

TPC-EPRI 2025 Forum Digital Transformation and LCRI Project Update

R&D Planning Office: Chang, Hsiang Lin

Taiwan Power Company (TPC), in collaboration with Electric Power Research Institute (EPRI), successfully co-hosted the “TPC-EPRI 2025 Forum - Digital Transformation and LCRI Project Update” from July 30 to 31, 2025. The two-day forum began with a welcome speech by TPC President Yao-Ting Wang. It featured EPRI Senior Vice President Daniel Brooks leading ten senior executives to Taiwan for the event. The forum also welcomed various experts from grid resilience industry-academia cooperation projects, including Professors Chan-Nan Lu, Yu-Chi Wu, and Yi-Zeng Hsieh, alongside TPC Vice Presidents Chih-Meng Tsai, Chin-Chung Wu, Ming-Shu Chen, Kao-Long Shi, Yu-Hua Sun, and TPRI General Manager Nien-Mien Chung, with approximately one hundred colleagues from TPC participating in vibrant discussions.

This forum focused on critical topics, including AI data center power consumption challenges, global energy transition trends, strengthening grid resilience, and the application of digital transformation and artificial intelligence. Participants shared experiences from diverse perspectives, generating many valuable insights. International experience shows that integrating AI into grid operations can enhance system dispatch efficiency. In extreme weather conditions, zonal dispatch and emergency use of renewable energy are key strategies for improving resilience. Additionally, to meet the high power demands of AI data centers, TPC plans to explore

the “Data Center Flexible Load Initiative (DCFlex)” model, balancing grid stability with service availability.

Beyond technical exchanges, the forum also underscored the deep collaborative foundation between TPC and EPRI, spanning over four decades. EPRI shared forward-looking achievements, including new nuclear energy research, Grid Model Data Management (GMDM), and simulation tools, which inspired corporate talent development and R&D directions. Experts, scholars, and TPC colleagues actively participated with questions during the event, fostering enthusiastic bilateral interaction that highlighted the robust energy of industry, academia, and research collaboration.

During his welcome speech, TPC President Wang also stressed that, in the face of extreme climate challenges, TPC must accelerate the implementation of zonal dispatch and emergency applications of renewable energy to ensure a stable power supply. EPRI's Daniel Brooks, in turn, shared the latest trends in global energy transition, which resonated with TPC's steadfast commitment to advancing towards a smart grid and net-zero transition.

The forum strengthened TPC's international cooperation and updated colleagues on global power technology. TPC will now advance AI and digital transformation to boost grid resilience against extreme climate and power demands, collaborating globally for a sustainable future.



TPC and EPRI jointly organized “TPC-EPRI 2025 Forum - Digital Transformation and LCRI Project Update.”



TPC, EPRI, and key stakeholders from industry, academia, and research united at this forum to address pivotal issues, including AI data centers, grid resilience, and energy transition.



TPRI General Manager Nien-Mien Chung shared Taipower's energy system transformation strategy towards net-zero sustainability.



EPRI Senior Vice President Daniel Brooks shared key topics, including global energy transition trends.