Fulfilling Houston's storage potential

Following the completion of 7.5 million barrels of underground cavern storage capacity, Fairway Energy is focusing on creating an extensive distribution network to support Houston's thriving crude oil market

Fairway Energy's underground cavern storage is addressing a need in Houston for a more efficient crude oil market as production continues to drive demand for logistics infrastructure.

Commercial operations for Phase 1A have started at the Fairway Energy crude oil storage facility, which comprises 7.5 million barrels of underground storage caverns. This capacity is served by two separate bi-directional 24 inch pipelines, which are currently connected to the Genoa Junction hub and with potential access to the Speed Junction hub.

These pipelines will allow the company to receive inbound crude oil from the Permian and Eagle Ford Basins, the Mid-Continent and Canadian regions as well as the Gulf of Mexico.

The facility will address the region's storage needs, which have been driven higher by the significant growth of pipeline-delivered crude oil into and through the Houston market.

Currently, the facility comprises three segregated underground caverns, supported by central pumping and metering facilities and by 6.5 million barrels of brine pond.

Completion of construction of Phase 1B is expected to increase the storage capacity by 2.6 million barrels to 10.1 million barrels as well as provide additional brine pond capacity. Commencement of work on this expansion is dependent on customer commitments.

CEO Chris Hilgert says that the facility is responding to customer and market demands for a more efficient crude oil market, that offers lower costs for storing and shipping crude oil.

In an interview with *Tank Storage Magazine* chief commercial officer Dana Grams says that since the Phase 1A of the facility became operational, approximately 70% of its capacity was filled during May and June.

'We now have around half of the capacity available and are pursing contracts to fill it. Due to the lack of continuity in the market at the moment, and the flat shape of the forward crude oil curve, customers are reducing their storage commitments in the short term.

'However the push from the Permian Basin to deliver barrels is steadily increasing and we have seen exports rise from major points on the Texas Gulf Coast – and that trend is expected to continue.

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FAIRWAY ENERGY AT A GLANCE:

The facility comprises three cavern systems with approximately 7.5 million barrels of storage

It has twin 24 inch bi-directional pipelines with connectivity to Genoa Junction, which is the primary distribution point for refiners in the Texas City and Baytown market areas with additional third-party connectivity to Houston Ship Channel and Port Arthur refineries and waterborne terminals

It is capable of simultaneously receiving and delivering over 15,000 barrels per hour per pipeline


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'Several companies have plans to build new marine terminals along the Texas Gulf Coast as crude oil exports increase to Asia, South America and Europe.

'There is a crude oil excess in the Texas Gulf Coast at the moment and we are hoping to absorb some of that excess with our facility.'

Houston is a region that is pipeline rich and Fairway Energy believes that there is a need for additional storage to properly handle the new pipeline volumes that are expected to flow to the area.

In a previous interview, Hilgert explained that without the appropriate amount of storage, pricing in the market becomes inefficient and that those areas with storage have better pricing.

He said: 'This project will serve the growing crude oil storage needs driven by the significant new pipeline-delivered crude oil into and through the Houston market.'

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DIVERSIFYING OPERATIONS

Currently, the caverns store two different crude blends, Western Canadian Select (WCS), a heavy crude oil blend and Domestic Sweet Blend (DSW), a light, sweet blend variety originating from Cushing, Oklahoma. However, executives at Fairway Energy have been approached by several companies to store other types of hydrocarbons such as butane and different types of refined products including petrol and propylene.

'There is a robust market for these products,' Grams explains.

'These products are traded in small quantities and we want to ensure we optimise the capacity we have. We are looking at creating new caverns but of a smaller size to the ones we currently have to fulfil this need.

'There is a potential for more than 30 million barrels of crude oil storage at the Fairway Energy crude oil storage facility, but we need to make the best use of the space we have.

'It could take us years to get to 30 million barrels, but we believe that the Houston market is ready for that size.'

Phase 2 of the facility, which is still in the planning stage, is expected to consist of two additional cavern systems with more than nine million barrels of existing cavern capacity.

'We were able to fill up the majority of our initial capacity early on and we continue to have enquiries for markets connected with refineries and other facilities,' says Grams.

'It is a big step going from a concept to building the facility itself, connecting it and storing large quantities of crude oil.

'We have impressed the market and there is a new found respect that salt caverns work well for hydrocarbon storage.

'We want to diversify our geographical footprint. For example, if there is a need for a new pipeline into Houston, we could be the city gate entrance.'