

China Power Huachuang's Wind Turbine Blade Anti-Icing Technology Passes Scientific & Technological Achievement Appraisal

On June 8, 2026, the project "Integrated Early Warning, Anti-Icing and De-Icing Technology for Wind Turbine Blades and Its Engineering Application," developed by China Power Huachuang, successfully passed a formal scientific and technological achievement appraisal.

The appraisal was organized by the Chinese Society for Electrical Engineering and chaired by Academician Liu Zhongfan of the Chinese Academy of Sciences. The review committee included nine leading experts from universities, power research institutes, and major wind turbine and blade manufacturers in China and abroad. Following a rigorous process involving document review, on-site Q&A, and comprehensive deliberation, the expert panel highly recognized the project results. The panel unanimously concluded that the technology delivers outstanding economic and social benefits, with strong potential for wider deployment and broad application prospects. Its overall technical performance was assessed as internationally leading.



Aiming to tackle the industry-wide challenge of blade icing in high-altitude, humid, and cold regions, the R&D team pioneered a comprehensive anti-icing solution integrating early warning, anti-icing, and de-icing. The technology addresses key technical bottlenecks in blade anti-icing and fills an important

gap in de-icing retrofits for certain turbine models operating in extreme cold environments. The team has established a complete retrofit solution characterized by low cost, short construction period, strong adaptability, and excellent scalability. It provides a practical technical approach to address reduced power generation efficiency and increased safety risks caused by blade icing in extreme weather. With strong innovation, practicality, and replicability, the technology is expected to play an important role in promoting the high-quality development of the wind power industry and supporting stable renewable energy supply.