PR Article 3 August 2023

The Future of Power Business Must Embrace Digital Technology; BPP to Thrive in the U.S. Merchant Power Market Aligning with Global Energy Trends

The global power generation industry is undergoing a continuous evolution, demanding that producers swiftly adapt to ever-changing government regulations in each country. Simultaneously, they must cater to increasingly complex consumer needs, improve production efficiency, reduce environmental impacts, and generate enhanced economic value. Addressing these challenges requires the adoption of crucial tools, such as "digital technology," which can help in transforming power generation and distribution businesses in the energy market. Embracing digital technology not only empowers entrepreneurs by improving their competitiveness, but it also fosters growth in the power business, reinforces energy security, and enhances the quality of life of consumers.

The United States stands out among countries that leverage digital technology in the management of power generation and distribution businesses. This commitment has proven crucial in advancing **the merchant power market** thanks to the adoption of diverse technological innovations. One notable example is the emergence of **energy trading platforms**, facilitated through online systems. These platforms allow power buyers to compare different offering packages and directly select electricity sellers. Likewise, sellers can connect with buyers directly, leading to the efficient matching of offers based on prices and conditions. This healthy competition in pricing and service indirectly benefits consumers. Furthermore, the integration of digital technology assists in mitigating risks or managing fluctuations that may occur within power generation and consumption systems. However, the electricity market in the U.S. has witnessed intense competition among numerous entrepreneurs striving to develop advanced

technologies to offer services that cater to diverse customer needs and the growing demands of a dynamic market.

Banpu Power Public Company Limited or BPP, an international quality power generating company committed to delivering sustainable energy, is a power operator of the acquired 768-MW Temple I gas-fired power plant and the 755-MW Temple II gas-fired power plant in Texas, the U.S. Additionally, BPP's ownership of a power trading business, which is part of the Electric Reliability Council of Texas (ERCOT), has adopted digital technology that plays a pivotal role in planning electricity production and sales to better meet the dynamic needs of the market and anticipate future energy trends, ensuring a comprehensive approach across various processes.

Kirana Limpaphayom, CEO of BPP, said, "Digital technology stands out as a pivotal driver behind the success of current and future power generation businesses. BPP has adeptly harnessed this technology to efficiently manage its power business in the U.S. Its integration throughout the value chain, spanning electricity production in large power plants to the sale of electricity in wholesale, retail, and power trading markets, underscores BPP's excellence in providing economic value, stability, and environmental sustainability, ensuring the consistent delivery of quality megawatts."

The ERCOT market in Texas, which serves roughly 30 million people, is witnessing a surge in electricity demand due to population growth driven by migration and a thriving business sector. In response, entrepreneurs must leverage their potential across diverse fields, particularly technology, to elevate service levels that meet the increasing demands of consumers while cultivating strong relationships to expand their customer base, leading to higher electricity sales and future profitability.

Power producers and distributors in the merchant power market have embraced AI technology, which offers the potential for enhanced accuracy in collecting, analyzing, and managing

customer information. By leveraging AI capabilities, these companies aim to create competitive advantages by marketing to digitally-savvy consumers.

Paul Didsayabutra, Chief Executive Officer – BPPUS, a wholly-owned subsidiary of BPP, brings over 22 years of experience in the U.S. electricity market. He noted that, "BPP utilizes a range of advanced software to efficiently store data and analyze factors influencing future power supply in the market so that we can remain agile and responsive in the power trading market in real-time. This results in more effective business management as we develop and increase our service capabilities by using AI technology to understand the electricity consumption behavior of customers to design various service packages at reasonable and competitive prices to address their diverse needs. We also tap into publicly available information from social media and digital platforms to widen access to target customers and implement engaging marketing activities, aimed at attracting a broader user base in the future."

In addition to revolutionizing the power trading market with technology, power generation businesses are also deploying advanced technology to improve efficiency while minimizing environmental impacts. BPP's Temple I and Temple II gas-fired power plants in the U.S. are leveraging cutting-edge digital systems to achieve flexibility to rapidly adjust power output. This flexibility allows for the continuous delivery of electricity, effectively responding to market demand and creating opportunities for increased revenue. BPP has also adopted highly efficient software systems that excel in recording, monitoring, and controlling power plant emissions, surpassing the required standards. The power plants are operated by Combined Cycle Gas Turbines (CCGT) technology, which integrates both gas and steam turbines. This more environmentally friendly approach significantly reduces carbon dioxide emissions, with levels up to 50 percent lower than traditional fossil fuel power plants.

"BPP's two power plants effectively address the challenges of maintaining stability in electricity production and distribution within the system, while being highly responsive to market dynamics. These plants play an important role in facilitating the transition in power generation while collectively ensuring robust energy security," added Paul.

Undoubtedly, digital technology plays a crucial role in driving advancements in the energy industry, aligning it with the current direction of global energy, known as the "3D Trend" which encompasses three key aspects: a more decentralized approach to electricity generation (Decentralization), the efficient management of power systems through technology (Digitalization), and environmentally friendly power generation (Decarbonization).

"BPP is fully prepared to lead the charge in cutting-edge technology and innovation, while prioritizing human development across all strategic countries in our portfolio. We strongly endorse the exchange of knowledge within the BPP ecosystem such as China, Japan, and Australia. Our goal is to facilitate the exchange of information, expertise, and experience related to electricity generation and distribution business management, particularly in countries that have a strong focus on technological developments. By joining forces and harnessing our collective potential, we are driving BPP's sustainable growth, aligning with the evolving energy trends of the future," concluded Kirana.

Learn more about BPP business at www.banpupower.com.

###

About BPP

Banpu Power Public Company Limited (BPP), an international quality power generating company, is committed to delivering sustainable energy through its concept "Powering Energy Sustainability with Quality Megawatts." The Company generates and distributes power in the Asia-Pacific region, including Thailand, Laos, China, Japan, Vietnam, Indonesia, Australia, and the U.S. For more than two decades, BPP has been committed to operational excellence to achieve efficient power generation while deploying high-efficiency, low-emissions (HELE) technologies that are safe and environmentally sound in accordance with its Greener & Smarter strategy. The Company is continuously moving forward to reach a total equity-based power generation capacity of 5,300 MW within 2025.

For more information, please contact:

BPP Corporate Communications Team

Duangkamol Saleerat	061 446 6698	duangkamol_s@banpu.co.th
Mukphrao Phungphuank	087 404 0044	mukphrao_p@banpu.co.th

ABM Connect

Chanadda Tongtaow	086 316 3555	chanadda.t@abm.co.th
Satida Meeudorn	085 166 2442	satida.m@abm.co.th