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Asia driving natural gas growth

Jérôme Ferrier President IGU

Allocated time: 30 minutes

Dr. Manmohan Singh, Hon'ble Prime Minister of India

Shri S. Jaipal Reddy, Hon'ble Minister for Petroleum & Natural Gas, Government of India

Shri R. P. N. Singh, Hon'ble Minister of State for Petroleum and Natural Gas, Government of India

Mr. G. C. Chaturvedi, Secretary, Ministry of Petroleum & Natural Gas, Government of India

Ms. Maria J. A. van der Hoeven, Executive Director, International Energy Agency

Mr. Muhammad Ejaz Chaudhry, Secretary, Ministry of Petroleum and Natural Resources, Government of Pakistan

Mr. Heri Poernomo, *Director - Oil & Gas Program Development, Directorate General of Oil & Gas, Ministry of Energy and Mineral Resources, Government of Indonesia*

Mr. S. Krishnan, Chairperson, Petroleum & Natural Gas Regulatory Board, India

Mr. Saumitra Chaudhuri, Member, Planning Commission, Government of India

Mr. P. Uma Shankar, Secretary, Ministry of Power, Government of India

Mr. Ajay Bhattacharya, Secretary, Department of Fertilisers, Ministry of Fertilizers and Chemicals, Government of India

(This list has to be updated in due course with the Conference's organizers according to the final programme)

It is a great honour and privilege for the *International Gas Union* and his President to have been invited to present the views of the Organization at the Inaugural session of the 8^{th} Asia Gas Partnership Summit 2013 in New Delhi.

IGU is representing the worldwide gas industry, gathering 83 countries, and covers 95 % of the natural gas and LNG global market. This conference is an event of great importance for IGU, which receives the support of 21 Asian Members and associate Members in Asia-Pacific, a region that has the worldwide fastest growth in natural gas demand.

Slide 2

Asia is the world's largest continent and, with 4.3 billion people in 2013, accounting for 60 % of the global population. It is also the continent with the fastest growing energy demand, China and India representing 50 % of the global energy demand increase between 2010 and 2035.

Slide 3

Natural gas has the potential to improve energy security, as well as economic and environmental performance in the Asian-Pacific economies. The Asian natural gas market is the fastest growing gas market worldwide, and is expected to become the second-largest, after North America, by 2015, with nearly 850 billion cubic meters of yearly demand.

Slide 4

Natural gas growth comes mainly from Asia, and in the scenarios of the *International Energy Agency*, China and India are accounting for nearly 50 % of the global demand gas growth to 2035.

Slide 5

Asia traditionally relies primarily on its coal resources and it is expected that the continent will capture about 90 % of the world coal demand growth to 2035, while its share of total coal demand will expand to 71%.

Slide 6

Coal demand in Asia will continue to be driven by the power sector in order to fuel important growth in electricity demand, mainly in China and India, both of which have abundant and inexpensive domestic coal resources.

This situation is a challenge for Asia in its attempts to contribute more and more effectively to global warming mitigation and it is obvious that substituting still more natural gas to coal for power generation in India and China would be highly environmentally beneficial both locally and at a worldwide level.

However, this challenge raises three fundamental questions:

• Will the natural gas resources be available in sufficient volumes to meet the increasing Asian demand?

- Will the necessary infrastructures to deliver the additional pipeline gas and LNG resources be developed in the medium term? And
- Will the new pipeline and LNG resources be affordable for the Asian people and competitive for its industry?

The answer to the first major question is obviously positive, if we take into account the immense reserves accessible to Asia from the Middle East, the Caspian region and Russia. Even if we only consider the conventional proven reserves of the Middle East and of three selected countries in the Caspian region, namely Turkmenistan, Kazakhstan and Uzbekistan, we reach a figure of 100 Trillion cubic meters (Tcm) of natural gas, which represents more than 125 years of the increase in the Asian consumption of natural gas between 1990 and 2016.

Slide 8

Furthermore, very significant resources of unconventional gas should be made available to the Asian economies in the coming years, mainly in China which, according to the latest estimate of the EIA of USA, has the largest potential of shale gas worldwide, with technically recoverable reserves of more than 1 100 Tcf or 37 Tcm.

Slide 9

Under the EIA scenarios, China might become the second largest producer of unconventional gas in the world by 2035, after the USA, and should cover about 60 % of its gas demand from such resources.

Slide 10

The second major question relates to the development of new inter-regional pipeline and LNG infrastructures to sustain the demand growth in Asia.

Asia is already the largest LNG importer worldwide, accounting for 71 % of global LNG demand. For the second year in a row, all Asian countries without exception recorded a growth, lower imports into Europe and the USA providing for the swing between global supply and demand.

Slide 11

However, inter-regional imports by pipeline in Asia are limited mainly to China and represented less than 5 % of global gas trades by pipeline in 2012. There is a critical need for new transcontinental gas pipelines providing a better security of supply, enhancing the liquidity of the Asian gas market and triggering regional market integration. The challenge is without doubt to foster the geopolitical and economic conditions allowing Asia, and primarily India, to capture a significant share of the abundant and still relatively untapped continental reserves of Iran, Turkmenistan and other large Eurasian reserve holding countries.

The two main pipeline projects of *TAPI* (Turkmenistan-Afghanistan-Pakistan-India) and *IPI* (Iran-Pakistan-India) both constitute major pieces of regional energy integration that would benefit to all the parties concerned.

Slide 13

New large pipeline infrastructures would reduce the Asian markets dependence on LNG, increase the diversification of supply and the liquidity on the markets, trigger more competition among suppliers and enhance the economic value of the existing already well-developed pipeline systems, particularly for India. Although roadblocks remain to TAPI and IPI pipeline projects, IGU believes that they will be beneficial to all participating nations and is adamant to contribute, through its cooperation with UNO and its agencies, to mitigating the geopolitical drawbacks that have been hindering their concrete development over the last years.

New inter-regional pipeline projects would help Asian countries striking a more balanced trade supply between pipeline gas and LNG than under the present medium term projections of IEA, as they are shown on this slide.

Slide 14

The third major question is whether additional resources of imported gas in Asia will be made available under affordable and competitive conditions to coal, with due consideration to the invaluable advantage of natural gas on environmental grounds.

In North America and Europe, where gas-to-gas competition has been made possible, both through diversified supplies and adequate regulatory dispositions, the bulk pricing of natural gas has been decoupled from the former oil-indexed pricing reference, totally in North America and still only partially in Europe, for the benefit of customers in both regions.

Slide 15

There is no doubt that the market pricing of natural gas is beneficial to consumers. Even if we discount the situation of North America, which has become self sufficient in gas thanks to large shale gas resources, we observe that the European Union, which depends for more than 50 % on imports - a lot more than the 30 % dependence of the Asia-Pacific region- purchases its imported resources under much more favourable pricing conditions than Asian countries.

Slide 16

It is therefore clear that the future role of gas in Asia will depend on whether natural gas pricing is tied more closely on supply and demand fundamentals in the region and less on oil-related contracts. In a very well documented study published in 2013, under the title "Developing a Natural Gas Trading Hub in Asia", the IEA has presented its views on the opportunity for Asian countries to switch to a market-based trading model, with the creation of a regional hub to facilitate the exchange of natural gas and LNG and foster the creation of a market place allowing more transparent price signals and steering investments in natural gas infrastructures.

The development of additional regasification capacities in Asia to 2020, as well as the prospects of large additional LNG resources from Australia and Eastern Africa, should facilitate the development of an Asian LNG trading hub.

Slide 18

Spot and short-term LNG trade is in constant growth since 2000 and, although it represents only 24 % of the volumes delivered to Asia in 2011, it is expected to increase with the re-exports from Europe and the USA and the progressive extinction of destination clauses in the long-term LNG supply contracts.

Slide 19

In last October, the governments of India and Japan announced cooperation for, I quote, "rationalizing of LNG prices in Asia-Pacific", and "supporting the launch of a Multilateral Joint Study Group." This initiative is well in line with the recommendations issued by IEA in its aforementioned document and evidences the will of India and Japan to increase market connectivity, foster liquidity and price convergence of LNG on a global basis.

Developing a hub and a market place for natural gas and LNG in Asia will not be achieved overnight. The EU experience shows that it may take a decade before bringing significant results for consumers. However, it is now a well known process and IGU would be delighted to contribute by giving a feedback to its Asian members on the pathway to success, the pitfalls to avoid in the deregulation roadmap and the implementation of a new commercial paradigm.

Once again, I wish to thank the organizers of the conference for having invited me to present and I would be delighted to welcome you all in Paris, in June 2015, for the *World Gas Congress* of IGU where all these important issues will be debated and reviewed at the highest level of our industry.

5