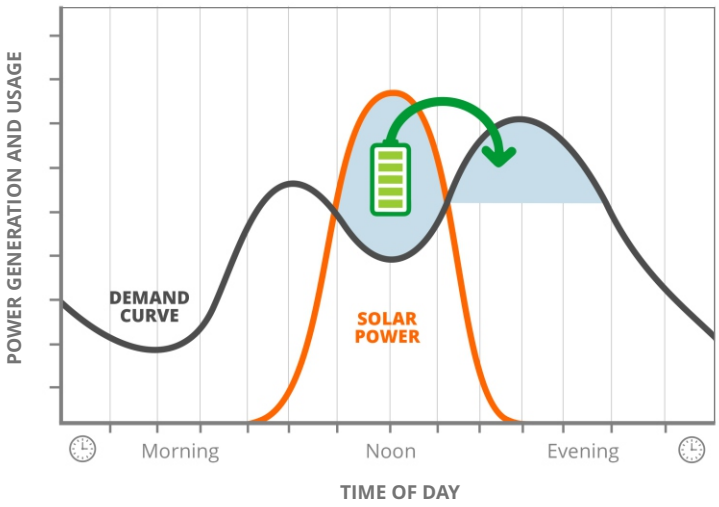
Western Maine Energy Storage

Maine's Energy Challenge: According to ISO New England's 2050 transmission study, the demand for electricity in Maine will grow in coming years due to the electrification of heating, cooling, and transportation, as well as the anticipated load from artificial intelligence. Aligning this demand with generation is complicated by the variable nature of wind and solar energy.

Maine's Energy Solution: Energy storage systems help balance supply and demand by storing excess energy during peak generation and delivering it during shortages. According to FERC, there are 24 constructed and operating pumped storage hydropower facilities in the country today, which account for nearly half the utility-scale energy storage. With a century of reliable global use, PSH is well-suited for Maine and key to economically smoothing out the relationship between generation and demand.

The Energy Storage Concept



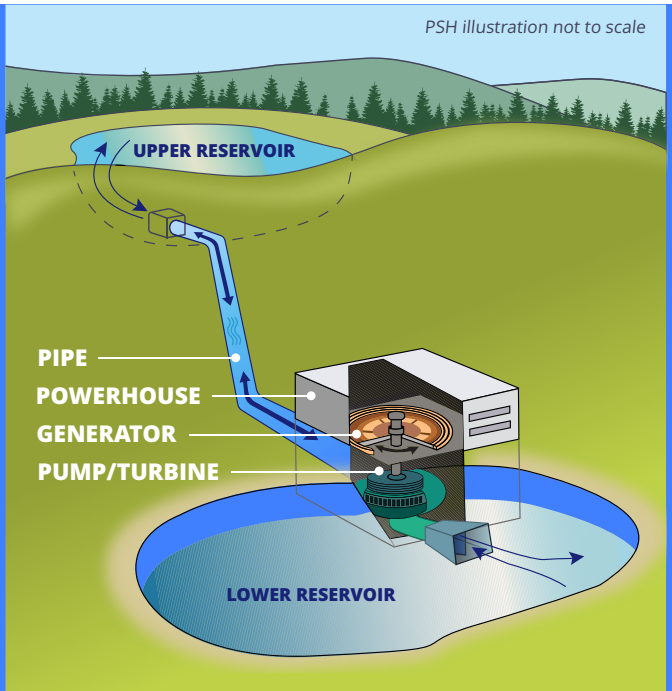
Pumped Storage Hydropower – How it Works: PSH uses two reservoirs at different elevations to act as a water "battery." When excess generation on the grid provides low-cost electricity, water is pumped to the upper reservoir and stored. When electricity demand exceeds availability, water flows back to the lower reservoir, passing through the turbines and generating electricity.

PUMPED STORAGE HYDROPOWER

A Natural Fit

The Maine landscape is ideal for PSH, with open space and natural topography that provides the elevation differences necessary for efficient operation. PSH also supports Maine's long tradition of utilizing hydropower to serve homes, communities, and businesses throughout the state.

For more information:
WesternMaineEnergyStorage.com



Capabilities and Benefits of Pumped Storage Hydropower

Grid Reliability

- Provides electricity when needed, regardless of time of day or weather.
- Enhances grid reliability and stability.

Rate Payer & Community

- Features low cost energy storage technology due to a long-proven service life.
- Boosts community tax revenue and job creation.

Environment

- Recycles water as a storage medium between reservoirs.
- Utilizes existing transmission infrastructure.
- Provides opportunity for increased clean energy integration.
- Can provide an opportunity to establish environmental and renewable energy education opportunities as well as resource protection/restoration areas.

Developing a pumped storage hydropower facility is a significant undertaking. All design and construction will be governed by local, state and federal regulations. We look forward to more interaction and feedback from the community and the environmental resource/regulatory agencies.

SCAN ME!

For more information, please contact Tom Brennan, info@westernmaineenergystorage.com or visit **WesternMaineEnergyStorage.com**

Western Maine Energy Storage is a Maine-based company working to enhance future grid reliability and efficiency in Maine.