Razor Energy is deploying a commercial-scale project to produce economic, geothermal power with co-produced hydrocarbon fluids in the South Swan Hills oil field in Central Alberta. This project will prove the thermal co-production concept on a commercial scale, opening the doors for widespread deployment of such systems by hydrocarbon producers through the Western Canadian Sedimentary Basin. Expertise and experience gained through deploying geothermal co-production technology in Alberta will lead to significant global export opportunities for Alberta-based know-how. Results from this project will support the entire hydrocarbon value chain, while simultaneous providing Razor with a robust secondary income stream and competitive advantage in a rapidly changing upstream production market.

Razor Energy Geothermal Co-Production from an Active Legacy Oil Field in Swan Hills, Alberta

Razor Energy is targeting applications for both geothermal heat and power. On the power side, the power generated will be sold directly to the Alberta electricity grid. The establishment of a commercial geothermal power industry opens a new type of energy for the Alberta energy story, and will entice new business to participate. Power revenue provides an additional revenue stream to Razor Energy and will solidify the company mandate to develop a sustainable energy mix. On the heat side, the geothermal heat generated could be sold to industrial or agricultural heat users, with Razor developing new business outcomes. The geothermal energy target audience is vast and new business can be envisioned anywhere oil and gas is produced.

APPLICATION

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Razor Energy completed the engineering design for the power plant, reservoir and hot water supply analysis, design and field deployment of the heat exchange technology, full regulatory review, and full stakeholder engagement. The project received an Alberta Utilities Commission approval for the power plant and grid connection in October. A detailed economic model was prepared and verifies that the geothermal co-production pilot project is commercially viable and aligns with shareholder expectations. Razor is now Proceeding with the execution phase of the project.