RBAC Foreshadowed Resurgence in GTLs

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As early as 2010 at the Santa Monica, California, User Conference for RBAC's GPCM® Natural Gas Market Model, Dr. Robert Brooks and Dr. Tom Woods presented evaluations of the potential for Gas-To-Liquids (GTL) plants as a growth market for the continuing surge of shale gas production in North America. RBAC's most recent forecast, released October 30th, shows future gas demand for GTL's in the industrial sector for North America helping to provide additional price support for currently beleaguered gas producing firms.

While the jump in gas-fired generation demand in 2012 has made headlines due to low natural gas prices versus coal feed-stocks, the industry has been looking further out with LNG exports and GTL prospects as potential demand solutions. The economics of LNG exports work well in light of world-wide demand and location; but as noted by Dr. Brooks, GTL might be a better fit for production areas not near a coastline. GTL plants would be able to pay higher prices for natural gas than most LNG plants, because they would be selling into the higher priced diesel fuel market. Also, LNG exports have to factor in the price of tanker transport, so the per-unit cost of energy for GTL could have an edge.

Currently, only Malaysia, South Africa, and Qatar have commercial GTL plants. The capital costs for GTL plants are at least twice the cost of a new refinery. Pilot plants have been built in places like Oklahoma, Alaska, and Louisiana, but the economics are still uncertain. Potential projects abroad are in places like Nigeria, Uzbekistan, and Brazil where stranded gas and increased pressure to reduce flaring are occurring. In North America, companies such as Chesapeake, Shell, Sasol, and Oxford Catalysts are evaluating potential projects in Pennsylvania, Western Canada and Louisiana.

As with any competitive market, large-scale GTL production or over-build could seriously re-calibrate refinery economics and/or drive crude prices down which would reduce the margin for GTL sales. That means the window of opportunity is for right-sized projects in the right locations. Investments in GTL should not be based on near-term prices of oil and gas but rather long-term expectations. Because long-run prices are difficult to estimate, GPCM takes a scenario approach to evaluate alternative possible solutions to the excess North American gas supply problem. RBAC's recently released 12Q3base scenario contains just under 2.5 BCF/d of US Lower-48 LNG exports competing with announced export projects in British Columbia as well as possible GTL projects in the US and Canada.

For more information on RBAC's GPCM and GPCM Base Case products, contact James Brooks at james.brooks@rbac.com or visit http://www.rbac.com.