

Pumped Storage Hydropower Station

This pumped storage hydropower station uses the height difference between two reservoirs to generate electricity. Water is pumped from the lower reservoir to the upper reservoir during off-peak hours and released back down to generate electricity during peak demand.



Station Overview

Tianhuangping Pumped Storage Power Station

This pumped storage hydropower station represents a major engineering achievement designed to bolster energy grid stability and efficiency. By leveraging the gravitational potential energy between two reservoirs at different elevations, the facility functions as a massive energy storage battery. It efficiently pumps water to the upper reservoir during low-demand periods and releases it to generate power during peak consumption hours.

Operational Details

Primary Benefits

- Enhances grid stability
- Facilitates large-scale renewable energy integration
- Provides rapid response to peak energy demand

Operational Mode

Energy Storage, Peak Shaving, Renewable Integration