Fengshuba Reservoir Power Station

The Fengshuba Dam is a concrete gravity dam on the Dong River in Longchuan County, Guangdong Province, China. The primary purpose of the dam is hydroelectric power generation and it has an installed capacity of 150 MW. Construction on the dam began in May 1970, the first generator was operational in December 1973 and the second in November 1974. The 95.4 m (313 ft) tal...

Compared with traditional PSPP and open pit pumped storage, the reservoir capacity depends on the volume of underground water storage space, so it is difficult for a ...

Fengshuba is a 150MW hydro power project. It is located on Dong river/basin in Guangdong, China. According to GlobalData, who tracks and profiles over 170,000 power plants worldwide, ...

The Ffestiniog Power Station (Welsh pronunciation (i)) is a 360-megawatt (MW) pumped-storage hydroelectricity scheme near Ffestiniog, in Gwynedd, north-west Wales.The power station at the lower reservoir has four water turbines, which can generate at full capacity within 60 seconds of the need arising. The scheme has a storage capacity of around 1.44 GWh (5.2 TJ) at ...

Fengshuba hydroelectric plant () is an operating hydroelectric power plant in Fengshuba, Longchuan, Heyuan, Guangdong, China. Project Details Table 1: Project details for Fengshuba hydroelectric plant. Status Commissioning year Nameplate capacity Turbines Technology type Owner Operator Operating:

1 Introduction. Pumped-storage power plant (PSPP) is a special hydropower station, which can use the electricity to pump water up to the upper reservoir when the energy demand is low, and release the water back down to ...

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Download scientific diagram | Information on the studied flood events. from publication: Evaluating the Feasibility of the Liuxihe Model for Forecasting Inflow Flood to the Fengshuba Reservoir ...

Fengshuba Dam has a peak capacity of 150.0 MW which is generated by Hydro. The power plant was commissioned in 1973 and started energy production the same year. The current owner ...

Cobb River Hydro-electric Power Station sits in mountainous country at the junction of the Takaka and Cobb Rivers in the Kahurangi National Park. The stored water is at 794 metres in altitude, almost 600 vertical metres above the power station. This "head" is the greatest of any New Zealand power station enabling 36 MW of power to be ...

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Pumped storage hydropower is a type of hydroelectric power generation that plays a significant role in both energy storage and generation. At its core, you"ve got two reservoirs, one up high, one down low. When electricity demand is low, excess energy from the grid is used to pump water from the lower to the upper reservoir.

Fig. 2 c and d shows a relatively larger impact of Xinfengjiang reservoir on flood regimes at the Lingxia and Boluo stations but slight alterations of the flood regimes at the Lingxia and Boluo stations when compared to those of Fengshuba reservoir on flood regimes at the Longchuan station. This phenomenon can be attributed to different distances between ...

1. Hebei Fengning PSH Station in China. With a total installed capacity of 3,600 MW, the world"s largest PSH station (under construction) has 12 units with a single capacity of 300 MW and a rated head of 471 m, two of which are ...

From there, water flows to a power station at Dinas featuring a 13 MW generator. The additional reservoir at Dinas then supplies water to the largest power station at Cwm Rheidol with two 20.5 MW generators. At Cwm Rheidol, a further reservoir has been created to avoid large variations in the flow of water down river towards Aberystwyth.

Fengshuba dam, located in the up-East River with a storage capacity of 1,940 million m 3 and a drainage area of 5,150 km 2, was built in 1970 to reduce floods downstream

The power generation of a PSPP is related to the reservoir capacity and head and is calculated as follows: (1) E T = VHi T / e where ET is the power generation during one pumping cycle operation, kW·h; V is the reservoir capacity, m 3; H is the average head, m; iT is the operating efficiency of power generation, 0.75; and e is the energy unit conversion ...

Fengshuba Dam Power Plant (Hydro) The Fengshuba Dam plant is a Hydro power plant located in ?? China. Fengshuba Dam has a peak capacity of 150.0 MW which is generated by Hydro. ... Tailan River Fourth Station: 11.0 MW: Hydro: Taipingwan: 190.0 MW: Hydro: Taipingyi: 260.0 MW: Hydro: Tangkeng: 600.0 MW: Hydro: Taohe Shangchuan: 12.0 MW ...

The highest degree of hydrologic alteration is at Heyuan station, perturbed by the largest dam--Xinfengjiang in Guangdong province and Fengshuba reservoir upstream as well. Lingxia station, receiving flow from the natural confluence of the Qiuxiang River and district area (Heyuan to Lingxia) exhibits a moderate degree of hydrologic alteration.

The main function of Xinfengjiang reservoir is hydroelectric power generation, and flood control, shipping, and irrigation are considered secondary. The main functions of Fengshuba are shipping and hydroelectric power generation and those of Baipenzhu are flood control and water supply for the downstream megacity groups.

The hydrological regimes at the Longchuan station are only influenced by Fengshuba reservoir, and then the change point of pre- and post-segment of streamflow series was 1973. As the Heyuan station is located just downstream to the Xinfengjiang reservoir, the pre and post streamflow series of Heyuan station were divided by the year of 1959.

Poulaphouca Reservoir, officially Pollaphuca (from Irish Poll a" Phúca, meaning "the Púca"s hole"), [1] [2] is an active reservoir (for both water supply and electricity generation) and area of wild bird conservation in west County Wicklow, Ireland named after the Poulaphouca waterfall on its south-western end where the water exits the lake. The lake is also commonly known as the ...

Among drinking water sources in China, Fengshuba Reservoir that is the largest mainstream reservoir of Guangdong Province and located on the Pearl River basin in South China has been considered as one of the most important sources of drinking water (Chen et al., 2019a; Y. Chen et al., 2017). It could supply vital drinking water source for >40 million people living in ...

Line 26: "The Fengshuba Reservoir was designed according to the 1,000 flood..." Do the authors here mean the reservoir storage volume or the elements of the reservoir outflow hydraulic structures (e.g. flood evacuation spillway)? Lines 39-43: This is not entirely true. Lumped models can be (despite their relatively simplified representation ...

The change points coincide the time that the second largest reservoir (Fengshuba) was first put in operation, after the largest reservoir (Xinfengjiang) has already been in use since 1961. Compared with the period prior to the change point, the concentration degree and non-uniformity coefficient after the change point decrease approximately by 15-34 % and ...