



HYDRO WORKS FOR AMERICA

The Hydropower Improvement Act of 2011

Recognizing the vital role of hydropower as a reliable, available and domestic clean energy resource, Senator Lisa Murkowski (R-AK) introduced the Hydropower Improvement Act of 2011 on Mar. 17.

The bill seeks to substantially increase U.S. hydropower capacity and support local job creation and economic opportunities. With a total of nine original co-sponsors, the HIA underscores the broad bipartisan support for hydropower. The legislation provides forward momentum for an achievable clean energy agenda in the 112th Congress.

Key Provisions

- **Grant Program:** Directs the Department of Energy (DOE) to establish a competitive grants program to support efficiency improvements or capacity additions at existing hydropower facilities; adding generation to non-powered dams; addressing aging infrastructure; conduit projects; environmental studies; and environmental mitigation measures.
- **Non-powered Dams and Pumped Storage:** Directs the Federal Energy Regulatory Commission (FERC) to explore a potential two-year licensing process for hydropower development at existing non-powered dams and closed-loop pumped storage projects.
- **Conduit and Small Hydro:** Allows for conduit projects on federal lands and directs FERC and other federal agencies to enter into a Memorandum of Understanding (MOU) to better coordinate reviews of these projects. Requires regional workshops to reduce barriers and investigate improvements to the regulatory process for small hydro and conduit projects.
- **Federal Hydropower Development:** Requires the Departments of Energy and Interior and the Army Corps of Engineers to report to Congress on the implementation of the March 24, 2010 MOU on increasing federal hydropower development. Also directs FERC and the Bureau of Reclamation (Bureau) to complete a new MOU to improve the coordination and timeliness of non-federal hydropower development at Bureau projects.
- **R&D Program:** Requires DOE to develop and implement a plan to increase the nation's use of hydropower through research, development, and demonstration initiatives.
- **Studies:** Directs DOE to study pumped storage project opportunities on federal and non-federal lands near existing or potential sites of intermittent renewable resource development, and a Department study of hydropower potential from existing conduits. Directs the Bureau of Reclamation to study barriers to non-federal development at Bureau projects.

Available. Reliable. Affordable. Sustainable.

About Hydropower

Hydropower is the nation's most available, reliable, affordable and sustainable energy resource. Requiring only the power of moving water – rivers, streams and ocean waves and tides– hydropower is also safe and domestic. Free from a dependence on volatile fuel prices, much of the money spent on hydropower stays in America. Expanding hydro capacity can lead to substantial job creation and local economic investment opportunities.

- **Available:** Hydropower is available in every region of the country. Every state benefits from the services that hydropower provides to the electric grid. The industry employs approximately 300,000 workers around the U.S., from project development to manufacturing to facilities operations and maintenance.
- **Reliable:** Hydropower is a flexible and reliable electricity source, characteristics that optimize the functioning of the electric grid for all power sources, as well as assist with the integration of variable energy resources. These grid support services, also known as ancillary services, provided by hydropower include frequency control, regulation, load following, spinning reserve and supplemental reserve.
- **Affordable:** Hydropower provides more than 30 million American homes with affordable power. Taking into account the full project lifetime, fuel costs and operation and maintenance, hydropower has the lowest leveled cost of electricity of any energy source.
- **Sustainable:** Hydropower is America's leading source of renewable electricity, providing clean air benefits across the country. Hydropower generation avoided approximately 196 million metric tons of carbon emissions in the U.S. in 2009.

Growing our hydropower capacity will add good-paying family-supporting jobs around the country. With the right policies in place, the U.S. could add 60,000 MW of new hydro capacity by 2025. For example, capacity additions and efficiency improvements at existing projects could increase hydropower generating capacity by nearly 9,000MW, while adding power generating equipment to non-powered dams expands capacity by another 10,000MW.



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