

Sponsors: Northwest Public Power Association; Irrigation & Electrical Districts Association of Arizona; Mid-West Electric Consumers Association; California Municipal Utilities Association

In Support of Hydropower, Hydropower Licensing Reform, and Hydropower Tax Credits

Hydropower makes up a large portion of the nation’s source of emissions-free, renewable energy, accounting for 26.9 percent of domestic renewable generation and 5.7 percent of total electricity generation according to the 2023 Energy Information Administration data.

Hydroelectric generators have desirable qualities that support grid reliability. They can be started or stopped quickly, which makes them more responsive than most other energy sources for meeting demand for electricity at its “peak” or highest volume. These units often have “black start” capability that makes them especially valuable in restoring power when there are widespread outages or disruptions on the system—allowing them to cycle back on quickly if they have been tripped off in a power outage. A 2019 Department of Energy report entitled “Hydropower Plants as Black Start Resources” found that “[a]bout 40 percent of the units in the United States maintained and tested for black start are hydropower turbines.” Given these characteristics, hydropower plays an important role in ensuring reliable electric service.

There is significant potential for new hydropower to be generated at non-powered dams throughout the country and to increase output at existing hydropower facilities. Currently, only three percent of U.S. dams include hydropower generating facilities. But there are excessive barriers to tapping this potential, particularly due to the complex permitting process. The Federal Energy Regulatory Commission (FERC) is the primary federal agency responsible for the licensing and relicensing of non-federal hydroelectric projects, but the process can be lengthy, costly, and uncertain for applicants. In addition, FERC is not the sole decision maker in the licensing process: many state and federal agencies hold independent statutory authority, which leads to duplicate reviews, delays and conflicting license terms and conditions.

Under the Federal Power Act (FPA), FERC must give “equal consideration” to not only power needs, but also Endangered Species Act requirements, water quality, navigation, and other public interests. FERC imposes protection, mitigation and enhancement measures on hydropower projects, and federal and state agencies can also impose “mandatory conditions” or water quality certifications that FERC cannot balance or modify in the public interest. The complexity and costs associated with obtaining and renewing hydropower licenses means some existing project owners are surrendering their licenses and decommissioning, while new project developers face major financial hurdles. The licensing process must be reformed to enhance coordination, eliminate duplication, increase transparency, and reduce costs.

Another significant obstacle to the growth and retention of non-federal hydropower capacity is insufficient federal tax incentives. While hydropower is eligible for the clean energy tax credits enacted by the Inflation Reduction Act, a significant gap remains for existing hydropower. Tax policy does not support the critical infrastructure investments for dam safety and environmental upgrades necessary to maintain existing facilities. Between now and 2035, 437 facilities representing about 15.6 gigawatts of hydropower generation and pumped storage capacity (almost 40 percent of FERC hydropower licenses) are up for relicensing. An investment tax credit for environmental and dam safety improvements would benefit the economics of the existing hydropower fleet, particularly at a time when project owners are evaluating the viability of projects entering relicensing.

The nation cannot afford to lose these resources without threatening grid reliability and resiliency, emission reduction goals, and associated public benefits from these multi-purpose infrastructure projects.

NOW, THEREFORE, LET IT BE RESOLVED: That the American Public Power Association (APPA) urges Congress to explicitly recognize all hydropower as a zero-emission electric generation resource that provides critical grid reliability characteristics and meets the requirements of any state or federal clean energy standard or policy.

BE IT FURTHER RESOLVED: That APPA supports reforming the hydropower licensing process, including designating the Federal Energy Regulatory Commission (FERC) as the lead agency with the authority to set and enforce schedules for the issuance of all resource agency authorizations and studies and to ensure that any “mandatory conditions” are directly relevant to the project.

BE IT FURTHER RESOLVED: That APPA supports tax incentives for environmental and safety upgrades necessary to maintain and relicense existing hydropower facilities and that those tax incentives be available to public power utilities through elective payment.

Adopted at the Legislative & Resolutions Committee Meeting

February 25, 2025

Sunsets in March 2033