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COMPETITION AND COOPERATION PROBLEMS IN THE ENERGY SECTOR OF THE BALTIC REGION

This article considers the problems of competition and cooperation in the field of energy in the Baltic region, first of all, those related to the export of Russian oil and oil products, the Nord Stream gas pipeline, and the construction of nuclear plants in Poland, the Kaliningrad region, Lithuania, and Belarus. The author shows that, though Russia and the EU occasionally pursue opposite goals, there is considerable interdependence between them, and a confrontation is disadvantageous for both parties.

Key words: Baltic Region, Russia, EU, energy sector, competition, cooperation, oil and oil product export, Baltic Pipeline System, Baltic Pipeline System 2, Nord Stream, Ignalina NPP, Baltic NPP.

Over the last decade the problems related to cooperation and competition in the field of energy have aggravated in the Baltic region, which can be explained by several factors.

Firstly, the export of oil and, to a lesser extent, oil products via Russian ports on the Baltic Sea has dramatically increased simultaneously with a substantial decrease in export via the ports of the Baltics. After the collapse of the USSR, approximately 90% of oil export terminals located in the Soviet Baltic area was left beyond the borders of Russia [32]. At the time, almost all ports remaining in Russia, such as Saint Petersburg, could handle only light oil products but not crude oil. It led to a heavy dependence of Russian oil exporters working on transit via the Baltic States, which induced excessive tariff rates using their monopolistic position. At the same time, Russia's political relations with these states left a lot to be desired due to the anti-Russian stand of the countries' leaders and the discrimination against the Russian speaking population (in Latvia and Estonia).

In these conditions, Russia made a strategic decision to redirect oil and oil product export to Russian ports on the Baltic Sea. Presidential edict No 554 stipulating the construction and development of a port complex in the town of Primorsk in the Leningrad region was signed on June 6, 1997; the complex was to become a part of the integrated Baltic pipeline system (BPS) (Yaroslavl – Kirishi – Primorsk).

Phase 1 of the BPS of a capacity of 12 mln tons of oil per year came online in 2001. In 2004, after Phase 2 had been launched, the capacity of the BPS increased to 42 mln tons. In March 2006, as Phase 3 was launched, the transfer capacity of the system reached 65 mln tons [1]. At the end of 2006, Primorsk could transfer to carriers approximately 75 mln tons of oil [3], becoming the largest Russian port on the Baltic Sea (not only in the field of oil export) and second largest in the Russian Federation after Novorossiysk. The BPS is maintained by Baltnefteprovod – an affiliate of the public owned Transneft. Oil is transported via the pipeline from the Timan-Pechora basin, western Siberian fields, and Kazakhstan. The BPS became the principal oil
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export route of the only Russian pipeline operator – the state owned Transneft. In 2007, the BPS handled 36% of the total Transneft export (the former leader – the Druzhba pipeline – approximately 31%) [30].

As a result of the development of oil export capacities of Russian ports on the Baltic Sea, the export of crude oil has increased from 21 mln tons in 2003 to 75.2 in 2007, while the export via the Baltic States (Lithuania, Latvia, Estonia) has decreased over the same period from 24.1 to 6.5 mln tons [28].

Since 2003, Transneft has discontinued crude oil supply via a Druzhba branch line to the Latvian port of Ventspils. It was explained by the unsatisfactory condition of the pipeline. Later, due to the breakdown on the Russian stretch of the Druzhba pipeline on July 29, 2006, oil supply to the Mažeikių refinery in Lithuania was completely disrupted. Nevertheless, Lithuanians consider the breakdown a mere excuse and believe that supply was disrupted due to political reasons (the only Baltic refinery Mazeikiu Nafta was sold not to a Russian oil company, but to the Polish oil refiner and petrol retailer PKN Orlen). Transneft, in its turn, denies the political motivation of this step. At the moment, crude oil is being supplied by the Bütingė Terminal.

In the foreseeable future, Russia can completely stop exporting crude oil via the Baltic States due to gradually increasing export via the Russian ports on the Baltic Sea. The construction of the Baltic Pipeline System 2 (BPS 2) started in June 2009. The new 1170 km long pipeline will stretch from Unecha (the Bryansk region) through the Smolensk, Tver, and Novgorod regions to Ust-Luga (the Leningrad region) with a branch line to Surgutneftegaz oil refinery in Kirishi. The capacity of the first start-up facility is 30 mln tons of oil per year, as the construction of the second start-up facility is completed, the transfer capacity of the pipeline will increase to 50 mln tons per year [4].

The northern branch of the Druzhba pipeline running through the Belarusian city of Polotsk and the Lithuanian city of Mažeikiai is expected to be closed with the launch of the BPS 2 [12].

The volume of oil product export via the ports of the Baltic States has slightly increased over the past years (from 42.5 mln tons in 2003 to 48.7 in 2007). But the export via Russian ports on the Baltic Sea has been increasing at a faster rate (from 10.1 mln tons to 42.6) [28]. The export of oil products via Saint Petersburg and Kaliningrad has also risen. The Vysotsk Lukoil II terminal was set in operation in the port of Vysotsk (2004-2006), then followed the first start-up facility of Kstovo (Vtorovo–Yaroslavl–Kirishi–Primorsk oil pipeline, built in the framework of the 1056 km “Sever” project (2008), and later a fuel oil terminal in the port of Ust-Luga was built (2009).

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1 It accounts for 86% of Russian oil export (including the transit from neighbouring states) [31].
2 Transneft plans to complete the construction of Phase 1 in the first quarter of 2012. The completion of Phase 2 is planned for December 2013.
Russia plans to have completely stopped oil export via the Baltic States by 2015 [21]. In view of the launch of new port facilities in the North-West of Russia, this target seems feasible even in the conditions of the economic crisis.

The changes in oil and oil product export via the leading oil export ports on the Baltic Sea are shown in the table.

**Leading oil export ports in the Baltic region (mln tons)**

<table>
<thead>
<tr>
<th>Port</th>
<th>Oil export</th>
<th>Oil product export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primorsk</td>
<td>17.7</td>
<td>74.2</td>
</tr>
<tr>
<td>Vysotsk</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Saint Petersburg</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Kaliningrad</td>
<td>3.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Sillamäe (Estonia)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Tallinn (Muuga) (Estonia)</td>
<td>10.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Paldiski (Estonia)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Riga (Latvia)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Ventspils (Latvia)</td>
<td>3.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Büttingë (Lithuania)</td>
<td>10.8</td>
<td>4.6</td>
</tr>
<tr>
<td>Klaipeda (Lithuania)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Gdánsk (Poland)</td>
<td>6.0</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Secondly, with the launch of the Nord Stream pipeline in 2011-2012, the Baltic region will become one of the principal transit routes for the export of Russian natural gas to Europe.

The 1220 km long offshore gas pipeline will run across the floor of the Baltic Sea from Russia (Portovaya Bay in Vyborg near the Gulf of Finland) to Germany (Greifswald). Its transfer capacity is 55 bln m³ per year (two branches, 27.5 bln m³ per year each).

Gas will be supplied to the first branch from the Yuzhno-Russkoye field (the Yamal peninsula); the main gas source for the second branch will be the offshore Shtokman field in the Barents Sea.

Nord Stream will deliver gas to Denmark, the Netherlands, Belgium, Great Britain, and France.

Nevertheless, the pipeline project faced strong opposition. One of its principal opponents is Poland. In 2005, the then president Aleksander Kwaśniewski criticised possible environmental and economic effects of the "Schröder-Putin Pact". The members of the Polish Sejm brought a complaint alleging that the German-Russian agreement is a threat to Poland's security and independence [6]. Furthermore, Poland emphasised a high cost of the project and suggested as an alternative the contraction of the second leg of the onshore Yamal-Europe gas pipeline [16]. In response, deputy chair

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3 Source: [28].
4 A more than a clear hint at the so called "Molotov-Ribbentrop" pact of 1939.
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of the Gazprom Board Alexander Medvedev asserted that "if Poland proves that there is sufficient demand for the construction of the Yamal-Europe gas pipeline, the construction will start" [15]. During his visit to Poland in September 2009, Prime minister of the Russian Federation Vladimir Putin stressed that the Nord Stream project was not aimed against Poland and that the ambition to diversify supply was normal practice [19]. And, finally in October 2009, Poland was offered to join a branch of the Nord Stream – the Opal branch – which is being constructed in Germany and will run from the town of Lubmin across German territory to the Polish and Czech borders [17].

The Finnish environment protection agency demanded that the pipeline be moved to the South. The Finnish Department for External Relations expressed concerns about possible environmental impact of the pipeline [24]. Estonia, Latvia, Lithuania, Sweden and the European Parliament also questioned the route of the pipeline from both a geopolitical and an environmental perspective. In particular, they paid attention to the fact that the pipeline was designed to cross the burial site of Nazi Germany's chemical weapons. Vladimir Putin said in response that if European countries asserted that they did not need the fuel offered by Gazprom, Russia would not build the pipeline. In this case Russia would construct LNG plants and sell gas on world markets [18].

As a result, by the beginning of 2010, after a large-scale long-standing process of the environmental impact assessment, the necessary permissions from all countries the pipeline will stretch across – Denmark, Finland, Sweden, Russia, and Germany – were obtained.

Apparently, the position of Denmark and Sweden were influenced by the decision of the Norwegian Skanled pipeline consortium to suspend the construction indefinitely due to the economic crisis [5]. In return, Russia delayed a rise in round timber export duties and increased the volume of exported logs qualifying for tax-exemption [23].

Thirdly, the closure of the Ignalina NPP (Lithuania) in 2009 stimulated a number of NPP and power bridge construction projects in the Baltic region.

In accordance to the obligations under the agreement on the accession of Lithuania into the European Union of December 31, 2009, Unit 2 of the Ignalina NPP was taken out of operation (Unit 1 one was removed from service on December 31, 2004).

5 The influential British magazine The Economist emphasizes that "the requirement [to close the Ignalina NPP] was a political one, sprouting from a neurotic strand of greenery in western Europe" [9].

6 The Ignalina NPP (Visaginas, Lithuania) contained two RBMK-1500 water-cooled graphite-moderated channel-type power reactors (the Chernobyl type), each of a capacity of 1500 MW. Unit 1 came online on December 31, 1983, Unit 2 - on August 31, 1987. The construction of Unit 3 started in 1983, but was suspended in 1987 due to the protests of environmental organisations and the deterioration of economic situation in the USSR and was completely stopped in 1989. The construction of Unit for has never started. The NPP was designed to operate till 2028-2032.
The closure of the Ignalina NPP, which accounted for approximately 70% of Lithuanian total power generation, plunged the country into a difficult situation. Furthermore, the NPP also supplied power to Latvia and Estonia. Thus, as early as 2006, Lithuania, Latvia and Estonia signed a communiqué on the construction of a new Visaginas NPP (Ignalina 2) at the same site; the power plant was designed for two 1600 MW reactors.

Later, Poland joined the project. But there arose a number of serious problems, which questioned the implementation of the project. Firstly, for a long time, the parties were unable to reach an agreement on the distribution of quotas for the generated power. Secondly, the initial period of the construction of the new NPP (2015) is completely unfeasible (not to mention the economic crisis). The years 2020 or even 2025 are considered to be more feasible targets. Thirdly, there is a lack of clarity about the financing – approximately 5-7 bln euros (by the most conservative estimate) [8]. In these conditions, a number of partners, without exiting the project officially, started to take steps towards the development of local nuclear energy.

So, Poland announced that it would construct its own NPPs. The first NPP is to be constructed in 2020; the second one – within the next 1-2 years [13].

On February 26, 2009 the Estonian government approved the programmes of the development of the energy industry, under which Estonia aims to construct an NPP by 2023 [25]. The chair of the border of Latvenergo Kārlis Miķelsons said in August 2009 that Latvia should consider the construction of an NPP [29].

Thus, Lithuania is likely to construct the new NPP on its own. Still, Lithuanian minister for energy Arvidas Sekmokas repeatedly mentioned that the country adversely affected by the crises would not handle the construction of a new NPP [11]. At the same time, the justified doubts as to the necessity of an NPP stimulated competitive projects in the Kaliningrad region and Belarus, which we discuss below. As a result, without abandoning the NPP construction plans, Lithuania signed a ten year contract for the annual power supply of 2.5 bln kWh [22].

Russia reacted to the closure of the Ignalina NPP, which accounted for 30-40% of the power consumed in the Kaliningrad region, with a decision on the construction of the Baltic NPP. On September 5, 2009, Vladimir Putin signed an order for the construction of the 2300 MW Baltic NPP (two 1150 MW reactors) in the Kaliningrad region. The construction of Unit 1 will be underway in 2010-2016; the Unit 2 will be built in 2012-2018 [20].

The plant will be constructed 15 kilometres to the south-east from the town of Neman. The cost estimate exceeds 194 bln roubles (approximately 5 bln Euros) [7]. The Baltic NPP will not only meet the local needs of the Kaliningrad region but also generate energy for export. Its potential markets are Lithuania and the other Baltic States, which earlier used the power generated by the Ignalina NPP, Poland, and Germany. The prospect of Lithuania joining the construction of the Baltic NPP is being discussed by influential Lithuanian politicians. For example, Lithuanian ex-president Algirdas Brazauskas believes that his country has to participate in the project, since
Lithuania is unlikely to build an NPP [10]. Kęstutis Daukšys, a member of the Committee on Economics of the Lithuanian Seimas (the Labour party) thinks that "if Russia decides to sell 49% of the shares of the prospective power plant and makes a serious offer to Lithuania, the Lithuanian government must seriously consider it" [ibid].

Russia can offer to Poland 1000 out of 2300 MW of the Baltic NPP. Russian energy can be in demand in the Polish market, since, under the EU laws, in 2013 Polish coal-fired power plants will have to purchase CO₂ emission quotas (gradual introduction which is to be completed by 2020). Therefore, the prices for coal-fuelled power plant electricity will increase by several dozen percent resulting in the growing competitiveness of NPPs in the Polish market [27].

Inter RAO UES considers anchoring a cable along the North Stream pipeline to export the Baltic NPP power to Germany [2].

Belarus can become another player in the Baltic nuclear energy market. Today, the Russia-Belarus agreement on the construction of an NPP on the territory of Belarus is almost ready for signing.

The power plant will have a capacity of 2400 MW. Unit 1 is expected to be put in operation in 2016, Unit 2 – in 2018. It will be built (so will the Baltic NPP) according to the 2006 NPP project developed by the Atomenergo-proekt Institute in Saint Petersburg [14].

Eventually, the country that will be first to complete the construction of a NPP, will win the competition in the energy markets of the Baltic States and Poland.

The solution of the Baltic region power related problems apparently lies in promoting cooperation in the power industry. Already in the early 1990s, it was suggested to create the so called Baltic electricity grid. In May 1998, the Baltic Grid Electricity Cooperation Committee (BALTREL) was established to promote the idea of a common electricity market in the Baltic region. The committee includes representatives of 11 countries: Belarus, Germany, Denmark, Estonia, Finland, Latvia, Lithuania, Norway, Poland, Russia, and Sweden. 15 power generating companies (including the Russian Inter RAO UES, Lenenergo and Yantarenergo) also participate in the work of the Committee.

BALTREL is aimed at the integration of the energy system of the Baltics, Belarus and Russia into the electricity markets of Poland and Nordic countries. In this case, the Baltic region should become sort of a hub in the power trade between the East (Russian and Belarus) and the North-West of Europe. BALTREL also considers an opportunity of constructing new large power generating capacities (NPPs).

The idea of the Baltic electricity grid led to the construction of power lines between Germany and Sweden (the Baltic Cable, operating since 2004), Denmark and Germany (KONTEK, since 1995), Poland and Sweden (Swe-Pol Link, since August 2000), Estonia and Finland (Eastlink, since December 2006). It is planned to build new offshore electric cables: EstLink 2 between Estonia and Finland, NordBalt (initially Swedlink) between Litu-
The problem of a common electricity market in the Baltic region is aggravated by the fact that the region has been, for a long time, dominated by three large independent energy systems:

— the transmission system of the CIS\(^7\) and the Baltics (IPS/UPS);
— Nordic transmission system operator association (NORDEL), which included Eastern Denmark, Finland, Norway and Sweden;
— the EU Union for the Coordination of Transmission of Electricity (UCTE), which included Germany, Poland, Western Denmark and many European countries beyond the Baltic region.

On July 1, 2009 the NORDEL and ECTE system gave up their independence and were completely (alongside a number of other systems) integrated in the European Network of Transmission System Operators for Electricity (ENTSO-E). The opportunity of the synchronous operation of the IPS/UPS and the western systems has been discussed since 1990s. It is possible from a technical point of view (all European transmission systems operate at a frequency of 50 Hz) and was proven by practice (in 1993 the transmission systems of former socialist states of Eastern Europe successfully integrated into UCTE). In 2005-2008, a research conducted in the framework of the Agreement on cooperation in UCTE–IPS/UPS feasibility study proved that the synchronous interconnection was technically feasible. Its implementation requires corresponding technical, maintenance, and organisational measures as well as the development of a corresponding legal framework. Obviously, these measures will be taken in view of the synchronous interconnection of the IPS/UPS and ENTSO-E.

Thus, Russian energy policy in the Baltic region seeks to overcome the limitations imposed by the energy transport infrastructure developed in the Soviet times. The Russian Federation aims to create an alternative to old onshore transit routes via the CIS country and reduce the role of Ukraine in the transit of natural gas (through the construction of the Nord Stream pipeline) and Belarus in the transit of crude oil (through the construction of the BPS 2 pipeline running to the port of Ust-Luga).

Furthermore, oil and oil product export flows are redirected from the ports of the Baltic States to Russian ports (predominantly, Primorsk and Ust-Luga) in order to eliminate, in the long term perspective, transit dependence on Latvia, Lithuania, and Estonia. At the same time, Russia does not reject the idea of cooperation in the field of energy. So, Russia's principal partners in the Nord Stream project are companies from Germany. Private (most probably, foreign) investors will acquire 49% of the Baltic NPP developed in the Kaliningrad region, the electricity generated by which is expected to be exported abroad.

The energy relations in the Baltic region should be considered in a broader context of the EU-Russia relations. The conflicts between Russia,

\(^7\) Except Armenia and Turkmenia, their transmission systems operate parallel to that of Iran.
Ukraine, and Belarus leading to the interruption in energy supply exacerbated and politicized the problem of energy security for the EU. Today the voices claiming that the dependence of the EU on Russian energy is too heavy and, therefore, it is necessary to diversify supply and ensure its stability and security, are growing louder. These concerns were reflected in the EU strategy for the Baltic Sea region approved at the meeting of the EU leaders in Brussels on October 30, 2009. It says that the energy markets of the region lack proper infrastructure and are too concentrated on national needs instead of establishing connections within the region. It generates serious risks in terms of energy supply and leads to high energy prices. Furthermore, an efficient functioning of internal energy markets requires a certain connection between the countries. However, Estonia, Latvia and Lithuania are still isolated from the more extensive EU energy network (an exception is the EstLink cable between Estonia and Finland) [26]. Unofficially, it is openly discussed that the Baltics are too heavily dependent on Russia in terms of power and energy, which can be used by Russia as a tool to exert political pressure on these countries.

The solution of these problems at a strategic level requires the creation of an integrated and well-functioning market in the framework of the Baltic Energy Market Interconnection Plan (BEMIP) approved on June 17, 2009. Its principal objective is full integration of Lithuania, Latvia and Estonia in the European energy market through strengthening their connections with the neighbouring EU states. In particular, the Plan considers the opportunity of building offshore cables connecting Estonia and Finland (EstLink 2), Latvia and Sweden (Ambergate), Lithuania and Sweden (SwedLink, now Nord-Pol), and the construction of an onshore power line between Lithuania and Poland (LitPol). As to gas supply, the document recommends, in particular, to construct the Amber PoLit gas pipeline running from Poland to Lithuania and the Balticconnector pipeline connecting Finland and Estonia across the floor of the Baltic Sea and to build an LNG terminal in Finland or Estonia and underground gas storages in Latvia or Lithuania. Power generation is expected to increase as a result of the construction of the NPP in Estonia and Lithuania (Visaginas NPP or Ignalina 2) and the building of new and expanding of the existing CHPs.

At the same time, the EU cannot and does not want to terminate cooperation with Russia, which can be proven, in particular by the recent approval of the Nord Stream project by Denmark, Sweden and Finland giving way to its practical implementation. But we should not forget that Russia and the EU are mutually dependent in the field of power and energy, and Russian dependence on European market is greater than European dependence on Russian energy*. Thus, any confrontation is disadvantageous for both parties. This conclusion holds true for the Baltic region.

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* Around 30% of the EU oil and gas consumption comes from Russia, while more than 70% of Russian oil and gas export goes to Europe.
Bibliography


