



Special Industry Session on

Driving the Net-Zero Transition: Taiwan Power Company's Innovative Strategies for a Resilient and Reliable Grid - Part 1

Time: Thursday, June 19, 2025 - 13:20 – 15:00

Type of presentations: Case Studies

Moderator, Dr. Chin-Chung Wu, Taiwan Power Company, Taiwan

Dr. Yen-Chi Huang, Taiwan Power Company, Taiwan

Dr. Ping-Heng Ho, Taiwan Power Company, Taiwan

Dr. Hsiao-Wei Chen, Taiwan Power Company, Taiwan



Moderator Short Bio: Dr. Chin-Chung Wu currently serves as the Vice President of Taiwan Power Company (Taipower). He graduated from the Department of Electrical Engineering and Technology at the National Taiwan Institute of Technology in 1990 and received the "Taipower Scholarship," which enabled him to join Taipower. Over the past 35 years, he has held various positions, including Dispatch Section Chief, Planning Section Chief, Central Dispatch Superintendent, Director of the Power Dispatching Department and concurrently Director of the Emergency Supply Center, Senior Professional Engineer, and Spokesperson of Taipower.

In 1991, Dr. Wu passed the National Civil Service Senior Examination, and in 1995, he obtained the Electrical Engineering Professional Engineer Certification. While working at Taipower, he pursued further studies at the Graduate Institute of Electrical Engineering at National Taiwan University of Science and Technology (NTUST), earning his master's degree in 1993 and a Ph.D. in 2003. In 2015, Dr. Wu was selected for Taipower's "Global Vision Program" and attended the Executive Management Program at the London Business School (LBS) in the UK. He has also been assigned multiple times to conduct overseas studies on power dispatching centers, electricity markets, and international conferences.

General abstract of the presentations:

Taipower, a vertically integrated state-owned enterprise, has invested significantly in developing a reliable and sustainable power system for Taiwan. In line with national energy transition goals, Taipower has implemented advanced technologies across its power generation, transmission, and distribution operations. The company has also demonstrated leadership in institutional innovation within the electricity sector, notably through the introduction of a free and open ancillary services market to procure services from private providers and the establishment of a small-scale green energy sales program designed to stimulate Taiwan's renewable energy market. This session will highlight Taipower's efforts and achievements in facilitating the Net-Zero transition.

13:20 – 13:45

A Private Public Partnership Practice for the Grid Resilience Enhancement: Taiwan's Ancillary Service Market

Presenter's Biography: Dr. Yen-Chi Huang serves as the Subsection Head of the Energy Trading Market Measuring and Monitoring Subsection at Taipower. In this role, he oversees market participants, ensuring fair competition on Taiwan's Energy Trading Platform. His focus is on maintaining a free and fair competitive environment for private participants and strengthening Taipower's ability to provide affordable, resilient, and reliable electricity. Dr. Huang holds a Ph.D. in Economics from National Central University, specializing in geo-economics, microeconomics, and game theory. His research interests include industrial organization and the design of energy market mechanisms.



13:45 – 14:10

Grid Stability & Energy Storage Applications



Presenter's Biography: Dr. Ping-Heng Ho was born in Taiwan, R.O.C. in 1968. He received the B. Sc. and M. Sc. degrees in Information Management Department from the Ming-Chuan University, Taipei, Taiwan, R.O.C., in 1999 and 2001, respectively. He received the Ph. D. degree in the Electrical Engineering Department, National Taiwan University of Science and Technology in 2011. He has been with Taipower since 1993. Currently, he is a Grid Technical Senior Engineer in the System Planning Department, Taipower. His major research fields are system analysis, network planning, and problem identification in electrical power systems.

14:10 – 14:35

Driving the Future of Transition: Taipower's R&D Strategies for Innovation and Technology Deployment in the Net-Zero Era

Presenter's Biography: Dr. Hsiao-Wei Chen is the Director of the R&D Planning Office at Taiwan Power Research Institute (TPRI), where she directs the comprehensive research and development strategies for Taipower. She holds a Ph.D. in Management and an Executive M.B.A. from National Taiwan University of Science and Technology, further complemented by a M.S. from the College of Life Sciences, National Taiwan Ocean University. This interdisciplinary foundation provides her with a unique and robust perspective. With her extensive tenure at TPRI, including roles as Senior R&D Planning Staff and Research Specialist, Dr. Chen has gained deep insights into organizational strategy and execution. Her previous research explored carbon capture using biotechnology innovation. Currently, her expertise encompasses technology foresight, technology scouting and open innovation, R&D direction setting and resource allocation, and value chain analysis. She is committed to optimizing research outcomes through strategic planning and effective management practices.



14:35 – 15:00

Extra time for discussion