



Press Release

Electric Power Development Co., Ltd.

## J-POWER Acquires State-of-the-Art Drilling Rig for Geothermal Power Generation Wells

## Ownership of Large-Diameter Drilling Rig to Accelerate Geothermal Power Development and Enhance Operational Stability

Electric Power Development Co., Ltd. (J-POWER, headquartered in Chuo-ku, Tokyo; President and CEO: Hitoshi Kanno) announced today that its wholly owned subsidiary, J-POWER HYTEC Co., Ltd., has acquired a state-of-the-art large-diameter drilling rig for wells<sup>1</sup> for geothermal power generation. The new rig will strengthen the J-POWER Group's efforts to ensure stable operation and advance the development of geothermal power generation facilities.

 Wells: Boreholes drilled to survey, produce, and reinject geothermal resources. Wells are used to confirm resource volumes and to produce and reinject steam and hot water for power generation.

Geothermal power generation offers distinct advantages over other renewable energy sources, such as solar and wind power. It can operate around the clock, 365 days a year, unaffected by weather conditions, achieving high capacity factors. With proper management of resources and equipment, geothermal plants can deliver long-term, stable power output for over 40 years. As decarbonization efforts grow both globally and domestically, geothermal power is expected to help support the transition to carbon neutrality as a baseload power source.

Drilling geothermal wells is crucial for exploration, construction, and stable plant operations after a geothermal power plant goes online. However, geothermal well drilling requires large-diameter drilling rigs, and only about ten companies in Japan possess such equipment. In recent years, the rise in domestic geothermal development projects has led to a tight balance between supply and demand for drilling services, causing constraints and delays in geothermal power development.

To address this challenge, J-POWER HYTEC, which has extensive experience in geothermal well drilling, has acquired a state-of-the-art large-diameter drilling rig. Working in collaboration with Osanai Suigen Kogyo K.K., a company with expertise in geothermal well drilling, J-POWER HYTEC will establish a stable drilling framework. This will strengthen the supply chain for geothermal well drilling, supporting both new development projects and operations at existing sites within the J-POWER Group. Looking ahead, the company plans to expand its drilling

services to sites outside the Group, contributing to the broader expansion and long-term stability of geothermal power generation in Japan.

J-POWER is committed to advancing geothermal power generation to ensure a stable power supply in Japan while addressing climate change. The J-POWER Group will continue to strive for the achievement of carbon neutrality, as outlined in the <u>J-POWER BLUE MISSION 2050</u> announced in February 2021.





Inside the cabin

The outside appearance

## Rig Specifications

■Equipment: HONGHUA ZJ40/2250DBS geothermal AC VFD rig

■Drilling Capacity: 2,500-meter depth class

■Total Height: 54 meters above ground (derrick assembled on substructure)

■Power Output: Drawworks 1,000 HP, drilling equipment 500 tons, mud pump 800 HP × 3

units

## ■Key Features

✓ The rig features dual operator stations inside the cabin, real-time drilling parameter display

via communication systems, and automated tool integration with one-button operation to boost work efficiency. Intuitive rig control through touchscreens and joysticks, along with enhanced operability through video monitoring of equipment status, enables smooth well drilling operations.

- ✓ The automation of machinery and materials that previously required manual operation—
  including drill string handling, pipe racking, drill floor tools, and mud savers—enhances
  safety and reduces crew workload.
- ✓ The AC motor drive system offers a wide range of rotational speeds and high torque output, reducing the impact of geological structure changes on drilling operations compared to conventional rigs.