Winning the AI Race/Tapping Into Pumped Storage Hydropower: National Hydropower Association Report



Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

03/27/2026

The National Hydropower Association ("NHA") issued a March 2026 report titled:

Winning the AI Race: Tapping into Pumped Storage Hydropower ("Report").

The Report argues that 60,000+ megawatts of proposed new pumped storage hydropower can help achieve American AI dominance.

Pump storage hydropower is a type of hydroelectric energy storage. It is typically a configuration of two water reservoirs at different elevations that can generate power as water moves down from one to the other, this discharge passing through a turbine. It absorbs surplus energy at times with low demands and releases it when demand is high.

The amount of energy such projects can store depends on the size and height difference of the two reservoirs it is made up of. Further, the amount of electricity it can produce at once depends on the size of the turbines.

Pumped storage hydropower is argued to be flexible, as they can quickly increase or decrease the amount of power they generate. Such projects are also argued to be capable of providing a range of ancillary services to support the integration of renewable resources and the reliable and efficient functioning of the electric grid.

Pump storage of hydropower plants typically fall into two categories:

- Pure (or closed-looped) pumped storage.
- Mixed (open-looped) pumped storage.

The NHA's Report states that 80 projects are currently pending in the U.S. Federal Energy Regulatory Commission licensing pipeline. 85% of which are located in the West.

The Report contends that:

… Policies that unlock this proven yet often-overlooked technology are necessary to ensure that the nation has the 24/7 reliable power to win the AI race.

The Report describes benefits that it states pumped storage hydropower provides that are essential for grid stability include:

- Grid Integration.
- Essential Grid Reliability Services.
- Longevity.
- Efficiency.
- Cost-Effectiveness.

The Report addresses:

- Structural Reliability Problems Hamper AI in the West.
- Pumped Storage Hydropower's Untapped Potential in the West.
- Policy Recommendations to Win the AI Race.
- Legislative Solutions.
- Regulatory Solutions at Federal Energy Regulatory Commission.
- U.S. Department of Energy Solutions.

A copy of the Report can be found here.