A major turning point and pricing challenges in the Asia Pacific LNG market^{*}

Hiroshi Hashimoto*

Introduction

The global LNG industry is relatively young in the various energy sectors, just celebrating its 50 year anniversary in October 2014. Thus it is quite natural for it to continue changing its shape and evolving.

In the past the global LNG market has doubled its size every ten years - from 50 million tonnes in 1990, 100 million tonnes in 2000, and 220 million tonnes in 2010. Now it is expected to have 400 million tonnes per year by 2020.

The latest phase of expansion, starting in the 51st year of the industry, is expected to be unprecedented. We also saw huge expansion of the industry from 2009 to 2011. And it was also unprecedented at that time and the expansion caused a lot of changes.

During the latest phase of expansion, significant transformation in trading patterns is expected. This phase is even more unprecedented as two production centres are expected to increase presence: Australia and the United States. This is also expected to bring about another layer of flexibility and liquidity into the market.

Always evolving and unpredictable LNG industry

In this always evolving industry, it has been often difficult to predict the future. Players act based on some specific perspectives and assumptions, and they often lead to unintended consequences. Just ten years ago many people thought that the United States would be short of gas and importing a lot of LNG. But the expectation of higher gas prices over there encouraged huge domestic gas production, not only LNG production projects around the world targeting the United States.

Then during the past year we saw declining oil prices, partly caused by expansion of liquid production in the United States, which in turn was caused by expectation of widening gaps between dry gas and oil prices. While some people may expect an amply supplied LNG market for some years to come, others may be worried about slowing investment leading to supply shortage years later.

At the beginning of 2015, the LNG industry was already facing another new set of challenges caused by the declining oil and gas prices.

^{*} The paper has been modified from the one published in the March 2015 issue of LNG Journal.

^{*} The author belongs to Gas Group, Fossil Fuels and Electric Power Industry Unit.

Affordable and competitive prices are more important

In the short-term, while lower prices mean smaller revenues for sellers, they offer some relieves to LNG buyers, especially in North Asia, who have suffered financial pains from expensive LNG prices in the past five years or so, in both contract and spot and short-term purchases. The lower prices may also encourage those potential buyers who have been hesitant to decide to introduce LNG because of expensive prices.

At the same time, the relatively rapid change in pricing environment has made it more difficult for buyers to establish procurement strategies than in the past, as they may find it more difficult to predict future pricing environment.

Japanese and Asian LNG long-term contract prices have been linked with crude oil prices for decades. It is because oil was considered to be the main competing fuel against LNG and there was not, and has not been, a better indicator to represent the general energy market trend in the region.

The linkage was in general accepted as a reasonable practice until around 2008 although the percentages of linkage had been contentious issues in price negotiations between LNG sellers and buyers from time to time.

Since 2008, however, in the wake of rapid increase of gas production in the United States, price gaps between Asia and North America have been widened and so apparent, especially after the 2011 nuclear crisis in Japan. Many LNG buyers have realized that it would be structurally very difficult to reduce the gaps if they continue relying mostly on the linkage.

General public, especially in Japan, are also now well aware of high costs of LNG, as electricity prices have been raised for both residential and industrial uses, although there have been some misunderstandings that LNG has been expensive because it is LNG - if gas had been supplied via seaborne pipeline it would have been even more expensive in the past.

In order to keep energy prices affordable and maintain industrial competitiveness, every possible measure should be taken, including energy savings and boosting renewable energy capacity, as well as (re)starting nuclear reactors which are confirmed safe (according to the new safety standard, in case of Japan).

In terms of LNG procurement, buyers should try to obtain reasonably lower prices for both long-term contract deals and short-term and spot LNG transactions.

The buyers in the region have been trying to obtain better terms and conditions in LNG procurement, by diversifying their supply sources, contract terms - including both long-term and short-term contracts - and pricing methodologies.

Flexibility and equity are pursued

They also want to improve restrictive clauses in traditional sale contracts to make procurement more flexible so that they can be more resilient in the more variable market environment in the wake of anticipated more market opening policies. This flexibility is expected not only to mitigate risks of downstream market fluctuation but also enhance opportunities to bring upside benefits to LNG buyers in the international LNG market. This could also be good for LNG sellers as this could provide with them expand greater LNG markets as a whole than otherwise.

Around the turn of the century some utility buyers from Japan started considering minority equity participation in the upstream, liquefaction and ocean transportation segments of the LNG value chain. They initially started modest investment into those segments. After seeing more proliferation of LNG production projects in the Asia Pacific region, some buyers have become more proactive in equity participation. And this has not been confined to Japanese players, but also included LNG buyers in other countries.

In most cases Japanese players' equity participation is accompanies by project financing deals organized by the Japan Bank for International Corporation (JBIC) and biggest commercial banks, as well as financial supports by Japan Oil, Gas and Metals National Corporation (JOGMEC), leading to stable and competitive capitals employed.

For those volumes allocated in proportion with equity participation, buyer-partners have certain degree of discretion in pricing the commodity. This type of flexibility is expected to have positive influence on other portions from the same project, as well as trends in the industry as a whole.

Different pricing indices are introduced

Another important aspect of changing trends in recent years has been a pursuit of introduction of different indices in LNG pricing - notably Henry Hub and other North American ones. Even some assessed spot LNG prices have been used to determine prices.

Some indirect impacts had been briefly felt even before the recent wave of LNG export projects in the United States (notably regulatory approvals and project activities in 2014), as some volumes of LNG originally proposed to be sold into the United States had been diverted to the Asian markets - some of them were priced at a discount to the Henry Hub at their FOB points with additional transportation elements. But in most cases it was intermediary players that pocketed arbitrage profits and those diverted cargoes did not translate into hugely more competitive prices in the end-use markets in Asia. The cargoes were priced arbitrarily referring to either NBP plus transportation elements or prevailing Asian long-term contract prices, rather than the Henry Hub.

New model of LNG procurement

From those LNG export projects in the United States, expected to become online from 2016, several Asian players have made long-term lifting commitments with prices linked to Henry Hub prices, rather than crude oil. Some commitments have been made in the form of liquefaction tolling arrangements rather than straight-forward sale-and-purchase agreements (SPAs) at the planned plants, meaning that the offtakers are responsible in procuring feedgas and pipeline transportation to the plants as well as ocean transportation of resulting LNG.

From those LNG export projects planned in other countries, Asian LNG buyers also seek diversification in pricing, as well as more flexible terms and conditions.

Later in this decade LNG from the United States is expected to start flowing into the Asian LNG markets. There remains uncertainty over whether it would lead to lower prices of LNG in the region, while it is certain that this would bring pricing diversification of LNG. When landed prices in Asia for LNG from the United States are expected to be more expensive than oil-linked LNG prices in Asia, some of the American LNG, or the gas before liquefaction, may be diverted to other markets, either in the United States or other LNG/gas consumers.

If persistently lower oil prices are also assumed, there could be a convergence of those LNG prices linked with oil and those determined according to gas indices. Resulting narrower bands of LNG prices and increasing liquidity out of more flexible lifting arrangements from the United States and other supply sources as well could lead to improved transparency and active trading in the Asian LNG markets. This would facilitate development of Asia's own active market places.

Conclusion

In conclusion, in order to mitigate expensive LNG costs, Japanese and Asian LNG players are trying to be more proactive in their procurement activities, notably in equity participation and acquiring volumes with competitive pricing and other conditions. And they should continue doing so. This is expected to lead to Asia's own competitive and transparent market place. Although the market is accompanied with more uncertainty and is expected to be more difficult to manage, the greater market is expected to provide more reward. New reality of lower crude prices and market calls for more competitive LNG prices pose challenges - but they should be overcome through cooperation between parties.

Contact: report@tky.ieej.or.jp