The Commercial Viability of the Trans-Caspian Gas Pipeline

Current Studies on Business/Public Policy Issues in Energy

An Energy Institute White Paper

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October, 1999

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Executive Summary

Turkmenistan has large proved natural gas reserves. Potential markets for Turkmen gas are Turkey via a new pipeline, Europe via Turkey or Russia, Pakistan and India via a new pipeline through Afghanistan, and China via a new pipeline through neighboring Central Asian Republics. The Afghan pipeline is politically impossible for the foreseeable future. Cost estimates for the Chinese pipeline are extremely high, not to mention potential geopolitical problems among (within) the Central Asian Republics along its route, or in Western China. Also, it is clear that the best paying customers are in Western Europe. However, since Gazprom limits the use of its pipeline network for Turkmen exports to non-paying customers such as Ukraine, Turkmen exports have fallen to 77 bcf in 1998 from 2.4 tcf in 1987. Obviously, Turkmenistan would benefit greatly from an alternative export pipeline to the West. Of the two major routes for a Turkmenistan-Turkey pipeline that have been considered, the Trans-Caspian route has recently gathered greater support, at least in the U.S., than the Iranian option.

After analyzing the potential for gas demand in Turkey as well as Azerbaijan and Georgia, and carrying out a NPV analysis supported with numerous scenarios, we conclude that the Trans-Caspian pipeline is commercially viable and would bring positive, but limited, returns to Turkmenistan under most scenarios. This conclusion holds true even if Turkey is the sole buyer of Turkmen gas, albeit with low investment cost and high price assumptions. Our analysis also indicates that the pipeline operators will be the clear winners if this pipeline gets built. On the other hand, given the intense supplier competition to Turkey (further enhanced after the recent Azeri discoveries) and doubts about that market's potential, there are significant risks for both Turkmenistan and pipeline operators. However, the strategic importance of the pipeline is tremendous for Turkmenistan, which stands to gain significant independence from, and bargaining power against Gazprom. Therefore, Turkmenistan will need to participate in the pipeline consortium in order to share both the risks and operation revenues with other stakeholders.