

THE RUSSIAN GAS INDUSTRY, ITS LEGAL STRUCTURE, AND ITS INFLUENCE ON WORLD MARKETS

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LIST OF ACRONYMS

BCM Billion Cubic Meters
E&P Exploration and Production
FDI Foreign Direct Investment
FTS Federal Tariff Service
IMF International Monetary Fund
LNG Liquefied Natural Gas
NGO Non-Governmental Organization
PSA(s) Production Sharing Agreement(s)
RUE RosUkrEnergO AG
NEGP North European Gas Pipeline
TCM Thousand Cubic Meters
TPA Third Party Access
UGS Unified Gas Transportation System

I. INTRODUCTION

Russia has the world's largest proven reserves of natural gas—at forty-eight trillion cubic meters—an amount that comprises over a quarter of the world's proven reserves. Russia provides Europe with a quarter of its gas needs. The Russian gas industry is dominated by OAO Gazprom (Gazprom), a publicly traded company in which the government holds a majority stake of fifty-one percent. Gazprom is considered a monopolist because it owns all of the high pressure interregional pipeline network as well as nearly seventy-five percent of

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low pressure distribution networks. It owns¹ about half of Russia's proved reserves of natural gas and all the main gas processing facilities, as well as a legal export monopoly. Private companies do own reserves, but because domestic price is regulated by the state, and export is forbidden, their participation in the industry is comparatively small. As such, without foreign investment, concerns have been raised by such bodies as the International Energy Agency,² the European Commission (EC),³ and other NGOs⁴ about the Russian gas industry's ability—in particular, the ability of its largest producer Gazprom—to continue current levels of production and to invest in the development of new fields. This article will look at the legal and policy issues which have affected not only the multinational investors but the end-users in Europe and beyond. Some of these issues have led to the well-publicized confrontations between Ukraine and Russia over the price of natural gas sold by Russia to Ukrainian and other European markets. Other issues may be less visible, but just as important in their effects on world energy markets.

The first section of this article looks at Production Sharing Agreements; what they are, how they came about, and their current status in the Russian gas industry. The second and third sections of the article discuss the recent developments in Russia's domestic pipeline law and the application thereof, and the future of the Soviet-era long-term contracts which are expiring in the near future. The fourth section of the article looks at the legal and policy issues likely to affect trade between Russian and Ukraine, the major transit state for transportation of Russia's gas supplies to the rest of Europe. The last section of the article looks at Russia's proposed new Subsoil Law, the major changes it makes in existing law, and their potential impact on gas industry investment.

II. PRODUCTION SHARING AGREEMENTS

The world investment community has suffered a number of setbacks in their efforts to invest in Russia with particular difficulties being encountered with the Russian political and legal system. Before the economic reform known as "Perestroika" took place in the late eighties, the Soviet Union was closed to foreign investment or indeed any foreign involvement whatsoever. The country first became open to foreign investment in 1987⁵ through a series of directives, initially limiting foreign participation to forty-nine percent, yet subsequently this

1. The state ultimately owns the natural resources; in this case, however, the legal right for exploitation of these reserves by corporate entities is referred to as ownership.

2. Dr. Fatih Birol, *World Energy Prospects and Challenges*, 39 AUSTRALIAN ECON. REV. 190 (2006), available at <http://ssrn.com/abstract=909829>; Claude Mandil, *Russia Must Act to Avert Gas Supply Crisis*, FIN. TIMES, Mar. 21, 2006, available at <http://search.ft.com/ftArticle?queryText=Russia+Must+Act+To+Avert+Gas+Supply+Crisiskag>.

3. Marina Pustilnik, *Hot Air Over Russian Gas*, THE MOSCOW NEWS, Dec. 5, 2006, available at <http://english.mn.ru/english/issue.php?2006-47-13>.

4. VLADIMIR MILOV, ET AL., INST. OF ENERGY POLICY, DEEPENING THE INTEGRATION BETWEEN ENERGY PRODUCING AND CONSUMING NATIONS 14-15 (2006), <http://www.energypolicy.ru/files/deepening%20integration.pdf>.

5. Soviet Joint Venture Law, *The Decree of Presidium of the Supreme Council of the USSR*, J. OF THE SUP. COUNCIL OF THE USSR, Jan. 13, 1987, at 6362-XI. "On the issue of the creation and activity of joint ventures, international mergers and organizations with participation of Soviet and foreign organizations, firms and control centres on the territory of the USSR." *Id.*

restriction was removed.⁶ After the end of the “Perestroika” in 1991, the West looked towards Russia as an opportunity to tap into the country’s vast reserves of raw materials. Many of the industries that did open up to foreign investors have benefited from capital inflow, including the oil industry. But natural gas has been considered by the Russian government to be of great strategic importance⁷ and as such, closed to foreign participation. Natural gas is in abundance, it is environmentally clean, and allowed to substitute oil thereby freeing it for export. Before the mass privatization era of the early nineties, the gas industry was consolidated into one entity, State Gas Concern Gazprom. Several internal opponents to splitting up the company managed to keep the newly formed RAO Gazprom⁸ as a single structure while controlling the producing, transporting, and servicing companies.⁹ The sector’s importance has been further entrenched by the fact that it comprises such a large segment of the domestic energy mix (although Russia is the world’s largest exporter of natural gas, it consumes twice as much as it exports) and the large revenues and political influence associated with its export. The gas industry that supplied the internal market and signed export contracts with the West was built on the technology of the time and has seen little investment into upgrade or maintenance¹⁰ due to, *inter alia*, the fact that the sector has been closed to foreign investment. This is not to say that there was no Soviet-era foreign investment in the Russian gas industry, but the limited investment was the product of a legal structure that has had carryover effects into the current era. It is this underinvestment into the infrastructure that emerges as a main argument for the deregulation of the industry and the introduction of foreign independent competition.

Russia currently has two types of operating legal frameworks, one being Production Sharing Agreements (PSAs) authorized by the Production Sharing Law of 1995,¹¹ and the other a so called “Tax and Royalty” or “Licensing System” according to the Subsoil Law of 1992.¹² The latter system allows the investor to seek a license for the exploration and production (E&P) of the hydrocarbon (or any other subsoil resource) and in return pay royalty and taxes under the normal fiscal regime. The former, on the other hand, is an agreement between the investor and the state, whereby the costs and risks associated with

6. T. Kudina, Роль иностранных инвестиций в развитии России: исторический аспект, [*The Role of Foreign Investment in the Development of Russia: Historical Aspect*], Nalogi, Investitsii, Kapital, No. 1, pp. 75-80 (Apr. 2001); N. N. VOZNESENSKAIA, Вознесенская Н.Н. Иностранные инвестиции: Россия и мировой опыт (сравнительно-правовой комментарий), [FOREIGN INVESTMENT: RUSSIA AND THE WORLD EXPERIENCE: A COMMENTARY IN COMPARATIVE LAW], INOSTRANNYE INVESTITSII ROSSIIA I MIROVOI OPYT: SRAVNITELNO-PRAVOVOI KOMMENTARI, [The Institute of State and Law of the Russian Academy of Sciences ed., Kontrakt 2001].

7. Darryl Biggar, *The Natural Gas Sector*, 4 OECD J. OF COMPETITION LAW AND POL’Y 148 (Sept. 2002).

8. Elana Ivanova, *Gas Industry 1991-2000*, KOMMERS., Jan. 31. 2007, available at http://www.kommersant.com/p295882/r_33/Gas_Industry_1991_2000/, (carried out by Presidential decree # 1337, *On Transformation of the Gas Concern Gazprom into RAO Gazprom*, Nov. 2002).

9. *Id.*

10. A. Rudiger & W. Tompson, *Russia’s Gas Sector: The Endless Wait for Reform?* 14 (ECON. DEP’T, WORKING PAPER NO. 402, 2004).

11. On Production Sharing Agreements, No. 225-FZ (Dec. 30, 1995).

12. On Subsoil, No. N 2395-1 (Feb. 21, 1992); Johannes Rath, *Production-Sharing Agreements in the Russian Federation*, 3 OGEL (March 2005).

the E&P befall solely on the investor and the profit generated from the subsequent sale of the resource must be split to initially cover the expenses of the investor and then the remainder split between the investor and the state.¹³ The problem with the Licensing System for the investor lies within the fact that the government may at any time change the fiscal policy, which may have an economic impact on a project to the extent that it may render it unprofitable.

The Sakhalin projects are perhaps the best example of how foreign investment projects can be successful and at the same time how political capriciousness can damage investors' morale. These projects were oil and gas projects that involved the exploration and subsequent production of hydrocarbons on and around the Sakhalin Island in easternmost Russia, and the subsequent sale of said hydrocarbons. Some of the Sakhalin projects, namely Sakhalin-1 and Sakhalin-2 (of which there are six), date back to the 1970's and are referred to as first generation, have seen relative success. Others however, such as the later Sakhalin-3, Sakhalin-4, and Sakhalin-6 projects have come to a grinding halt.¹⁴ One major difference between the dates of the first generation projects and the others is the political regime. The Soviets had signed a general cooperation agreement with the Japanese to explore the offshore regions of the Sakhalin Island. From the signing of this agreement in 1975, exploration continued until the collapse of the Soviet Union in 1991. The discovered reserves led to the Sakhalin-1 and -2 projects that were set up under the production sharing agreement (PSA) framework but only after the introduction of the PSA law in 1995.¹⁵ These two projects are two of only three so called "grand-fathered" PSAs operating in Russia at the moment. The third operating agreement is Kharyaga in the Nenets region,¹⁶ under the 1995 PSA legislation. The Russian Continental Shelf offshore fields Shtokmanovskoye and Prirazlomnoye (Shtokman and Prirazlom) are authorized by current PSA legislation, but are not yet operational. Some doubt has been cast on whether they will be allowed to proceed under PSA system. Sakhalin-3 was initially authorized as a PSA project, but has had this authority removed after the initial 1993 tender results were annulled by the government.¹⁷ ExxonMobil, who had already invested US\$60 million in the project but holds other interests in Russia, including a stake in Sakhalin-1, did not legally pursue this decision in the courts. The reason for this was that they wanted to take a "long-term perspective"¹⁸ on investment in Russia, thereby limiting themselves to no more than the public

13. Cost Oil refers to the profits used to cover expenses, and Profit Oil and Government Take refers to the profits shared between the investor and the government respectively. R. Vyakhirev, *A Strategy For Development of the Russian Gas Industry*, 4 PERSPECTIVES IN ENERGY 39 (1997).

14. Selma Stern, *Russia's Production Sharing Contract Regime*, OIL, GAS & ENERGY LAW INTELLIGENCE, Mar. 2005.

15. Rosneft.com, History of the Sakhalin Projects, <http://www.rosneft.com/Upstream/ProductionAndDevelopment/OtherProducingAssets/SakhalinHistory/> (last visited February 6, 2007).

16. Kharyaga is being operated by Total (the other shareholders are Hydro and Nenets Oil Company).

17. Sergei Blagov, *Russia Stirs Up Sakhalin Projects*, ASIA TIMES ONLINE, Feb. 4, 2004, available at http://www.atimes.com/atimes/Central_Asia/FB04Ag01.html.

18. Arkady Ostrovsky & Doug Cameron, *Moscow Takes Back Economic Resources*, FIN. TIMES, Feb. 11, 2005, available at <http://www.ft.com/cms/s/b6464110-7bc4-11d9-9af4-00000e2511c8.html>.

expression of concern.¹⁹ Two offshore projects in the north Caspian²⁰ under the current PSA legislation are not yet operational and are likely to be removed from the table.

The Russian political climate for the investor is a case of Dr. Jekyll and Mr. Hyde: on the one hand being progressive and market-oriented, while on the other, conservative and nationalistic. These forces pull in opposite directions—trying to attract foreign capital and technological know-how at the same time as affirming the political and social importance of maintaining control of the national resource base. This has traditionally been further compounded by the conflict between the local and central authorities; the Russian constitution granted jurisdiction to both in the field of mineral resources.

Since the Russian constitution did not set a clear boundary between the respective jurisdiction of these authorities, the local governments considered themselves fully authorized to regulate all aspects of petroleum activity in their territory. Investors could find themselves in the cross-fire of a power struggle whereby conditions of the license are modified by both authorities in contradictory or cumulative ways, with detrimental consequences for the predictability and profitability of their projects.²¹ Amendments to the Subsoil Law in 2004²² have cleared up this confusion, granting jurisdiction over licensing to the federal government.²³ PSAs offer protection against this by ensuring that the “Government Take” encompasses the taxes, royalties, and duties and absorbs the risk of any changes thereof. In many cases a stabilization clause within the PSA “freezes” the legal situation in place when the agreement is signed, creating more certainty for the investor. In the case when the legal (or fiscal) situation changes, the investor may be compensated if such a change has caused a detrimental effect on the project.²⁴ Certain banks will not invest in the Russian subsoil sector because the country’s risk is too high²⁵—the stabilization clause in the PSA may go some way in offsetting this risk.

19. Valeria Korchagina, *Energy Minister Says State is Seeking \$1Bln for Exxon Sakhalin-3 License*, ST. PETERSBURG TIMES, Feb. 6, 2004, available at http://www.sptimes.ru/index.php?action_id=2&story_id=12206.

20. Jonathan Hines & Alexei Bardin, *Tail Whacks Dog: Few PSAs Can Go Forward in Russia*, AIPN ADVISOR, Sept. 2003 [hereinafter *Tail Whacks Dog*].

21. Giuditta Moss, *Contract or Licence? Regulation of Petroleum Investment in Russia and Foreign Legal Advice*, 12:2 J. OF ENERGY AND NAT. RESOURCES LAW (May 1998), reprinted in Giuditta Moss, *Contract or Licence? Regulation of Petroleum Investment in Russia and Foreign Legal Advice*, 3 OIL, GAS & ENERGY LAW INTELLIGENCE (2005).

22. Concerning the Introduction of Amendments to Legislative Acts of the Russian Federation and the Annulment of Certain Legislative Acts of the Russian Federation in Connection With the Adoption of the Federal Laws “Concerning the Introduction of Amendments and Additions to the Federal Law ‘Concerning the General Principles of the Organization of Legislative (Representative) and Executive State Bodies of Constituent Entities of the Russian Federation’” and “Concerning the General Principles of the Organization of Local Government in the Russian Federation,” N 122-FZ Aug 22, 2004 (section 13)

23. Victor Somov, *Tug of War: Moscow and Provinces Fight for Control of Mineral Resources*, RUSENERGY, Sept. 22, 2005.

24. UNCITRAL, LEGISLATIVE GUIDE ON PRIVATELY FINANCED INFRASTRUCTURE PROJECTS 140-43 (United Nations 2001).

25. This is according to the Director of Project Finance of a Major UK bank (oil and gas) in a private conversation in December of 2005.

The PSA legislation that was put in place on December 19, 1995, during the term of President Boris Yeltsin, underwent revision in 1999, after which, in 2000, President Vladimir Putin expressed a view that PSAs were a beneficial arrangement for Russia.²⁶ He transferred the responsibility for the PSA regime to the Ministry for Economic Development and Trade,²⁷ where it stalled. The so-called “killer amendments” in 2003 clearly outlined a new position in opposition to PSAs when Russia’s Ministry of Finance proposed a series of amendments to the Tax Code, PSA law, and other legislative documents.²⁸ The amendments in essence restricted production sharing and made potential PSA operators either switch to the regular fiscal system or abandon the licenses altogether. It achieved this by stating that PSAs will only be offered when fields cannot be developed under a normal licensing regime, as confirmed by the outcome of an auction, and the production of such field is deemed necessary by the government. In order to demonstrate the impossibility of production under the license regime, a series of hurdles have been installed for the investor.²⁹ It was these hurdles—namely demands that the investor demonstrate implausibility of using a Licensing System—that in essence killed the PSA. Finally, later that year Prime Minister Mikhail Kasyanov announced that the role of PSAs in Russia had been reconsidered and would only be used for remote regions. Hence the very mechanism that would have served to attract foreign direct investment (FDI) came to a grinding halt. The apparent reason for this policy turnaround served to upset potential investors even further. It was easy to see that the PSAs regime came under heavy fire from both media and several domestic oil companies—namely Yukos and Sibneft (Yukos-Sibneft following a subsequent merger)—with Mikhail Khodorkovsky emerging as a leading opponent. Khodorkovsky was the owner of Yukos oil company and Russia’s richest man as well as arguably the most powerful oligarch, until his arrest in October 2003.³⁰ His arguments, supported by the media,³¹ that the PSAs were counter to the national interest because of relatively low tax paid years in arrears and an incentive to increase production beyond the optimum level, have been lampooned by foreign investors, claiming it to be no more than a mechanism to

26. Marina Volkova, *Putin Gives Hope*, NAZAVISSIMAYA GAZETTA, Sept. 5, 2000, available at http://www.ng.ru/politics/2000-09-05/3_sahalin.html (title translated from Russian); M. Klasson, *Subsoil Doesn't Seem to Share*, THE MOSCOW NEWS, Feb. 14, 2001, available at <http://www.businesspress.ru/newspaper/article.asp?mld=40&aid=54175> (title translated from Russian).

27. The Ministry is headed by German Gref. It has, however, been subsequently moved to another government organization.

28. Concerning the Introduction of an Addition to Part Two of the Tax Code of the Russian Federation and the Introduction of Amendments and Additions to Certain Other Legislative Acts of The Russian Federation and the Annulment of Certain Legislative Acts of the Russian Federation, No. 65-FZ (June 6, 2003).

29. *Tail Whacks Dog*, *supra* note 20.

30. *Profile: Mikhail Khodorkovsky*, BBC NEWS, available at <http://news.bbc.co.uk/1/hi/business/3213505.stm>.

31. Andrei Konoplianik, *The Fight Against PSAs In Russia: Who is to Benefit and Why Not the State?*, 10 INT'L ENERGY L. & TAX'N REV. 277 (2003).

increase the capitalization of Russian firms³² as well as their competitive advantage.³³

One of the main features of the PSA is that the E&P risk is borne solely by the investor, and the host government compensates the investor by reimbursing the costs after the start of production from profits designated as Cost Oil, often providing a favorable tax rate. This may be an appropriate system for countries with limited access to funds and high E&P risks, but Gazprom has access to large credit lines and there is minimal E&P risk as investors are, in most cases, invited into fields with proved and probable reserves. In the case where the required investment is substantial or the production process is highly complex, the government may introduce a PSA and indeed there has been some indication that PSAs will be considered for the Shtokman condensate field in the Barents Sea.³⁴ This is in line with the aforementioned position that PSAs will only be used in remote regions. It seems that when technology transfer is essential, the government may be convinced to introduce a PSA, to attract the necessary investment and expertise. Yet since the announcement by Gazprom that it will proceed with this field development without foreign partners,³⁵ the likelihood of the application of the PSA concept seems very doubtful indeed. If investors were not able to acquire personal fields and they did not want a joint venture with Gazprom, they were encouraged to invest in the Russian companies; this was shown to be true by the subsequent merger of BP and TNK in June 2003. This strategy has also become obsolete, largely due to the difficulties seen aligning state and foreign shareholder's interest. Instead another type of joint venture emerged, predominantly due to the windfall profits experienced by Gazprom and a new strategy employed to acquire European downstream assets. This gave birth to the upstream-downstream swap (UDS),³⁶ such as Gazprom's agreement with Germany's biggest oil and gas producer Wintershall,³⁷ which allowed the company to gain a share in a production license in Russia, in exchange for allowing Gazprom ownership of some of Germany's local distribution network by increasing its stake in Wingas,³⁸ a natural gas distribution company in Germany. Gazprom is set to acquire the remaining major oil producing companies such as Lukoil and Surgutneftegas, with the final aim of creating a trans-national energy giant.

III. THIRD PARTY ACCESS AND COMMON CARRIAGE

Third party access and common carriage are terms which are employed in the pipeline industry to describe the type of access regime that exists for the

32. DR. MARTHA OLCOTT, *THE ENERGY DIMENSION IN RUSSIAN GLOBAL STRATEGY: VLADIMIR PUTIN AND THE GEOPOLITICS OF OIL* (James A Baker III Institute for Public Policy of Rice Univ. 2004).

33. Andrei Konoplianiuk, *PSA Debate Not Over*, PETROLEUM ECON. (July 2003).

34. The Shtokman field has probable reserves of 3.7 trillion cubic meters (130 trillion cubic feet) of gas and 30.97 million MT of condensate which may require up to US \$10 billion to develop. Judy Clark & Nina Rach, *Gazprom to Develop Shtokman Alone, Pipe Gas to Europe*, 104.39 OIL & GAS J. (Oct. 16, 2006).

35. Neil Buckley & Carola Hoyos, *Gazprom Dashes Hopes of Foreign Stakes in Shtokman*, FIN. TIMES, Oct. 6, 2006.

36. Y. Grigoryev, *Today or Not Today: Deregulating the Russian Gas Sector*, ENERGY POL'Y (2006).

37. Wintershall is a wholly owned subsidiary of BASF, the world's biggest chemical company.

38. Wingas is a joint venture between Wintershall and Gazprom.

pipelines. They came about to protect independent producers from the monopoly power of the pipeline operators/owners. Third party access (TPA) describes a regime where indiscriminate access must be granted to an independent (from the operator) gas company wishing to use the pipeline, so long as there is spare capacity (and gas meets pipeline specification). This differs from common carriage regime which forces the operator to create capacity for the applicant by reducing the throughput of other parties to such an extent as every party is granted access. The volume of throughput per entity is calculated individually but the formula must be equitable, indiscriminate, and wholly transparent.

Foreign energy companies, NGOs, and academic institutions have been calling for a liberalization of the Russian gas industry. They call for unobstructed access to Russian gas reserves and that access should be made available to foreign or independent firms to enter the gas sector. Even if access to reserves is given, the problem of having unobstructed access to the pipeline network as well as export channels prohibits investment into large deposits by independent companies. The Russo-British joint venture TNK-BP has been unable to find a market for the Kovykta gas field because no pipelines exist to take the gas to the Asian market, no permission is being granted to construct such lines, and the domestic gas prices would not yield a sufficient return on the investment needed to develop the field. The demand to allow free access to the pipeline network is often tied into the foreign direct investment argument; i.e., investment that is so necessary will not flow into the industry until conditions are more favorable, but is also the fundamental demand of the Washington Consensus³⁹—used in the loose meaning of the term to imply a set of policy recommendations issued by the International Financial Institutions such as the World Bank and the IMF⁴⁰ to developing countries. Because independents are free to own gas resources, and indeed they do,⁴¹ the crux of the matter lies in access to the pipeline network which is currently owned by Gazprom.

Gazprom is a financially vertically integrated company and holds a monopoly on transport, through a wholly owned subsidiary, Transgaz, compelling other gas producers to sell to Gazprom at prices regulated by the incumbent, often below an economically viable price.⁴² As a result, in 1997, after a request from the IMF, the Russian government introduced a common carrier principle on the gas pipeline network;⁴³ however, with no effective body to enforce this, implementation of this provision was left to the goodwill of

39. Christian von Hirschhausen & Hella Engerer, *Post-Soviet Gas Sector Restructuring in the CIS: A Political Economy Approach*, 26 ENERGY POL'Y 1113 (1998), http://www.tu-dresden.de/www/bleeg/publications/hirschhausen_engerer_energy_policy_gas_cis.pdf [hereinafter *Post-Soviet Gas*].

40. John Williamson, *What Should the World Bank Think About the Washington Consensus?*, 15 THE WORLD BANK RES. OBSERVER 251 (Aug. 2000).

41. Independent producers own 20.9% of total Russian reserves. CENTER FOR ENERGY PETROLEUM & MINERAL LAW AND POLICY, *SHOULD THE RUSSIAN GAS SECTOR BE DEREGULATED?* 15 (2005).

42. Catherine Locatelli, *The Viability of Deregulation in the Russian Gas Industry*, 28 J. OF ENERGY & DEV. 221 (2003) [hereinafter *Viability of Deregulation*].

43. Common carriage was changed to TPA a year later.

Gazprom management.⁴⁴ What is required here is that there exists a transparent tariff system, an open third party access or common carriage policy, and an efficient mechanism to settle disputes in a fair and timely fashion.

Access to independent producers has been open and indeed over twenty percent of gas reserves in Russia are currently owned by independent producers. The regulator (Federal Tariff Service) has clearly outlined the TPA rules for access to the UGS which have been incorporated into the Gas Supply Law on March 31, 1999.⁴⁵ The tariff for the transit of gas is also published⁴⁶ and incorporated into Federal Law. Despite criticism by certain analysts that Gazprom does not allow access to the pipelines, thirty-one independent producers successfully shipped 114.9 BCM (\approx 4 trillion cubic feet) in 2005. Since the TPA regime was introduced in 1998,⁴⁷ a total of 700 BCM has been shipped through the UGS by independent suppliers. Due to the previous de facto monopoly on export, independent producers marketed their gas domestically, or shipped Central Asian gas to other states through Russia.⁴⁸ The low regulated price in the domestic market did not provide an incentive for many producers to enter this market. Seeking to simplify access to its gas mains for those producers that are interested, Gazprom will, in the first two quarters of 2007, finalize the drafting of its new internal Policy Governing the Preparation and Issuance of Permits to Independent Entities Seeking Access to Gazprom's Gas Transportation System.⁴⁹ A special government panel oversees the fair allocation of pipeline capacity to independent suppliers and their compliance with the terms and conditions to Gazprom's network, with any decisions by this panel being binding for all the parties concerned. This panel ensures that Gazprom will grant independent gas producers access to the pipeline system if:

- pipe capacity is available for the period when the producer intends to supply gas;
- their gas meets the required quality level and technical specifications; and
- the producer has the pipe capacity to funnel gas into the UGS, and city gate facilities⁵⁰ to deliver from UGS to consumers, all fitted with gas testing and flow control facilities.

44. *Viability of Deregulation*, *supra* note 42. In 1998, six independent producers shipped 28.2 BCM. Yuli Grigoryev, *Should the Russian Gas Sector be Deregulated?*, Presentation to the Expert's Forum of the 23rd World Gas Conference in Amsterdam, Holland (June 2006).

45. On Gas Supplies in the Russian Federation, N 69-FZ (Mar. 31, 1999).

46. On the confirmation of tariffs for the transportation of gas along the transmission system of OAO Gazprom for independent organizations, No. 474-3/2 (Dec. 26, 2006). The tariff set by the regulator for the transport of natural gas via the UGS is currently 26.68 Russian Rubles (c. US\$1) per TCM per 100 km when exporting and 13.80 Russian Rubles per TCM per 100 km for the domestic market.

47. An additional clause was added in 1998, stating that access was conditional on spare capacity and thereby changing the regime from common carriage to TPA.

48. ZEYNO BARAN, *ENERGY REFORM IN THE UKRAINE: ISSUES AND RECOMMENDATIONS* (The Nixon Center, 2005), <http://www.nixoncenter.org/ukraine-energy.pdf>. One example of this is the shipment of gas from Turkmenistan to Ukraine via Russia. This activity has traditionally been carried out by independent firms such as Itera, then EuralTransGas, and recently RosUkrEnergo.

49. Gazprom in Questions and Answers, <http://eng.gazpromquestions.ru/page14.shtml>.

50. City gate stations are receiving terminals or facilities where a distributor receives high-pressure gas from the transmission network. World LNG/GTL Review, Maps & Glossary, http://www.lngexpress.com/lngrev/maps_gloss.asp#c.

IV. EXPORT CONTRACTS

Europe has a sophisticated transmission system whose development has gone hand-in-hand with long-term import agreements. A key part of the European gas transportation network is the Interconnector, which, at the end of 1998, integrated the UK and Ireland into mainland Europe.⁵¹ The liberalization of the European gas market, through EU Directives,⁵² aimed at removing the monopoly power of pipeline owners and to allow indiscriminate access to new entrants or other existing gas producers.⁵³ Pipeline capacity was largely committed to suppliers that had contracted into long-term take-or-pay agreements, predominantly contracts with the former Soviet Union. Gazprom has held a de facto monopoly on export, through a wholly owned subsidiary, Gazpromexport (formally known as Gazexport), which took over all former Soviet Union intergovernmental long term export contracts. Since all the export contracts had been consolidated into this company, which also holds an existing monopoly on transport, it was impossible for other producers to enter the export market without the permission of the government⁵⁴ and to create a spot market parallel to the long-term contracts. Since the enactment of the new Gas Export Law, of July 2006,⁵⁵ the export monopoly has been solidified in the legal code. Article 3 of the said law stipulates that the exclusive right to export natural gas is granted to the owner of the UGS or a wholly owned subsidiary. The law does not apply however to gas exported under PSAs signed before this law came into force.

An interesting parallel can be drawn with an existing monopoly in the crude oil pipelines, with state-owned OAO Transneft owning all the transport capacity. Independent producers are free to book capacity with Transneft, which unlike Gazprom, acts solely as a pipeline operator and holds no production interest. It is, however, also regulated by the FTS under a TPA regime, but independent oil producers have long complained about a lack of transparency in the pipeline capacity quota allocation mechanism.⁵⁶

Long-term contracts have played an important role in the development of the European gas market by providing a risk sharing arrangement between producers and buyers, enabling important new investment into production and infrastructure projects to be undertaken. The European communities realize that their growing gas needs, the bulk of which are met with Russian gas, can only be adequately supplied if Russia is able to invest in new gas fields and pipeline construction. They understand that if gas is supplied exclusively through spot deals, gas suppliers, Gazprom included, will not be willing to shoulder the risks

51. Burckhard Bergmann, *Supply Prospects and Network Integration in the European Natural Gas Sector*, 22 OPEC REV. 159 (June 1998).

52. See, e.g., Council Directive 2003/55, 2003 O.J. (176) (repealing Council Directive (EC) No. 98/30).

53. There has been mixed results with certain countries, such as Germany, remaining largely uncompetitive.

54. David G. Victor & Nadejda Victor, *Program on Energy and Sustainable Development, Belarus Connection: Exporting Gas to Germany and Poland* (Program on Energy and Sustainable Development Working Paper No. 26, 2004), available at <http://pesd.stanford.edu/publications/>.

55. On Export of Natural Gas, N 117-FZ (July 18, 2006).

56. C. Locatelli, *The Russian Oil Industry Restructuration: Towards the Emergence of Western Type Enterprises?*, 27 ENERGY POL'Y 435, 449-50 (Aug. 1999).

associated with multi-billion dollar investments with long payback periods and high quantity risk. Thus European importers are committed to their long-term agreements with Gazprom. Gaz de France, for one, has renewed its gas import contract until 2015. In order to secure its market, Gazprom has initiated the acquisition of downstream assets, whether by the aforementioned UDS or via debt-for-equity swaps (Hungary) or equity-for-price agreements (Armenia, Belarus) where control of the transmission network is given to Gazprom in exchange, predominantly, for a lower price of gas. The counterargument to reliance on long-term arrangements as the way to achieve supply security is that liberalization of entry barriers better promotes choice and free movement of gas, and consequently, supply diversity and flexibility which, in turn, enhances security. In this argument, it is market rigidity and lack of access to networks at reasonable cost which endangers security.⁵⁷

One must not look at liberalization, however, as a panacea. The UK has been a liberalization champion, the question becoming more pertinent after it became a net-importer of gas in 2005, whilst the continued gas price rise over the past two years has been blamed on the non-liberalized European market, where certain suppliers have been using their market power to artificially increase the price of gas in the UK.⁵⁸ In fact, the idea that a liberalized market will provide greater security of supply to the UK was voiced by the government in 2002.⁵⁹ But even though the UK has been a completely liberalized gas market for some years now, some seventy percent of gas supplies are still sold under long-term contracts. These long-term contracts ensure a stable supply yet create barriers to entry for new player wishing to enter the market. Unless the whole European continent moves towards a fully liberalized and competitive market, single liberalized demand centers such as the UK will be affected as a result of the concentration of power further up the supply network. Saying that, these long-term contracts are likely to undergo an evolution with certain traditional terms being re-examined and renegotiated. Some of the centrally important clauses such as duration/period which will see a decrease from the frequently encountered fifteen to twenty-five years to perhaps eight to twelve years in length. This will be in part due to the contract volumes also decreasing with new project supplying between three and ten BCM annually as opposed to the traditional ten to twenty BCM. Take-or-pay obligations will also become less stringent, with increasing “carry-forward” and “make-up” rights. Index or commodity pricing, although very common, is being replaced in highly competitive markets by daily pricing derived from a liquid short term market, such as the UK National Balancing Point (or Henry Hub in the U.S.).⁶⁰ Certainly this trend will apply to some of the new export contracts yet others, which intend to supply large volumes and require substantial investment, will be

57. EU Commission Green Paper, *A European Strategy for Sustainable, Competitive and Secure Energy*, at 5, SEC 317/2 (Mar. 3, 2006), http://ec.europa.eu/energy/green-paperenergy/doc/2006_03_08_gp_document_en.pdf.

58. UK Channel 4: *The Gas Puzzle* (Channel 4 news broadcast Jan. 27, 2006), available at http://www.channel4.com/news/video/video_archive/jan_2006/jan_27.html.

59. Press Release, UK Cabinet Office, Prime Minister Welcomes Energy Review (Feb. 14, 2002), available at <http://www.number10.gov.uk/output/Page2542.asp>.

60. Jonathan Stern, *UK Gas Security: Time to Get Serious*, 32 ENERGY POL'Y 1967 (Nov. 2004).

done in part on long term contracts. Projects such as the North European Gas Pipeline (NEGP, also known as Nord Stream) will supply Europe with up to fifty-five BCM annually. It will run from Russia to Germany under the Baltic Sea, bypassing many of the transit states and intermediaries.

Gazprom, the main shareholder in the pipeline project, expects to use the pipeline to capture about twenty percent of the UK market. This project falls under the provision that has been made in Article 22 of the 2003 "Acceleration Directive" for major new gas infrastructures to be exempt from the access requirements of the Directive under certain conditions, having been adopted by the EU-Russia Energy Partnership as a "project of European Interest."⁶¹ This is significant because it confirms that the EU understands the importance of major supply projects and is willing to exempt them from certain access demands that are being imposed on existing infrastructure and projects. In demanding that Russia liberalize its gas industry, the EU is willing to accept that a totally liberalized market will not be the ultimate solution.

V. TRANSIT STATES

A transit state is a term used to describe a country which acts as a corridor for pipelines between a producer and a consumer. Because of geography, it is sometimes impossible to connect two countries with a pipeline without passing through the territory of a third. Indeed sometimes it is impossible to connect a demand and supply center because of political issues with such a transit state. For example the Turkmenistan-Afghanistan-Pakistan (TAP) pipeline project due to instability in Afghanistan, or the Iran-Pakistan-India (IPI) pipeline because of tension between India and Pakistan.

The issue of transit states has been very topical for Russia, for oil and for gas. In the case of transit pipelines, the transit state is in a position to demand higher transit fees or lower cost of off-take. The bargaining power of the transit state increases after the pipeline has been built, and the unilateral action by the transit state to renegotiate transit terms became known as the obsolescing bargain after it was originally coined by Raymond Vernon in 1973.⁶² It has always been thought by economists that the bargaining position of the transit state is stronger for oil pipelines due to the relative monetary value of crude oil as compared to natural gas.⁶³

Russia has been in such a situation for some time. When the first gas pipelines were being extended from Russia to Western Europe, West Germany wanted to bypass East Germany, and therefore the pipeline was constructed through the Ukraine. This did not cause any concern because Ukraine was part of the Soviet Union. Once the Soviet Union collapsed, Ukraine became an independent state with very easy access to Russian gas but relatively little

61. *Id.*

62. RAYMOND VERNON, *SOVEREIGNTY AT BAY: THE MULTINATIONAL SPREAD OF US ENTERPRISES* (Basic Books 1971).

63. Paul Stevens, *Pipelines or Pipedreams? Lessons from the History of Arab Transit Pipelines*, 54-2 MIDDLE EAST JOURNAL 224 (Spring 2000).

reserves of its own⁶⁴ and an inability to sustain sufficiently high levels of production.⁶⁵ Russia has always been a very reliable supplier of gas to Europe, and this reputation was an important part of the relationship that was established and that continues today. Despite a series of media reports claiming the opposite, members of the EU still “acknowledge that Russia, and Gazprom in particular, have been, and remain, a reliable supplier of natural gas to the European Union.”⁶⁶ Algeria, on the other hand, interrupted LNG shipments to the U.S. in the early eighties in an attempt to raise prices, with the final outcome being the boycott of Algerian gas to the U.S. and a substantial loss of revenue to Algeria.

Unlike oil, gas is used directly in heating and cooking appliances in Europe, as well as in the traditional generation of heat and electricity. Unlike oil, which is sold in a world market, natural gas markets are regional markets, as it is prohibitively expensive to transport natural gas globally,⁶⁷ especially for countries which do not already have liquefaction facilities to send gas as LNG. A sudden cessation of gas deliveries for a prolonged period could have tremendously detrimental effects for a dependent importer. Until December 2005, the transit situation remained mainly an internal Gazprom concern—Ukraine was withholding payment for consumed gas but not affecting the Europe-bound supply. In December Gazprom announced a shift to a market price for gas, substantially increasing Ukraine’s gas bill (the price prior to this was US\$50 per TCM) which Ukraine refused to accept.⁶⁸ In response to this, Russia cut off the gas supply to Ukraine (as threatened), while Ukraine withdrew Europe-bound gas for its own consumption (also as threatened) with the result being a drop in the pipeline pressure and deliveries to Europe arriving up to thirty percent below the contract volume.⁶⁹ Gazprom compensated for the loss but continued to demand that Ukraine pay \$230 U.S. dollars per TCM. An agreement on price was reached⁷⁰ on January 4, 2005, when a Swiss intermediary, RosUkrEnergo, intervened and was able to sell the gas to Ukraine at \$95 per TCM by buying Russian gas at \$230 per TCM and mixing the expensive Russian supply with cheap gas from Central Asia.⁷¹ But because the

64. See BRITISH PETROLEUM, STATISTICAL REVIEW OF WORLD ENERGY 2006 (2006), <http://www.bp.com/productlanding.do?categoryId=6842&contentId=7021390>. Ukraine’s natural gas reserves stood at 39 trillion cubic feet, compared to Russia’s 1,688 trillion cubic feet. *Id.*

65. *Post-Soviet Gas*, *supra* note 39.

66. Press Release, Commissioner Piebalgs and Minister Bartenstein Clarify Key Points of the EU-Russia Gas Trade Relationship in a Letter to the Russian Government (May 2, 2006), *available at* <http://europa.eu/rapid/pressReleaseesAction.do?reference=IP/06/556&format=PDF&aged=1&language=EN&guiLanguage=en>.

67. Although the LNG trade is growing, it currently constitutes just a small portion of world gas market and is expected to reach 15% by 2030. See EXXONMOBIL, THE OUTLOOK FOR ENERGY: A VIEW TO 2030, <http://www.exxonmobil.com/Corporate/Citizenship/Imports/EnergyOutlook06/index.html>.

68. Isabel Gorst, *Gas-Price Spat Alarms West*, PETROLEUM ECON. (Feb. 2006).

69. Dan Bilefsky & Cater Dougherty, *As Supplies Drop, EU Officials Appeal to Moscow*, INT’L HERALD TRIB., Jan. 3, 2006, *available at* <http://www.ihf.com/articles/2006/01/02/news/eu.php>.

70. Thomas Catan & Tom Warner, *Russia and Ukraine Reach Gas Agreement*, FIN. TIMES, Jan. 3, 2006, *available at* <http://www.ft.com/cms/s/6ea768c4-7c8c-11da-936a-0000779e2340.html>.

71. Ethan Wilensky-Lanford, *Ukraine Deal Clouded by Turkmen Secrecy*, INT’L HERALD TRIB., Jan. 10, 2006, *available at* <http://www.ihf.com/articles/2006/01/10/business/gas.php>.

beneficiary owners of RosUkrEnerg (RUE) remained unknown at that stage,⁷² the Ukrainian parliament ruled that the signing of such an agreement⁷³ was against national interest, sacking the Prime Minister and the Fuel and Energy Minister.

As such, there was no minister in office required to sign the contract; the RUE deal seems unlikely to be signed for some time. In the end, RUE remained as the principal supplier of gas to the Ukraine. Further complications followed when cold weather descended on Russia and Eastern Europe. Russia began to hold back on exports to meet the increased domestic demand, and Ukraine began to consume more than the allocated quota, exceeding contract terms and leaving Europe with insufficient gas deliveries from Russia. Italy was worst hit with emergency measures put in place by the Italian Cabinet of Ministers.

Ukraine remains in a very powerful position because eighty percent of Russian gas to Europe travels through this route, namely in the Brotherhood pipeline. To build an alternative route would more than double the average cost of the pipeline, and thus this option is usually avoided. Russia has, however, decided to build an alternative route to bypass all the transit states and problems associated with them. The NEGP or "Nord Stream" will deliver Russian gas directly to West Europe. Until this pipeline comes online in 2010, Russia will need to continue finding ways to ensure uninterrupted and timely supplies of contracted gas reach Europe in the future.

VI. PROPOSED NEW SUBSOIL LAW

As previously mentioned, the Subsoil Law is one of two operating legal frameworks in Russia. It regulates the relationship between the state and the subsoil user, including all minerals and hydrocarbons included therein. The current Russian Subsoil Law was established in 1992 and underwent some major changes in 1995. Some ten years later, a new subsoil law has been drafted by the Ministry of Natural Resources and submitted to the State of Duma in June of 2005. Some of the major proposed changes are outlined and discussed below.

The introduction of civil law contract-based relationships for those wishing to carry out mineral and hydrocarbon exploration and production activities is perhaps the most important change to emerge. The substance of this change allows for a better protection of investors' rights since it provides more equality in the relationship between the state and the investor, where, as parties to a contract, they proceed on an equal relationship. In the existing administrative legal regime, the state retains priority and sovereignty. Furthermore, the licenses that are currently awarded cannot be recognized as property rights because their legal status is unclear,⁷⁴ which has a detrimental effect on the availability of project finance. The new contract makes way for clearly defined property rights recognizable in the international capital markets. An early draft of the new law expressed the view that the government may not reconsider or terminate agreed-upon contracts without the permission of the courts; however, this somewhat

72. Banking confidentiality rules prevent the beneficiaries of RosUkrEnerg from being disclosed without their approval.

73. For a copy of the agreement in English, see Appendix 1.

74. These are known as "special government permissions" in the current version of the Subsoil Law.

important concept was removed from the latest draft of the proposed law in early 2006.

Although the license may be replaced, it has not been done away with altogether. Instead, existing licenses will remain to complement (or impede) the introduction of a new type of contract—the “subsoil use contract”—which, as it happens, is neither defined in section II of the Russian Civil Code nor in the General part of the Code. To complicate matters further, there is no prohibition on the issue of new licenses and the creating of a special chapter to govern old licenses. With no experience in implementing the new type of contract, and a text suggesting a new regime where the civil and license systems co-exist, there is little surprise why some investors are puzzled by the proposed plan.⁷⁵ How exactly these two forms may co-exist and which will be applicable where, has not been clarified at all.

The other major change, which has seen wide media coverage, is the restriction it places on foreign investors. What has been somewhat overlooked⁷⁶ by reporters is that the provision for such restriction is only applicable to new arrangements, and thus licenses or PSAs issued prior to this law becoming effective are entitled to continue their operations on the terms granted to them by those agreements. But the law retains the Government’s right to block the participation of foreign entities⁷⁷ in any future auction without justification and on a case by case basis. Because the emphasis is made on an ownership structure where the foreign investor holds over fifty percent of the share capital—i.e., “fifty percent and over” as opposed to “under fifty percent” as was previously expected—it places no restriction on such “fifty-fifty” entities as TNK-BP where BP owns fifty percent of the joint-venture.

The draft of the proposed law does not clarify however in which circumstances such restrictions would apply. It was widely expected for the government to publish criteria from which restricted fields may be identified (e.g., proved and probable reserves of fifty million tons of oil, one-hundred bcm of gas, or a specific catalogue of restricted fields or regions). The government has indicated that twenty-six gas fields and ten oil fields will be considered strategic and will be incorporated into law,⁷⁸ while a threshold will also exist that will require special consideration by the government to allow foreign investment. This threshold was identified by Deputy Natural Resources Minister Anatoly Temkin in early June as seventy-five bcm for gas (down from one tcm,

75. VLADIMIR MILOV, INST. OF ENERGY POL’Y, *THE NEW RUSSIAN SUBSOIL LAW AND ITS IMPLICATIONS ON OIL & GAS UPSTREAM BUSINESS AND FOREIGN INVESTMENT* 5 (June 2005), <http://www.energypolicy.ru/files/Subsoil-IEP%20June%202005.pdf>.

76. Arkady Ostrovsky, *Russia Further Restricts Foreign Oil Groups*, FIN. TIMES, June 13, 2006, available at http://www.ft.com/cms/s/90d25580-fb12-11da-b4d0-0000779e2340_i_rssPage=7c2e2eb0-cbe5-11d7-81c6-0820abe49a01.html.

77. The actual definition extends to foreign individuals, individuals without citizenship, and foreign legal entities controlling either over 50% of the voting rights, share capital, rights to appoint a single executive body, or more than 50% of the executive board.

78. Alex Nicholson, *Russian Cabinet Approves Draft Bill on Foreign Investment in Strategic Sector*, INT’L HERALD TRIB., Jan. 31, 2007, available at <http://www.ihf.com/articles/ap/2007/01/31/business/EU-FIN-Russia-Foreign-Investors.php>.

hence a considerable drop) and 150 million tons of oil.⁷⁹ This has further been reduced to fifty bcm for gas fields and seventy million tons for oil fields.

The law introduces a new provision strengthening the right of the government to appoint a temporary operator for a period of up to one year in order to prevent subsoil damage if the license is revoked. This provision allowing operator replacement by a temporary operator appointed by the federal government—without an open or competitive process—creates a substantial opportunity for abuse. It remains to be seen whether this mechanism will be used as a political tool or worse, as an instrument of corruption.

Some other points that have arisen out of the new draft of the proposed law allow for the securitization or transfer to third parties of the property rights (to be entered into the Unified State Property Rights Register) assigned by new contract rights. Furthermore the bidding procedure is improved, moving from a “contest” system to a more transparent auction process. The proposed law also grants the right to exploration license holders to apply without an auction for a development and production license in the case of commercial discovery of new reserves. It also stipulates that the ownership of the produced hydrocarbons belong to the investor and not the government (this is unclear in the present system). It is worth noting, however, that the above changes will be supplemented by an additional law for offshore fields and those on the continental shelf.⁸⁰

VII. CONCLUSION

Legal issues affecting the Russian gas industry are very wide-ranging, from major international disputes over the price and delivery of gas, to legal regimes affecting the rights of foreign investors, to domestic law concerning the obligations of Russian pipelines to transport gas for their competitors. All of the issues seem to stem from two factors: Russia’s vast resources of natural gas and the desire of the multinational firms to participate in the profits associated; and Europe’s growing dependence on gas imports. The former urges discussion on foreign direct investment into production and infrastructure and the transfer of technology, the latter on liberalization of markets, diversification of sources and security of supply. Although the legal framework surrounding the natural resources sector of the Russian economy has always been a hindrance to foreign investors because it was often complicated, discriminatory, and constantly changing, recent stability has been warmly welcomed by the international community. The reward has been a steady flow of capital into the country. Yet the natural gas sector remains a strategic sector and has the commanded special attention of the Kremlin. But more due to necessity rather than desire, there has been some noteworthy development for this sector recently. The Russian Energy Minister Viktor Khristenko announced the government may consider PSAs for Shtokman field development. This may become a recurrent occurrence if more gas fields are developed offshore.

79. *Big Deposits/Fields to Become Strategic*, KOMMERS., June 6, 2006, available at <http://www.kommersant.com/page.asp?id=679609>.

80. Continental Shelf of the Russian Federation (adopted by the State Duma Oct. 25, 1995), http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/RUS_1995_Law.pdf.

The recent events in Ukraine have been treated as a “wake up call” by the EU, with members recommending a review of the current energy policy. With the exception of the Nordstream, there is commercial pressure on Gazprom to modify the terms for the next generation of long-term contracts. Europe’s liberalization effort may require a greater diversification of gas imports which may erode Gazprom’s market power. There seems to be a greater number of independent firms using the pipeline network each year, suggesting that the TPA regime is becoming more transparent and better regulated.

These issues are of interest to the household gas user in Europe as well as the multinationals in the U.S. and their development bears following. There has never been a time when legal issues in the petroleum industry have been so readily discussed in the public forum. Finally, on the issue of the proposed new Subsoil Law, certainly some changes have been made to facilitate the involvement of the foreign investor. However, remaining cautiously receptive, the Russian government has been careful to retain a number of clauses that will ensure that control of the industry remains firmly in its hands, albeit at the risk of paying financial damages awarded by the courts. The government has been careful to retain the rights issued previously to investors and has moved to a more transparent and familiar system for the international community. Whether the law will pass Duma approval without any other changes, and how fairly it is implemented, will become apparent soon enough.

VIII.APPENDIX 1

Agreement Regulating Relations in the Gas Sphere Moscow, 4 January 2006.

The open joint stock company (OAO) “Gazprom” (Russian Federation), subsequently referred to as Gazprom, represented by Management Chairman A. B. Miller acting by the Statute, on the one Side, The National joint stock company “Naftohaz of Ukraine (Ukraine), subsequently referred to as Naftogaz of Ukraine, represented by Management Chairman O. G. Ivchenko, acting by the Statute, on the other Side, And the Company “RosUkrEnergo” (Switzerland), subsequently referred to as RosUkrEnergo, represented by Executive Directors O. A. Pal’chikov and K. A. Chuichenko, acting by the Constitutive Agreement, Referred all together as the Parties, Seeking to reach a mutually beneficial agreement on the regulation of relations in the gas sphere, have worked out the present Agreement, agreeing on the following:

1. The Parties agree that the price of transit of natural gas, which belongs to Gazprom (Ltd. Gazexport) and RosUkrEnergo, across the territory of Ukraine and the Russian Federation is to be set at US \$1.60 per 1000 cubic meters per each 100 km of transit until 01.01.2011.

2. The Parties appoint RosUkrEnergo as the supplier of natural gas to Ukraine. Starting from 1 January 2006, Gazprom does not supply Russian natural gas to Ukraine and Naftohaz of Ukraine does not export natural gas that arrives from the Russian Federation.

3. Naftohaz of Ukraine and RosUkrEnergo are to found a joint venture on the basis of cash deposits and other assets as soon as possible and not later than 1 February 2006 in order to provide Russian natural gas for consumption at Ukraine’s domestic market.

4. The Parties are to work out necessary agreements/contracts (and are to assure working out of necessary agreements/contracts) creating, starting from 1 January 2006, the commodity balance of gas of company RosUkrEnergo to cover the following volumes:

Purchases:

- 41 billion cubic meters of Turkmen gas that is to be purchased from Ltd. Gazexport and Naftogaz of Ukraine, which is at their disposal.

- Up to 7 billion cubic meters of Uzbek gas that is to be purchased from Ltd. Gazexport in order to, specifically, swap existing gas deliveries in the South Caucasus.

- Up to 8 billion cubic meters of Kazakh gas that is to be purchased from Ltd. Gazexport in order to, specifically, swap existing gas deliveries in the South Caucasus.

- Up to 17 billion cubic meters of Russian gas that is to be purchased from OAO Gazprom at the price determined by the formula based on the base price of gas (Ro= US \$ 230 per 1000 cubic meters).

On sales:

- In 2006, 34 billion cubic meters of gas to be sold at the price of US \$95 per 1000 cubic meters of gas, which is valid for the first six months of 2006 to the joint venture created in accordance with point 3 of the present Agreement (until the joint venture is created, until 1 February 2006 to be sold to Naftogaz) for the subsequent sale for consumption in Ukraine's domestic market without re-export rights.

- Starting from 2007, up to 58 billion cubic meters of gas to be sold to the joint venture created in accordance with point 3 of the present Agreement for subsequent sale for consumption in Ukraine's domestic market without re-export rights.

- 15 billion cubic meters of gas to be forwarded for export for joint programs with Gazprom.

5. The rate of pay for transit and the price of natural gas determined by the present Agreement can be changed only by mutual agreement of the Parties.

Addresses of the Parties

OAO Gazprom: 16, Nametkin Str, Moscow, Russia, 117997

NJSC Naftohaz of Ukraine: 6, Bogdan Khmel'nitsky St., Kyiv, 01001

Company RosUkrEnergo A": 7 Bahnhofstrasse, Zug, Switzerland

Signed by:

A. B. Miller on behalf of OAO Gazprom

A. G. Ivchenko on behalf of NJSC Naftohaz of Ukraine

O. A. Pal'chikov, K. A. Chuichenko on behalf of Company RosUkrEnergo AG

IX. APPENDIX 2

RUSSIAN RESERVES SYSTEM

The Russian reserves system is based solely on the analysis of geological attributes. Explored reserves are represented by categories A, B, and C1; preliminary estimated reserves are represented by category C2; potential

resources are represented by category C3; and forecasted resources are represented by categories D1 and D2. Natural gas reserves in categories A, B and C1 are considered to be fully extractable. For reserves of oil and gas condensate, a predicated coefficient of extraction is calculated based on geological and technical factors.

Category A reserves are calculated on the part of a deposit drilled in accordance with an approved development project for the oil or natural gas field. They represent reserves that have been analyzed in sufficient detail to define comprehensively the type, shape and size of the deposit; the level of hydrocarbon saturation; the reservoir type; the nature of changes in the reservoir characteristics; the hydrocarbon saturation of the productive strata of the deposit; the content and characteristics of the hydrocarbons; and the major features of the deposit that determine the conditions of its development (mode of operations, well productivity, strata pressure, natural gas, gas condensate and crude oil balance, hydro and piezo-conductivity and other features).

Category B represents the reserves of a deposit (or portion thereof), the oil or natural gas content of which has been determined on the basis of commercial flows of oil or natural gas obtained in wells at various hypsometric depths. The type, shape and size of the deposit; the effective oil and natural gas saturation depth and type of the reservoir; the nature of changes in the reservoir characteristics; the oil and natural gas saturation of the productive strata of the deposit; the composition and characteristics of crude oil, natural gas and gas condensate under in-situ and standard conditions and other parameters; and the major features of the deposit that determine the conditions of its development have been studied in sufficient detail to draw up a project to develop the deposit.

Category B reserves are computed for a deposit (or a portion thereof) that has been drilled in accordance with either a trial industrial development project in the case of a natural gas field or an approved technological development scheme in the case of an oil field.

Category C1 represents the reserves of a deposit (or of a portion thereof) whose oil or natural gas content has been determined on the basis of commercial flows of oil or natural gas obtained in wells (with some of the wells having been probed by a formation tester) and positive results of geological and geophysical exploration of non-probed wells.

The type, shape and size of the deposit and the formation structure of the oil- and gas-bearing reservoirs have been determined from the results of drilling exploration and production wells and by those geological and geophysical exploration techniques that have been field-tested for the applicable area. The lithological content, reservoir type and characteristics, oil and natural gas saturation, oil displacement ratio and effective oil and natural gas saturation depth of the productive strata have been studied based on drill cores and geophysical well exploration materials. The composition and characteristics of crude oil, natural gas and gas condensate under in-situ and standard conditions have been studied on the basis of well testing data. In the case of an oil and natural gas deposit, the commercial potential of its oil-bearing fringe has been determined. Well productivity, hydro- and piezo-conductivity of the stratum, stratum pressures and crude oil, natural gas and gas condensate temperatures and yields have been studied on the basis of well testing and well exploration results.

The hydro-geological and geocryological conditions have been determined on the basis of well drilling results and comparisons with neighboring explored fields.

Category C1 reserves are computed on the basis of results of geological exploration work and production drilling and must have been studied in sufficient detail to yield data from which to draw up either a trial industrial development project in the case of a natural gas field or a technological development scheme in the case of an oil field.

Category C2 reserves are preliminary estimated reserves of a deposit calculated on the basis of geological and geophysical research of unexplored sections of deposits adjoining sections of a field containing reserves of higher categories and of untested deposits of explored fields. The shape, size, structure, level, reservoir types, content and characteristics of the hydrocarbon deposit are determined in general terms based on the results of the geological and geophysical exploration and information on the more fully explored portions of a deposit. Category C2 reserves are used to determine the development potential of a field and to plan geological, exploration and production activities.

Category C3 resources are prospective reserves prepared for the drilling of (i) traps within the oil-and-gas bearing area, delineated by geological and geophysical exploration methods tested for such area and (ii) the formation of explored fields which have not yet been exposed by drilling. The form, size and stratification conditions of the assumed deposit are estimated from the results of geological and geophysical research. The thickness, reservoir characteristics of the formations, the composition and the characteristics of hydrocarbons are assumed to be analogous to those for explored fields. Category C3 resources are used in the planning of prospecting and exploration work in areas known to contain other reserve bearing fields.

Category D1 resources are calculated based on the results the region's geological, geophysical and geochemical research and by analogy with explored fields within the region being evaluated. Category D1 resources are reserves in lithological and stratigraphic series that are evaluated within the boundaries of large regional structures confirmed to contain commercial reserves of oil and natural gas.

Category D2 resources are calculated using assumed parameters on the basis of general geological concepts and by analogy with other, better studied regions with explored oil and natural gas fields. Category D2 resources are reserves in lithological and stratigraphic series that are evaluated within the boundaries of large regional structures not yet confirmed to contain commercial reserves of oil and natural gas. The prospects for these series to prove to be oil-and-gas-bearing are evaluated based on geological, geophysical and geochemical research.

The evaluation of natural gas reserves in newly discovered natural gas or oil-and-gas deposits is carried out under the Russian reserves system using the volume method. The volume method determines the volume of reserves by examining the filtration and capacitive parameters of the deposit based on (i) the area of the deposit; (ii) the effective depth of hydrocarbon saturation; and (iii) the porousness of the deposit and the level of saturation of the hydrocarbons, taking into account thermobaric conditions.

The evaluation of natural gas reserves in deposits already under development is carried out under the Russian reserves system using both the volume method and the material balance method. The material balance method takes into account temporal changes in the effective reservoir pressure as a result of the extraction of the hydrocarbons and the resultant influx of water.

In accordance with the Law on Subsoil mineral reserves in Russia are subject to mandatory state examination, and subsoil users cannot be granted a production license with respect to a field that was not examined. The state examination of reserves is conducted by subsidiary organizations of the Federal Agency on Subsoil Use, including the State Reserve Commission, Central Reserve Commission and its regional departments. If the commercial feasibility of certain reserves is approved by any such organization, the reserves are entered in the State Balance of Mineral Products.

Once a subsoil user is granted an exploration, development or production license, it is required to file annual statistical reports reflecting changes in reserves. In addition, subsoil users' reserve reports are submitted annually for examination and approval by the Central Reserve Commission or its regional organizations or, if there has been a substantial change in reserves, by the State Reserve Commission.

Estimation of reserves, as examined by the state expert organizations and reflected in subsoil users' annual statistical reports, are accumulated in the State Balance of Mineral Products.