For Immediate Release

Saskatoon, SK, February 6, 2023



# Canada's Geothermal Energy Industry Reaches Major Milestone

# DEEP Earth Energy Production Provides Update on Geothermal Power Generation Facility – CEO says "We are a go"

SASKATOON - DEEP Earth Energy Production Corp. ("DEEP" or "the Corporation") is pleased to announce that a strategy for the engineering, construction, and commissioning of DEEP's first geothermal project in southeast Saskatchewan has been finalized. Engineering and procurement activities have commenced. Field construction is planned for Q3, 2023.

Geothermal power generation has the capacity to provide renewable, reliable baseload energy (24/7), and the DEEP project in Saskatchewan is anticipated to be the first Canadian 100% naturally sourced geothermal power facility.

DEEP has concluded that the reservoir characteristics could support the construction of multiple geothermal expansion facilities in southeast Saskatchewan over several years. DEEP is grateful for the ongoing support from Natural Resources Canada, SaskPower and private partners as DEEP is now firmly positioned to convert its geothermal resource into renewable energy.

"We are a go," said DEEP CEO, Kirsten Marcia. "There is a market that is hungry for truly sustainable, renewable power projects. The technology is proven, the leases are in place and initial government funding is confirmed."

DEEP is positioned to move forward with the construction phase of a 25 MW power facility in southeast Saskatchewan, which includes a 5 MW power purchase agreement with SaskPower. The facility is planned to be constructed in 2 phases – 5 MW followed by an additional 20 MW at the same location. Production and injection wells are planned to be drilled to a depth of approximately 3.5 kilometres and horizontally for an additional 3 kilometres.

DEEP's "ribcage" layout and geothermal well field design are leading edge and may be a globally transformative application of modern oil and gas drilling and completions techniques, which will be applied for the first time on a renewable energy project. Wells with equivalent depth, lateral length and step out are routinely drilled in the hydrocarbon resource plays of the Western Canadian Sedimentary Basin and DEEP will be leveraging this local knowledge and drilling capability. The well design also incorporates learnings from DEEP's 5 vertical and 1 horizontal test wells drilled from 2018 - 2021. To help prevent corrosion, all wells are engineered to be completed with carbon steel tubing that incorporates a non-metallic coating.

The subsurface geological reservoir model predicts that the well spacing for the first 25 MW field development will utilize only 10% of DEEP's entire subsurface lease that covers 39,568 hectares (97,775 acres). This large subsurface lease is anticipated to support the build-out of multiple power facilities greater than 200 MW. 25 MW is roughly equivalent to the power required to supply 25,000 households.

The geothermal resource is designed to generate power utilizing Organic Rankine Cycle (ORC) technology, which is fast becoming the most deployed technology for new geothermal installations. Engineering and procurement activities of long lead well and surface facilities items are underway. Licensing and permitting for all well and surface facilities are anticipated to commence in Q1-2023.

Field work for a 56.2 km<sup>2</sup> 3D seismic program has commenced and projected to be completed in March. Data will be utilized for horizontal well trajectory planning on the eastern half of the first well array and for future expansion planning.

GeothermEx (SLB) has begun a final review of DEEP's geothermal resource. GeothermEx's due diligence has resulted in more than 8.5 GW of geothermal power and related investments exceeding USD \$14 billion dollars.

Surface facility construction and drilling are planned to commence in Q4, 2023 with first power production estimated by summer 2024.

In addition to geothermal power production and with proper regulatory approvals, the DEEP subsurface lease contains separate stratigraphic intervals that are anticipated to have the characteristics necessary for CO2 storage. DEEP is exploring strategic CO2 storage opportunities in efforts to develop a major multi-use CO2 storage field.

DEEP is pleased to announce that two new officers were appointed in 2022 – Christie Gradin (CFO) and Steve De Maio (COO). Christie Gradin, CPA, CA, brings extensive expertise to DEEP having held numerous senior financial and management positions in both private and publicly traded companies. Previously, Christie held the position of Director of Finance and Administration at SED Systems and has experience in both the insurance and financial services industries. Christie attended the University of Saskatchewan where she obtained her Bachelor of Commerce degree with Great Distinction and a Master of Professional Accounting.

Steve De Maio has 29 years of industry experience and has held executive positions for more than two decades. Steve has built and led multi-disciplined teams of professionals and support staff in the execution of design, drilling, completions, construction, commissioning and operations of steam, water, oil and power production projects totalling over \$2 billion in development costs. Steve's distinct competences include capital projects, design, engineering, procurement, construction, commissioning, operations, technology development, corporate and business development, strategy, finance, corporate and economic modelling.

DEEP was named the Exceptional Engineering/Geoscience Project Award Winner of 2022 by the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS). They produced a professional video to mark the award. You can watch that <u>here</u>.

We have launched a newly designed website to make it as easy as possible for people to learn about DEEP and geothermal in Saskatchewan. <u>www.deepcorp.ca</u>

DEEP Dropbox Media Kit: https://www.dropbox.com/sh/6limdgwp3dma4d2/AAAZIEg6Z\_H1fJwhEeV9Z0XHa?dl=0

## About DEEP Earth Energy Production:

DEEP is developing geothermal resources to meet increasing energy needs with sustainable, clean and renewable energy. The company is advancing its first planned ~25 MW geothermal power facility in southeastern Saskatchewan that will produce emissions-free baseload power. This first facility is planned for full commissioning by 2026. A staged build aims to increase the project to produce approximately 200 MW of renewable power generation.

### For more information on DEEP, please visit DEEP's website at <u>www.deepcorp.ca</u> or contact:

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