



THE JAMES A. BAKER III
INSTITUTE FOR PUBLIC POLICY
OF RICE UNIVERSITY

THE ENERGY DIMENSION IN RUSSIAN GLOBAL STRATEGY

RUSSIAN PIPELINE STRATEGIES: BUSINESS VERSUS POLITICS

ISABEL GORST

RUSSIAN EDITOR, PLATT'S OILGRAM NEWS, MCGRAW HILL PUBLICATIONS

PREPARED IN CONJUNCTION WITH AN ENERGY STUDY SPONSORED BY
THE PETROLEUM ENERGY CENTER OF JAPAN
AND
THE JAMES A. BAKER III INSTITUTE FOR PUBLIC POLICY
RICE UNIVERSITY - OCTOBER 2004

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Introduction

Russia's state Transneft pipeline monopoly controls the longest crude oil pipeline system in the world. Its sprawling network, which serves the entire Russian Federation, stretches over 48,700 kilometers of often extremely inhospitable terrain and carries over 90% of Russian domestic oil output. The network is linked to pipeline systems in almost 20 countries in the Caspian, the Baltics and Europe.

Since Transneft inherited the Russian portion of the Soviet Union's Glavtransneft after the collapse of the USSR in 1991, it has served as a highly influential agent of government oil policy, and all signs are that the company's power and influence will grow rather than diminish as proponents of free markets once hoped.

Transneft's record of achievement is quite impressive, and the firm has been praised by Russian and Western investment analysts alike.¹ Projects they undertake are generally completed on time and within budget. In spite of the difficult operating environment in Russia and years of deferring maintenance, the system has operated in a reliable manner. Nonetheless, Transneft is still perceived by many experts to represent the single largest impediment to reforming the Russian oil sector to operate according to market principles and to allowing Russia to achieve the full potential of its bountiful energy resources. Statist policies inhibit local producers from directly resolving export capacity constraints, with political, rather than commercial factors, ruling the day on pipeline expansion strategies.

Certainly, the new government of President Putin, who won a second term in office in March 2004, moved fast to end any speculation that private investors might be permitted to own independent pipelines. Both the President and his new Prime Minister, Mikhail Fradkov, have stressed that state control over the nation's oil and natural gas pipelines will remain a cornerstone of government energy policy and be a key tool for containing the economic and political influence of Russia's powerful and rich private oil and gas producers for years to come. Transneft, as agent of the Kremlin's policy of control, looks impregnable to political wrangling. Financial demands on the company could force some measure of reform in the coming years, or at least compromise, in the way pipelines are structured, constructed and

¹ See Renaissance Capital's private report on Transneft, for example, 2003.

operated, but will be unlikely to dislodge the state from the helm of the all important transport network.

So far, capital has not been much of a problem for Transneft, which has self-funded pipeline projects over the past decade from cash flow by imposing facility surcharges to their tariffs or, to a limited extent, from borrowing. But the sums required to tackle ambitious new pipelines are many times larger than any project undertaken in the last two decades. Key political and economic decisions on financing up to \$20 billion worth of new export lines are still in the making. Outside investors, be they Russian or international oil majors, bankers or foreign governments, will inevitably seek some commercial guarantees in exchange for capital. Such strings might not be acceptable to the increasingly statist Russian government. The alternative of relying on a combination of state funds and far higher transport tariffs and taxes may not be economically realistic.

As one would expect, Transneft has no interest in relinquishing its monopoly position. It is the king of the castle in the Russian oil industry. There was a brief period between 2001 and 2003, prior to the arrest of Yukos' founder Mikhail Khodorkovsky, when Russian producers, egged on by potential foreign partners, attempted to force changes in Russian pipeline policy. With mountains of cash building up on the back of high oil prices, several major Russian companies offered to spend their own capital to expand the Russian pipeline network including construction of a huge export system to Murmansk on the Barents Sea. But in exchange, they wanted sweeping changes in the way the system was run including preferential access to lines, quality banking and even, possibly equity ownership in the line. They were careful to acknowledge that Transneft would have a role – as operator – of any new lines they financed, but stopped short of saying they would turn ownership over to the state monopoly.

Notably, Khodorkovsky was the most vociferous of the oil magnates proposing change. Yukos had initiated debate regarding pipeline policy reform even before discussion of the Murmansk project came to the fore. Its proposal to build an oil pipeline to Daqing broke the taboo by advocating private pipeline ownership and strayed dangerously into the foreign policy arena by racing ahead of the government to promote a close oil alliance between Russia and China.

The arrest of Khodorkovsky and other Yukos shareholders for tax evasion and other charges, and the subsequent business crisis within the Yukos empire will likely persuade other Russian business magnates to think twice before confronting the Kremlin head on for some time. All the signs are that the Yukos scandal has hardened government determination to exert state control over the oil sector and to seek regulatory means to drain capital away from over powerful oil oligarchs. At least in the short term, Russian oil producers may well draw the conclusion that they have little choice but to help fund pipeline projects that in turn will benefit their operations with or without access to equity stakes.

Foreign investors, who so far have a relatively small stake in the Russian upstream, may try to drive a harder bargain. Given Russia's geographical, political, economic, and social peculiarities, their room for manoeuvring may be limited. While high oil prices may, on the one hand, have strengthened the urgency for the construction of expensive new Russian oil pipelines, they may also have emboldened the Kremlin's confidence and inclination to run the oil industry on its own terms.

Oil And Foreign Policy: Global Status

Geopolitical upheaval since September 2001 has shifted the attention of the world's major oil consumers, particularly the United States, Japan and China, towards Russia as an alternative source of supply to the Middle East. Russian oil corporations, spurred on by high oil prices, are keen to oblige, and oil production, which suffered a prolonged slump in the 1990s, is surging.

For the Russian government, the oil boom is pure good luck, stimulating an economic recovery that looked impossible just a few years earlier. On the geopolitical stage, Russia's growing activity on world oil markets provides an opportunity to establish itself as a great oil power, in some measure compensating for the blow to its international status it suffered when the Soviet Union fell apart. Put simply, oil is becoming for Russia what nuclear status was to the USSR. Russia, traditionally a marginal, albeit important, oil and gas supplier to Europe, has the possibilities to emerge on the global stage as a vigorous energy supplier trading in all major markets of the world. Just as oil enhanced the geopolitical status of Saudi Arabia in the aftermath of the 1970s oil crises, Russia, with its broader industrial base and prior

superpower experience, is in an excellent position to utilize energy exports to reestablish its global position.

Pipelines are a critical feature for Russia's transformation into a major global oil power. With the timely construction of new infrastructure, Russia's energy geopolitical aspirations simply cannot (use of the word cannot seems wrong) be achieved. The way Russia structures and runs its expanding pipeline business in the coming years will determine where and how fast new Russian oil reserves can be tapped. It will also impact the pattern of future crude oil flows not just from Russia but from the entire former Soviet space. Pipeline policy will significantly influence Russia's foreign relations with the United States, Japan, China, the European Union, and Central Asia.

Meanwhile, at home, the growing pipeline business will be a key benchmark in the way the overall economic reform process is conducted. Of particular interest will be the way Russia balances the compelling desire for state control over pipelines with the equally pressing need to attract private investment for the development of prospective new production regions and for the expensive expansion and modernisation of the domestic energy sector.

Export Pipeline Plans

When domestic oil producers complain about Russia's lack of pipeline capacity, they generally are referring to the shortage of space in pipelines running west into Europe or to marine terminals that serve mainly western export markets. It is often overlooked that projects to expand crucial export capacity also entail investment in the internal Russian network that feeds export systems.

Transneft is rapidly building new export capacity and is also investing in improvements to the domestic network to support such expansion. But progress has not been fast enough to keep pace with Russia's oil boom.

Russian oil production rates pulled out of a prolonged slump in 2000 thanks in large part to the ruble devaluation and the wider application of Western technology. It has been rising faster each year since 2001.

Table 1: Russian Oil production
In million barrels per day

1992	1995	2000	2001	2002	2003	2004*
8.0	6.3	6.5	7.0	7.6	8.5	9.1

Source: BP Statistical Review of World Energy
**forecast*

Output has already outstripped earlier government expectations for the first years of this century and could easily over shoot the targets set out in the nation's long term energy strategy to 2020.

Table 2: Russian Oil Production Forecasts
In million barrels per day

	<u>2010</u>	<u>2020</u>
Optimistic	9.9	10.5
Moderate	9.0	9.1
Critical	7.2	6.3

Source: Russian Energy Strategy 2020 available on www.mte.gov.ru in Russian

In fact, oil production levels in 2005 are now expected to exceed even the most optimistic production scenario for 2010. Since Russian domestic demand has until recently been relatively flat, incremental oil output must flow to foreign markets. Export pipelines are crammed full, and transport constraints have been a frustrating brake on the production boom, sending confusing price signals to Russia's domestic market.

Thanks to high oil prices, producers are justified in moving increasing volumes of oil out of Russia by railway. But rail transport is an expensive, cumbersome and limited solution that will not be economic should oil prices dip much below \$20/barrel. Moreover, producers are dependent on the Transneft network to carry crude from West Siberia to railway loading hubs, limiting the diversity offered by this alternative method of export.

President Putin, who has declared an ambitious target of doubling GDP by 2010, has demanded that the government speed up studies and approvals of new export pipeline proposals. In his annual speech to the nation on May 26, 2004, Putin pinpointed five pipeline projects that could help Russia diversify as well as grow its oil exports. These included :

- expansion of the Baltic pipeline to Primorsk on the Gulf of Finland,
- construction of a new line from West Siberia to the northwest coast of the Barents Sea,
- initiation of a route out of East Siberia,
- construction of a bypass skirting Turkey's congested Bosphorus Strait, and
- connection of the Druzhba pipeline to Europe by reversing the Adria line to terminate at the deep water Omisalj terminal on the Croatian Adriatic.

In his public statement, President Putin chided the government for being tardy in its selection of new pipeline routes. Recently, he drew attention to key aspects of state pipeline policy that laid out the framework for the multi-billion dollar projects that will likely be launched in the next year or so. President Putin reminded decision makers that, in setting pipeline priorities, they should be guided by broad state interests rather than the desires of individual companies.²

The private sector, he said, could make a significant contribution to the creation of a reliable and diversified transport system. But, he warned that no private investors should come forward until the government had defined the agenda by choosing which pipelines would be built and when, and what would be the terms for project participants. Significantly, Putin stressed that the nation's transport infrastructure should, for the foreseeable future, remain under state control.

Barriers To Pipeline Development

If both the highest authority in the land and an important business group that accounts for some 25% of the country's foreign revenues want more pipelines built quickly, why is it not happening?

² Rossiskaya Gazeta, May 27, 2004

One answer is that expectations are too high. New pipeline construction is taking place and at a relatively fast pace considering the complexities of the projects being planned and executed under an evolving economic, political and legal landscape. In fact, Transneft is building new pipelines at a quicker pace than ever before.

Another explanation for the apparent lag in pipeline proposals versus constructions is the pressing demand for new pipelines has aroused debate about how Russia should best utilize its not infinite oil bounty.

But perhaps more importantly, as Putin has admitted publicly, no clear plans for financing pipelines are yet on the table. Since Mikhail Khodorkovsky was arrested, Russian producers have stopped talking openly about winning equity in oil pipelines. But that does not mean that they have arrived at a final compromise with the government or Transneft on how they will be compensated for investing in new export systems. Without their capital contributions, it is unclear how major projects will be financed.

Foreign companies might be willing to invest in pipelines. But they want a share in oilfields in addition to guaranteed pipeline access and fixed tariffs, and even a quality bank to compensate shippers of high grade oil for the less attractive blend they pick up at the end of the pipeline, which carries a mix of crudes.

Despite their widespread use in other markets, the issue of quality banks is a controversial one in Russia. Many Russian majors with large volumes of less attractive crudes in their portfolios are of two minds or even against the notion of quality banking. On the economic front, introduction of such a system would likely trigger readjustment in development strategies in the huge and prolific West Siberian oil patch, which yields a wide range of different grades that for the most part currently earn a uniform Urals blend price at export terminals.

Politically, quality banking would bring complications that the government is keen to avoid. Predominantly Muslim republics like Tatarstan and Bashkiria produce mainly heavy, sour crudes and would have much to lose from quality banking that would lower the realizable value of their exports. Although reserves in these areas are declining, oil still provides substantial enough income to embolden separatist local policies. Under President Putin, the

cohesion of the Russian Federation has always been of paramount importance. Renewed war inside independent minded Chechnya and the spilling over of related violence into other areas of Russia has spread fear about the possible disintegration of the nation far beyond the inner halls of the Kremlin.

Putin's affirmation that there could be a role for the private sector in pipeline projects sent a signal of hope for investors dismayed by signs that the state is asserting tighter influence over the oil industry as a whole. But the road ahead is far from clear. Since the President's May 26 address, both government and Transneft officials have admitted that there is a highly polarised debate going on behind the scenes about private investment in export pipelines. Reformers – notably in the Ministry of Economy – want the system liberalised altogether. Conservatives say export pipelines should stay out of bounds to any non-state players.

The quest for a compromise has awoken interest in Russia's long stalled pipeline law drafted in the 1990s. Hundreds of amendments have been made to the text of the original bill, which received a first reading in the Duma in 1999. That draft did not rule out the possibility of private pipeline ownership in Russia. But, it enshrined the right of the state to select pipeline routes and define tariffs and access rules. Duma deputies have said the law should be passed by the end of 2004 but given past history and current political and commercial disputes, one of two outcomes can be expected – further delay or the issuance of a document more limited in scope and substance.

Pipelines as a Tool of Resource Management?

Several government officials and the Transneft leaders have opened discussion about the possibility of slowing production growth both to prevent over exploitation of fields at the expense of their long term recoverability and – an idea that is currently highly unfashionable in the West – to conserve precious oil reserves for future generations.

It would, however, be a rare oil producer who would voluntarily curb output when oil prices were hovering around the \$50/barrel mark. Still, some Russian oilmen trained in the years following the Brezhnev era oil boom are acutely aware of how West Siberian fields were wrecked as the government, eager to profit from record world oil prices, set overly ambitious output targets. Companies like Lukoil and Surgutneftegaz are led by such oilmen. Others, like

Yukos and Sibneft, are driven by financial entrepreneurs who only landed in the oil patch during Russia's giddy rush to privatize industry in the 1990s when extensive natural resources came up for grabs at extremely low prices.

The notion that the extraordinarily successful newcomers may be no more than fast buck merchants and reservoir wreckers is never far from the surface in discussion about the sustainability of Russia's oil boom. Sour grapes? Perhaps. But there is as yet no scientific consensus about the size of Russia's reserves – still officially a state secret – or their economic recoverability using only recently applied advanced technologies.

Russia's new Minister of Natural Resources, Yuri Trutnev, appointed in March 2004, is in no doubt about the deterioration of Russia's oil reserves base. New finds over the past decade have tended to be far smaller than during Soviet days, with lower well flow rates. Exploration is urgently needed to prevent a levelling off or even fall in West Siberian output after 2010, Trutnev warned in October.³ He is backing amendments to the Law of Natural Resources to encourage producers to invest in the search for new finds rather than opting to drain existing fields. Trutnev also wants state funds to support high cost exploration programmes.

Trutnev also wants the Ministry to force stricter observance of licences, with punishments for producers who sit on reserves or extract oil irresponsibly. This could be a sensible enough policy, depending on how it is implemented .

Some old school energy policy makers would have the government rein in production in the interests of long term recoverability. If that happens, which seems unlikely, the Ministry of Natural Resources is likely to be the body that applies the brake. (a bit awkward in phrasing)

Transneft might also be called on to enforce restraint. In a conversation with reporters earlier this year, company President Simon Weinstock proposed that Transneft could enforce any government instigated production cuts by, quite simply, refusing to transport oil.⁴ But Mr.Weinstock insisted that Transneft would only act as an agent of state policy, not as an instigator

³ www.government.ru

⁴ Platt's Oilgram News, May 24, 2004, page 1

As operator of the entire pipeline network, Transneft is also the guardian of both domestic and export markets. Russia's energy strategy clearly states that domestic markets should enjoy priority call on oil resources. Until very recently, domestic demand for oil was virtually flat, leaving all incremental production available for more profitable export markets. But in recent months, the trend has changed, prompting the Ministry of Energy warnings that less oil may be available for foreign sales.

Dealing with Bottlenecks and Capacity Constraints

Capacity constraints are a relatively new problem for the Russian oil industry. The integrated Soviet oil pipeline network that Transneft inherited had carried at its peak over 10 million barrels per day (b/d) of crude from fields not just in Russia, but also in Central Asia and the Caucasus. Capacity was ample for Russia's needs, especially as production tumbled after the fall of the USSR.

Transneft's more pressing concern in the 1990s was to adapt to the unprecedented political and logistical hurdles thrown up in the ruins of the USSR. The most urgent of these was transit, a concept almost entirely unknown in the days of the Soviet empire. When the Baltic republics declared independence in 1991, overnight, Russia lost its access to northern ports under its national control. For example, Ventspils, the only large oil terminal on the north coast of the USSR, fell within the boundaries of Latvia, now an independent state with its own ideas about pipeline tariffs and port fees. Ukraine and Belarus, both hosts to long sections of the vital Druzhba oil pipeline linking Russian fields with Europe, also broke away from Moscow's control. Meanwhile, as foreign investors moved into Central Asian oilfields, Kazakhstan began demanding more access to Russian oil pipelines. In those early days, there was no eagerness in Moscow to help newly independent neighbours benefit from oil reserves discovered by an oil industry it had so recently dominated.

In light of these political changes, all new pipeline projects undertaken by Transneft in the 1990's were designed to enhance the security of oil exports by cutting out routes that transited newly independent foreign states or areas torn by strife. Construction of the so-called Sukhodolny – Rodionov bypass in southern Russia cut out a loop of the main line to Russia's Black Sea oil terminal of Novorossiysk that dipped into Ukraine. Access for

Azerbaijani exports was made safer by a bypass inserted in the Baku-Novorossiysk line to skirt the warring Russian republic of Chechnya in the north Caucasus .

Most important from both the strategic and economic standpoints was the plan launched in 1997 to build the Baltic Pipeline System (BPS). In its initial stages, the BPS project relied largely on upgraded existing pipelines to bring crude from Yaroslavl in northwest Russia to a new terminal near St. Petersburg at Primorsk on the Gulf of Finland. Yaroslavl is a nexus for pipelines running south out of the Timan Pechora Basin where a big new oil province is developing in northwest Russia and for lines feeding crude westwards from Siberia.

Initially, the driving motive for building the Baltic line was not to expand export capacity but to provide Russia with its own north western oil port accessible without leaving home soil. As originally conceived, the Primorsk routing would allow Transneft to bypass Latvia's Ventspils terminal and reduce deliveries to the Odessa terminal in Ukraine. Prior to the construction of Primorsk, the Black Sea port of Novorossiysk was the only large oil port left to Russia after the USSR broke apart.

Original plans to add capacity slowly to the 240,000 b/d were revamped when Russian production began to surge after 2000. Transneft has moved fast to expand the Baltic line in successive phases. By March 2004, capacity was up to 850,000 b/d, with Transneft promising to add a further 160,000 b/d by the end of the year. Meanwhile, the state pipeline company is seeking government approval for a project that would boost potential throughput to 1.2 million b/d by the end of 2006.

As soon as exports were flowing through the Baltic line to Primorsk in early 2002, Transneft choked off the pipeline running north to Ventspils oil terminal on the Baltic, depriving the Latvian port of its lifeblood. The aggressive action also hurt Russian producers who have lost pipeline access to the 360,000 b/d Ventspils terminal.

Transneft's explanation is that, without substantial investment, it is technically impossible to operate both the lines to Primorsk and Ventspils in tandem. The company's position is that it is only prepared to sink its own capital in the project in exchange for a controlling packet of shares in Ventspils terminal and approach lines running to the coast.

As oil ports, both Primorsk and Ventspils have drawbacks. Neither is deep enough to host supertankers that could improve the economics of long distance oil trade. Ice inhibits tanker movements around both terminals for four or five months a year. Vessels leaving the Baltic Sea for north Europe must also navigate the narrow and increasingly crowded Danish Straits. Tanker congestion in the Danish Straits could end up costing shippers as much as the delays in another crowded oil waterway – the Bosphorus – which is the route to the Mediterranean for over 1 million b/d of Russian crude exports from the Black Sea.

Transneft's aversion to relying on foreign routes to carry Russian oil has not receded. But more urgent goals than transit have been added to the company's agenda since the events of September 11, 2001 shook the world. Russian oil production was already on a recovery path when major consuming nations, particularly the United States and Japan, began urgently seeking ways to reduce dependence on Middle East oil.

Russian government and oil officials were quick to see the huge opportunity presented by the world's new hunger for non-Middle East oil supplies. Buoyant prices and the growing volumes of oil exports flowing onto Mediterranean markets have convinced producers to push out beyond the boundaries of their traditionally Eurocentric trading activities.

Given that most of Russia's oil reserves lie thousands of kilometres from any port, any large scale courtship of new markets must entail construction of new long-distance, high-cost pipelines. As oil producers clamour for more export capacity, Transneft's challenge is to satisfy their demands at the same time to devise and implement pipeline projects that are realistic both in terms of Russia's long term production potential and the outlook for world prices and demand. Oil producers' concerns are mainly commercial; Transneft must also balance the geopolitical interests of its master, the state. From the Kremlin, investment in high cost oil pipeline infrastructure is not just a commercially expedient strategy. It is a commitment to a given foreign policy strategy for decades to come.

Russian oil majors don't often partner with one another. But frustration about oil export constraints brought them together in 2002 when five of the country's top producers, including Yukos, Lukoil, Sibneft, Tyumen Oil Co. and Surgutneftegaz, announced they would finance construction of a pipeline from West Siberia to Murmansk on the coast of the Kola Peninsular to carry up to 1.6 million b/d of oil exports. At the heart of the producers'

argument for the ambitious project was the prospect of a Russian advance on the huge and growing oil market of the United States.

Murmansk has physical advantages that Primorsk does not offer. Its harbour is deep enough to host super tankers that can improve the economics of long distance oil trade. Also, thanks to the Gulf Stream, waters around the Kola Peninsular do not ice over in winter. In their proposal, the oil majors were careful to invite Transneft to operate the system. But they indicated that in exchange for investment, they would require equity, preferential access and a quality bank to compensate shippers of premium grade crudes for the downgrading in value during blending in the transport system with less attractive oil.

Producers were in a hurry. Mikhail Khodorkovsky of Yukos pointed out that if the Murmansk project did not move ahead quickly while the majors were flush with cash, it might never happen.

By contrast, Transneft's approach to the Murmansk project was from the start sceptical and unhurried. They were firmly opposed to the development of a competitive alternative to their own system in the heart of the Russian oil sector. Finance was also a major concern. Oil companies originally estimated that the line would require investment of \$3.4 to \$4.5 billion, depending on the route selected. Transneft's preliminary costing of the projects was \$9 to \$15 billion. In recent months, it seems that Murmansk has all but dropped off the oil policy agenda. Instead, Transneft is studying a somewhat shorter 1,700 kilometer line terminating farther east on the Barents Sea coast at Indeika. Estimates are that this system would cost about \$6 billion, far less than the Murmansk routing.

During a recent presentation by Transneft of the project, Russian majors asked if the Indeika line could be tied into both West Siberian fields and Timan Pechora in northwest Russia where a major new oil province is opening up. Transneft is also wary about prospects for marketing large volumes of Russian crude in the United States. The company has dropped earlier, unrealistic demands that the United States should commit to long term imports of Russian crude before the Murmansk project is launched. But Transneft has expressed lingering doubts about the willingness of U.S. refiners to invest in refinery upgrades necessary to handle large volumes of Russia's relatively sour Urals export blend.

Discussion initiated by producers about building a dedicated export pipeline to Murmansk carrying premium grade Siberian crudes is no longer conducted in the open, if it is happening at all. Detractors have argued that removing such a large volume of high quality oil from the overall Transneft system would create complications with far reaching impact on both the domestic refining industry and other export streams.

Looking East

Both the government and Transneft appear to be more focused on plans to build Russia's first eastern-oriented crude oil export pipeline that will open a window into the growing markets of the Far East. No final decision has been taken on the politically charged question of routing for an eastern export system. For now, the most eastern point of the Transneft network is the Yukos-controlled Angarsk refinery, not far from Lake Baikal in East Siberia. To date, the refinery is supplied with crude feedstock from West Siberia. Fields in the southern Siberian province of Tomsk, mostly controlled by Yukos' Tomskneft, are the obvious source of crude for Angarsk. Once development of new deposits in East Siberia's Krasnoyarsk region gets underway, they too will feed oil into the line to Angarsk. Yukos owns several promising licensing areas in Krasnoyarsk.

Before the arrest of Mikhail Khodorkovsky, Yukos vigorously promoted a plan to build an export pipeline directly to China that could provide a dedicated outlet for anticipated growth in output from both the Tomsk and Krasnoyarsk regions. In May 2003, Yukos concluded a long term framework supply contract with the Chinese and said it was willing to help finance a 560,000 b/d pipeline to Daqing in northeast China.

Even if the Russian government became ready to approve the line to China, Yukos' ability to fund or even participate in the venture now looks highly uncertain at best. The forced sale of Yukos' main West Siberian producer Yuganskneftegaz to help court marshalls claw back tax arrears allegedly owed by the company looks imminent and, given the multi-billion dollar scale of the tax charges, may well be followed by other asset sacrifices that will leave Yukos a shadow of its former self. In any case, Transneft's preference in the eastern export route debate has always favored an alternative trunkline running over 4,000 kilometers across East Siberia to Nakhodka port on the Pacific coast. An environmental study of a project to build a

\$15 billion line from Taishet to Nakhodka is underway and should be finished by the end-2004.

Government leaders, including President Putin, have been careful not to close off the Daqing route option. It has been pointed out that a branch line from the Nakhodka system could be laid to Daqing. But it is almost unthinkable given the ferocity of the law enforcement attack on Yukos that the stricken major will have any role in such a project. The very idea of an individual oil producer establishing its own dedicated export outlet of significant capacity now seems far off the Kremlin's agenda.

Government statements about the Daqing spur appear to be motivated more by international diplomacy than commercial factors. China is still pressing Moscow for assurances on long term energy supplies. But despite high level meetings between the two countries, including a state visit to Beijing by President Putin this October, the Chinese have yet to secure any substantive promise on a pipeline from East Siberia. For Russia, choosing between Daqing and Nakhodka involves deciding and balancing key foreign and domestic policy objectives, economic interests, and the role the country is to play in world oil markets.

Looming over the whole eastern pipeline debate is the key question of how much oil will be found in East Siberia and how much it will cost to tap. From a producers point of view, the line to Daqing has some compelling advantages. First and foremost, it would be quicker and cheaper to build than the line to Nakhodka. Yukos has claimed that a 560,000 b/d export line from Angarsk to the Chinese border could be brought onstream within two years at a cost of about \$2 billion.

By contrast, the line to Nakhodka will stretch 4,200 kilometers over extremely difficult terrain from Taishet in East Siberia to the Pacific and cost as much as \$15 billion. It is unlikely to be completed before 2009 at the earliest. Capacity would need to be a large 1.6 million b/d to justify such massive investment. Investing in such a large export system will be risky until more is known about the potential and cost of developing East Siberian reserves. If West Siberian deposits are initially tapped to feed Nakhodka, it would drain line fill away from proposed expansions on western routes.

In all likelihood, Transneft's preference for Nakhodka over Daqing was originally driven by an understandable resistance to Yukos' encroachment on its monopoly. It is also natural for a pipeline company to favor grandiose long term projects that will heighten its importance and prestige. Transneft has argued that Nakhodka will better protect the security of Russian oil trade by accessing a far wider range of buyers on the Pacific than a line that comes to a dead end in China. Shippers would be highly vulnerable if Chinese buyers chose to refuse supplies or to negotiate down prices. Russia's Gazprom has already suffered a similar blow in its Blue Stream project to Turkey where slumping demand has left the line greatly underutilized.

Nakhodka scores well on the domestic policy agenda. Construction of such a long system will help stimulate growth in Eastern Russia, strengthening the economic and social wellbeing of the distant and often neglected eastern reaches of the Russian Federation at the same time as enhancing security in the region.

But, finding finance for such a huge export system may be a stumbling block especially since there is no obvious immediate source of line fill for an 1.6 million b/d line. Japan has offered to provide soft loans and credit backed equipment supplies. Russian prevarication over the eastern routes may partly be connected to the desire to wring better terms out of the Japanese. Recently, the Ministry of Energy asked the government to consider tapping the Stabilisation Fund to help pay for the line. According to Minister Viktor Khristenko, the Fund, set up in 2003 to store windfall oil revenues, should be used to support major infrastructure projects. In an effort to improve the economics of the venture, Transneft has devised a scheme involving the combination of pipelines and railroad transport that could bring first oil to Nakhodka within two years after all necessary approvals were provided. Transneft's proposal is to press ahead with a first phase of the project which would include construction of an oil export terminal at or near Nakhodka. This phase could be brought into operation as soon as it is ready – probably within 18 to 20 months after project launch. Construction of the lengthy pipeline from East Siberia to the Pacific coast will take twice as long. To allow an early start to exports, Transneft plans to start laying pipeline parallel to the route of the Baikal-Amur railway sections, which could be used as a temporary route. Apart from speed of execution, Transneft's rail-pipeline proposal would bring needed business to the BAM railway line, in turn, stimulating local economic growth in East Siberia.

Given the technical, financial, economic and political complexities of the project, no government or pipeline company could be expected to arrive at a decision quickly on the best routing for an eastern pipeline out of Russia. However, some observers suspect that the eastern route will remain bogged down in discussions for years to come – until additional information is available on the resource base in the region. Until then, it makes little commercial sense to proceed.

Japan and China are essentially rivals for Russia's eastern oil and gas (this is the first mention of gas) bounty. Both are eager for their oil companies to play a role in development of Siberian oil and gas resources, and they are willing to supply financial or technical support for pipeline projects in exchange for an assurance of access to oilfield developments.

Russia has so far been reluctant to allow foreign companies a major share in the development of large oil and gas fields in its heartland. High oil prices may strengthen any determination to hold outsiders out of its precious resource base, with the exception of rare deals, such as ConocoPhillips' recent purchase of Lukoil stock. Final decisions on new pipeline routes could be delayed if foreign investors insist unbendingly on a slice of the upstream pie. Few international majors would willingly commit capital to an export pipeline without access rights for 100% of their production enshrined in a long term contract. But there is no indication that the Russian government intends to change the system of allocating export capacity to producers on an equal, percentage basis. In his May 26 speech, Putin made clear that pipelines should serve the interests of all, not individual producers.⁵

The Daqing versus Nakhodka debate raises crucial questions about how much Russian oil will be available for export in the coming years. Transneft and oil company estimates are that East Siberia will eventually yield 1 million – 1.2 million b/d, less than the 1.6 million b/d capacity in the planned Nakhodka line. Development costs are likely to be extremely high.

Transneft's plan is to tie fields from West Siberia's Tomsk and Khanty Mansiysk regions into the new export system. The export of a significant volume of West Siberian oil towards the east will inevitably mean less spare volume to fill western routes. The go ahead for the 1.6

⁵ Op cit.

million b/d Nakhodka project could, therefore, jeopardize the chances of an additional western route, be it to Murmansk or Indeika, ever being built.

Transit for Caspian Oil

Russia is of two minds on the transit issue. For its own production, it seeks to avoid transit via other countries to the greatest extent practical. At the same time, it works by all means at its disposal to ensure that transit of oil and gas from the Caspian takes place through its territory. Despite twelve years of effort to the contrary, Russia for the time being remains the only large export route to world markets for its neighbours in Central Asia and the Caucasus.

In the early 1990s, Transneft was reluctant to open its lines to outsiders. But in recent years, the company has come to see transit as good commercial business. In geopolitical terms, oil transit offers Russia, via Transneft, an opportunity to exert control over the Caspian region and contain the influence of foreign powers, particularly the United States, in the area. As Russia and Caspian states, particularly Kazakhstan, grow in importance as world oil suppliers, they will, if they can agree to act collectively, be positioned to exert considerable pressure on OPEC pricing policy.

Transneft has invested in several modest projects designed to lure more Central Asian oil into its network. The Atyrau-Samara line from northwest Kazakhstan to central Russia has been expanded to handle up to 300,000 b/d of oil. There is talk about increasing capacity further to 500,000 b/d. A new link has been opened between a receiving terminal at Makhachkala port on the west coast of the Caspian with the main export line running to Novorossiysk, Russia's biggest marine oil outlet on the Black Sea. Both Kazakhstan and Turkmenistan are shipping small volumes of oil across the Caspian for onward pipeline transport from Makhachkala.

But Transneft's success in capturing most Central Asian transit oil is going to face serious challenges in the next few years as individual republics, supported by foreign companies and governments, establish more diversified approaches to world markets.

Within a year, Azerbaijan, where Western oil companies have invested in construction of their own export lines specifically designed to bypass the Russian network, will achieve total independence from Transneft's pipes. The start-up in late-2005 of the Baku-Tbilisi-Ceyhan

pipeline (BTC) will open a 1 million barrel a day route for Caspian crude to the Turkish Mediterranean, dramatically altering trading options for the landlocked states of the region. Built by a group of international majors led by BP, BTC is designed to handle oil from offshore Azerbaijan fields. With U.S. encouragement, Kazakhstan is negotiating to join the project, which could provide an outlet for crude from the huge Kashagan field in the northeast Caspian Sea. Several of the investors in BTC are also participating in Kashagan's development and would enjoy priority access to the new line.

Since 1999, most of Azerbaijan's exports have moved through a 300,000 b/d line built by a BP led group. The line extends from Baku to Supsa on the Georgian Black Sea. Commissioning of that system reduced the availability of oil to transit Transneft's Northern Route from Baku-Novorossiysk. Azerbaijan's refusal to ship more than small volumes via the Russian line is a cause of friction between the two countries, which have in the past specified throughput volumes in 5-year, government to government contracts. Russia would like to increase the Northern Route's 100,000 b/d capacity and tie Azerbaijan into a long term transit accord. But Azerbaijan has refused to commit more than 50,000 – 54,000 b/d of oil to the line.

A recent proposal that the line should be reversed to instead carry Russian oil south for processing at Baku refineries was quickly rebuffed by the Russian Ministry of Foreign Affairs. But the rejected invitation is indicative of Azerbaijan's confidence that its access to world oil markets without Russian routes is now assured.

Transneft has succeeded in finalizing a long term oil transit accord with Kazakhstan. But even so, Kazakhstan, which has potential to be a much larger exporter than Azerbaijan, is sticking to plans to diversify its export routes.

Apart from negotiating entrance to the BTC line, Kazakhstan has also teamed up with Chinese National Petroleum Corporation (CNPC) to build an export system east to China. The pipeline was recently announced to be onstream by early 2006. Russian producers have been invited to commit crude oil input to this Chinese line, which originates in the South Turgai Basin in central Kazakhstan some 2,000 kilometers east of the Caspian Sea. West Siberian oil could be brought south to South Turgai via the existing line from Omsk to Central Asian refineries at Pavlodar, Chimkent and Chardzhou. So far, however, no

throughput contracts have been signed. As operator of the line from Omsk, Transneft's blessing would certainly be needed for any such deals. The scheme could end up clashing with Transneft's own plan to use the Omsk-Chardzhou line as a new export route to Iran. The Iranian project is not moving ahead quickly but remains on Transneft's agenda.

In any case, the Russian government will likely be reluctant to see West Siberian crude exports escaping into foreign operated pipelines. The possibility that Kazakhstan, which is currently 100% dependent on Russian pipelines, can establish alternative access to world markets is not pleasing to Moscow. Shortly after the September 28th inauguration of the Kazakhstan-China line, Prime Minister Mikhail Fradkov visited Astana to discuss oil policy with President Nursultan Nazarbayev. Fradkov declared that Russia and Kazakhstan should develop a joint oil balance including a long term transit accord.

Kazakhstan's success in getting the Chinese line moving may persuade Russia to be more accommodating to the Caspian Pipeline Consortium's system (CPC), which moves Kazakh oil to market and to date represents the only privately owned trunkline crossing Russian territory.

Transneft's attitude to the Caspian Pipeline Consortium's export system has not been welcoming. CPC transports just over 400,000 b/d of Kazakh oil to a terminal on the Russian Black Sea. Although two entry points exist on the 1,500 kilometer system for entry of Russian crude, no action has been taken to build spur lines linking Transneft's network with CPC even though for a modest investment 190,000 b/d of additional export capacity could be added. Russia, which owns 24% of CPC, has criticised shareholders' plans to expand the line to handle up to 1.34 million b/d of Caspian exports. Agreement of all owners is needed before the expansion can be sanctioned. Russia's complaint is that the first phase of the line is not yet full – a criticism that seems somewhat misdirected given that the lack of a Russian connection is indeed a key reason for the shortfall. Transneft had originally expressed a preference for CPC to draw down its debt rather than invest in expansion. But signs are emerging that Transneft's resistance to the project may be weakening. CPC officials have said that they hope a decision on the expansion may be ready by the end of 2004.

As the Caspian oil transit business grows more competitive, Transneft will likely come under pressure to modify transport terms to attract shippers into its own lines. Current terms

extended by the company to transit customers are less favorable than those offered to Russian producers crossing foreign states in contravention of the Energy Charter Treaty. However, any improvement in transit terms offered to outsiders by Transneft is bound to incur the wrath of Russian producers that are already irked by having to share scarce export pipeline space with competitors.

In any case, there is ample evidence that simply offering lower tariffs is not enough to bring customers with alternative routes at their disposal into transit pipelines in the Caspian region. A reduction in the tariff on the Northern Route has not lured more Azerbaijani crude into that system that is now running at half its capacity. It is worth noting that transit via Russia is less attractive because of the lack of a quality bank. Russia for its part has refused an invitation from Azerbaijan to reverse Baku-Novorossiysk to bring Russian oil south for refining in the Caucasus. Russian companies have not invested in BTC and have not been invited by foreign backers to use the line as an outlet for their own crude.

It is difficult to avoid the conclusion that politics rather than economics continues to play the lead role in deciding pipeline routes in the Caspian region. Russia wants to retain as much influence as possible over a region it once regarded as its backyard. If the volume of competing oil flowing out of the Caspian increasingly cannot be controlled by Transneft's heavy hand, Russia may try to convince its neighbors, where possible, to join it in some kind of exporters group that will coordinate sales terms and market share. (It seems like the Conclusion starts with this paragraph and not in the section entitled Conclusion.)

For the United States, the key policy objectives have been to ensure that Iran, which could offer an economically attractive pipeline route to the Persian Gulf for Caspian exports, is excluded from the transit game. A secondary, but nonetheless important Caspian oil policy objective for Washington, is to support pipelines that bypass Russia, weakening Moscow's earlier monopoly over Caspian oil transport. Given world events, however, it would be wise for the United States to reconsider its strategies. Clearly, there are significant opportunities for regional cooperation that could result in significant economies of scale, higher exports to world markets, and the promotion of the development of oil sectors according to market principles that would be mutually beneficial to U.S. interests.

For its part, Russia's desire to control Caspian transit goes beyond politics and the commercial desire to bag extra pipeline tariff income for itself. As long as Transneft's system handles transit volumes, the quality advantages enjoyed by most Caspian export oil is ironed out during blending in the Russian network. Oil emerging at its marine terminals or the European frontier is rendered more or less uniform with Russian Urals blend. This reduces Caspian oil's competitive superiority to Russian grades and ensures Russian producers a higher price for the blend flowing through the Russian system.

Transneft's dislike of the CPC's ability to move high quality crude out of west Kazakhstan is both emotional and commercial. CPC captures Kazakh transit crude business that might otherwise go to Transneft and delivers to the Black Sea a blend of oil that sells at a premium to Urals. The consortium fills tankers that compete for space with those carrying Russian crude in the crowded Bosphorus. Moreover, CPC operates a quality bank that offers financial compensation to shippers of premium crudes for quality loss that occurs in the line via contact with less attractive oil.

Quality concerns have also fueled Russian determination to prevent the Odessa-Brody pipeline across Ukraine from working. Odessa-Brody was designed to help Ukraine reduce dependence on Russian oil and instead import and transit Caspian crude delivered to the Black Sea. The idea was eventually to extend the system north to feed Central European refineries – traditionally outlets for Russian crude – before moving further to terminals on the Polish Baltic.

After a protracted battle, Transneft, together with Russian producers, has persuaded Ukraine to operate the system in a reverse southerly direction to provide Russia with an additional export outlet to the Black Sea, preventing Caspian producers to compete with Russian producers for space in Central European refineries. TNK BP has offered to fill the line which should start operating before the end of 2004. Access will be shared proportionally among Russian producers as on other Transneft operated export systems. Had the Odessa-Brody been extended to bring more oil northwards from the Black Sea, the arrival of growing volumes of light Caspian crude in central Europe could have undermined Russian dominance over its traditional markets in the region served by Transneft's Druzhba pipeline system.

Conclusion

At the core of Russia's long term energy strategy lies the goal to exploit the nation's hydrocarbon resources to raise the country's living standards to European levels by 2020. In President Putin's second term, the government is showing its strong desire to exert control over the oil and gas sectors and to push former President Yeltsin's team of financiers and reformers out of the oil patch. The desire for control is coming from the highest level with President Putin himself more and more frequently presiding over key oil and gas meetings or granting personal approval for favored investments.

At present, Transneft is probably the single most important agent of government oil policy. Allegiance to the state and its long term interests engage Transneft in a far more complex web of tasks than merely running a sprawling oil transport network. Priorities include to protect domestic consumers at the same time as ensuring that adequate export capacity is available to provide a growing stream of revenue to producers and federal and local budgets. Transneft has been actively defending itself against criticism from producers that it has not provided enough oil transport capacity to accommodate the country's booming production in recent years. Expansion of the system is underway, and Transneft has committed to providing 9.6 million b/d of pipeline capacity by early 2005 of which 5.2 million will be available to exporters and a further 4.4 million for supply to domestic refineries.

Foreign policy imperatives complicate oil transport decisions particularly when it comes to establishing new markets and allocating export flows. Decisions on the direction of new export pipeline routes will likely be determined which prospective oil resources are developed and where the oil will be sold. Transneft's power over oil pipeline transit continues to define Russian influence over developments in the former Soviet republics of Central Asia and the Caspian and may help shape new oil alliances powerful enough to act as a partial counterbalance to key OPEC producers in the coming decades.