Central Asia: Pipelines Are the New Silk Road

By Leonard L. Coburn*

Central Asia (includes Caucasus in this discussion) historically has been a region where major powers fought for control of the overland trade routes between China on the east, Europe on the west, and Russia to the north. The various "silk" routes crisscrossed the region carrying out an active inter-regional trade. The rise of the Soviet Union in modern times changed the political dynamic of the region as Russia brought the five "stans" of Central Asia and the Caucasus within its political sphere. With Russia's dominance, the energy trade developed in a north-south pattern with all pipelines and other modes, rail, electric power lines, and water, all moving north into Russia. Today, the effort to break this monopoly on transport routes is at the forefront of energy politics in the region.

The players include Russia attempting to maintain its political and economic hegemony over the region; China entering into long term relationships to sustain economic growth and satisfy its energy security; EU seeking new sources of energy (primarily gas) to meet future demand and enhance its energy security; U.S. seeking to enhance its political and economic influence to counterbalance Russia and China; and the region's countries working out a delicate balance among all these competing interests. In this heightened political atmosphere, pipelines become the new silk road—the control over them is seen as the way to maintain Russia's political and economic hegemony or the way for each of the other players to break Russia's dominance and at the same time help the countries of the region diversify economically and politically.

Oil Pipelines

In the Soviet era all pipelines went north into Russia. In the post Soviet era new pipelines or new routes using old pipelines developed to provide diversity. Many cracks developed in the Russian monopoly. The United States, with European backing, supported this diversity with its multiple pipeline strategy to break Russia's monopoly. Today, route diversity and competition undermine Russia's former monopoly.

The first crack developed in Azerbaijan with pipeline and rail routes starting in Baku, Azerbaijan and transiting Georgia carrying oil to the Black Sea ports of Supsa and Batumi. The second crack was the Caspian Pipeline Consortium (CPC) pipeline opened in October 2001 carrying oil 1500 kilometers from Kazakhstan's Tengiz oil field to the Black Sea via Russia. CPC was first and remains the only oil pipeline within Russia not controlled by state-owned Transneft, Russia's oil pipeline monopoly. The third crack was the Baku-Tblisi-Ceyhan (BTC) pipeline—an 1100 mile, 1 million barrels per day crude pipeline from Baku to Ceyhan, a deepwater port on the Mediterranean that opened in July 2006. BTC provides a significant new route out of the region, breaking Russian monopoly on shipments and also bypasses the Bosporus bottleneck.

The next crack in Russia's was the completion of the Kazakhstan to China oil pipeline in July 2006 carrying crude oil 613 miles from Atasu (NE Kazakhstan) to Alashankou in China's Xinjiang region (origin of west-east China pipeline). This pipeline now has been extended across Kazakhstan to Atyrau to link up with its western oil fields. The oil in this pipeline comes from Kazak fields developed by Chinese oil companies. Finally, Kazakhstan is developing a trans-Caspian barge system that will ship oil from the port of Aktau via barge to the BTC pipeline. The current 200 mbpd shipments are expected to double with the opening of Kashagan.

A new possibility is part of French President Sarkozy's recent agreement with Kazakhstan's President Nazarbayev to enhance economic and political relations. This includes the possibility of a pipeline from Kashagan (Total is a major participant) directly across the Caspian to Baku, rather than using existing pipelines (CPC or Russian network).

All these new routes provide Central Asia with competitive and diverse routes undermining Russia's monopoly position. All the countries must continue to balance their relationships with Russia carefully since Russia still has a strong position in Central Asia, but Russia no longer dominates as in former times.

Gas Pipelines

During the Soviet era, all gas pipelines went north and connected with the Russian gas system. In the post Soviet era, the emergence of Gazprom as Russia's state controlled gas monopoly (85% of Russian production; 100% of gas pipeline transit; sole gas exporter) continued Russia's domination of Central Asian gas transportation. The Central Asia Center Pipeline (CAC) connected

* Leonard Coburn is President of Coburn International Energy Consultants. He is a past president of IAEE and may be reached at coburnel@msn.com

Kazakhstan, Turkmenistan, and Uzbekistan for distribution of gas within the region and export to Russia. Gazprom continued to dominate this system by contracting with the three countries to buy all the available capacity in the CAC system. With this contract, Gazprom was able to maintain its monopoly over Central Asian gas.

The Russian monopoly is slowly dissipating as alternatives are developed. In Azerbaijan, the development of the Shah Deniz gas field in the Caspian, considered one of the largest natural gas discoveries in the last 20 years, led to the development of the 429-mile South Caucasus Pipeline (SCP) that carries gas from Baku through Tbilisi, Georgia to Erzurum, Turkey (often called the BTE pipeline), where it connects to the Turkish gas pipeline network. SCP parallels BTC and began gas exports in 2007, marking the change of Azerbaijan from a net importer of Russian gas to a net exporter of its own gas.

In June 2009, Azerbaijan's President Aliyev signed an agreement with Russia's President Medvedev for Azerbaijan to export gas to Russia. This agreement was followed by an implementing agreement in October 2009 signed by Gazprom and Azerbaijan's gas company. The agreement runs from 2010 to 2014 for the sale of 500 million cubic meters per year through the pipeline Russia used to sell gas to Azerbaijan.

While Russia thought it had staged a coup by buying Azeri gas and precluding any commitment by Azerbaijan to Nabucco. Closer analysis revealed that Azerbaijan got the better of the deal since it was able to sell its surplus gas for a limited period of time at world prices (one source indicated the price was $350 per thousand cubic meters-mcm), but retained the ability to commit gas in the future to Nabucco since Nabucco is not expected to begin operations until 2015, a year after the Russian contract expires. Furthermore, Azerbaijan made no commitments for phase 2 of Shah Deniz, preferring to remain noncommittal with the hope that it can sign a deal with Nabucco. Azerbaijan continues to seek gas export alternatives and is now working with Bulgaria for pipeline and tanker movements of compressed natural gas for additional gas exports.

Another wedge in Russia's dominant gas position is taking place in Turkmenistan. In past years, Gazprom turned to Turkmenistan when its own Russian production leveled off and found that it was cheaper to buy Turkmen gas at $50 mcm than to develop its fields in Yamal. Under President Niyazov, Turkmenistan was content to sell its gas to Russia or Ukraine, while making overtures to the west about a trans-Caspian pipeline. This situation continued until the death of Niyazov in December 2006.

Turkmen President Gurbanguly Berdymukhamedov was elected in February 2007. In 2007, the president signed an agreement with Russia to expand the Prikaspiiski pipeline system that runs along the eastern shore of the Caspian. With Gazprom's contracts for all the capacity of the CAC gas pipeline system and the expansion of the Prikaspiiski pipeline, it appeared that Russia had moved aggressively to re-assert its hegemony over Central Asia and especially over its gas.

This illusion did not last long. Turkmenistan and China signed a gas export deal in December 2006 (weeks before Niyazov's death) for the export of gas to the east. Construction of the Turkmen section of the gas export pipeline—188 km—began in August 2007 and has just been completed. The Uzbek section—525 km—began construction in June 2008, while the Kazak section—4860 km—began construction in July 2008. The Chinese National Petroleum Company (CNPC) is providing most of the financing for the pipeline. China and Turkmenistan expect that gas will start flowing in the Turkmen section in December 2009 and small volumes of gas will reach China in early 2010. The initial agreement with China was for 30 billion cubic meters per year for 30 years. A new agreement was signed in June 2009 for an additional 10 billion cubic meters per year.

In the meantime, negotiations with Gazprom over the expansion of the Prikaspiiski pipeline continued and still have not been completed primarily due to lack of agreement over price terms. A 600 km east-west spur line also was to be built and financed by Gazprom to connect central Turkmenistan gas fields with the expansion. Rather than have Gazprom finance the pipeline, Turkmenistan has requested tenders from international companies for the pipeline's construction. Turkmenistan now thinks that Gazprom lacks the financial capacity to complete the east-west spur. Moreover, this is an indication that Turkmenistan wants to set its own course independent of Russia.

In the spring of 2009, Gazprom came under intense pressure due to the steep global recession. Gas demand from Europe, Gazprom's prime export market, fell by 25% to 30% or more. Oil prices reached their nadir in December 2008 falling to the mid-$30/bbl range from their high of $147/bbl. Gas prices started to fall in 2009 since Gazprom's gas contracts are all linked to oil prices and follow oil prices with a six to nine month lag. Prices did start to fall significantly for Gazprom during the first three quarters of 2009 and only now have stabilized. With Gazprom paying "world prices" for Turkmen gas in Central Asia, Gazprom was losing significant amounts of money on every cubic meter of Turkmen gas it was selling in Europe or at home.

On April 9, 2009, a blast occurred on the CAC-4 section of the Turkmen-Russian pipeline stopping all Turkmen gas shipments to Russia. Whatever the cause, no gas has flowed from Turkmenistan to Russia since the explosion. On April 24, 2009, at a 2 day international energy conference in Ashgabat, President Berdymukhamedov declared Turkmenistan's energy independence from Russia. Berdymukhamedov's statements have important implications for China, EU and the U.S. He said, "Today we are looking for conditions to diversify energy routes and the inclusion of new countries and regions….Turkmenistan must create a new system of relations with Europe. In the current situation, the diversification of energy routes could help to stabilize the global economy." He continued that "it is normal and absolutely justified…for any energy producer country wishing to maintain its economic and energy security to assert its national interests….Energy security has been the cornerstone of the foreign economic strategy of Turkmenistan."

Representatives from the United States in attendance at the conference expressed interest in having Turkmen gas committed to a trans-Caspian pipeline route. European representatives also in attendance were seeking commitments to supply gas to Europe.

Since the April explosion and the April conference, Gazprom has been working hard with Turkmenistan to re-establish gas flows. Russia pressured for lower gas prices or gas volumes or both. Turkmenistan resisted all Russian efforts to date, despite Turkmenistan's loss of $1 billion per month in revenue from its gas sales.

Turkmenistan is working with China to develop its South Yoloten gas field in eastern Turkmenistan. Some estimates have placed the reserves in this field as high as 14 trillion cubic meters, which is about twice current total Turkmen reserves. CNPC is the first foreign company to develop a major onshore field under license in Turkmenistan. China has provided a $4 billion line of credit for the development of South Yoloten and Osman fields. China also is financing a fertilizer plant that will export its output to China. Additional incentives have been offered as well. Turkmen-Sino relationship is important since China provides financing, demand guarantees (security of demand), spin-off projects, and political cultivation.

China is not alone in its pursuit of Turkmen gas. The EU is seeking commitments from Turkmenistan for its Nabucco pipeline. President Berdymukhamedov indicated recently that South Yoloten has enough gas to supply Europe through Nabucco. The development of Nabucco is proceeding since on July 13, 2009, Nabucco and its partners signed transit agreements with Turkey and European countries (Bulgaria, Romania, Hungary, Austria) to permit the Nabucco pipeline to carry gas across each country's territory. The EU is now more optimistic than at any other time that Nabucco will be built. The lessening influence of Russia and Gazprom over Berdymukhamedov and Turkmenistan is providing new opportunities for China, EU and U.S.

A relatively new pipeline proposal, White Stream, a private venture, may provide an opportunity to carry Azeri gas directly to Europe, bypassing Turkey. White Stream shows up in EU's strategy for a Southern Corridor for natural gas to Europe. The private companies would transport gas across Georgia (relying on a 100 mile pipeline from the South Caucasus Pipeline to Supsa), then under the Black Sea for 1,100 km to the Romanian coast near Constanta and then using Romania's gas transmission on to EU markets. Total capacity would be 32 bcm. EU's Southern Corridor gas strategy includes Nabucco, White Stream, and the Turkey-Greece-Italy Interconnector with potential capacity ranging from 60 bcm to 120 bcm—larger than Nabucco's 31 bcm capacity. Adding White Stream to the Southern Corridor strategy removes competition between Nabucco and White Stream. It also sends a message to Turkey to stop trying to monopolize gas transit from Caspian to Europe. Turkey has not signed a European standard agreement for gas transit from Azerbaijan to Europe. Turkey also wants to buy Azeri gas at deeply discounted prices. These tactics are holding up expansion of Shah Deniz, hampering Nabucco development. Turkey's conduct persists despite signing the July 13, 2009 agreement on Nabucco. Turkey's behavior undermines Central Asian efforts at gas diversification. Note that Azerbaijan and Turkey are working hard to resolve these differences.

Since the demise of the Soviet Union in 1991, many cracks developed in Russia's energy hegemony over Central Asia and the Caucasus. Diversification of oil routes occurred first, starting in the mid-1990s and continues to the present. Diversification of gas routes occurred much later and we are only now witnessing diversification in gas export routes. All the countries of the region rely on pipelines for their energy trade, the modern day version of the old silk routes.