

Gasification plan advances

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Wednesday, September 2, 2009 8:17 AM MDT

Casper-based GasTech Inc. has inked a deal with Linc Energy of Australia to launch an underground coal-gasification demonstration project in the Powder River Basin.

Linc acquired dozens of state coal leases in a checkerboard pattern extending westward of existing surface mining operations in the basin. The estimated 7 billion tons of state coal has an energy equivalent of about 20 billion barrels of oil, according to GasTech chairman and CEO John Wold.

"These coal resources of the (Powder River Basin) are unparalleled anywhere on earth," Wold said. "This is great development for Wyoming which can transform the energy landscape in the United States."

GasTech had signed a similar deal with British Petroleum, but the global oil giant is no longer active in the project, Wold said.

GasTech has been working for years to bring underground coal gasification to commercialization in the basin, underscoring the notion that 95 percent of the Powder River Basins coal resource is 500 feet or deeper below the surface.

Within 12 years, half of the Powder River Basins annual production could come from coal seams deeper than 500 feet, according to industry officials. That depth is thought to represent the limit of economically viable surface mining technologies in a region where loose overburden and massively thick coal seams obliterate any chance of applying underground mining technology.

Underground coal gasification involves drilling surface wells into the coal and injecting air into a water-sodden coal seam. Under pressure, the steam and oxygen gasifies the coal, producing hydrogen, carbon monoxide, methane, carbon dioxide and other gases.

The pressurized gases are brought to the surface through a production well and separated for a variety of potential uses.

Linc has operated underground coal-gasification pilot facilities in Queensland, Australia, since 1999, and is recognized in the industry as a leader in the technology.

"We are particularly pleased to bring our underground coal technology to Wyoming. We join GasTech in a program in your Powder River Basin which can demonstrate a major new world energy supply," Linc chairman and managing director Peter Bond said in a prepared statement.

Terms of the deal were not disclosed.

Wold said he believes the Powder River Basin project could lead to the first commercial-scale underground coal-gasification project in the world. He also noted that the project is entirely privately funded.

Linc is expected to decide on a location for facilities within months and begin building facilities within a year.

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