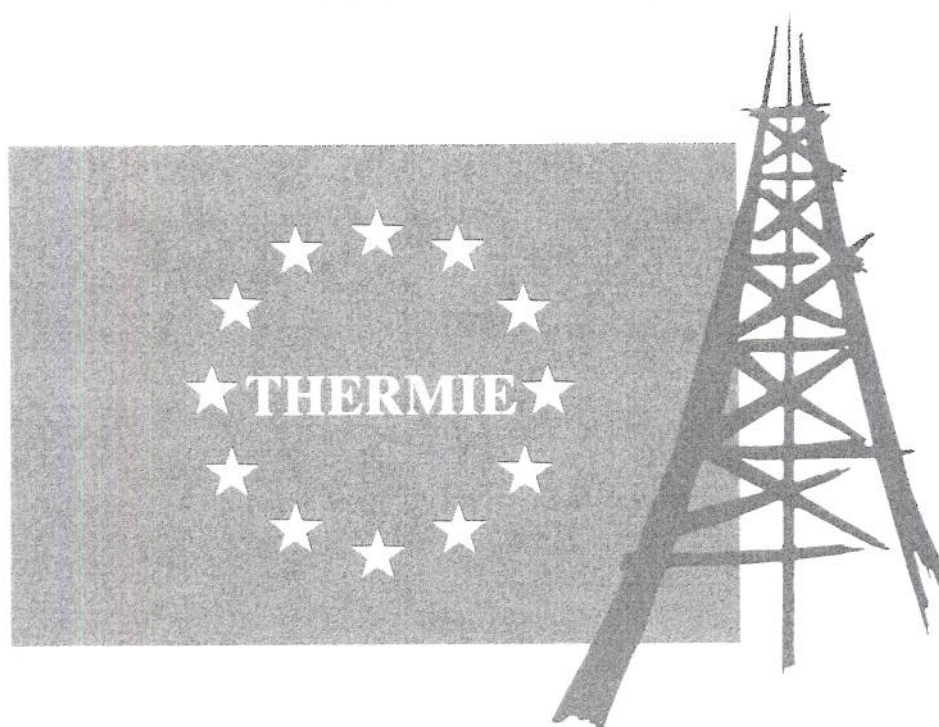


OIL AND GAS **TECHNOLOGY** IN A WIDER EUROPE

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Current Oil and Gas Situation, and Key Technologies required in Russia

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It is a great pleasure for me to be a guest speaker at the Thermie Symposium. It is the second Thermie Symposium where I have been given an opportunity to give a speech. The first one was the Brussels Symposium in December 1991 and this Symposium was a great success from my point of view. I hope that our current Symposium will also be a great success and it would be a pleasure of mine to attend another Symposium that we may have an opportunity to hold somewhere in Europe, let us say in October 1993. I am quite sure that all the problems that we have been discussing in previous meetings, this meeting and in the future under the coverage of the Thermie Programme will provide us with good stimuli for technology transfer between East and West.

In my presentation I do not want to cover technology programmes in particular. I think that during the Symposium my colleagues, who are more experienced in technology problems, will have an opportunity to discuss them in more depth during the technical sessions and during the panel discussions. What I would like to cover are the energy policy issues; to focus our attention on the problem of foreign capital involvement in our economy; to reflect the energy policy basis for the co-operation between East and West, between our host country and their potential investors. I appreciate that this problem is rather difficult to discuss in half an hour, so I would like to identify some major priorities and problems which we are now dealing with.

Let's begin with some facts and figures. The major form of foreign capital involvement in the Russian energy economy since 1987 is the so-called joint ventures that were established after the Council of Ministers of the Soviet Union published its decrees numbers 48 and 49, of 13 January 1987. To date thirty joint ventures have been created in the fuel and energy sector of Russia. The declared reserves of these joint ventures equals around 500 million US Dollars. The participation of foreign investors in these joint ventures is mostly greater than thirty percent.

The major foreign interest in the energy industries is of course in oil production and around two thirds of all the joint ventures established are in this area. Currently identified at the stage of registration and establishment are some twenty joint ventures with planned capital funds equal to some 500 million US Dollars.

What is the total cumulative demand for external financing for our energy economy according to our calculations? When, in the middle of the year, the governmental decrees were prepared which identified the short term and medium term demand up to 1997 in external financing for oil production, gas production and oil refining, these calculations showed that the total demand is equal to no less than 30 billion US Dollars. When we were preparing our Russian position on the programme for increasing nuclear energy safety before the C7 meeting which was held in Munich in July 1992, our calculations showed that the total hard currency cost of this programme might be equal to some fifteen to twenty billion US Dollars. This programme for increasing the nuclear safety of the Russian nuclear energy sector will be based on the substitution of nuclear plants with Chernobyl-type reactors, and the first generation of water energy reactors, by conventional energy stations with steam and gas based power units. We will need to increase

gas production and expand some engineering industries which will provide the necessary equipment for the power generation sector, which will lead to the conversion of some plant. That is why these figures are so high, some fifteen to twenty billion US Dollars.

Taking into account that the Russian oil industry's external financing is equal to some 500 to 600 million US Dollars per year, we will arrive at a cumulative total for the entire energy sector of Russia for the period from 1993 to 1997 of something like 45 to 50 billion US Dollars. If you take into account the above mentioned figures, you will understand that it is not technically possible to provide all this finance through external finances of credit origin. We need to find some new forms of foreign capital involvement in our energy economy. First of all, we need to concentrate on direct foreign investments. This is illustrated by some simple calculations; in order to cover these abovementioned figures if they are to be supplied in the form of credits and taking into account the necessary debt servicing, we will need to produce additional oil exports equal to 90 million tonnes per year. That is impossible taking the current status of our oil industry. That is why we need to concentrate on direct foreign investments. And what is the potential interest of the foreign investors in our oil and energy economy? According to some unofficial estimates, the expectation of foreign investments lies in the range of 60 to 70 billion US Dollars during the forthcoming 10 year period. This indicates that the intentions of foreign investors are in excess of the requirements of the Russian energy economy for these investments. Even if we take into account the current situation in the international financial markets, the natural resources of Russia and the huge energy market provides this potential interest for foreign investors.

The legal basis for our relations with the foreign potential investors, as with all governments, needs to be based on the principles that are declared in the European Energy Charter and the legally binding protocol to this charter. We understand that, in connection with these legally binding protocols, a unified energy, legal and economic framework will be created for the industrially developed world. After signing these agreements, anti-discrimination rules will apply to all the contracting parties. The problems of access to resources and to the energy markets, the problems of transportation, access to technologies and to the capital markets, will decide the level of interest between the host countries and the potential investors.

Our major priority for involving foreign capital in Russian energy is provided by the recent developments in our energy economy. The former development of our energy was based on speed and significant increase in volumes of energy produced, but the level of energy efficiency, the level of energy saving was rather low. That is why the major interest for us as a host country will be to provide foreign capital involvement in the area of energy efficiency, particularly in downstream areas. So if we take the oil sector, our major interest is not so much in oil production in the long and medium term but in oil refining.

But we realise that our recent decline in oil production will create major negative market economy consequences. That is why when talking about some short term priorities of our country, we understand that these priorities are located in the area of oil production, which is where we are beginning to involve foreign investors in the first instance. In the short term the most urgent technology programme will be the programme for restarting idle oil wells. Up to now the total cumulative volume of idle oil wells in Russia already exceeds twenty five thousand. Investors will receive the shortest pay-back period for their investment if they participate in such a programme. According to our calculations the pay-back period for investments made in the revitalisation of idle oil wells will be equal to some three or four months. This means that each dollar invested

in this particular programme can be reinvested through a year, two to two and a half times. We have based these calculations on the average cost of repair of one typical idle well, which is equal to something like 100 thousand dollars per well, and on this average the losses of these idle oil wells are equal to something like eight tonnes per well per day. We can calculate the total loss of oil production due to the enormous number of idle oil wells based on the following figures: around half of all the idle wells are idle due to soluble technical problems. These 12.5 thousand idle wells create a loss of annual production equal to something like 30 million tonnes. This is equivalent to a loss of hydrocarbons earnings on an annual basis of 3.6 billion US Dollars. The cumulative costs of repair of these 12.5 thousand idle wells will be equal to 1.4 billion US Dollars. That means that the ratio of the loss of current earnings to the cost of repairs is equal to something like 2.6.

There are two potential mechanisms for involvement of foreign capital in the area of revitalising the idle oil wells. This may be on the basis of service contracts, but the most effective for us as a host country would be the involvement of foreign external financing in the form of credit, in order to provide some financial resources for importation of necessary equipment. The Russian workforce has quite a high level of skills to operate this equipment and install it in the fields, and the compensation for the supply of this equipment can be made by some portion of additionally produced oil from these idle and revitalised wells. A major problem was created at the end of last year due to the technical bankruptcy of the National Bank, but from our point of view that provides another stimulus for creating this sort of transaction between potential foreign investors and our Russian enterprises, because a lot of contracts have already been made at a high level, and so all that is needed is something like a financial bridge enabling them to finalise these contracts that were already well advanced by the year end of 1991.

One of the major problems with regard to credit is the question of guarantees. The commonest western demand for guarantees is for a state guarantee. But in the case when state guarantees cannot be provided, the formula being proposed by western creditors is the normal international practice of organising the overseas export accounts at some first class banks, which of course as the western creditors have always demanded, need to be located outside Russia and therefore outside the competence of the government regulating bodies of Russia. We understand that this scheme is common international practice, but it is a major concern for our country and for our industry to have to cover these credits. We need to find a balanced form for providing these guarantees, and in some transactions with our potential creditors we have already struck this balance which reflects the interest not only of western creditors but also of us as a host country. This formula provides the export accounts not in the overseas banks but in Russian banks. Due to the current situation we have been negotiating with some international organisations such as the World Bank and some other government agencies, and the cumulative totals of the credit facilities now being developed in connection with the oil and gas industry is equal to some 5.5 billion US Dollars. From this amount we hope that around 1.1 billion US Dollars of credit can be mobilised in the very short-term future, perhaps by the beginning of 1993.

That was a brief explanation of our short term priorities in connection with the potential slow down of oil production in Russia. Now we come to the medium term priority. We understand that a further slow down of this decline in production might be provided only by a large scale development of already proven fields that have not been developed due mainly to the lack of financial resources. You may know that since June the 5th, 1992 we have had in our country the so called mineral law or law on subsurface resources and, due to this law, licensing can be achieved only by means of tenders or

auctioning. That is why we are now trying to create a model tendering procedure and to organise proposals for new tenders on a model basis that will be similar for all the regions and fields that have been proposed for these tenders. We do not have a lot of experience of organising tenders in our oil and gas economy. I can identify only five of these sort of tenders that have recently been organised in the former republics of the Soviet Union and in Russia. These are the well known Sakhalin tender, tenders in Russia, the tender in East Turkmenia, the tender for the Azeri field in Azerbaijan, and a tender in Kazakhstan. There are some proposals from different regions to develop this tender practice, and we understand that in the very near future there may be an opportunity to provide some dozens of new fields, possibly in the region of 30 or 40 fields for further tendering, as indicated in the proposals of various authorities such as the Tomsk region. The government has decreed a third phase of development of Sakhalin continental shelf in the near future. The Sakhalin first phase was the general agreement between the Soviet Union and Japan. The Sakhalin second phase was the tender announced in May 1991; the Consortium is finalising and preparing with their Russian partners a feasibility study for field development. The next tender will be the Sakhalin three phase; now we are at the stage of identifying the details of the tender in order to submit the tender in the near future for government approval.

I must emphasise that we have now changed our approach regarding the selection of fields that need to be presented for tenders. In the recent past, the main approach was to invite international tenders for more marginal fields. Now we are looking at some highly productive fields which will create an additional interest for potential investors. Moreover we are now speaking not only about marginal fields which are located in remote areas, we are looking at those fields which are located in existing areas of stable oil production. This means that additional stimuli will appear for potential foreign investment due to the already existing infrastructure, which will help them to significantly reduce the cost of production of oil and gas.

So I would like to repeat that we think that around 30 or 40 fields may be proposed for different tenders if we aggregate all the existing proposals of the various regions. Our intention is to provide a unified procedure for the tenders, which will not yield an opportunity for conflict of interest or conflict in procedures provided by different regions, or allow conflict between the organisation of the tenders and our existing legal procedures. This is the medium term priority. We hope that the cumulative effect of short term and medium term procedures for attracting foreign capital to our energy economy will provide a significant slow down in the decline of oil production. We need to change the trend by addressing the exploration and development of some new big or giant fields. We understand that it is a characteristic feature of the international oil industry that the major part of oil production comes from a few giant oil fields; this was also the case for our country's oil production in the seventies.

We need to attract foreign investors into exploration and development in new and prospective oil and gas areas; in this case we need to deal with the multi-billion dollar projects, in which the investors will be the major international firms or consortia. On the other hand, when we were speaking about the revitalisation of idle oil wells the major interest for us was the opportunity to attract here the small and medium sized firms. Long term, of course, we will be dealing with the major companies. We understand that these long term developments will take 8 to 10 years and it will not be possible to speak about significant changes in production in the near future. To attract foreign capital in this area we need to make petroleum agreements of the type common in international oil practice; we consider that we will attract foreign capital on the basis of risk contracts. Taking into account the non-convertibility of the Russian Rouble at the moment, we feel

that the most attractive form of petroleum agreement will be the production sharing agreement. This might be the basic agreement in our energy economy when we are speaking about foreign capital involvement in our country. I will not specify the particular details of these agreements as you are well aware of them. We already have some examples of these sorts of agreements established in our energy economy. The first example was Elf Aquitaine, which signed a production sharing agreement to explore and develop oil and gas resources. We have been developing such agreements in the north of the European part of Russia with such firms as Total and Texaco and so these sorts of agreements are beginning to appear in our oil economy.

We understand of course that the volume of foreign capital investments that might be involved in our energy economy and the number of potential investors depends significantly on such issues as the energy pricing level and taxation and I would like to say some words about this. According to our discussions with a large number of oil companies, a lot of potential investors consider our taxation system to be a de-stimulating one. This is based on the large number of taxes, duties, tariffs etc and on the cumulative tax received from the profits of the producers. At the moment we have around 40 different taxes, duties, levies etc; the total cumulative government take from all these taxes is significantly high and one of the major concerns is created by the so-called export tariff.

The situation with taxation in our country reflects those contradictions that exist in each country, in each government and international organisation, between those agencies which reflect a fiscal approach and are solving fiscal tasks, and those agencies which are concerned with long term economic development, based on solving the problems of project financing and so on. In our country we have the same situation, where interest in fiscal measures in order to minimise the budget deficit is promoted by the Ministry of Finance and others, leading to an increase in the number of taxes and the tax rate, while our Ministry, the Ministry of Economics and the former Committee of Foreign Investment and some other ministries, are attempting to solve the problems of long term economic development. In order to provide the beginning of the investment process we need to somehow liberalise the initial stage of taxation in order to stimulate investors to invest in our economy, and then the loss of fiscal budget receipts that will occur due to this decrease in the number of taxes and the tax rate will then be compensated in the future by the expansion of the number of investment projects and by expanding the pre-tax profit which will be received from these investment projects. However, there is a conflict of interest and it is not easy to solve this problem in a very short period of time. We understand that a conflict of interest exists and we must try to solve this problem. One example already mentioned is the export tariff.

This was established on 1 January 1992. A lot of investors who had made an investment decision prior to this date were put in a very difficult position because the level of this tariff, which is based on a flat rate, is equal to something like one third of the international world price and this means that it significantly increased the costs of production for all these investors. A lot of joint projects and investment projects were made before this tariff and a lot of investors told us that the situation had changed radically and they were even thinking of coming out of our economy.

We have had an opportunity to discuss this problem within the government and have established government decrees which give an exemption for the pay-back period for joint ventures which were established prior to 1 January 1992, those which made their investment decision prior to the establishment of this export tariff. We hope that these twenty plus joint ventures which were established prior to 1992 now understand that we are trying to solve these particular problems that arose during this transitional period

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which we are experiencing in our economy. During this transitional period, while we are creating the legal, economic and environmental framework and establishing this new approach to the relationship between the host country and the investors, some mistakes may be made, but we intend to solve them in the future as we are trying to solve them in these particular cases.