MAKING THE CASE FOR ENERGY STORAGE TAX INCENTIVES

An essential attribute of our nation’s electric power system is grid reliability - ensuring that electric supply securely matches demand and in real-time. The primary challenge in ensuring reliability is that electric supply has no shelf life - it must be generated when needed - and electricity demand continually changes, as do the system conditions impacting secure delivery of that generation.

Electric grid operators have long met the challenge of aligning energy supply and demand and responding to steep increases in demand on a real-time basis with a limited number of long-life, proven generation technologies - specifically hydropower, pumped storage hydropower and natural gas - that have the ability to start up quickly and/or vary their electric output as the demand changes.

Large reservoir hydropower, thermal (generally coal and gas) and nuclear resources have commonly served as baseload resources, providing the stabilizing backbone to grid reliability. As greater amounts of variable renewable energy resources are integrated into the energy supply, and more retirements of coal and nuclear resources occur, additional new pumped storage hydropower and other energy storage technologies will be needed to provide flexible solutions to meet grid reliability challenges.

However, there is no federal tax incentive that supports the deployment of new energy storage resources, including pumped storage hydropower.
A CALL TO ACTION

NHA supports H.R. 2096, sponsored by Rep. Doyle (D-PA), and S. 1142, sponsored by Sen. Heinrich (D-NM), which would make energy storage technologies, including pumped storage hydropower, eligible for the investment tax credit (ITC). These bills, if enacted, would allow a diversity of U.S. companies to better obtain financing, create jobs, and become more competitive internationally in the fast-growing global storage market. Clarification of the ITC for energy storage would provide greater certainty to investors and businesses. All storage technologies – batteries, pumped storage hydropower, compressed air, and others – would be eligible, ensuring technology neutrality so companies can choose the optimal solution.

More significantly, with many other competitor energy technologies currently eligible for the ITC, allowing energy storage technologies access to the same tax policy is critical to ensure a level playing field across all energy technologies.

In the U.S. today, pumped storage hydropower provides the vast majority of the nation’s energy storage, with over 22,000 MW of installed capacity. However, the industry is primed to do more with thousands of MW of proposed projects across the country, particularly in the West. And the Department of Energy in its 2016 Hydropower Vision Report showcased pumped storage hydropower as the largest area of growth potential in the hydropower sector.

However, the full potential of pumped storage hydropower will not be realized if support policies, like the expansion of the ITC to include energy storage, are not adopted.