
10% is Better than 25%

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Data Sources Used in This Publication

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LNG Tariffs

In the tit-for-tat trade war between the United States and China, LNG has come into the crosshairs. The Chinese government originally threatened to hit U.S. based LNG with a 25% tariff. When China announced their retaliatory tariffs on \$60 billion of U.S. imports, LNG showed a 10% tariff instead of the original 25%. The new tariff schedule took effect on September 24th, and although the 10% announced was less than expected; U.S. LNG may see headwinds as new export terminal projects seek final investment decisions. A deeper look reveals that the short-term impacts depend on global prices while long-term impacts to new LNG facilities may be tied to trade.

Short-term Impact to U.S. LNG

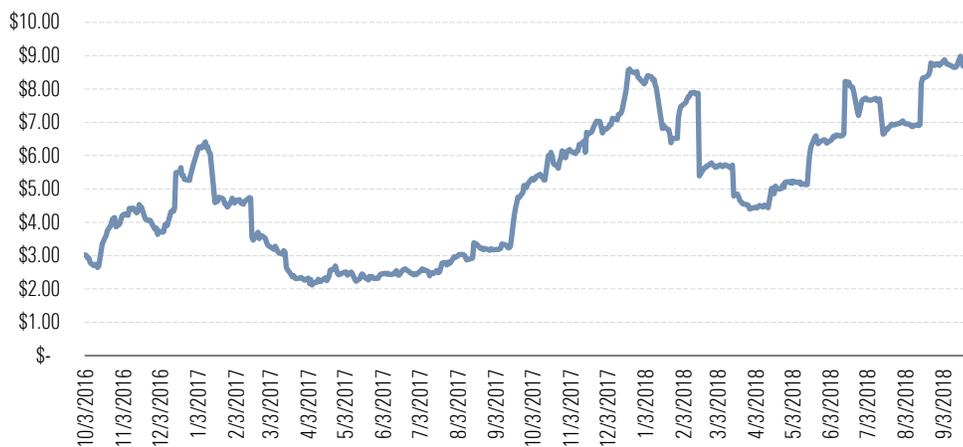
In theory, Chinese tariffs could impact two facets of the existing U.S. LNG supply chain in the short term - existing terminals with long term agreements with Chinese buyers and spot market purchases of cargoes shipped from the U.S. to China by sellers not bound by destination clauses. As we detail below, there are no long-term Chinese sale and purchase agreements (SPA) now and only one on the way next year. That leaves spot market purchases as the main exposure.

The lower 48 currently has two operating LNG export facilities in Cheniere's Sabine Pass and Dominion's Cove Point, with a combined export capacity of 3.6 Bcf/d. Looking at 2018 year-to-date export figures, the United States has shipped around 2.7 Bcf/d, to a slew of countries including China. In the first seven months of 2018, China represented about 11% of U.S. exports, 95% of which were under long-term agreements. But the counterparties with long-term sale and purchase agreements (SPA) in place at the two operating facilities are primarily from Europe, Mexico, India, and South Korea which would not be impacted by the U.S./China trade dispute unless the shippers send cargoes to China on an ad-hoc basis. Among the next set of LNG export projects with FID and under construction (Corpus Christi, Freeport, and Cameron), the only Chinese counterparty is China National Petroleum Corporation at Corpus Christi LNG with a long-term SPA for 1.2 million tons a year, or 0.15 Bcf/d, which represents 9% of the total capacity at Corpus Christi. The three trains at Corpus Christi will be online by 2021, with the first scheduled for the first half of 2019.

The impact to operating and soon to be operating LNG projects will therefore depend on global demand for LNG, which is expected to be strong this season, attracting cargoes to China from these facilities. Shippers will need to factor in the additional tariffs when assessing potential sales to Chinese buyers, which are likely to dissuade the latter from making purchases at the Gulf Coast. Spot month price spreads between JKM and Henry Hub have widened significantly since April 2018 (Exhibit 2), sitting

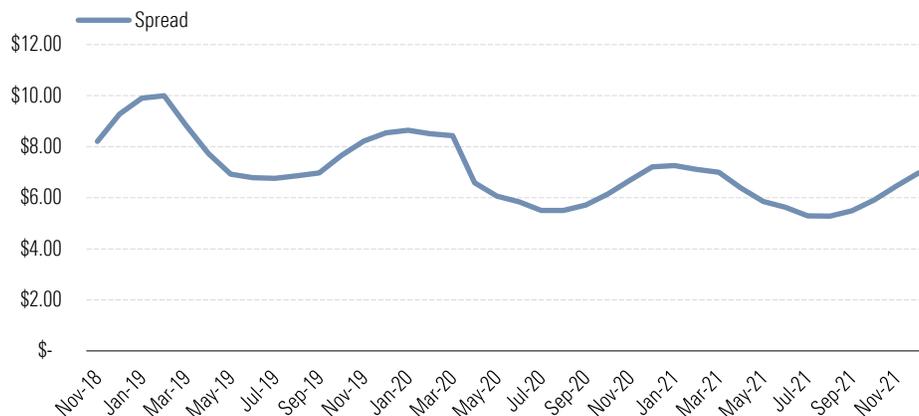
slightly above \$8.00/MMBtu as of early October. The impact of a 10% tariff delivered into China would add an additional \$1.055/MMBtu to the landed price although it is likely the seller would swallow this premium. In any case the spread is easily wide enough to absorb the tariff without impacting overall supply. In fact, high demand worldwide means the spread has not been this wide since the 2017/18 winter months, when China experienced natural gas shortages from unexpected weather-related natural gas demand - and we are only just entering the winter season this year. In addition to the potential for higher demand this winter in Asia, European demand for LNG is also strong, with front month futures at NBP settling a little shy of \$10.00/MMBtu as of the beginning of October. Winter prices at NBP are also pricing above \$10.00 /MMBtu, setting up what could be an LNG seller's market this winter.

Exhibit 1 JKM/Henry Hub Arb (\$/MMBtu)



Source: ICE

Looking at the forward curve we see a similar story with winter spreads hitting \$10/MMBtu between JKM and Henry Hub (Exhibit 2). The December to February JKM contract is trading slightly below \$13.00/MMBtu, which is on average about \$3.00/MMBtu higher than those respective contracts last year. What makes these stronger prices unique is that we are seeing them in the fall and not in the middle of winter when these spreads have tended to expand. If temperatures turn colder in Northeast Asia, prices could continue to move up at JKM, and coupled with strong demand for LNG in Europe the market could see greater competition as sellers are presented with more options for their exports.

Exhibit 2 Forward JKM/Henry Hub Spread \$/MMBtu (as of 10/1/2018)

Source: ICE

The strong global prices for LNG this winter will mask any immediate impact from trade barriers between the U.S. and China, and if demand is strong the wide arbs will likely support shipments despite the added tariffs. If last winter is any indicator of prices at JKM being driven by demand, this winter already looks set to exceed levels seen last year. U.S. LNG exports may accelerate at the end of the year as sellers look to supply heavy demand in both Europe and Northeast Asia.

Long-Term Impact to LNG Projects

In the long-term, questions remain for approved but not yet under construction projects seeking FID, most of which are located in the U.S. Gulf. Although the 10% tariff was less than the expected 25%, the impact on future projects will come down to the length of any trade conflict. If the U.S. and China can resolve their disagreement quickly, the long-term impact should be minimal. As long as the trade conflict drags on; however, the next set of projects will experience delays because securing long-term SPA's becomes difficult if participants from the second largest LNG importer and arguably the fastest growing market are excluded. Additionally, Shell's recent decision to invest in LNG Canada's western Canadian port adds another challenge for U.S. Gulf-based projects. Investors may look to place their capital in projects that have shorter routes to the demand centers for LNG, and projects located in countries with friendlier ties to Northeast Asia generally. One silver lining is that global LNG trade is still fairly young, and the lower position of the U.S. on the production cost curve provides its exports additional advantage compared with competitors. Nevertheless, uncertainty in the future direction of the U.S./China trade war will factor into which LNG projects investors look to develop in the future.

Conclusion

Although the announcement of a 10% tariff on U.S. LNG is better for the industry than the originally announced 25% tariff, it is currently too early to tell where the trading relationship between the U.S. and China goes from here. In the short-term the prospect for greater demand in Northeast Asia shown by the wider spread between Henry Hub and JKM this winter appears to easily support the additional 10% for U.S. exporters if spot cargoes are needed in China this winter, delaying any structural impact from trade barriers. Additionally, the long-term contracts at operating and soon to be operating LNG export

terminals are more dependent on Europe and other Asian counterparties, insulating them to a degree from the tit-for-tat trade war between the U.S. and China. The bigger questions left unanswered regard the impact on the approved projects that have not started construction and whether or not the trade barriers are here to stay. When the approved and not yet under construction projects come online beyond 2020, the trade policies between the U.S. and China may look very different than they are today.



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