections of 12 U.S.C., 15 U.S.C., 16 U.S.C., and 42 U.S.C.) (regulating energy use in reaction to the 1970s energy crisis).

⁵⁹ See PURPA §§ 2, 101, 92; ERIC MARTINOT ET AL., RENEWABLE ENERGY POLICIES AND MARKETS IN THE UNITED STATES 1 (2005), available at <http://www.resource-solutions.org/lib/librarypdfs/IntPolicy-RE.policies.markets.US.pdf>; *Public Utility Regulatory Policy Act (PURPA)*, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/clean_energy/smart-energy-solutions/strengthen-policy/public-utility-regulatory.html (last visited Dec. 12, 2014) (“Before PURPA, only utilities could own and operate electric generating plants. PURPA required utilities to buy power from independent companies . . .”).

⁶⁰ See BOSSELMAN ET AL., *supra* note 29, at 143-44, 834.

⁶¹ See *id.*; see also Melissa Powers, *The Fifth Circuit Eviscerated PURPA in Texas*, GREEN ENERGY INST. (Sept. 23, 2014), <https://law.lclark.edu/live/news/27970-the-fifth-circuit-eviscerated-purpa-in-texas>.

⁶² Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 3, 127 Stat. 493, 493 (codified as amended in scattered sections of 16 U.S.C.).

⁶³ Energy Policy Act of 2005, Pub. L. No. 109-58, §§ 241-246, 119 Stat. 594, 674-79 (legislation streamlining the hydro permitting process and eliminating some environmental review).

⁶⁴ See, e.g., *id.* § 245, 119 Stat. at 678-79 (allowing for an extension of time for a preliminary permit for certain projects).

hydroelectric projects on land governed by the Bureau of Reclamation.⁶⁵ NEPA review requires an Environmental Assessment (“EA”) or Environmental Impact Statement (“EIS”) to ensure a full consideration of foreseeable environmental effects.⁶⁶ These requirements are largely procedural and involve extensive time and paperwork.⁶⁷ Thus, the removal of NEPA review in the Energy Policy Act greatly speeds the federal licensing process because it eliminates one significant step: the preparation of an EA or EIR.⁶⁸ In addition, the Energy Policy Act promotes federal agency coordination by streamlining licensing.⁶⁹

d. Hydropower Regulatory Efficiency Act

Most recently, Congress passed the HREA.⁷⁰ President Obama signed the HREA on August 9, 2013 after both the House of Representatives and the Senate *unanimously* passed the legislation.⁷¹ The Congressional record indicates that the vote was unanimous because the HREA is not a substantial change to current energy legislation.⁷² The bill appealed both Democrats and Republicans by promoting infrastructure, hydro industry jobs, and independent energy production while also supporting environmental goals to

⁶⁵ *Id.* §§ 390, 1840, 119 Stat. at 747-48, 1142-43 (2005).

⁶⁶ National Environmental Policy Act (NEPA) of 1969 § 102, 42 U.S.C. § 4332 (2012).

⁶⁷ *See id.*

⁶⁸ *See generally* Energy Policy Act, 119 Stat. at 747-78 (creating a rebuttable presumption that certain activities fall into a categorical exclusion under NEPA); Megan J. Anderson, Note, *The Energy Policy Act and Its Categorical Exclusions: What Happened to the Extraordinary Circumstance Exception?*, 28 J. LAND, RESOURCES & ENVTL. L. 119, 120 (2008) (stating that NEPA review has been perceived as extraordinarily lengthy and suggesting that the Energy Policy Act will streamline this process).

⁶⁹ *See* Anderson, *supra* note 68, at 125.

⁷⁰ Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, 127 Stat. 493 (codified as amended in scattered sections of 16 U.S.C.).

⁷¹ *President Signs Bipartisan Bill into Law to Boost Hydropower Development, Help Create Jobs*, ENERGY & COMMERCE COMM., U.S. HOUSE OF REPRESENTATIVES (Aug. 12, 2013), <http://energycommerce.house.gov/press-release/president-signs-bipartisan-bill-law-boost-hydropower-development-help-create-jobs> [hereinafter *President Signs Bipartisan Bill*] (announcing the passage of H.R. 267).

⁷² H.R. 267, 113th Cong. (2013) (listing the U.S. House of Representatives roll call votes for the HREA as 422 yeas and 0 nays) *available at* <http://clerk.house.gov/evs/2013/roll040.xml>; 113 CONG. REC. S6257 (daily ed. Aug. 1, 2013) (passing the HREA in the Senate by unanimous consent).

reduce greenhouse gas emissions.⁷³ The HREA affirms the promotion of federal hydropower by further reducing regulatory hurdles, streamlining permit requirements, and expanding hydropower definitions.⁷⁴

The HREA has seven sections, four of which are substantive and applicable to this Note.⁷⁵ The HREA amends two sections of the FPA and one section of PURPA.⁷⁶ Section 3 amends PURPA section 405(d) by changing the definition of small hydroelectric power plants from those that have the capacity to produce 5,000 kilowatts of energy to 10,000 kilowatts.⁷⁷ This change represents a 100% increase in energy production capacity and demonstrates support for small hydropower projects.⁷⁸ Small hydro projects are less costly and less environmentally damaging than new, large hydro construction.⁷⁹

Section 4 of the HREA amends section 30 of the FPA.⁸⁰ This section promotes conduit hydropower projects by eliminating licensing requirements.⁸¹ HREA section 5 amends FPA section 5.⁸² This section gives FERC the authority to extend preliminary hydropower permits for two additional years beyond the three years already authorized for such permits.⁸³ Section 6 demonstrates Congressional intent to promote streamlining of hydropower licensing.⁸⁴ By extending the preliminary permitting period, Congress reduces the chance for a permit to expire before a permanent license is issued. A lapse in

⁷³ See *President Signs Bipartisan Bill*, *supra* note 71.

⁷⁴ HREA §§ 1–6, 127 Stat. at 493–96 (2013).

⁷⁵ *Id.* §§ 1, 3–6, 127 Stat. at 493–96.

⁷⁶ *Id.* §§ 3–4, 127 Stat. at 493–94.

⁷⁷ *Id.* § 3, 127 Stat. at 493 (amending Public Utilities Regulatory Policy Act (PURPA) of 1978 § 405(d), 16 U.S.C. § 2705).

⁷⁸ See *id.*

⁷⁹ See Kosnik, *Potential of Water Power*, *supra* note 1, at 3255, 3263.

⁸⁰ HREA § 4, 127 Stat. at 494 (amending Federal Power Act (FPA) § 30, 16 U.S.C. § 823a (2014)).

⁸¹ *Id.* Conduits are structures for transporting water, not for generating electricity. Conduit hydropower projects do produce electricity, but only a very limited amount and there is no licensing requirement. This Note focuses on licensing of hydropower facilities. Thus, the regulation of conduits is not relevant in this Note and is only quickly mentioned. Conduit is defined as “any tunnel, canal, pipeline, aqueduct, flume, ditch, or similar manmade water conveyance that is operated for the distribution of water for agricultural, municipal, or industrial consumption and not primarily for the generation of electricity.” *Id.* § 4(a)(3)(A).

⁸² *Id.* § 5 (2013) (amending FPA § 5, 16 U.S.C. § 798 (2014)).

⁸³ *Id.*

⁸⁴ See 113 CONG. REC. S6188–89 (daily ed. Aug. 1, 2013) (statement of Rep. Pete Sessions).

licenses could result in permit violation and delay necessary building or reconstruction on hydropower generators.⁸⁵ This gives more time for a project to gain a permanent license.⁸⁶ The goal is to speed up the licensing process so that a preliminary permit extension is unnecessary, but this section fills in the gap until federal agencies achieve efficiency.⁸⁷

HREA section 6 directs FERC to explore the feasibility of a two-year licensing process for hydropower projects at non-powered dams and closed-loop pumped storage facilities.⁸⁸ A non-powered dam is an existing dam lacking a hydropower generator.⁸⁹ Converting a non-powered dam to a hydro-powered dam is often an inexpensive, efficient, and environmentally-friendly method to produce renewable energy.⁹⁰ A closed-loop pumped storage facility is a secondary energy source that produces renewable energy for an electric grid by the movement of pumped water.⁹¹ Section 6 is significant because Congress explicitly states its goal of expediting the licensing process in non-powered dams.⁹² This goal shows potential for hydro energy production and the need for licensing efficiency to achieve renewable energy goals.

e. Legislative Trend Toward Streamlining

The legislative history shows an increasing affinity for the promotion of renewable energy sources, but also demonstrates the

⁸⁵ HREA § 5, 127 Stat. at 495; see Jim Ross, *112-year-old Hydro Plant Gets Modern Makeover*, ST. J. (June 15, 2011), http://www.uppermon.org/news/charleston/SJ-Hydro_Makeover-15June11.html (noting the hurdles and delays caused by licensing and stating the “time-consuming problems with applying for permits that would be necessary” to give a dam a modern makeover).

⁸⁶ See HREA § 5, 127 Stat. at 495.

⁸⁷ See 113 CONG. REC. S6188-89 (statement of Rep. Pete Sessions).

⁸⁸ HREA § 6, 127 Stat. at 495-96 (2013) (directing FERC to determine if it is feasible to implement a two-year licensing process for nonpowered dams and closed loop pumped storage projects). The HREA explicitly reiterates the purpose “[t]o improve the regulatory process and reduce delays and costs for hydropower development” *Id.* § 6(a), 127 Stat. at 495.

⁸⁹ See *Converting Non-powered Dams*, NAT’L HYDROPOWER ASS’N, <http://www.hydro.org/tech-and-policy/developing-hydro/powering-existing-dams> (last visited Oct. 6, 2013).

⁹⁰ See *id.* (“As we look for ways to expand America’s access to affordable, sustainable hydropower, adding hydroelectric generation at our existing dams is a top priority.”).

⁹¹ See *Pumped Storage*, NAT’L HYDROPOWER ASS’N, <http://www.hydro.org/tech-and-policy/technology/pumped-storage> (last visited Jan. 3, 2015) (explaining pumped storage facilities and their potential for a backup source of renewable energy).

⁹² HREA § 6, 127 Stat. at 495-96.

layers of regulatory hurdles for such projects, specifically hydroelectric power projects.⁹³ The federal legislation above is not exhaustive and highlights only the major policies.⁹⁴ These five statutes progressed by adding regulations for hydropower licensing and then imposing more licensing requirements. Progressively, the Rivers and Harbors Act, the FPA, and PURPA each mandated more requirements.⁹⁵ Ironically, in recent years, the trend is to remove steps in the licensing process.⁹⁶ Policymakers recognize that layers of requirements serve to halt a project instead of promoting hydropower, as the legislation claims.⁹⁷

2. Federal Agencies

a. Federal Energy Regulatory Commission

The FPA created the Federal Power Commission in 1930.⁹⁸ The Commission was renamed the Federal Energy Regulatory Commission in 1977.⁹⁹ FERC is an independent federal agency that has authority over non-federal dams.¹⁰⁰ FERC's duties include licensing, compliance, and comprehensive planning.¹⁰¹

⁹³ See, e.g., Adam M. Dinnell & Adam J. Russ, *The Legal Hurdles to Developing Wind Power as an Alternative Energy Source in the United States: Creative and Comparative Solutions*, 27 NW. J. INT'L L. & BUS. 535, 535 (2007) (describing the regulatory permitting requirements that slow down the implementation of wind projects).

⁹⁴ See *supra* Part I.B.1.

⁹⁵ See Federal Power Act (FPA), 16 U.S.C. §§ 791–828 (2012); Rivers and Harbors Act (RHA) of 1899 §§ 9, 10, 33 U.S.C. §§ 401, 403 (2012); HREA §§ 2–6, 127 Stat. at 493–96 (2013); Public Utility Regulatory Policies Act (PURPA) of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (1978).

⁹⁶ See Dinnell & Russ, *supra* note 93, at 536 (describing permitting requirements and showing trends of reduced requirements). See generally HREA § 1–2, 127 Stat. at 493 (2013) (discussing the importance of hydropower and modes to achieve necessity of a streamlined permitting process).

⁹⁷ See HREA §§ 3–6, 127 Stat. at 493–96. Each of these sections of the HREA promotes some form of hydropower development. However, the existing regulatory hurdles still stand and perhaps the HREA does not go far enough to streamline licensing because it does not address USACE's role. See 113 CONG. REC. S6188–89 (daily ed. Aug. 1, 2013) (statement of Rep. Pete Sessions).

⁹⁸ FPA § 1, 16 U.S.C. § 792 (creating the FPC).

⁹⁹ Department of Energy Organization Act, Pub. L. No. 95-91, § 402(a), 91 Stat. 565, 583–84 (1977); see also *History of FERC*, FED. ENERGY REGULATORY COMMISSION, <http://www.ferc.gov/students/ferc/history.asp> (last visited Jan. 4, 2015) (providing a brief history of FERC).

¹⁰⁰ *General Information*, FED. ENERGY REG. COMM'N, <http://www.ferc.gov/industries/hydropower/gen-info.asp> (last updated Aug. 26, 2014) (providing general information about hydropower and FERC's duties); *What FERC Does*, FED. ENERGY REGULATORY

First, FERC is the primary agency that issues licenses to non-federal hydropower facilities.¹⁰² All dams must obtain a FERC license, except for federal dams constructed prior to June 10, 1920.¹⁰³ Thus, FERC has the leading role in the licensing process.¹⁰⁴ As discussed above, the hydropower licensing process is often the source of significant regulatory delay.¹⁰⁵ FERC has three licensing methods: the integrated, traditional, and alternative licensing processes.¹⁰⁶ The Integrated Licensing Process (“ILP”) is the default process.¹⁰⁷ The ILP is an attempt to streamline the licensing process by encouraging all stakeholders to find early solutions to identifiable licensing issues.¹⁰⁸ Also, as part of the licensing process, FERC prepares environmental reviews under the mandates of NEPA.¹⁰⁹

Second, FERC’s duty is to ensure compliance with the conditions of the licenses.¹¹⁰ Issuance of a license does not complete FERC’s involvement with a hydro project. FERC agents and employees must regularly monitor hydro projects to ensure consistent compliance with the license in order to achieve the goals of the license.¹¹¹ The goals

COMM’N, <http://www.ferc.gov/about/ferc-does.asp> (last updated June 24, 2014).

¹⁰¹ *General Information*, *supra* note 100.

¹⁰² See FPA § 4, 16 U.S.C. § 797 (2012) (establishing the general powers of FERC).

¹⁰³ See *id.*; see also Margaret B. Bowman, *Legal Perspectives on Dam Removal*, 52 BIOSCIENCE 739, 740 (2002). There are a few exceptions to the requirement of a FERC license for non-federal dams if the dam is granted an “exemption” or is on a non-navigable river. *Id.*

¹⁰⁴ See FPA § 4, 16 U.S.C. § 797.

¹⁰⁵ See *supra* notes 94–97 and accompanying text.

¹⁰⁶ FED. ENERGY REGULATORY COMM’N, HANDBOOK FOR HYDROELECTRIC PROJECT LICENSING AND 5 MW EXEMPTIONS FROM LICENSING 1-2 (2004), available at http://www.ferc.gov/industries/hydropower/gen-info/handbooks/licensing_handbook.pdf.

¹⁰⁷ See Integrated License Application Process, 18 C.F.R. pt. 5 (2014); BOSSELMAN ET AL., *supra* note 29, at 145.

¹⁰⁸ *Integrated Licensing Process (ILP)*, FED. ENERGY REGULATORY COMM’N, <http://www.ferc.gov/industries/hydropower/gen-info/licensing/ilp.asp> (last visited Dec. 29, 2014).

¹⁰⁹ NEPA compliance requires the preparation of an Environmental Assessment (“EA”) or Environmental Impact Statement (“EIS”) for each hydroelectric project licensed by FERC. See National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. § 4332 (2012); BOSSELMAN ET AL., *supra* note 29, at 145. “The ILP tries to streamline the licensing process by permitting the pre-filing consultation process, and the early stages of NEPA review . . . to occur concurrently rather than sequentially.” BOSSELMAN ET AL., *supra* note 29, at 145. The ILP only concerns FERC’s licensing authority, not that of other agencies working with FERC. See *id.*

¹¹⁰ See Federal Power Act (FPA) § 4, 16 U.S.C. § 797 (2012); *General Information*, *supra* note 100.

¹¹¹ *Administration and Compliance*, FED. ENERGY REGULATORY COMM’N,

may be environmental conservation, power production, beneficial public use, or other goals as stated by FERC and the licensee.¹¹²

Third, FERC must consider the states' comprehensive plans for waterways.¹¹³ A hydroelectric project will doubtlessly have some impact on a state's use of its waterways, whether minor or significant.¹¹⁴ FERC studies the natural and artificial resources and benefits of the dam in the region in order to determine the best manner to proceed with licensing.¹¹⁵ The study may result in a decision to license the project, modify the project, or decline to license the project because a license may only issue if it is in conformity with the listed conditions.¹¹⁶ This third mandate for comprehensive planning requires FERC to represent jointly the interests of both the federal government and the states.¹¹⁷

b. U.S. Army Corps of Engineers

USACE must participate in the federal dam licensing process under the FPA, CWA, and Rivers and Harbors Act.¹¹⁸ Section 4(e) of the FPA states that a new dam must gain USACE approval for a permit on "navigable waters" of the United States.¹¹⁹ Navigable waters are all

<http://www.ferc.gov/industries/hydropower/gen-info/comp-admin.asp> (last updated July 11, 2014).

¹¹² See FPA § 4, 16 U.S.C. § 797.

¹¹³ FPA § 10(a)(2)(A), 16 U.S.C. § 803(a)(2)(A) (2012) (requiring FERC to consider the consistency of FERC licensing with states' waterway plans). The study must consist of the "comprehensive study of one or more of the beneficial uses of a waterway or waterways." *Comprehensive Plans*, FED. ENERGY REGULATORY COMM'N, <http://www.ferc.gov/industries/hydropower/gen-info/comp-plans.asp> (last updated Dec. 8, 2014).

¹¹⁴ See *Comprehensive Plans*, *supra* note 113.

¹¹⁵ Natural resources include navigation, power development, energy conservation, fish and wildlife, recreational opportunities, irrigation, flood control, water supply and other aspects of environmental quality. *Id.*

¹¹⁶ See 16 U.S.C. § 803(a); *Comprehensive Plans*, *supra* note 113; see also Steve Rappaport, *FERC Issues Split Decision on Ellsworth Dam Fish Study Plan*, ELLSWORTH AM. (Jan. 15, 2015), <http://www.ellsworthamerican.com/maine-news/waterfront/ferc-issues-split-decision-ellsworth-dam-fish-study-plan> ("FERC modified the Bangor Hydro plan to meet federal Fish and Wildlife Service recommendations" after comprehensive study).

¹¹⁷ See *Comprehensive Plans*, *supra* note 113 (FERC must "consider the extent to which a project is consistent with Federal or state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project").

¹¹⁸ FPA, 16 U.S.C. §§ 791–828c (2012); Rivers and Harbors Act (RHA) § 10, 33 U.S.C. § 403 (2012); Clean Water Act (CWA) § 404, 33 U.S.C. § 1344 (2012).

¹¹⁹ FPA § 4(e), 16 U.S.C. § 797(e) (stating licensing requirements for dam construction).

waters that can support transportation of persons or goods, as further defined in federal regulations and judicial decisions.¹²⁰

The CWA authorizes the Secretary of USACE to issue permits under section 404.¹²¹ CWA section 404 regulates dredged material in a navigable waterway of the United States.¹²² CWA section 404 is relevant to dam licensing because dam construction may require dredging of soil and other material in the waterway, often a river, where the dam will be located.¹²³ The construction may move material within the river or may move material from the bottom of the river to the bank.¹²⁴ If there is any dredged material in a project, USACE must issue a section 404 permit after doing NEPA review.¹²⁵ This becomes one step within the dam licensing process.¹²⁶

USACE must also issue permits for certain hydro projects under sections 9, 10, and 14 of the RHA.¹²⁷ Section 9 requires USACE to issue a permit if a dam crosses a navigable waterway.¹²⁸ This section is generally applicable only when a hydropower project sits across the

¹²⁰ See, e.g., *Am. Petroleum Inst. v. Johnson*, 541 F. Supp. 2d 165, 185-87 (D.D.C. 2008) (determining that the EPA's new regulatory definition of "navigable waters" was not the result of reasoned decision-making). "Navigable waters," as defined by the EPA and published in the *Federal Register*, include:

- (1) all navigable waters of the United States, as defined in judicial decisions prior to the passage of the . . . [CWA], and tributaries of such waters;
- (2) interstate waters; (3) intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes; and (4) intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce.

40 C.F.R. § 112.2 (2014); *Revisions to the Regulatory Definition of "Navigable Waters,"* U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/osweroel/content/spcc/spcc_nov08waters.htm (last updated Oct. 23, 2014).

¹²¹ See CWA § 404, 33 U.S.C. § 1344.

¹²² *Id.*

¹²³ See GILBERT, *supra* note 13, at 5.

¹²⁴ See *id.*; *15-005 Ice Harbor Dredging Complete; Lock Operations Return to Normal — Corps Dredging Operations Continue in Lewiston-Clarkston Area*, U.S. ARMY CORPS OF ENGRS (Jan. 15, 2015), <http://www.nww.usace.army.mil/Media/NewsReleases/tabid/2614/Article/560287/15-005-ice-harbor-dredging-complete-lock-operations-return-to-normal-corps-dred.aspx> ("American Construction Company, completed dredging of about 2,000 cubic yards of material at the downstream lock approach of Ice Harbor Dam.").

¹²⁵ CWA § 404, 33 U.S.C. § 1344.

¹²⁶ See Bowman, *supra* note 103, at 743.

¹²⁷ Rivers and Harbors Act (RHA) §§ 9, 10, 14, 33 U.S.C. §§ 401, 403, 408 (2012).

¹²⁸ *Id.* § 9, 33 U.S.C. § 401.

entire waterway.¹²⁹ Section 10 authorizes USACE to issue a permit for obstruction or alteration of a navigable waterway.¹³⁰ Section 14 authorizes the Secretary of USACE to allow the United States to utilize non-federal facilities, such as dams.¹³¹ Section 14 concerns the dual regulation of federal and non-federal structures in order to ensure that the federal government may make use of non-federal structures.¹³²

c. FERC and USACE

FERC is authorized to issue a license for a new dam if USACE approves the dam.¹³³ Thus, the two federal agencies are both integral to the licensing of a new federal dam constructed for the purpose of producing hydroelectric power.¹³⁴ FERC regulates the energy component while USACE regulates and manages the physical structure affecting navigable waters.¹³⁵

However, in some phases of the licensing process, only one agency's regulation is necessary. For example, a FERC license can achieve the requirements of a USACE Rivers and Harbors Act section 10 permit, thus obviating the need for USACE to also issue this permit.¹³⁶ It is statutorily permissible for USACE to issue the section 10 permit, but it is not necessary. The overlap in permitting by multiple federal agencies contributes to a lengthy, inefficient permitting system.

II. THE ISSUE OF INEFFICIENT PERMITTING

Hydropower project licensing is often inefficient due to lack of agency coordination. Currently, obtaining a hydropower license often

¹²⁹ See GILBERT, *supra* note 13, at 4.

¹³⁰ RHA § 10, 33 U.S.C. § 403.

¹³¹ See *id.* § 14, 33 U.S.C. § 408.

¹³² See *id.* This section is relevant to non-federal and federal dam licensing, but this Note focuses on non-federal dams.

¹³³ Federal Power Act (FPA) § 4(e), 16 U.S.C. § 797(e) (2012).

¹³⁴ See *id.*

¹³⁵ See *id.*

¹³⁶ Federal Energy Regulatory Commission Form L-3, 33 C.F.R. pt. 221, app. B (2014); FED. ENERGY REGULATORY COMM'N, MEMORANDUM OF UNDERSTANDING BETWEEN UNITED STATES ARMY CORPS OF ENGINEERS AND THE FEDERAL ENERGY REGULATORY COMMISSION ON NON-FEDERAL HYDRO PROJECTS 2 (Mar. 2011), available at <http://www.ferc.gov/legal/mou/mou-usace.pdf> [hereinafter MEMORANDUM OF UNDERSTANDING, USACE & FERC] ("The Corps' [USACE] Section 10 requirements for non-Federal hydropower development are met through the Commission's licensing process.").

takes more than the intended maximum of five years.¹³⁷ While each project has differing determinative variables, the licensing timeframe is inconsistent — FERC has issued licenses in as quickly as two months.¹³⁸ Despite the movement toward a more efficient process for hydropower project licensing, the permitting process is still inefficient.¹³⁹ Permitting inefficiency is due to a multiplicity of uncoordinated agency involvement.¹⁴⁰ Primarily, the overlapping jurisdiction of FERC and USACE and the lack of timely coordination unnecessarily delay the licensing process.¹⁴¹

Each agency imposes its own regulatory procedures on differing timeframes.¹⁴² For example, FERC may begin reviewing a project license application years before USACE even begins the CWA permitting, Rivers and Harbors Act review, and FPA approval (if applicable to the project).¹⁴³ USACE may ultimately discover that its

¹³⁷ See Kosnik, *Bureaucratic Delay*, *supra* note 15, at 259.

¹³⁸ As the result of a Memorandum of Understanding (“MOU”) between FERC and Colorado, a news release in September 2011 reported that FERC granted a Colorado dam license in two months. The MOU highlights the benefits of cooperation and delegation between the individual states and FERC. See Press Release, Fed. Energy Regulatory Comm’n, FERC Approves First Hydroelectric Project in Colorado Under Small Hydro Agreement (Sept. 14, 2011), available at <http://www.ferc.gov/media/news-releases/2011/2011-3/09-14-11.asp> [hereinafter FERC Press Release]; see also FED. ENERGY REGULATORY COMM’N, MEMORANDUM OF UNDERSTANDING BETWEEN THE FEDERAL ENERGY REGULATORY COMMISSION AND THE STATE OF COLORADO THROUGH THE GOVERNOR’S ENERGY OFFICE TO STREAMLINE AND SIMPLIFY THE AUTHORIZATION OF SMALL SCALE HYDROPOWER PROJECTS 6 (Aug. 24, 2010), available at <http://www.ferc.gov/legal/mou/mou-co.pdf> [hereinafter MEMORANDUM OF UNDERSTANDING, FERC & CO]. Some variables that determine the timeframe of a dam license include the size of the dam, the amount of electricity production capacity, FERC’s workload, and other incoming licensing requests, among other variables. Kosnik, *Bureaucratic Delay*, *supra* note 15, at 261.

¹³⁹ See Kosnik, *Bureaucratic Delay*, *supra* note 15, at 259.

¹⁴⁰ See *supra* Part I.B.2.c.

¹⁴¹ See *supra* Part I.B.2.c.

¹⁴² See *supra* Part I.B.2.c; see, e.g., MEMORANDUM OF UNDERSTANDING, USACE & FERC, *supra* note 136, at 8 (discussing coordination of timelines between FERC processes and USACE process).

¹⁴³ FPA approval is only necessary for projects on navigable waters of the United States. See Federal Power Act (FPA) § 4(e), 16 U.S.C. § 797(e) (2012) (discussing FERC’s licensing and permit requirements and the ability of FERC to issue preliminary permits in before it issues final permits); see also MEMORANDUM OF UNDERSTANDING, USACE & FERC, *supra* note 136, at 4; cf. PowerPoint Presentation, Richard L. Darden, U.S. Army Corps of Eng’rs, Regulatory Div., Charleston Dist., What You Need to Know About Section 404 Permits, available at http://www.dnr.sc.gov/marine/NERR/present/regulations/Darden_USACEprocess.pdf (last visited Dec. 26, 2014).

review of the project license application under section 10 of the Rivers and Harbors Act was unnecessary because FERC already completed an identical review.¹⁴⁴ Thus, years may be added to the licensing process due to nonessential agency regulation.¹⁴⁵ As a consequence, this segmented FERC and USACE regulation slows production of renewable energy in the nation and frustrates the goals of the HREA.¹⁴⁶ This delay directly leads to fewer hydroelectric generators, less hydro-generated electricity, and a general decrease in potential renewable energy sources in the nation's energy portfolio.¹⁴⁷ This also hurts the nation's economic goals and environmental policies.¹⁴⁸

The regulatory inefficiency in hydropower licensing is an issue of "political-legal fragmentation and overlap."¹⁴⁹ The problem is not due to lack of competence.¹⁵⁰ Rather, the problem stems from the lack of a leader or head regulatory agency.¹⁵¹ In some cases, there is too much regulation; in others, there is too little regulation. In either case, the regulation of hydropower licensing is segmented, leaving gaps between the agencies' processes, delaying the issuance of formal approval for months.¹⁵²

The HREA is one of multiple attempts by Congress to streamline the hydropower licensing process.¹⁵³ However, as written, the statute is insufficient to counteract the current inefficiencies, namely agency regulation. Section 6 of the HREA directs FERC merely to "investigate the feasibility" of a two-year licensing process.¹⁵⁴ There is no mandate to either implement the two-year licensing process or coordinate with

¹⁴⁴ See *supra* Part I.B.2.c.

¹⁴⁵ See *supra* Part I.B.2.c.

¹⁴⁶ See *supra* Parts I.A, I.B.1.e.

¹⁴⁷ See *supra* Parts I.A, I.B.1.e.

¹⁴⁸ See *supra* Parts I.A, I.B.1.e.

¹⁴⁹ William W. Buzbee, *Recognizing the Regulatory Commons: A Theory of Regulatory Gaps*, 89 IOWA L. REV. 1, 23 (2003) (discussing the problem of overlapping and mismatching jurisdiction in government regulation, most prominent in environmental regulation). Professor Buzbee uses the term "regulatory primacy" to describe the agency leader. *Id.*

¹⁵⁰ See *id.*

¹⁵¹ See *id.*

¹⁵² See *id.*

¹⁵³ See Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, §§ 4, 6, 127 Stat. 493, 494-95 (codified as amended in scattered sections of 16 U.S.C.); Christy McCann, *Dammed If You Do, Dammed If You Don't: FERC's Tribal Consultation Requirement and the Hydropower Re-licensing at Post Falls Dam*, 41 GONZ. L. REV. 411, 417 (2006) (discussing FERC's hydropower licensing process and the relevant statutes).

¹⁵⁴ HREA § 6, 127 Stat. at 495-96.

USACE. This statute alone, without proper implementation by FERC, will not achieve efficient licensing and will not succeed in promoting hydropower. In order to solve the permitting inefficiencies, there is a need for effective implementation of the HREA.

III. SOLUTION TO INEFFICIENT PERMITTING

The HREA is important and necessary because it can help achieve the benefit of three characteristics of hydroelectric power: efficient energy production, economic benefit, and environmental conservation. However, proper implementation is necessary to achieve the goal of the HREA to promote hydropower. Coordination between the two primary agencies is key to ensure efficient implementation.

FERC and USACE should coordinate simultaneously in order to achieve an efficient licensing process for non-federal dams. First, FERC should be the primary agency with authority to delegate and lead the process.¹⁵⁵ Second, USACE should approve the project under the FPA, issue permits under the CWA, and maintain operation of the hydropower facility.¹⁵⁶ Additionally, where it is possible, the two agency licensing processes should occur concurrently rather than sequentially. Third, FERC should implement the two-year licensing period as suggested by HREA section 6.¹⁵⁷

A. FERC Should Lead as the Primary Agency in the Hydropower Licensing Process

Congress has granted FERC the final authority on decisions made during the licensing process of non-federal dams.¹⁵⁸ FERC determines the ultimate and binding terms of licenses.¹⁵⁹ In addition, case law has established that the FPA gives FERC exclusive jurisdiction over licensing of non-federal projects on navigable waters, subject to limited exceptions.¹⁶⁰ Thus, consistent with statutory rule and case law, FERC should function as the lead agency in the hydropower

¹⁵⁵ See *infra* Part III.A.

¹⁵⁶ See *infra* Part III.B.

¹⁵⁷ See *infra* Part III.C.

¹⁵⁸ See Federal Power Act (FPA) § 10, 16 U.S.C. § 803(a)(1) (2012); see also McCann, *supra* note 153, at 417.

¹⁵⁹ See FPA § 10, 16 U.S.C. § 803(a)(1).

¹⁶⁰ See *Fed. Power Comm'n v. Oregon*, 349 U.S. 435, 444-45 (1955); *First Iowa Hydro-Elec. Coop. v. Fed. Power Comm'n*, 328 U.S. 152, 167-70 (1946); *Bd. of Elec. Light Comm'rs v. McCarren*, 563 F. Supp. 374, 378 (D. Vt. 1982) (holding that FERC has exclusive licensing power for dams on navigable waters).

licensing process because FERC has ultimate authority. In turn, FERC should delegate tasks to USACE in order to streamline the licensing process.

FERC must analyze multiple factors, but FERC remains the ultimate decision-maker within the hydropower licensing process.¹⁶¹ For example, the FPA directs FERC to consider comments, reports, and plans from state agencies.¹⁶² These reports may include topics such as the project's impact on commerce, on development of the waterway, on the water supply, and on other applicable uses.¹⁶³ Although FERC must generally weigh all of these inputs from state, municipal or other relevant agencies, FERC has the ultimate discretion when formulating the final terms of a hydropower license.¹⁶⁴ In theory, FERC may disregard the comments and suggestions if there is adequate justification for its final licensing decision, consistent with the FPA.¹⁶⁵

The Supreme Court has emphasized FERC's licensing authority under the FPA. For example, *First Iowa Hydro-Electric Cooperative v. Federal Power Commission* is one of the earliest cases to announce this authority.¹⁶⁶ In *First Iowa*, the Supreme Court held that the FPA grants the FPC, predecessor to FERC, the highest authority to license hydropower projects.¹⁶⁷ The FPC takes precedence over state licensing requirements for navigable waters.¹⁶⁸

The Court also addressed the issue of duplicative governance, in this case between state and federal regulatory agencies.¹⁶⁹ The Court held the following: that based on the explicit language of the statute and the legislative intent of Congress, the FPA necessitates regulation only by the Federal Power Commission;¹⁷⁰ that FPA does not mandate regulation by the states;¹⁷¹ and that if there were flexibility in the statute or a broad arena for the states also to regulate, the states would

¹⁶¹ FPA § 10, 16 U.S.C. § 803(a)(1).

¹⁶² *See id.* § 803(a)(1)–(2).

¹⁶³ *Id.*

¹⁶⁴ *Id.* § 803(a)(1).

¹⁶⁵ “If necessary in order to secure such plan the Commission shall have authority to require the modification of any project and of the plans and specifications of the project works before approval.” *Id.*

¹⁶⁶ *First Iowa Hydro-Elec. Coop. v. Fed. Power Comm'n*, 328 U.S. 152 (1946).

¹⁶⁷ *Id.* at 181-82.

¹⁶⁸ *Id.*

¹⁶⁹ *Id.*

¹⁷⁰ *Id.*

¹⁷¹ *Id.* “The detailed provisions of the Act providing for the federal plan of regulation leave no room or need for conflicting state controls.” *Id.* at 181.

be allowed to do so.¹⁷² However, here Congress made it clear that the states do not have authority to license non-federal dams on navigable waters.¹⁷³

The tension between federal and state licensing authorities in *First Iowa* is similar to the tension between two federal agencies, FERC and USACE. Regulation by both agencies is necessary in certain steps of the process, similar to state and federal regulation of hydropower licensing.¹⁷⁴ States regulate the bed and banks of the rivers within the state.¹⁷⁵ Duplicative regulation outside of this limited sphere of the bed and banks of state rivers is unnecessary and states are prohibited from regulating rivers outside the state.¹⁷⁶ The restriction on overlapping state and federal regulation in this case can be analogized to duplicative regulation by federal agencies in the context of hydropower licensing. Similar to *First Iowa*, but on the federal level, Congress should not allow overlapping dual regulation by FERC and USACE. FERC should act as the lead agency and should complete all steps of the licensing process not statutorily assigned to USACE. This shared system will prevent unnecessarily duplicative action and will streamline the licensing process.

In *Federal Power Commission v. Oregon*, the Court held that the FPC had “exclusive jurisdiction” and authority to license a hydroelectric project.¹⁷⁷ The Court’s holding was specific to a project in Oregon, preempting Oregon’s state authority to impose duplicative licenses.¹⁷⁸ Nevertheless, the holding is broadly applicable to licensing, though, because it states FERC’s authority as the primary licensing agency for non-federal dams.¹⁷⁹

Additionally, the Court followed Congressional intent by expressly reducing duplicative licensing.¹⁸⁰ The Court determined that the FPC

¹⁷² *Id.* at 171. The Court stated that in some instances dual regulation is acceptable, but only where it is not redundant. The Court opined on the need to avoid a “dual system of futile duplication of two authorities over the same subject matter.” *Id.*

¹⁷³ *Id.*

¹⁷⁴ See Federal Power Act (FPA) § 4(e), 16 U.S.C. § 797(e) (2012) (stating the USACE dam construction licensing requirements); Clean Water Act (CWA) § 404, 33 U.S.C. § 1344 (2012) (stating the USACE hydropower licensing requirements).

¹⁷⁵ See *First Iowa*, 328 U.S. at 174 (citing 56 CONG. REC. 9810 (1918)).

¹⁷⁶ See *id.* at 171.

¹⁷⁷ *Fed. Power Comm’n v. Oregon*, 349 U.S. 435, 446 (1955). One exception is given by the court: the Federal Power Commission has exclusive jurisdiction unless “modified by other federal legislation.” *Id.*

¹⁷⁸ *Id.* at 445-46.

¹⁷⁹ *Id.* at 446.

¹⁸⁰ *Id.* at 445-46.

licensing process was sufficient, and found that multiple licensing processes were unnecessary because they merely burdened the process.¹⁸¹ This concept can likewise be applied to current licensing by FERC under the HREA. Congress has explicitly expressed its intent to streamline and expedite licensing.¹⁸² FERC should lead the licensing process as the primary agency in order to eliminate duplicative agency processes. FERC's licensing process is sufficient, consistent with the holding in *Federal Power Commission v. Iowa*.

Finally, in *Board of Electric Light Commissioners v. McCarren*, the U.S. District Court for the District of Vermont held that FERC should authorize and administer all phases of the hydropower project licensing on a navigable water.¹⁸³ The court gave FERC exclusive jurisdiction over such project licensing.¹⁸⁴ The state from which the project is seeking a license may only intervene in the process in narrow circumstances, such as the use of the water for municipal irrigation purposes.¹⁸⁵ Even in those situations, the Court held that FERC's authority reigns supreme.¹⁸⁶ The court also expressed its disfavor for concurrent agency jurisdiction over project licensing.¹⁸⁷ By statute, Congress authorized FERC to regulate in this field.¹⁸⁸ Federal and state interests do not always align, though, and it is sometimes desirable to have separate regulation by federal and state agencies.¹⁸⁹ However, federal agencies should have primary authority in the licensing process because the federal government supports a

¹⁸¹ *See id.*

¹⁸² Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, §§ 4, 6, 127 Stat. 493, 494-95 (codified as amended in scattered sections of 16 U.S.C.).

¹⁸³ *See Bd. of Elec. Light Comm'rs v. McCarren*, 563 F. Supp. 374, 378 (D. Vt. 1982).

¹⁸⁴ *Id.*

¹⁸⁵ *See id.*

¹⁸⁶ *Id.*

¹⁸⁷ *Id.* “[B]ecause the federal licensing plan pervades the field by evaluating license applications in light of ‘comprehensive’ criteria . . . concurrent jurisdiction up to the point of veto is likewise condemned.” *Id.* (citing Federal Power Act (FPA) § 10, 16 U.S.C. § 803(a) (1982)).

¹⁸⁸ Federal Power Act (FPA) § 10, 16 U.S.C. § 803(a) (2012).

¹⁸⁹ For an example of two separate, yet overlapping systems of environmental regulation, see the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §§ 4321–4335 (2012); and the California Environmental Quality Act (CEQA), CAL. PUB. RES. CODE §§ 21000–21177 (West 2014). The two regulatory systems are necessary because they achieve different goals: NEPA is merely a review process while CEQA a more stringent and action-forcing environmental permitting regulation for projects within the state. California has determined it wants a higher mandate of protection, and this is a decision that directly affects the environment within the state.

uniform system and has the ability to collaborate with all interest groups across state lines.¹⁹⁰

The HREA should follow the lead of the Energy Policy Act section 372 for agency implementation.¹⁹¹ The Energy Policy Act promotes general energy production in the United States, including energy from coal, fossil fuels and renewable sources.¹⁹² In order to promote growth in the energy sector, streamlined permitting is necessary. Section 372 of the Act contains two tasks to achieve this: coordination of federal agencies involved in the licensing process and one environmental review (most often NEPA review).¹⁹³

The Energy Policy Act explicitly directs federal government agencies to coordinate with each other by entering into a memorandum of understanding (“MOU”).¹⁹⁴ Under section 372(a) of the Energy Policy Act, the Secretaries of the Interior, Agriculture, Defense, and Energy are required to work together under a six-month deadline.¹⁹⁵ In addition, the Energy Policy Act mandates that the agencies work together to create one comprehensive environmental review per project.¹⁹⁶ FERC and USACE should follow this direction in implementing the HREA.

According to some practitioners though, the Energy Policy Act’s goal of cooperation has not been successful.¹⁹⁷ The licensing process still takes significant time and incurs large costs.¹⁹⁸ In some cases, the

¹⁹⁰ See Exec. Order No. 13,604, 77 Fed. Reg. 18,887 (Mar. 22, 2012).

¹⁹¹ Energy Policy Act of 2005, Pub. L. No. 109-58, § 372, 119 Stat. 594, 734-35.

¹⁹² See generally *id.* (streamlining the hydro permitting process and eliminating some environmental review).

¹⁹³ *Id.*

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* § 372(a)(1), 119 Stat. at 734-35. The HREA currently has a three-year deadline for implementation of a two-year licensing process, if the two-year process is feasible. Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 6(b)(4), 127 Stat. 493, 495 (2013) (codified as amended in scattered sections of 16 U.S.C.). This is substantially longer than the six months provided in the Energy Policy Act.

¹⁹⁶ Energy Policy Act § 372(a)(2)(C), 119 Stat. at 736.

¹⁹⁷ See Peter J. Schaumberg & James M. Auslander, *Power to the People: Electric Transmission Siting in the American West*, 2013 ROCKY MTN. MIN. L. FOUND. MIN. L. SERIES, no. 5, at 6-1, 6-3, available at <http://www.rmmlf.org/REETpb/REE-Materials.pdf>. Schaumberg and Auslander state that “numerous legal and practical barriers . . . remain.” *Id.*

¹⁹⁸ See *id.*; see also Warner, *supra* note 14 (outlining the hurdles facing relicensing of Lake Chelan Dam and stating that the FERC process is “already out of hand” due to the hundreds of stakeholders and interveners). The high cost of the dam relicensing process has made some worried that companies will decide not to relicense and instead abandon the area. Bert Caldwell, *WVP Dam Relicensing Could Cost \$160 Million Money Would Fund Restoration of Clark Fork Fish, Wildlife*, SPOKESMAN-REVIEW (Jan. 29, 1998),

significant time and expense of the licensing process may ultimately kill a project.¹⁹⁹ This is an undesirable effect because the current goal of energy policy is to promote clean, efficient energy. Licensing is a necessary component to achieve new sources of clean energy.²⁰⁰

B. USACE Should Permit Hydro Projects Only Where Statutorily Mandated and Under the Direction of FERC as the Lead Agency

Although FERC should be the primary and lead agency in the hydropower licensing process, it is not the sole agency involved. USACE is statutorily required to participate in certain steps of the process.²⁰¹ Specifically, USACE has three primary tasks. First, USACE must issue permits for dredged material under the CWA.²⁰² Second, USACE must issue permits for navigable waters under the Rivers and Harbors Act.²⁰³ Finally, USACE must approve hydropower facilities on waterways that affect interstate navigation under the FPA.²⁰⁴

In order to both satisfy its statutory mandates and achieve the goal of the HREA of streamlining the licensing process, FERC must lead the process. FERC should oversee the process and ensure that USACE is taking the proper permitting steps, but no more than necessary to reduce inefficiencies. For example, FERC and USACE should not duplicate licensing requirements.²⁰⁵ FERC and USACE cooperation should start at the beginning of the process, immediately following receipt of a license application. The foregoing suggestions will ensure simultaneous FERC and USACE licensing and permitting procedures in order to streamline and expedite the process.²⁰⁶

<http://www.spokesman.com/stories/1998/jan/29/wwp-dam-relicensing-could-cost-160-million-money>. Locals worry that the dam operator “could choose to simply abandon the dams and let someone else deal with whatever environmental problems are left behind” instead of paying for relicensing. *Id.*

¹⁹⁹ See Schaumberg & Auslander, *supra* note 197, at 6-3.

²⁰⁰ See *id.*

²⁰¹ See, e.g., Federal Power Act (FPA) § 4(e), 16 U.S.C. § 797(e) (2012) (stating the licensing requirements for dam construction that are required to be fulfilled by USACE); Rivers and Harbors Act (RHA) §§ 9, 10, 33 U.S.C. §§ 401, 403 (2012) (prohibiting construction and obstruction of navigable water without USACE permit); Clean Water Act (CWA) § 404(a), 33 U.S.C. § 1344(a) (2012) (authorizes USACE to issue permits for “dredged or fill material”).

²⁰² CWA § 404(a), 33 U.S.C. § 1344(a).

²⁰³ RHA §§ 9, 10, 33 U.S.C. §§ 401, 403.

²⁰⁴ FPA § 4(e), 16 U.S.C. § 797(e).

²⁰⁵ See GILBERT, *supra* note 13, at 5 (discussing statutes that authorize USACE and FERC to participate in hydro licensing).

²⁰⁶ See *id.* at 4 (“While many of the Corps['] regulatory processes could

The FPA gives USACE broad authority over hydropower facilities.²⁰⁷ Congress does not mandate all actions by both agencies. Therefore, FERC should act as the leading agency where USACE is not mandated to regulate. USACE has the power to build federal dams and hydro facilities, operate the dams and associated recreational structures, and permit these structures to some extent.²⁰⁸

FERC and USACE both have authority to undertake NEPA environmental review, but two separate NEPA documents are not required for dam licensing.²⁰⁹ Thus, to avoid duplicative and possibly conflicting agency efforts, I suggest that as between FERC and USACE, only one NEPA environmental review should be completed. CWA section 404 requires NEPA review to assess the environmental impacts of a project.²¹⁰ In order to streamline licensing, therefore, USACE should use FERC's NEPA document instead of creating a separate, additional document.²¹¹ FERC licensing requires a NEPA environmental review permit.²¹² There is no requirement for two identical NEPA environmental impact statements unless there are exceptional circumstances necessitating additional assessment.²¹³ USACE's duties should instead be authorized to state and local governments, giving USACE less federal authority due to their past environmental destruction and inefficient permitting action.

Critics of USACE's broad authority suggest that certain USACE duties should be allocated to state and local governments or to the private sector.²¹⁴ Local governments may be better suited to maintain hydropower facilities because the facilities are located in their municipal or local territory.²¹⁵ Local governments maintain similar

theoretically be undertaken during licensing, most of the time they are not.”). This added regulatory step slows the final license issuance.

²⁰⁷ See FPA § 4(e), 16 U.S.C. § 797(e); Chris Edwards, *Cutting the Army Corps of Engineers*, CATO INST. (Mar. 20, 2012), <http://www.downsizinggovernment.org/usace>.

²⁰⁸ MEMORANDUM OF UNDERSTANDING, USACE & FERC, *supra* note 136, at 2, 10; see also Edwards, *supra* note 207.

²⁰⁹ See GILBERT, *supra* note 13, at 6.

²¹⁰ Clean Water Act (CWA) § 404, 33 U.S.C. § 1344 (2012).

²¹¹ See GILBERT, *supra* note 13, at 6.

²¹² NEPA compliance requires the preparation of an EA or EIS for each hydroelectric project licensed by FERC. *General Information*, *supra* note 100. See generally National Environmental Policy Act (NEPA) of 1969 § 102, 42 U.S.C. § 4332 (2012) (requiring that all agencies conduct environmental assessments of proposed actions if the action may have an environmental effect).

²¹³ See GILBERT, *supra* note 13, at 5.

²¹⁴ See Edwards, *supra* note 207.

²¹⁵ Cf. John Seebach, *Groups Sue over North Umpqua License*, HYDROPOWER REFORM COAL. (May 24, 2004, 8:00 AM), <http://www.hydroreform.org/news/2004/05/24/>

facilities in the region, such as wastewater treatment plants. In that capacity, they have management and work crews available.²¹⁶ Private companies may be better suited for building facilities due to the structure and financial capability of these sectors.²¹⁷

Critics also argue that USACE should have less authority over hydropower projects because the government's oversight over such projects has often been inefficient.²¹⁸ USACE is a decentralized federal agency historically subject to political capture.²¹⁹ USACE authority is divided into multiple entities: federal headquarters, regional divisions, and local offices.²²⁰ There is a distinct lack of coordination among the layers of entities that leads to inefficiency, segmentation, and wastefulness within the agency.²²¹

Another criticism of USACE's role in the permitting process is that USACE has contributed to significant environmental destruction, primarily through reckless and decentralized dam building in previous decades. For example, USACE dams damaged an area of the Florida Everglades.²²² Subsequently, USACE used additional federal funding to restore these areas.²²³

In sum, the foregoing critiques of USACE's involvement support my suggestion that federal agency regulation of hydropower must be coordinated through a lead agency. The lead agency should be FERC, as mandated by the FPA.²²⁴ USACE's power is overly broad and segmented and should be replaced by FERC's authority, except where USACE is statutorily required to participate in the licensing process.

groups-sue-over-north-umpqua-license. Seebach shows that the local community also carries the brunt of the environmental costs of a hydropower facility. For example, in Southwest Oregon, one member of the local community has claimed that "all the environmental costs have been borne by the North Umpqua River." *Id.* This is a small town hosting a large hydro facility maintained by the federal government. *Id.* However, there is an important distinction between issuing permits, which should be done by FERC, and maintenance of facilities, which can be done locally.

²¹⁶ Local governments may often be unable to cover the costs of hydropower facility maintenance. *Cf. id.* (showing that the local community bears the brunt of impacts and costs).

²¹⁷ Kosnik, *Potential of Water Power*, *supra* note 1, at 3256 ("There is a history of cost-effective private development of new hydropower facilities at existing federal dams."); *see also* Edwards, *supra* note 207.

²¹⁸ *See* Edwards, *supra* note 207.

²¹⁹ *See id.*

²²⁰ *Id.*

²²¹ *See id.*

²²² *Id.*

²²³ *Id.*

²²⁴ *See* Federal Power Act (FPA) § 10, 16 U.S.C. § 803(a) (2012).

C. *FERC Should Expeditiously Implement the Two-Year Licensing Process as Described in HREA Section 6*

FERC should take two specific measures as it implements section 6 of the HREA. First, FERC should execute a memorandum of understanding with all federal and state agencies that play a role in the licensing process.²²⁵ Second, FERC should include existing but non-operational hydropower facilities in the category of “nonpowered dams” because this is consistent with the plain text and the legislative history of the HREA.²²⁶ FERC should implement section 6 as expeditiously as possible in order to achieve sooner the goal of increased energy from hydropower.

Section 6(c) of the HREA directs FERC to enter into MOUs with applicable agencies. Colorado and FERC’s MOU is an example of successful licensing.²²⁷ Colorado signed this MOU with FERC in August 2010 in an effort to increase the quantity of its renewable energy sources by constructing and licensing small hydropower projects.²²⁸ The goal is to license projects more quickly and simply.²²⁹ The MOU delegates authority between Colorado — acting as the state regulatory body — and FERC.²³⁰ Use of an MOU has been largely successful because the two regulatory bodies work together from the beginning of the licensing process.²³¹ This licensing method facilitates communication and planning, and reduces duplicative and inefficient action by either agency.

²²⁵ Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 6(c), 127 Stat. 493, 495 (codified as amended in scattered sections of 16 U.S.C.). “The Commission shall, to the extent practicable, enter into a memorandum of understanding with any applicable Federal or State agency to implement a pilot project.” *Id.* However, the HREA does not define “any applicable Federal or State agency.” *Id.*

²²⁶ *See id.* § 6(a); Letter from Mark Matus, Manager, Envtl. Servs., Lansing Bd. of Water & Light, to Sec’y of Fed. Energy Regulatory Comm’n (Oct. 22, 2013) [hereinafter Letter from Matus], available at elibrary.ferc.gov (search the date range from “10/22/2013” to “10/22/2013” and docket number “AD13-9,” click PDF hyperlink for “Submittal 20131022-5122”).

²²⁷ MEMORANDUM OF UNDERSTANDING, FERC & CO, *supra* note 138.

²²⁸ *See id.* at 2. The MOU between FERC and Colorado demonstrates the parties’ efforts to achieve a more streamlined, efficient licensing process — in this case, specific to small hydro. *See id.*

²²⁹ *Id.*

²³⁰ *See id.*

²³¹ *See, e.g.*, FERC Press Release, *supra* note 138 (discussing FERC’s approval of a small hydroelectric project in Colorado).

One shortcoming of the HREA mandate for an MOU is that the HREA does not define the agencies or give a rubric for determining which agencies must enter an MOU with FERC.²³² This is a problem because it may lead to broad interpretation, causing FERC to enter into memorandums with a vast number of agencies. Instead of streamlining and expediting the process, this would then add another step in the licensing process and would cause a general delay.

Second, section 6(a) of the HREA should include existing non-powered dams in the goal of achieving a two-year licensing process.²³³ There are thousands of existing non-powered dams across the nation that have the potential for hydropower electricity generation.²³⁴ The main hurdle blocking many of these facilities from producing electricity is the burdensome licensing process.²³⁵ In order to restore a non-federal hydropower facility to power generation, FERC must license the facility.²³⁶

The Lansing Board of Water and Light provides an example of the potential to produce hydropower energy at one of its three existing units on the Grand River in Lansing, Michigan.²³⁷ The North Lansing Dam has not operated for over twenty-five years because its FERC license has expired.²³⁸ The Lansing Board of Water and Light discovered that the licensing process was too lengthy and costly to continue operation, so the facility now sits idle.²³⁹ The cost of licensing currently outweighs the revenue that would be produced by generating electricity at the North Lansing Dam.²⁴⁰ This is not an uncommon problem, and clearly goes against the goal of streamlined and efficient licensing.²⁴¹

²³² See Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 6(c), 127 Stat. 493, 495 (codified as amended in scattered sections of 16 U.S.C.).

²³³ See generally *id.* § 6(a), 127 Stat. at 495 (stating that “nonpowered dams and closed loop pumped storage projects” are included).

²³⁴ “[O]nly 3 percent of the 80,000 dams in the United States generate electricity.” *Id.* § 2, 127 Stat. at 493 (2013).

²³⁵ See Letter from Matus, *supra* note 226, at 3.

²³⁶ See *General Information*, *supra* note 100.

²³⁷ See Letter from Matus, *supra* note 226.

²³⁸ *Id.*

²³⁹ See *id.*

²⁴⁰ *Id.*

²⁴¹ See Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 6(a), 127 Stat. 493, 495 (codified as amended in scattered sections of 16 U.S.C.); Letter from Matus, *supra* note 226.

The legislative history of the HREA supports the integration of existing non-powered dams into section 6(a).²⁴² Representative Cathy McMorris Rodgers emphasized the need for reliable, renewable energy production.²⁴³ The Representative noted that hydropower is not intermittent as some other renewable sources are, such as solar and wind power.²⁴⁴ Consistent power production, as necessary for a functioning society, requires at least some non-intermittent power sources.²⁴⁵ Thus, if the two-year licensing process were applied to existing non-powered dams, hydropower energy production would increase and the base of consistent power production would increase.²⁴⁶ HREA section 6(a) should add existing non-powered dams into the licensing requirements in order to produce hydropower energy in facilities where the infrastructure already exists. This would promote energy and licensing efficiency.

1. FERC cannot implement a two-year licensing process until it follows the procedure of HREA Section 6.

If FERC first determines that this licensing scheme is feasible, HREA section 6 sets out a timeline for FERC to implement the two-year licensing process.²⁴⁷ FERC cannot unilaterally implement the two-year process today, and it may take up to three years to determine the feasibility of a two-year licensing process.²⁴⁸ This possibility of such a long delay illustrates the federal regulatory hurdles inherent in the implementation of the expedited licensing process. As is often the case, this three-year deadline may be extended, especially in the face of a federal government shutdown or budget cuts.²⁴⁹

²⁴² See H. COMM. ON ENERGY & COMMERCE, HYDROPOWER REGULATORY EFFICIENCY ACT OF 2013, H.R. REP. NO. 113-6, at 3 (2013), available at <https://www.congress.gov/113/crpt/hrpt6/CRPT-113hrpt6.pdf> (showing the legislative history and support of HREA).

²⁴³ *Id.* at 3.

²⁴⁴ *Id.*

²⁴⁵ See BOSSELMAN ET AL., *supra* note 29, at 581-82.

²⁴⁶ “[D]ams that have an existing unlicensed hydroelectric unit that is out of service but could be restored to service under an expedited process [would fulfill the HREA’s] express purpose of promoting the development of additional hydroelectric power.” Letter from Matus, *supra* note 226.

²⁴⁷ Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 6(a)–(c), 127 Stat. 493, 495 (codified as amended in scattered sections of 16 U.S.C.).

²⁴⁸ See *id.* § 6(b)(4), 127 Stat. at 495.

²⁴⁹ See Kosnik, *Bureaucratic Delay*, *supra* note 15, at 265-67. Kosnik reports that “adverse pressure from congressional and outside interest groups can lead to budget reductions, oversight, [and] distracting regulations” *Id.* Another source estimated

One response to budget and administrative crises may be the elimination of USACE from the dam licensing process altogether.²⁵⁰ If USACE is eliminated from the process and federal funding is cut from USACE, there will be increased federal funding directed at FERC administration.²⁵¹ Elimination of USACE from the dam licensing process would also simplify and streamline the process because there would be fewer parties involved.²⁵² Because FERC already fulfills the same purpose, USACE does not need to be involved.²⁵³

The congressional record from HREA consistently discusses the need for efficient, domestic energy as quickly as possible.²⁵⁴ Yet, nowhere does the record address the mechanisms and implementation of a two-year licensing process.²⁵⁵ The congressional record states that licensing under the HREA is the “1040-EZ for hydro permitting,” intending to demonstrate the uniformity and simplicity of the HREA licensing process.²⁵⁶ This suggests that the two-year licensing process is a realistic endeavor, but also indicates that it is necessary for FERC first to determine whether the licensing process is feasible.²⁵⁷

FERC may find it a tedious and burdensome process to study, analyze, and determine the feasibility of such a licensing scheme, and the congressional record does not evidence debate over this pre-process.²⁵⁸ The burden of determining whether a two-year process is feasible is exacerbated by lack of both administrative staff and funding due to recent budget cuts.²⁵⁹ In addition, there will be delay if outside agencies such as USACE are still involved in the licensing process.

that 95% of FERC’s staff would be furloughed by a federal government shutdown. See Stephen Lacey, *A Crash Course on How the Government Shutdown Could Impact Energy*, GREENTECH MEDIA (Oct. 1, 2013), <http://www.greentechmedia.com/articles/read/a-crash-course-on-how-a-government-shutdown-could-impact-energy>.

²⁵⁰ See Edwards, *supra* note 207.

²⁵¹ Cf. *id.* (stating that federal activities would shift from USACE to the Department of the Interior).

²⁵² Cf. *id.* (stating that the structure of USACE contributes to the inefficiency of the other entities’ activities).

²⁵³ See *id.*

²⁵⁴ See 159 CONG. REC. S6188-89 (daily ed. Aug. 1, 2013) (statement of Sen. Lisa Murkowski); 159 CONG. REC. H439-41 (daily ed. Feb. 12, 2013) (statements of Reps. Ed Whitfield, Cathy McMorris Rodgers, and Ben Ray Lujan).

²⁵⁵ See 159 CONG. REC. H439-41.

²⁵⁶ *Id.* at H439-40 (statement of Rep. Cathy McMorris Rodgers).

²⁵⁷ See 159 CONG. REC. S6188-89; 159 CONG. REC. H439-41.

²⁵⁸ See 159 CONG. REC. H439-41.

²⁵⁹ See Lacey, *supra* note 249.

FERC must also consider interest groups and stakeholders when assessing the feasibility of a two-year licensing process.²⁶⁰

The purpose of the HREA is to streamline hydropower licensing in order to promote more efficient energy production in the nation. If FERC determines that a two-year process is not feasible, the purpose of HREA will fail.²⁶¹ This goes directly against the congressional intent of the legislation.²⁶²

The nation needs efficient, reliable energy soon, and this energy could come from hydroelectric power.²⁶³ So what can be done now or sooner than three years from now? Congressional action, greater consideration of outside environmental interests, an inter-agency agreement (or MOU), or FERC order could assist swifter implementation of a two-year process.²⁶⁴ There should be bright-line rules to force quick implementation. The legislature or executive branch should authorize FERC to implement the two-year licensing process now, instead of years in the future. Further, FERC needs more resources, including financial resources, in order to expedite licensing.²⁶⁵ Perhaps funding could be diverted from USACE or other agencies with current, unnecessary licensing authority. In light of recent events and economic activity, additional funding for FERC without cutting budgets elsewhere seems unlikely.²⁶⁶

2. A two-year licensing process is not feasible due to environmental review requirements.

A leading counterargument cutting against the attainment of a two-year licensing process is that an effective NEPA environmental review takes significant time.²⁶⁷ The NEPA environmental review will be

²⁶⁰ See Hydropower Regulatory Efficiency Act (HREA) of 2013, Pub. L. No. 113-23, § 6, 127 Stat. 493, 495 (codified as amended in scattered sections of 16 U.S.C.) (requiring that FERC solicit public comments and recommendations as a part of its feasibility assessment).

²⁶¹ See *id.*

²⁶² See 159 CONG. REC. S6188; 159 CONG. REC. H440 (daily ed. Feb. 12, 2013).

²⁶³ See Reed, *supra* note 8.

²⁶⁴ See Kosnik, *Bureaucratic Delay*, *supra* note 15, at 261.

²⁶⁵ See *id.* at 267.

²⁶⁶ See Lacey, *supra* note 249.

²⁶⁷ See Kosnik, *Bureaucratic Delay*, *supra* note 15, at 258 (“[E]nvironmental interest groups, which, despite their apparent benefit/cost motivation to hasten the relicensing process (independent of relicensing outcomes), overall end up slowing it down.”). This supports the general concept that environmental concerns make a two-year licensing process nearly impossible. Further, the U.S. Government Accountability Office found that “the 197 final EISs in 2012 had an average preparation time of 1,675

rushed if the entire license is issued in two-years.²⁶⁸ Environmental review is a major component of the dam licensing process and consists of several separate steps.²⁶⁹ After a dam owner or operator applies for a FERC license or relicense, FERC begins the environmental review with a scoping process.²⁷⁰ The scoping is done to determine the availability of alternative actions.²⁷¹ FERC publishes these findings for public comment and then studies the alternatives, comparing the costs and benefits of each.²⁷²

FERC then holds a public hearing — primarily for local stakeholders to give input on the project and the alternative actions.²⁷³ The goal is to choose the most beneficial and least environmentally damaging option, although some environmental harm will invariably occur.²⁷⁴ Following the public comment period, FERC publishes a final scoping document.²⁷⁵

Next, FERC prepares and publishes an EA.²⁷⁶ FERC uses the final scoping document as a basis for the EA.²⁷⁷ Following the EA, FERC either concludes that there is a Finding of No Significant Impact (“FONSI”), or decides to prepare an EIS if there is a finding of significant impact.²⁷⁸ A FONSI usually allows the proposed action to proceed because the environmental impact is not significant enough to

days, or 4.6 years.” U.S. GOV’T ACCOUNTABILITY OFFICE, NATIONAL ENVIRONMENTAL POLICY ACT: LITTLE INFORMATION EXISTS ON NEPA ANALYSES 13 (2014), available at <http://www.gao.gov/assets/670/662543.pdf>.

²⁶⁸ See U.S. GOV’T ACCOUNTABILITY OFFICE, *supra* note 267, at 13.

²⁶⁹ See WASH. STATE DEP’T OF ECOLOGY, FREQUENTLY ASKED QUESTIONS: WATER QUALITY PROGRAM 2-3 (Mar. 2008), available at <https://fortress.wa.gov/ecy/publications/publications/0810022.pdf> (describing environmental review within the dam relicensing process).

²⁷⁰ *Id.* at 2.

²⁷¹ *Id.*

²⁷² HOLLY DOREMUS ET AL., ENVIRONMENTAL POLICY LAW: PROBLEMS, CASES, AND READINGS 235-39 (6th ed. 2012); WASH. STATE DEP’T OF ECOLOGY, *supra* note 269, at 2.

²⁷³ DOREMUS ET AL., *supra* note 272, at 238-39; FED. ENERGY REGULATORY COMM’N, HYDROPOWER LICENSING — GET INVOLVED: A GUIDE FOR THE PUBLIC 7 (2009) [hereinafter A GUIDE FOR THE PUBLIC], available at <http://www.ferc.gov/for-citizens/citizen-guides/hydro-guide.pdf>.

²⁷⁴ See DOREMUS ET AL., *supra* note 272, at 237-38.

²⁷⁵ WASH. STATE DEP’T OF ECOLOGY, *supra* note 269, at 2.

²⁷⁶ See National Environmental Policy Act (NEPA) § 102(2)(E), 42 U.S.C. § 4332 (2012); DOREMUS ET AL., *supra* note 272, at 237-38.

²⁷⁷ See A GUIDE FOR THE PUBLIC, *supra* note 273, at 10-11, 21. See generally NEPA § 102(2)(E), 42 U.S.C. § 4332 (detailing the necessary reports and recommendations that must be made before taking action).

²⁷⁸ DOREMUS ET AL., *supra* note 272, at 237.

warrant cancellation.²⁷⁹ Some environmental groups believe that a FONSI is never an appropriate decision because there will always be significant environmental impact.²⁸⁰

Issuance of an EIS takes significantly more time than a FONSI. An EIS is a lengthy and comprehensive discussion of all alternative actions and environmental issues that are present or could arise due to the proposed project.²⁸¹ FERC then publishes a Notice of Intent to publicly announce formal publication of the draft EIS.²⁸² There is another public comment period and then FERC publishes the final EIS.²⁸³ During this entire environmental review period, there can be no decision made on the proposed project.²⁸⁴ Each step in the environmental review requires at least a period of thirty days and can take up to three months.²⁸⁵ Thus, environmental review in itself often takes years, significantly slowing down the dam licensing process.

Environmental review under NEPA for a particular project can be shortened either through an expedited licensing process or through a project exemption.²⁸⁶ Environmentalist groups and individuals, however, argue that this will lead to negative environmental results.²⁸⁷ If NEPA analysis does not occur, the project certainly cannot fulfill the purpose of NEPA.²⁸⁸ If projects are commonly exempted from NEPA EISs, agencies will not fully consider environmental impacts of particular projects. This would undercut environmental protection in the context of federal government action.²⁸⁹

The HREA should achieve a middle ground, between energy production and protection of species and the environment, through

²⁷⁹ See BUREAU OF INDIAN AFFAIRS, INDIAN AFFAIRS NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) GUIDEBOOK 22-23 (2012), available at <http://www.bia.gov/cs/groups/xraca/documents/text/idc009157.pdf>.

²⁸⁰ See DOREMUS ET AL., *supra* note 272, at 237-38.

²⁸¹ See *id.* at 238.

²⁸² *Id.*

²⁸³ *Id.*

²⁸⁴ *Id.* at 238-39 (“No decision may be made concerning the proposed action until at least 30 days after the Notice of Availability of the final EIS or 90 days after the publication of the Notice of Availability of the draft EIS, whichever is later.”).

²⁸⁵ *Id.* at 238-39.

²⁸⁶ See Hydropower Regulatory Efficiency Act (HREA) of 2013 § 3, Pub. L. No. 113-23, 127 Stat. 493, 493 (codified as amended in scattered sections of 16 U.S.C.).

²⁸⁷ See Kosnik, *Bureaucratic Delay*, *supra* note 15, at 260.

²⁸⁸ See National Environmental Policy Act (NEPA) § 102(2)(E), 42 U.S.C. § 4332 (2012) (requiring, “to the fullest extent possible,” that agencies consider new environmental externalities in their decision-making).

²⁸⁹ See Kosnik, *Bureaucratic Delay*, *supra* note 15, at 260.

proper implementation. Environmentalist groups have diverse opinions on the wisdom of hydropower. Some would prefer an expedited licensing process to reduce potential damage to endangered species.²⁹⁰ The environmental review process should start at the beginning of the licensing process, with FERC as the lead agency. This process should begin with a concise focus, considering all alternative actions at the beginning of the licensing process, rather than years into the process. In this manner, the NEPA review will still be comprehensive and effective; it will not be rushed. Early issue-spotting would achieve the best of both worlds: comprehensive environmental review and efficient licensing with a reasonable timeframe.

CONCLUSION

Hydropower has a future in the United States as a clean, reliable energy source. The new hydro boom is occurring now. Hydropower is energy efficient, economically sound, and environmentally beneficial. Now it is necessary to achieve productive hydropower licensing. This Note argues that FERC and USACE should work simultaneously and delegate authority during the licensing process.²⁹¹ FERC should be the primary agency,²⁹² USACE should follow its own statutory mandates under FPA and CWA,²⁹³ and FERC should implement the two-year licensing period as quickly as possible.²⁹⁴ Proper agency action will streamline the process and ensure that it is more efficient and less costly. Most importantly, streamlining will better promote renewable energy in the United States.²⁹⁵

²⁹⁰ See *id.* at 280 (noting that environmental interests are not “cohesive”).

²⁹¹ See *supra* Part III.A–C.

²⁹² See *supra* Part III.A.

²⁹³ See *supra* Part III.B.

²⁹⁴ See *supra* Part III.C.

²⁹⁵ See *supra* Part III.A–C.