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What kind of energy storage does pumped storage power generation belong to

What is pumped storage?
Pumped storage is the process of storing energy by using two vertically separated water reservoirs. Water is pumped from the lower reservoir up into a holding reservoir. Pumped storage facilities store excess energy as gravitational potential energy of water.

How does a pumped storage power plant work?
When electricity supply exceeds demand,often due to surplus renewable energy,a pumped storage power plant uses this excess electricity to pump water from the lower reservoir to the upper reservoir.

What is pumped storage hydropower (PSH)?
Pumped storage hydropower (PSH) is a type of hydroelectric energy storagethat uses a configuration of two water reservoirs at different elevations. It generates power as water moves down from one reservoir to the other,passing through a turbine (discharge). The system also requires power to pump water back into the upper reservoir (recharge).

What is pumped water storage?
Water is pumped from the lower reservoir up into a holding reservoir. Pumped storage facilities store excess energy as gravitational potential energy of water. Since these reservoirs hold such large volumes of water,pumped water storage is considered to be a large scale energy storage system.

How does pumped storage hydropower work?
Pumped Storage Hydropower (PSH) works like a giant battery. During periods of low demand,excess power is used to pump water from a lower reservoir to an upper reservoir. Then,during periods of high demand,the water is released back into the lower reservoir through a turbine to generate electricity.

Why is pumped storage economical?
This is a result of the energy lost pumping the water up into the reservoir. However,pumped storage is economical because of a net increase in revenue. This is because the electricity used to pump the water is less expensive than the electricity sold at the time of peak energy demand.

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