

Monday, August. 14, 2023

Laining hotel

Room Ao Men Ting(澳门厅) -5th floor

10:00-12:00 Session: Pump-turbines Chair: Christof Gentner (GE Renewable Energy)			
Paper ID	Time	Paper Title	Paper Authors
297	10:00-10:15	Preliminary study on power regulation rapidity in pump mode of variable-speed pumped storage unit with DFIM	Yuanhong Liu, Weijia Yang, Jin Yang, Yifan Huang, Zixuan Shao
298	10:15-10:30	Redesign of Adjustable Guide Vane Cascades of Pump Turbine and Its Effect on Self-Excited Vibrations at Slight Opening During Pump Mode's Starting Up Process	Z J Hao, M K Wang, Q Y He, Q H Shi, H Chen and X L Ding
299	10:30-10:45	Study on vibration characteristics of pump turbine with different runner characteristics	Hailing Li, Shaocheng Ren, Yang Liu
300	10:45-11:00	Experimental study on simultaneous load rejection of dual pumped storage units	Shaohua Wang, Guohu Luo, Jie Qu, Jie Wu, Yang Liu, Mingjun Sun
31	11:00-11:15	Effect of guide vane closing speed deviation on transition process in pumped storage power plant	Dongkuo Li, Fei Zhang, Jinbing Ni, Yifeng Zhao, Zhonghua Gui, Jinghuan Ding and Wenfu Han
312	11:15-11:30	Optimal design of in-hole turbine generator based on numerical simulation	Hui Quan, Jun Sun, Xiaoze Zhang
320	11:30-11:45	Numerical Investigation on Influence of Guide Vane Shape on Rotor-Stator Interaction of a Reversible Prototype Pump-Turbine	Yang Haixia, Yang Mengqi, Jia Yalin, Peng Yu, Bi Huili, Wang Zhengwei
326	11:45-12:00	Study on dynamic stress variation of head cover bolt during transient operation of pump turbine	Liu Chen, Hailing Li, Mei Huang, Yang Liu, Shaocheng Ren, Jinwei Li, Mingli Jiang, Mingjun Sun, Weihua Cao
12:00-12:15 Coffee Break			
12:15-14:00 Session: Pump-turbines Chair: Christof Gentner (GE Renewable Energy)			
333	12:15-12:30	A Field Test Study on the Instability of a Pump-Turbine under Turbine Mode	X H Song, M Xia, H P Hu, W Q Zhao, Z W Wang
95	12:30-12:45	Calibration of Flow Differential Pressure Coefficients on Pump-Turbine by Thermodynamic Method	Wenkui Zhang, Hongyi Xu, Wei Liu, Xinwen Hu, Juan Liu
345	12:45-13:00	Optimization analysis of head cover structure of high head pump turbine	Zhang Hong, Huang Shihai, Zhou Junpeng, Song Min, Song Weibin, Ma Yanmei
351	13:00-13:15	Numerical analysis of inner flow characteristic for the pump turbine at part load condition	Wei Wang, Miao Guo, Weiqiang Zhao, Chao Xu, Zhengwei Wang
359	13:15-13:30	Research on Dynamic Stress Testing and Fatigue of Head Cover Bolt in High Head Pumped Storage Unit	Du Xuan, Fan Yangming, Wang Shijian, Tang Qin, Zhou Junpeng
363	13:30-13:45	Vibration Characteristics Analysis of Pump-turbine head cover based on Fluid-Solid Coupling	J P ZHOU, Y M FAN, Q Y HE, S J WANG, H L ZHAO, F SUN, Q TANG
A-148	13:45-14:00	Numerical investigation on the spatiotemporal correlation between hydraulic loss and vortex at turbine mode of a pump-turbine	Qizheng Ma
14:00-16:00 Lunch			
16:00-18:00 Session: Pump-turbines Chair: Deyou Li (Harbin Institute of Technology)			
368	16:00-16:15	Study on the influence of guide vane - blade number matching relationship (20-9) on the phase resonance risk coefficient of pumped storage units	Tao Zhang, Jinwei Li, Weibin Yang, Yanyan Liu

372	16:15-16:30	Numerical simulation on the flow characteristics of a pump-turbine in load rejection process	Jingwei Cao, Xin Liu, Chongji Zeng, Zhengwei Wang
51	16:30-16:45	Commissioning Problem Analysis and Solution Strategy for Pump Turbine at Dun Hua Pumped Storage Power Station	Qu Yang, Bu Liangfeng, Gong Rangqin, Liang Jinbo, Gao Xin
178	16:45-17:00	The method for identifying the potential of the fast response capability of a variable-speed pumped storage turbine in pump mode	L Meng, Y Zheng, X Wang, C Y Zhang, Y J Tian, L He
77	17:00-17:15	Numerical investigation on the spatiotemporal correlation between hydraulic loss and vortex at turbine mode of a pump-turbine	Y L Qin, D Y Li, H J Wang, Z S Liu, X Z Wei, X H Wang, Y J Song
93	17:15-17:30	Temperature prediction for technical water supply systems in pumped storage power plants based on random forest downscaling and improved LSTM methods	YUAN Jing, ZHANG XIN, FANG JIE, ZHENG Xiaonan
340	17:30-17:45	Influence of upper crown clearance thickness on axial force of high-head pump turbine	L Li, D Yan, X Liu, W Zhao, Y Wang, Z Wang
390	17:45-18:00	Vibration of Civil Structure and Regional Environment Caused by Dynamic and Static Interference of Pump Turbine in Pumped Storage Power Station	J X Zheng, P Liu, Q W Liang, S C Ren
18:00-18:15 Coffee Break			
18:15-20:00 Session: Pump-turbines Chair: Deyou Li (Harbin Institute of Technology)			
268	18:15-18:30	Vibration and noise of a high head pump turbine: analysis and improvement	Z W Guan, W B Jia ^{1,2} , Z J Leng, J Chen, Z N Wang, Q Y He, Q W Liang
282	18:30-18:45	Study on load rejection test of pumped storage units	Guohu Luo, Xi Wang, Wenjun Zhao, Shaozheng Huang, Jinwei Li
284	18:45-19:00	Study on phase resonance risk coefficient of pumped-storage units	Tao Zhang, Jinwei Li, Weibin Yang, Yanyan Liu
387	19:00-19:15	Technical investigation of the ternary pumped storage hydro units with ultra-high-water head	Li Dongkuo, Liu Zishi, Gui Zhonghua, Xiao Wei, Min Hongping, Wang Xiaodong, Lin Hao, Xiao Yexiang
A-124	19:15-19:30	Multi-objective optimization design of in-hole turbine generator based on load distribution	Sun Jun
20:00-22:00 Dinner			