



**MEMORANDUM**

**May 09, 2022**

**To: Subcommittee on Energy Members and Staff**

**Fr: Committee on Energy and Commerce Staff**

**Re: Hearing on “Modernizing Hydropower: Licensing and Reforms for a Clean Energy Future”**

**On Thursday, May 12, 2022, at 10:30 a.m. (EDT) in the John D. Dingell Room, 2123 of the Rayburn House Office Building, and using Cisco Webex online video conferencing,** the Subcommittee on Energy will hold a hearing entitled, “Modernizing Hydropower: Licensing and Reforms for a Clean Energy Future.”

**I. BACKGROUND**

Hydropower is one of the oldest sources of renewable energy. In 2021, hydropower produced more than six percent of the nation’s electricity and 31.5 percent of its renewable energy.<sup>1</sup> While several states, including Washington, Oregon, New York, and California, produce approximately half of the hydropower generated in the United States, hydropower is part of the electricity generation mix in almost every state.<sup>2</sup>

Hydropower plays an important role in addressing the climate crisis and in maintaining electric reliability. It is a carbon-free resource that can ramp up-and-down quickly, and it provides 40 percent of the nation’s “black start” capabilities to restart the grid in the event of a blackout.<sup>3</sup> Pumped storage hydropower can also serve as a source of energy storage.<sup>4</sup>

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<sup>1</sup> Energy Information Administration, *Energy Explained: Electricity in the United States* (Apr. 19, 2022) (<https://www.eia.gov/energyexplained/electricity/electricity-in-the-us.php>).

<sup>2</sup> Energy Information Administration, *Hydropower Explained: Where Hydropower Is Generated* (Mar. 16, 2022) (<https://www.eia.gov/energyexplained/hydropower/>).

<sup>3</sup> National Hydropower Association, *Black Start: Hydropower is the Guardian of the Grid* (<https://www.hydro.org/powerhouse/article/black-start-hydropower-is-the-guardian-of-the-grid/>) (June 1, 2021).

<sup>4</sup> Department of Energy, Office of Energy Efficiency & Renewable Energy, Water Power Technologies Office, *Pumped Storage Hydropower* (<https://www.energy.gov/eere/water/pumped-storage-hydropower>) (accessed May 4, 2022).

The hydropower industry supports more than 68,000 American jobs.<sup>5</sup> According to the Department of Energy, the United States has the potential to increase its hydropower capacity by almost 50 percent by 2050 by installing hydropower projects on currently non-powered dams, optimizing existing hydropower facilities, and deploying additional closed-loop pumped storage projects.<sup>6</sup>

Like many other electricity generation resources, however, hydropower can have adverse impacts on the environment, recreation, and Tribal Nations. For instance, hydropower works can obstruct fish migration, change natural water temperatures and water chemistry, and result in the flooding of important natural areas, agricultural land, and archeological sites.<sup>7</sup> Hydropower projects can also interfere with the use of Tribal lands.

President Biden signed the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law, into law in December 2021. The law invested almost \$3 billion to promote hydropower, incentivize environmental enhancements at existing dams, and fund dam safety upgrades.<sup>8</sup>

## II. REGULATORY FRAMEWORK

The Federal Energy Regulatory Commission (FERC) licenses hydropower facilities built by utilities in interstate commerce under Part I of the Federal Power Act of 1935 (FPA). Section 6 of the FPA authorizes FERC to license hydroelectric projects for periods of up to 50 years.<sup>9</sup> Section 15 of the FPA provides for the relicensing of existing projects and automatic annual extensions for those projects whose licenses have expired but have yet to complete the relicensing process.<sup>10</sup>

The FPA includes several protections for the environment, recreation, or similar considerations. Section 4(e) requires that any license within a reservation (e.g., a national wildlife refuge or a national park) not interfere or be inconsistent with that reservation's purpose.<sup>11</sup> It further requires that the license be subject to "such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservation."<sup>12</sup> Section 18 requires that the

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<sup>5</sup> National Association of State Energy Officials, *2020 U.S. Energy & Employment Report*, (June 15, 2020) ([www.usenergyjobs.org/](http://www.usenergyjobs.org/)).

<sup>6</sup> Department of Energy, Office of Energy Efficiency & Renewable Energy, Water Power Technologies Office, *Hydropower Vision: A New Chapter for America's 1st Renewable Electricity Source* (July 26, 2016).

<sup>7</sup> See note 2.

<sup>8</sup> Construction Dive, *Infrastructure Act Will Pump \$3B into Nation's Ailing Dams* (Dec. 7, 2021) (<https://www.constructiondive.com/news/federal-infrastructure-act-iija-pump-3b-into-nations-ailing-dams/610898/>).

<sup>9</sup> 16 U.S.C. § 799.

<sup>10</sup> 16 U.S.C. § 808(a)(1).

<sup>11</sup> 16 U.S.C. § 797(e).

<sup>12</sup> *Id.*

Commission require licensees to construct, maintain, and operate “such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce” to protect fish populations.<sup>13</sup>

In 1986, Congress significantly amended the FPA to require greater consideration of the environmental and recreational impacts of hydroelectric facilities in the licensing process. In particular, Congress required that a decision by FERC to issue a hydroelectric license not be based on power generation alone, but to also “give equal consideration to” such factors as fish and wildlife protection and enhancement, energy conservation, protection of recreational opportunities, “and the preservation of other aspects of environmental quality.”<sup>14</sup> Among other things, Congress also amended the FPA to require that a license contain conditions to “adequately and equitably protect, mitigate damages to, and enhance fish and wildlife...affected by the development, operation, and management of the project” and that such conditions be based on recommendations from federal and state fish and wildlife agencies.<sup>15</sup>

As part of the Energy Policy Act of 2005, Congress enacted a new set of reforms to the hydroelectric licensing process in response to longstanding complaints that the process both took too long and resulted in uneconomic projects.<sup>16</sup> More recently, Congress enacted the America’s Water Infrastructure Act of 2018, which reformed the licensing process for hydropower projects at non-powered dams and for closed-loop pumped storage projects.<sup>17</sup>

### III. UNCOMMON DIALOGUE

In 2018, Stanford University’s Woods Institute initiated the “Uncommon Dialogue” process, which convened stakeholders from the hydropower industry, environmental groups, and Tribal Nations to discuss how to promote environmentally and socially responsible hydropower development.<sup>18</sup> In April 2022, the Uncommon Dialogue stakeholders unveiled an agreement on proposed reforms to the FPA.<sup>19</sup> According to the stakeholders, those reforms will streamline FERC’s hydropower licensing and relicensing process while maintaining important protections for environmental, recreational, and Tribal interests.<sup>20</sup>

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<sup>13</sup> 16 U.S.C. § 811.

<sup>14</sup> See note 11.

<sup>15</sup> 16 U.S.C. § 803(a).

<sup>16</sup> Energy Policy Act of 2005, Pub. L. No. 109-58 (Aug. 8, 2005).

<sup>17</sup> America’s Water Infrastructure Act of 2018, Pub. L. No. 115-270 (Oct. 23, 2018).

<sup>18</sup> National Hydropower Association, *NHA BLOG: A New Uncommon Collaboration on U.S. Hydropower* (June 23, 2021) (<https://www.hydro.org/news/nha-blog-a-new-uncommon-collaboration-on-u-s-hydropower/>).

<sup>19</sup> National Hydropower Association, *Licensing, Relicensing and License Surrender Proposed Federal Power Act Revisions* (Apr. 4, 2022) ([www.hydro.org/wp-content/uploads/2022/05/Hydropower-License-Reform-Consolidated-FPA-Negotiated-Provisions.pdf](http://www.hydro.org/wp-content/uploads/2022/05/Hydropower-License-Reform-Consolidated-FPA-Negotiated-Provisions.pdf)).

<sup>20</sup> National Hydropower Association, *Groups Seek to Improve the Hydropower Licensing Process, Restore Authority to Native American Tribes*, (Apr. 4, 2022) (<https://www.hydro.org/news/groups-seek-to-improve-the-hydropower-licensing-process-restore-authority-to-native-american-tribes/>).

Among other proposed changes, the Uncommon Dialogue’s proposal revises Section 4(e) of the FPA to permit federally recognized Tribes to act as the conditioning authority for hydropower projects located on Tribal lands. It also requires that mandatory conditions imposed under Section 4(e) be reasonably related to a hydropower project’s effects on federal lands. Further, the proposal modifies Section 18 of the FPA to require any fishway requirement prescribed by the Secretary of Commerce be “appropriate to address project effects and other relevant factors.” The proposal also establishes new expedited licensing procedures for certain qualifying non-powered dams and closed-loop and off-stream pumped storage projects.

Additionally, the Uncommon Dialogue’s proposal includes numerous process revisions, such as creation of a new funding mechanism for federal resource agencies to participate in the hydropower licensing process, and modification of the trial-type hearings required for mandatory conditions imposed under Sections 4(e) and 18 of the FPA. The proposal also directs FERC to consider climate change in deciding whether to issue a hydropower license.

#### **IV. WITNESSES**

The following witnesses have been invited to testify:

**Malcolm Woolf**

President and Chief Executive Officer  
National Hydropower Association

**Tom Kiernan**

Chief Executive Officer  
American Rivers

**Mary Pavel**

Partner  
Sonosky, Chambers, Sachse, Endreson & Perry LLC

**Richard Wallen**

General Manager and Chief Executive Officer  
Grant County Public Utility District

**Chris Wood**

President and Chief Executive Officer  
Trout Unlimited