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By Justinas Juozaitis

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By Justinas Juozaitis[1]

Justinas Juozaitis
Dr, Policy Analyst
Centre for Defence Analysis, General Jonas Žemaitis Military Academy of Lithuania
Lithuania

Dr Justinas Juozaitis is a policy analyst at the Centre for Defence Analysis, General Jonas Žemaitis Military Academy of Lithuania. He also teaches energy security policy at the Faculty of Political Science and Diplomacy, Vytautas Magnus University. Previously, Dr Juozaitis worked at the Energy Security Research Centre, where he was responsible for publishing an annual Lithuanian Energy Security Review (2015 – 2018). From 2016 to 2018, he participated in the Future Energy Leaders (FEL-100) programme at the World Energy Council, where he, among other things, contributed to the development of the World Energy Issues Monitor. He was also a fellow at the NATO Energy Security Centre of Excellence (ENSEC COE), researching the threats posed by Russia to the Baltic States' synchronisation with the Continental European Network. A recipient of multiple scholarships for academic achievements from the Lithuanian Academy of Sciences, Justinas has written papers for the Atlantic Council, Royal United Services Institute, International Centre for the Defence and Security, NATO ENCEC COE, and others. He is interested in energy security, analysing energy geopolitics in the Baltic Sea Region. Mr Juozaitis speaks English, Russian and German.

Abstract

The Belarusian decision to construct a new nuclear power plant in 2008 sought to diversify the national energy mix, reduce electricity tariffs and stimulate the economy through electricity exports. Instead of achieving its intended objectives, the nuclear programme laid the foundations for a major dispute between Vilnius and Minsk, eventually isolating the Belarusian electricity system, increasing its reliance on Russia, and rising electricity prices for the final consumers. The report examines how the Ostrovets Nuclear Power Plant (NPP) affected Lithuania and Belarus in a broader geopolitical context and presents contemporary economic and political challenges. The report argues that Lithuania perceived Ostrovets NPP as an extension of Russian foreign policy designed for increasing its energy dependence, a threat perception amplified by its geographic proximity, incidents and lack of transparent bilateral information exchange with Belarus. At the same time, the report shows that Belarus has underestimated Lithuanian willingness to defend its national interests and failed to consider the implications of the forthcoming Baltic States' desynchronisation from the Integrated Power System/Unified Power System (IPS/UPS) on electricity trade. Isolated from the Baltic States and Ukrainian electricity markets, Belarus will have to raise capital from the population and local industry to repay its debt to Russia or eventually risk losing the ownership of Ostrovets NPP. For Lithuania, the situation does not fare better – Vilnius has not succeeded in preventing the emergence of a dangerous infrastructure object close to its borders and will have to make substantial investments in emergency preparedness going forward. Making things worse, Lithuania cannot expect transparent and timely information exchange from Lukashenko's regime.

Key words: Ostrovets NPP, nuclear power, electricity trade, Lithuania, Belarus

1 The author is writing in his personal capacity. Email: justinas.juozaitis@lka.lt

1. Introduction

In 2008, Belarus placed high hopes on nuclear power. Reacting to energy disputes with Russia, Belarus aimed to decrease its reliance on natural gas imports and find a cheaper electricity generation source by initiating a 2400 MW nuclear power plant project, later known as Ostrovets (Astravyets) NPP. At the same time, Belarus sought to capitalise on infrastructure trends in the neighbouring countries. In the west, Belarus observed the upcoming shutdown of the second block of Ignalina NPP (1300 MW), the largest generation unit in the Baltic States, and their ambitious plans to interconnect national electricity systems with Poland, Finland and Sweden. In the south, Minsk watched the ageing Ukrainian nuclear reactor fleet. It seemed that nuclear generation would diversify the Belarusian energy mix, decrease electricity prices and transform the country from electricity importer to exporter, strengthening its economy. Such was the story on paper.

Going forward to 2022, the practical results of the Belarusian nuclear power programme could not have been further away from the initial expectations. Belarus claims that the commercial launch of the first unit in 2021 reduced the natural gas imports from Russia by 1.8 billion m3, but it has not broken its monopoly in the overall natural gas import structure. By choosing a Russian state-owned contractor, credit and technology for the construction of Ostrovets NPP, Belarus has not diversified its energy sector nor stimulated its economy. On the contrary, Minsk has further strengthened its reliance on Russia by adding another layer of dependence.

Belarusian plans to export electricity generated in its new nuclear power plant have not materialised either. By selecting a construction site near its western border and involving Russia in its nuclear power programme, Belarus has provoked an adverse reaction in Lithuania which eventually decided to stop electricity trade with Belarus once Ostrovets NPP became operational. After the falsified Presidential election and the subsequent violent crackdown on Belarusian civil society, Latvia and Estonia joined the embargo on Belarusian electricity in 2020. Russian war of aggression against Ukraine further isolated the Belarusian electricity system two years later. Reacting to the Russian expansionism, the Baltic States reduced electricity trading capacity on their interconnections with the Russian mainland and Kaliningrad to 300 MW on 3 March, substantially constraining Belarusian possibilities to 'smuggle' its electricity to the Baltic States through Russia.[2]

On its southern border, Belarus has not fared better. Russian military invasion on 24 February 2022 coincided with a planned isolated Ukrainian and Moldavian power systems test, stopping electricity exchanges with Belarus. Ukraine has not reconnected to IPS/UPS and asked for emergency synchronisation with the Continental European Network, completing the process on 16 March. Belarus's involvement in the war (staging area for the Russian military, logistical and medical support, etc.) and desynchronisation from the IPS/UPS deems future electricity trading between Ukraine and Belarus unlikely. The same applies to the Baltic States, which will desynchronise their electricity grids from IPS/UPS by 2025 and stop all electricity exchanges with Russia and Belarus irrespective of national positions towards Ostrovets NPP. With the export markets effectively closed and obligations to repay the debt remaining, the local households and industry will bear the costs of Lukashenko's nuclear adventurism.

Focusing on the Belarusian nuclear power programme over the last two decades, the report explains how Ostrovets NPP transformed from a symbol of energy independence, glorified in Belarusian official documents and political rhetoric, to an economic and political burden it is today. In the first chapter, the study introduces the origins of the Belarusian nuclear programme and its intended effects. Then the report presents Lithuania's reaction to a nuclear power project close to its national border and identifies its response mechanisms, including an embargo on the electricity trade. The third part focuses on the Belarusian possibilities to circumvent Lithuanian trade restrictions. The fourth part analyses the interplay between Lithuanian attempts to isolate the Belarusian electricity market and Minsk's efforts to challenge Lithuanian foreign policy in a broader geopolitical context. The final chapter overviews the economic implications of Ostrovets NPP. In the end, the brief argues that Ostrovets NPP will be a challenge for both Belarus and Lithuania going forward, albeit for different reasons.

2 Prior to the launch of Ostrovets NPP, the Baltic States had 1950 MW trading capacity with Russia and Belarus. 1350 MW trading capacity was available on Lithuanian – Belarusian interconnections, while 600 MW were available via Lithuanian interconnections with Kaliningrad. Once Ostrovets NPP became operational in November 2020, the trade between the Baltic States and Russia was transferred to Latvian – Russian interconnection, reducing the trading capacity with the Russian mainland to 600 MW. The trading capacity on the Lithuanian border with Kaliningrad remained unchanged.

2. The launch of the Belarusian nuclear power programme

Looking from the historical perspective, Ostrovets NPP marks the third attempt in developing nuclear energy in Belarus. During the 1980s, the Soviet Union sought to construct two nuclear power plants in the former Byelorussian Soviet Socialist Republic but halted them after the Chernobyl disaster in April 1986. Once the Soviet Union collapsed, the idea to develop nuclear power quickly resurfaced in Belarus, resulting in a state programme on nuclear energy in the early 1990s. However, it has not produced any substantial results. The combination of limited financial resources, availability of cheap natural gas imports from Russia and profoundly negative social attitudes towards nuclear power due to the consequences of the Chernobyl disaster made the Belarusian authorities reconsider the feasibility of their nuclear aspirations and declare a ten-year moratorium on nuclear energy in 1998 (Ecologia 1998).

Despite the decision to postpone the discussions on nuclear power, Belarusian energy disputes with Russia in 2004 and 2006 – 2007 resulted in temporary supply disruptions and higher energy prices, reigniting the debates about alternative energy sources. In 2005, Belarus addressed its concerns in the national energy security concept for 2006 – 2010, which proposed reducing the reliance on natural gas by "*energy conservation, the development of renewable energy sources and nuclear power*" (Novikau 2019: 5). One year later, the Government prepared an action plan for preparation to construct a nuclear power plant in Belarus (Vasilievich 2014). In 2007, Alexander Lukashenko further solidified the case for nuclear power development by signing an updated Energy security concept and a directive on measures strengthening economic security (President of the Republic of Belarus 2007 a, b). The documents clarified that Belarus initiated the construction of a new nuclear power plant to diversify its energy supply by replacing at least 5 billion m^3 of Russian natural gas imports with domestic nuclear generation (for the intended effects, see Table 1). In the end, Belarusian Security Council decided in January 2008 to build two 1200 MW nuclear reactors, aiming to finish the first reactor by 2016, followed by completing the second one in 2018 (Stsiapanau 2018).

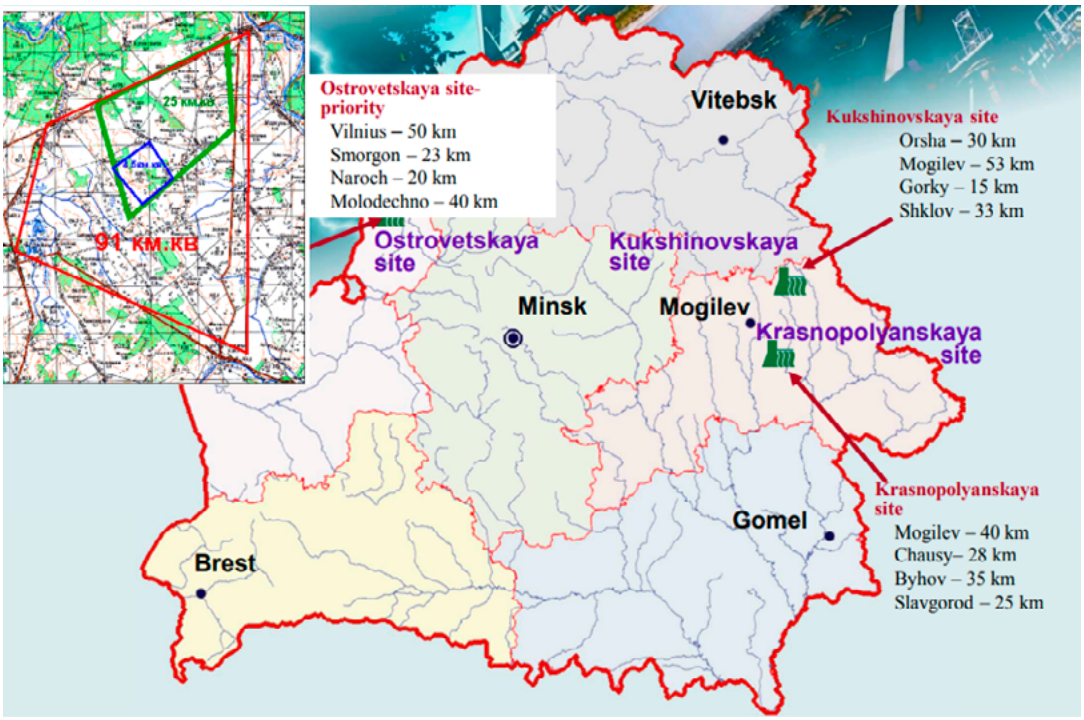
Table 1. Anticipated effects of a Belarusian nuclear power plant

	2015	2020	2025	2030	2035
Electricity consumption (TWh)	37.3	39.9	41.6	42.1	43.8
Electricity production (TWh)	34.4	39.9	41.6	42.1	43.8
Thermal power plants (TWh)	34.2	31.8	21.8	22	23.2
Renewables (TWh)	0.27	0.95	1.8	2.1	2.6
Nuclear (TWh)	N/A	7.1	18	18	18
Imports (TWh)	2.82	0	0	0	0
Share of natural gas in electricity and heat generation (%)	90	70	60	50	<50

Source: Novikau (2019).

After establishing nuclear power as part of the future Belarusian energy mix, local authorities considered potential construction sites and searched for possible funding sources. In 2007, Belarusian Prime Minister Sergei Sydorsky established a special commission for site selection, and in December 2008, it recommended the construction of a new nuclear power plant near Ostrovets in the Grodno region. For the study, it is essential to note that the commission has chosen the construction site located close to the Lithuanian border (25 km) and the capital city Vilnius (50 km) over two other primary alternatives in the Mogilev region, near Krasnopoliansk and Kukshinovsk, closer to the Russian border (Ministry for Emergency Situations of the Republic of Belarus 2013).

Map 1. Main potential construction sites for a nuclear power plant in Belarus



Source: Vasilievich (2014).

Shortly after Belarus has announced its preferred construction site, Russia declared its willingness in February 2009 to grant financial assistance to the project provided that a state-owned corporation, Atomstroyexport, a subsidiary of Rosatom, would construct the nuclear power plant for Belarus. Given Russian financial backing, Atomstroyexport had a competitive edge over other companies interested in the Belarusian nuclear programme (Areva, Guandong nuclear energy corporation and Westinghouse – Toshiba conglomerate). At the same time, Belarus could hardly afford to cover the construction costs, even if a Western contractor would have better served its strategic purpose of energy diversification from Russian energy supplies.

Russian and Belarusian counterparts finalised the contracts in 2011 – 2012 to construct two VVER-1200 nuclear reactors, each having an installed capacity of 1200 MW. According to the agreements, Russia committed to lending up to $10 billion for 25 years to finance 90 % of the project, while Belarus pledged to start repaying the loan by April 2021. The parties have also agreed that one half of the loan will have a fixed annual interest rate of 5.3 %, and another will be subject to a "*six-month LIBOR in dollars … plus 1.83 per cent per annum*." (Schneider and Fragot et al. 2021: 68). Belarusian official estimates indicated that the introduction of Ostrovets NPP will decrease the retail electricity prices in Belarus by 30 % and lower the natural gas import bill. However, the problem with the official estimate was that it had not included the cost of the Russian loan, constituting the most significant part of total capital costs, in its calculations (Konończuk 2018: 12). By that time, it was increasingly clear that Ostrovets NPP was also an export-driven project, aiming to fill the growing generation niche in Lithuania due to the closure of the second unit of Ignalina NPP in 2010 (Tsarik 2021) and utilise the emerging interconnectivity between the Baltic States, Poland and the Nordic countries.[3]

Despite ambiguous economic rationale and apparent strategic contradictions (diversifying from Russian energy supply by using its funding, state-owned companies, technology and experts), Belarus proceeded with its nuclear power programme. In November 2013, Belarus started the construction of the first unit of Ostrovets NPP, while the construction of the second unit began in April 2014. Five years behind the initially envisaged schedule, Belarus connected the first unit to the national grid in November 2020. In June 2021, the first unit received an operating license. Belarusian authorities are expected to connect the second reactor in 2022 (World Nuclear Association 2021). Belarus has also explored the possibility of constructing two additional nuclear reactors (1200 MW each) if the conditions prove to be favourable. However, it seems highly unlikely due to the violent crackdown of protests in 2020 and Belarusian involvement in the Russian war of aggression against Ukraine, leading to economic sanctions and political isolation.

3 Namely, LitPol link (600 MW in DC mode), NordBalt (700 MW) and Estlink 1 and 2 (1000 MW).

3. The anatomy of Lithuanian opposition

Lithuanian political elites and national security establishment were concerned about the Belarusian nuclear aspirations from the very beginning, while its foreign policy grew increasingly proactive over time. At first, Lithuania began raising public questions about the development of nuclear power in Belarus once its location became apparent. During a visit to Minsk on 29 December 2008, the Lithuanian Minister of Foreign Affairs Vygaudas Ušackas asked Belarusian officials to provide more information about a proposed nuclear power plant near Ostrovets (Ministry of Foreign Affairs of the Republic of Lithuania 2008). Over the following month, the Lithuanian Foreign Minister met European commissioners for energy and foreign affairs, raising concerns about the nuclear safety and environmental impact of Ostrovets NPP and asking to include the development of nuclear energy in the agenda of EU – Belarusian relations (Ministry of Foreign Affairs of the Republic of Lithuania 2009 a, b). In order to ensure higher international awareness and scrutiny over Ostrovets NPP, Lithuanian President Dalia Grybauskaitė met with former Director-General of International Atomic Energy Agency Yuka Amano in June 2010 and communicated Lithuanian expectations that the Belarusian nuclear power plant should conform to international nuclear safety and environmental standards (President of the Republic of Lithuania 2010).

The initial diplomatic steps highlight a somewhat cautious Lithuanian approach vis-à-vis Ostrovets NPP. Lithuanian political leadership hoped to establish more constructive relations with Belarus at that time, also considering that the development of Belarusian nuclear power was in its preliminary phase. For example, Lithuanian Prime Minister Andrius Kubilius met his Belarusian peer Sergei Sidorsky on several occasions in 2010, leading to declarations regarding the transparent cooperation and information exchange on nuclear energy projects. Moreover, Lithuania and Belarus signed a communique on economic cooperation in June 2010, which included cooperation in nuclear energy. As the Lithuanian Prime Minister later explained, the purpose of such cooperation with Belarus was to show how nuclear power projects should be implemented according to the best international practices, referring to a regional Visaginas NPP project. At the same time, the Lithuanian Prime Minister suggested that Belarus should consider constructing its nuclear power plant in a different location, given that the project is in a preliminary stage (Government of the Republic of Lithuania 2010 a, b).

As Belarus has not shown willingness to consider alternative construction sites and the bilateral relations deteriorated following the disputed Belarusian Presidential election in December 2010 and subsequent crackdown of protests, Lithuania increased its pressure on Ostrovets NPP. Shortly after the Belarusian Presidential election, the nuclear disaster in Fukushima in March 2011 emerged as another impetus for a more assertive Lithuanian foreign policy. First, the Lithuanian Parliament passed a resolution expressing concerns regarding the nuclear energy development in Belarus and its potential negative impact on Lithuania on 17 March 2011 (Seimas 2011). Second, Lithuania issued a formal complaint to the Implementation Committee of the Espoo convention regarding the non-compliance of Ostrovets NPP later that year (Ministry of the Environment of the Republic of Lithuania). Finally, Lithuania drafted its energy independence and security strategies in June 2012, further securitising the Belarusian nuclear power programme. For example, Lithuanian National Security Strategy implicitly referred to the Ostrovets NPP as a threat to its security in the following passage: "*development of nuclear energy in the region disregarding international nuclear energy safety standards when designing, constructing and operating nuclear energy facilities without performing a detailed environmental impact assessment.*" (Seimas 2012 a: 5).

Looking at the Lithuanian threat perception, it is crucial to establish that Vilnius was also concerned by Russian energy geopolitics. Lithuanian security community perceived the emergence of Ostrovets NPP and Baltic NPP in Kaliningrad[4] as Russian projects aimed to maintain Lithuania's energy dependence on Moscow by ruining the regional Visaginas NPP project and preventing the synchronisation with the Continental European Network. For example, the national security threat assessment published by Lithuanian intelligence institutions in 2016 argued (State Security Department and Second Investigation Department 2016: 34-35): "*Further integration of the Baltic Region into the Western European energy system (construction of new power plants, integration with the synchronous grid of Continental Europe) can be hindered by Russia's activities targeted against these projects. Two nuclear power plant projects are being implemented near the Lithuanian borders (in Kaliningrad Oblast, Russia, and Astravyets, Belarus), and the electrical interconnections between the IPS/UPS system and the synchronous grid of Continental Europe are being offered in parallel*".

4 The construction of the Baltic NPP has been halted since 2013 as Russia failed to find markets for its electricity. Lithuania refused to enlarge its interconnection capacity with Kaliningrad, while Poland and Germany were not interested in building additional electrical interconnections.

Even though there have been attempts to equate Russian energy geopolitics as a product of Lithuanian wishful thinking, Russia's behaviour and electricity trading patterns argued the contrary. Russian President Vladimir Putin himself criticised the synchronisation of Baltic States on several occasions (President of Russia 2015), a position primarily driven by Russian strategic (influencing political outcomes through energy dependence) and economic interests. Speaking about the latter, Baltic States became a lucrative market for Russian electricity exports after the shutdown of Ignalina NPP in 2010. Prior to the closure, Russia has exported only 1.1 TWh of electricity to the Baltic States. In 2010, the amount increased five times (5.45 TWh), peaking at 7.78 TWh in 2011. That year, Russian revenue from electricity exports to the Baltic States amounted to 32.8 billion roubles, constituting about a third of its total revenue from electricity trading abroad (Inter RAO 2012 a). It was in Russia's best interest to oppose the development of generation capacities in the Baltic States, and Ostrovets NPP played a part in achieving this objective as it was, among other things, used as an argument, persuading not to develop national generation capacities. Moreover, contemporary documents expose that Russia sought to utilise the Baltic States as energy bridges for exporting its electricity westward (Inter RAO 2012 b), an outcome the Baltic States wanted to avoid.

Lithuania systematically challenged Ostrovets NPP in various multilateral settings following its threat perception throughout 2011 – 2016. In the framework of the Espoo and Aarhus conventions, Lithuania questioned the procedural and legal aspects of the Belarusian nuclear power plant, such as its site selection, quality of the environmental impact assessment in a transboundary context and access to environmental information (Belarusian society and NGOs were also engaged in this regard). At the same time, Vilnius raised questions about the compliance of Ostrovets NPP to international nuclear safety standards and practises in International Atomic Energy Agency and within the framework of the Nuclear Safety Convention and EU's 'stress-test' procedure. In parallel, Lithuanian diplomats sought to promote international awareness about Ostrovets NPP bilaterally and multilaterally (for a systematic overview of Lithuania's diplomacy, see Janeliūnas 2021).

Despite several legal (Belarus was found in non-compliance with Espoo and Aarhus conventions) and political (European Parliament urged Belarus to ensure compliance with nuclear safety and environmental standards) victories, Lithuanian pressure has not changed Belarus' willingness to construct a nuclear power plant near its borders. Adding to the growing anxiety in Vilnius, Lithuanian officials learnt from public sources about the first incidents during the construction of Ostrovets NPP in May – July 2016. Especially concerning was the fall of a nuclear reactor vessel and a general Belarusian reluctance to share the information about incidents or to acknowledge them once public. Later that year, a statement by the Belarusian vice-minister for energy Michael Michadiuk, suggesting that ten incidents occurred during the construction of Ostrovets NPP, which resulted in three fatalities (Charter 97 2016), left Lithuanian authorities wondering about the potential mishaps that Belarusian authorities did manage to hide from the public eye.

Therefore, it is not surprising that from 2016 onwards, the Lithuanian approach became more assertive. On 12 May 2016, the Lithuanian Parliament has passed a resolution calling on the Lithuanian Government to take all the possible measures to stop the construction of unsafe Ostrovets NPP (Seimas 2016 a). By the end of the year, the 17th Lithuanian Government drafted a programme that contained a commitment to oppose the construction of Ostrovets NPP (Seimas 2016 b). In February 2017, parliamentary political parties drafted an agreement supporting the efforts of the Lithuanian Government, further solidifying a case against Ostrovets NPP (Seimas 2017 a).

With a firm bipartisan consensus, 2017 became a pivotal year for Lithuanian foreign policy toward the Belarusian nuclear power programme, leading to essential changes in national legislation and the definition of specific national measures regarding Ostrovets NPP. In April 2017, Lithuania drafted a law establishing a definition for an unsafe nuclear power plant (Seimas 2017 b: art. 2): "*a nuclear power plant under construction or operating in a neighbouring third country, the designing, installation or operation of which has resulted in non-compliance with the requirements for environmental protection or nuclear safety and radiation protection and violation of international agreements and conventions and which, due to its geographical location or technological characteristics, poses a threat to the national security of the Republic of Lithuania, its environment and public health.*". The law also provided a procedure for measuring the safety of a nuclear power plant and identified legal implications if competent Lithuanian authorities deemed the nuclear power plant unsafe. First, it prohibits Lithuania to trade electricity with a country having an operational unsafe power plant. Second, it bans the Lithuanian hydroelectric pumped storage power plant (900 MW) in Kruonis to provide reserve capacities. Finally, it obliges Lithuanian authorities to stop

physical electricity flows with third countries (Russia and Belarus) once the Baltic States desynchronise from the IPS/UPS and join the Continental European Network.

Based on the law mentioned above, national authorities conducted an assessment of Ostrovets NPP. Reacting to negative conclusions, the Lithuanian Parliament declared Ostrovets NPP a hazardous object, posing a threat to Lithuanian national security, environment and public health in June 2017 (Seimas 2017 c). In turn, it established the legal implications mentioned in the previous paragraph. In advance, the law made clear that once Ostrovets NPP becomes operational, Lithuania will cease electricity trading through its interconnections with Belarus and prohibit Minsk from accessing its reserve capacities from the pumped storage power plant.

Lithuanian decision to impose an electricity embargo on Belarus raised many questions about its practical implementation and implications on other countries, especially Latvia and Estonia, operating in the same power system (IPS/UPS). When the legislation was passed, electricity trade between the Baltic States, Belarus and Russia was conducted only through Lithuanian – Belarusian and Lithuanian – Russian (Kaliningrad) borders. Moreover, most of the electricity imported by the Baltic States through Belarusian – Lithuanian interconnections was not of Belarusian but of Russian origin (see Table 2). Hence, stopping electricity trade on the Lithuanian – Belarusian border would also lead to discontinuing electricity imports from the Russian mainland, which Belarusian and Russian governments tried to avoid.

Table 2. Lithuanian electricity import structure 2014-2021 by country of origin and other indicators (TWh)

Lithuanian electricity imports	2014	2015	2016	2017	2018	2019	2020	2021
From mainland Russia	1.210	1.154	0.984	0.763	1.684	3.754	1.334	0.238
From Kaliningrad	2.000	1.841	2.034	2.516	2.944	2.623	1.911	1.810
From Belarus	0.502	0.190	0.154	0.146	1.035	1.509	0.497	0
From Latvia[5]	4.070	4.178	3.623	3.729	2.813	1.231	2.046	5.087
From Estonia	0.007	0.031	0.059	0.369	0.170	0.122	0.134	0.200
From Poland	0	0.066	0.488	0.532	0.752	0.417	0.557	0.857
From Sweden	0	0	2.758	3.261	3.039	3.730	4.783	3.723
Total imports	7.779	7.460	10.101	11.168	12.437	13.385	11.261	11.916
Other indicators								
Electricity generation	4.054	4.598	3.973	3.866	3.220	3.640	5.143	4.693
Electricity consumption	10.715	10.861	11.434	11.726	12.107	12.154	11.973	12.760
Imports as of consumption (%)	72.59	68.68	88.34	95.24	102.72	110.12	94.05	93.38
Electricity export	0.156	0.252	1.827	2.490	2.805	4.042	3.352	2.872
Total electricity demand[6]	11.677	11.806	12.247	12.543	12.852	12.983	13.051	13.737
Imports as of total demand (%)	66.61	63.18	82.47	89.03	96.77	103.09	86.28	86.74

Source: Litgrid (2022).

Aiming to stop the construction of Ostrovets NPP by denying reserve capacities and export markets, Lithuania began consultations with its neighbours and the EU. In 2017, only Poland explicitly declared

5 Electricity imports from Latvia to Lithuania include electricity transit through the Latvian power lines. Latvia consumed 7.382 TWh of electricity in 2021 while producing 5.609 TWh (Lithuania claims importing 5.087 TWh from Latvia that year). The electricity generation in Latvia is mainly based on renewable sources and natural gas. In 2021, Latvia produced 1.925 TWh of electricity in its thermal power plants and 2.619 TWh in hydropower plants situated on the Daugava river (AST 2022). In 2021, electricity generation in Latvian thermal power plants was mainly based on Russian natural gas imports. According to Eurostat, Latvia consumed 1.187 m^3 of natural gas that year while importing 2.013 m^3 (imports from Russia – 1.851 m^3) and exporting 1.288 m^3 (Latvia does not produce natural gas but operates Inčukalns underground gas storage facility). For more about Latvia's energy sector, please see (Aboltins 2022: 245 – 273).

6 Electricity generation + electricity import – electricity export.

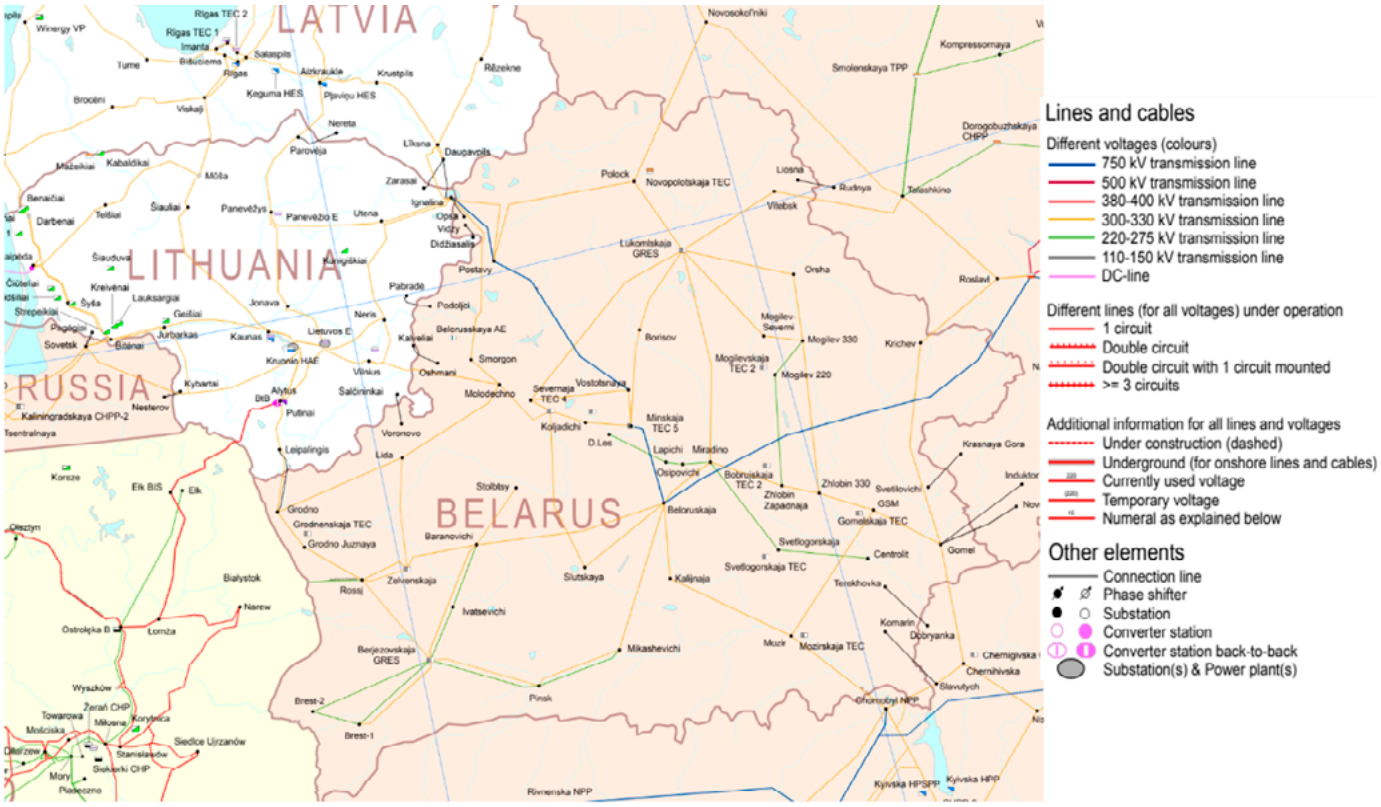
its support for Lithuania's aim to block Belarusian electricity export. Despite its symbolic importance, the Polish willingness not to trade electricity with Belarus had little practical significance as countries have not traded electricity in the first place. On the other hand, talks with Latvia and Estonia were complicated. Lithuanian neighbours initially maintained that discontinuing the electricity trade with Belarus would not yield substantial results and might harm their economic interests (Urbaitė 2020). Adding to the difficulties, European Commission was also reluctant to support the Lithuanian position due to legal and technical concerns (Staselis 2016). It became increasingly clear that Lithuania's aim to negotiate a multinational agreement on the isolation of Ostrovets NPP would be challenging to implement, while Belarus started questioning the electricity embargo advocated by Lithuania.

4. The Belarusian perspective: where to sell electricity?

With the deadline for the loan payments to Russia fast approaching and the launch of Ostrovets NPP behind schedule, Lithuanian embargo stood in Belarus' way to raise capital by exporting electricity. At the same time, Belarus has been facing increasingly more assertive Russian political pressure since 2015 – the Kremlin demanded a more profound political, economic and military integration within the framework of the so-called Union State. In trying to avoid having Russian military bases in Belarusian territory and further erosion of already constrained national autonomy, Alexander Lukashenko once again tried to negotiate with the East by engaging the West and electricity exports was one piece of a broader Belarusian geopolitical game.

Given the characteristics of the Russian IPS/UPS and the Belarusian national transmission system, Lukashenko's regime essentially had a few options[7] in 2017 to export electricity generated in Ostrovets NPP. The first option envisaged direct electricity exports to the Nord Pool market, provided that Lithuania lifts its trade embargo. The second option – accessing the Nord Pool market indirectly through Russian interconnections with Latvia, Estonia and Finland – depended on Russian willingness to cooperate. Despite having strong electricity interconnectivity with Russia, its power system had no demand for additional electricity imports. The third option was to sell electricity to Ukraine, which stopped importing electricity from Russia and Belarus in 2015 (see Map 2).

Map 2. Belarusian power transmission system and its interconnectivity with neighbouring states



Source: ENTSO-E.

7 In 2017, Belarus had 11 high-voltage interconections with neighbouring countries: five with Lithuania, four with Russia and two with Ukraine.

With 1350 MW capacity for electricity trade and a substantial electricity generation deficit, Lithuania offered Belarus the most lucrative opportunity for electricity exports. To some extent, Belarus was already exploiting the electricity interconnections with Lithuania in 2018 – 2019, exporting 1.035 TWh and 1.509 TWh respectively, before the trading ban came into force in November 2020. Given the strong interconnectivity on the Lithuanian and Belarusian border, annual export capacity could have reached roughly half of the total annual generation capacity of Ostrovets NPP. If the market conditions were favourable and the Lithuanian electricity trading ban was revoked, Belarusian electricity could dominate the Lithuanian electricity import structure as Lithuania's annual electricity imports fluctuated between 11-13 TWh over the last five years (Litgrid 2022).

Looking from the long-term perspective, Belarusian prospects to enter the Nord Pool market through its interconnections with Lithuania were complicated by Baltic States' aim to synchronise their power grids with the Continental European Network by 2025. Here, the devil lay in the details. The construction of back-to-back converter stations allows for maintaining electricity exchange between different synchronous zones, making the future electricity trade conditional on Lithuanian willingness to build them on the existing cross-border interconnections with Belarus. In 2012, the Lithuanian Energy Independence Strategy announced that Vilnius plans to build only one back-to-back converter on Alytus–Grodno's power line, maintaining electricity exchange with IPS/UPS once synchronisation is complete (Seimas 2012 b). It indicated an incoming reduction in trading capacity on the Belarusian – Lithuanian border as five high-voltage transmission lines interconnected the countries in 2012, while Lithuania planned to leave only one operational. Further constraining Belarusian possibilities to export electricity Westward, the Lithuanian Government clarified in 2017 that it would cease all electricity exchanges with Belarus and Russia once the synchronisation process is finished (Government of the Republic of Lithuania 2017).

Such developments presented Belarus with a twofold challenge. In the short run, Belarus had a chance to circumvent the Lithuanian electricity ban by 'smuggling' its electricity to the Nord Pool market through Russian interconnections with Latvia, Estonia and Finland. Given the mounting Russian pressure on Belarus to facilitate political and economic integration, potential Russian cooperation in such endeavour seemed obscure. The prospects of Belarusian electricity trading through Russia were further complicated because Finland and the Baltic States were the primary recipients of Russian electricity exports since Lithuania closed its Ignalina NPP in 2010, generating the majority of revenue for Inter RAO's trading segment abroad. For example, Russian electricity exports in 2017 totalled 16.698 TWh, while Inter RAO exported 6.903 TWh to Finland and 3.131 TWh to Lithuania. Given the electricity generation surplus in mainland Russia and Kaliningrad,[8] it was unclear why Inter RAO should focus on re-exporting Belarusian electricity to the Baltic States and Finland at the expense of its generation. Due to the same reason, Russia had little need for Belarusian electricity to cover its national demand. Finally, Gazprom and Inter RAO were interested in facilitating Kaliningrad's electricity exports to Lithuania from its expanded natural gas generation, where Belarusian presence would have meant increased competition.

In the long run, Belarusian chances of accessing the Nord Pool market once the Baltic States desynchronise from the IPS/UPS in 2025 mainly depended on Russian ability to coerce its neighbours to maintain electricity trade going forward. Like Belarus, Russia was interested in continuing electricity trade with the Baltic States post-2025. To that end, Russia questioned the techno-economic utility of the Baltic synchronisation project at the bilateral and the EU levels, also making demands for the continuation of electricity exchanges. However, the Baltic States were not backing down.

On the southern border, Belarusian interconnections with Ukraine have also offered lucrative opportunities for electricity exports, potentially reaching 4 – 5 TWh annually, but entering the Ukrainian market came with its specific challenges as Ukraine suspended electricity imports from Russia and Belarus in 2015. On top of that, Ukrainian and Moldavian transmission system operators signed an agreement with ENTSO-E in 2017 to synchronise their power grids with Continental European Network by 2023, casting doubt on wherever Belarusian electricity trade with Ukraine has a long-term future even if Kyiv eventually allows trading electricity with Belarus in the short run.

At that time, there were diverging opinions in Ukraine regarding wherever it should trade electricity with Belarus structured around economic and strategic considerations. On one side of the aisle, the proponents of electricity trade with Belarus argued that diversifying the electricity supply would lower the prices and thus benefit the consumers. At the same time, some officials believed that electricity imports from Belarus would help achieve Ukrainian long-term interest in increasing electricity exports to the Western

8 From 2018 to 2021, Russia has double Kaliningrad's generation capacity by constructing four new power plants, adding additional 967 MW.

countries and advocated for the construction of back-to-back converters on its interconnections with Belarus. Ukraine hoped that synchronisation with Continental European Network would quadruple its electricity exports from 5 to 20 TWh per year (Varfolomeyev 2017). Thus, some argued that re-exporting Belarusian electricity could help Ukraine achieve this goal (Holubeva 2021).

However, the opponents maintained that reopening the electricity trade with Belarus and Russia would do more harm than good. First, it would benefit the Russian electricity export monopoly Inter RAO, financing Russian military aggression against Ukraine. Second, it would harm Ukrainian market reforms and domestic producers. Third, it might jeopardise Ukraine's plans to synchronise with the Continental European Network. Fourth, it would establish friction between Ukraine and Lithuania, a firm supporter of Ukrainian statehood (Omelchenko 2019).

As the last chapters show, Lithuania and Belarus faced various challenges in implementing their national interests, centred around Ostrovets NPP and positioned within broader geopolitical processes. Lithuania struggled in finding common ground with its neighbours and the EU regarding the Belarusian electricity embargo. In contrast, the Belarusian transmission system offered at least three electricity export routes, albeit all problematic with unclear future perspectives. The next chapter highlights how Lithuania and Belarus sought to assert their interests and presents its outcomes.

5. Ostrovets NPP on the path to energy isolation

Aiming to secure electricity export markets, Belarus has engaged in proactive bilateral and multilateral diplomacy since 2016. The focal point of Belarusian diplomatic efforts was focused on challenging the Lithuanian assessment that Ostrovets NPP is not safe. For the most part, Belarusian authorities sought to legitimise its nuclear power plant through International Atomic Energy Agency, inviting a number of its 'peer-review' missions to access how Ostrovets NPP corresponds to international nuclear safety standards set by the Agency. Eventually, working through the 'nuclear watchdog' produced positive results. IAEA's public statements created a favourable public discourse regarding Ostrovets NPP and Belarusian authorities, countering the concerns expressed by other international organisations and environmental activists (Juozaitis 2020). Wasting no time, Belarus sought to build on the positive publicity by ridiculing Lithuanian safety concerns and mounting pressure on Vilnius to reconsider its intended electricity embargo.

Lithuania was disappointed with IAEA's public posture and saw no reason to change its position. For Lithuanian decision-makers, IAEA's statements were not reassuring at all. On the contrary, they felt that the Ostrovets' case exposed the shortcomings of the international nuclear safety regime. In its public communication, IAEA essentially ignored objective mishaps of the Belarusian nuclear power programme: violations of international law, crackdown of civil society and incidents during the construction and operational phases of Ostrovets NPP. The kind of shortcomings identified not only by Lithuania but also established by the UN's international bodies (implementation committees of Espoo and Aarhus convention) and exposed by international and Belarusian NGOs. Moreover, Lithuanian officials raised concerns regarding the potential influence of Rosatom within the IAEA, manifesting through its dominant global position in the new nuclear builds and ex-employees working in the organisation.

Looking from a distance, one could argue that IAEA's position was predetermined by its institutional characteristics. The organisation aims to promote peaceful uses of nuclear energy, a mission that faced substantial obstacles after the global financial crisis of 2008 and the nuclear disaster in Fukushima. Against this backdrop, Belarus' nuclear aspirations served as a breath of fresh air for the stalling nuclear power development in Europe as Belarus became the first 'European nuclear newcomer' over the last thirty years (International Atomic Energy Agency 2020). On top of that, IAEA's peer-review system is not designed to conduct a rigorous nuclear safety inspection that establishes legally binding implications. Instead, it focuses on consultations based on the needs expressed by the nuclear power developer. In a dispute between nuclear developers and their opponents, IAEA will inevitably favour the former as nuclear power developers have a right to choose between a wide range of peer review missions and determine their time and scope, while the opponent can only raise public questions.

Even though Belarus has managed to establish a competing narrative about Ostrovets NPP, it has not stopped Lithuania from promoting the Belarusian electricity boycott. For Minsk, it became increasingly clear that even if Lithuania fails to persuade Latvia and Estonia to boycott Belarusian electricity, Baltic States' synchronisation with the Continental European Network will eventually end electricity exchanges

in the near future.

Despite their initial success in securing the prospect of EU's financial assistance for the synchronisation in 2013, the Baltic States and their neighbours were long debating about the technical aspects of the strategic project. The primary question was wherever they should synchronise through the Lithuanian – Polish interconnections to the Continental system or should they join the Nordic grid via Estonian – Finnish submerged power lines. After lengthy debates, the Baltic States agreed with Poland and the EU to synchronise their power grid via Lithuanian – Polish power lines in June 2018 (European Commission 2018). One year later, the European Commission, Poland and the Baltic States made clear that electricity trade with the third countries, namely Russia and Belarus, will cease once the Baltic States synchronise with CEN in 2025 (European Commission 2019).

Disregarding the setbacks, Minsk sought to find new ways to approach Lithuania. With the changes in Lithuanian political leadership after the Presidential election in March 2019, Belarus sought to re-establish high-level contacts with Vilnius, which were discontinued since 2016 and try again to persuade its neighbour to lift the upcoming electricity embargo. Here, Belarus played on Lithuanian threat perception, suggesting that electricity trading with the Baltic States would strengthen its hand *vis-à-vis* Russia in the Union State negotiations. Moreover, Belarusian analysts suggested that Lithuanian specialists could monitor Ostrovets NPP on a 24/7 basis, provided that the trading question is renegotiated.

The Belarusian attempt at rapprochement came when Lithuania's opposition to Ostrovets NPP faced many challenges from 2019 to 2020, but Vilnius was determined to maintain an embargo on Belarusian electricity if Minsk continued to implement the project. The first significant problem lay on its Northern border. Contrary to Lithuania's expectations, Latvia announced in 2019 that it would transfer the trading area from the Lithuanian – Belarusian to Latvian – Russian border once the Lithuanian electricity embargo came into force. Estonia was also in favour of maintaining electricity trade in the short-term perspective. For that purpose, Latvian and Estonian transmission system operators have prepared a bilateral trading methodology, excluding Lithuanian operator from the document (Elering and AST 2019). The introduction of another methodology meant that two separate trading regimes might be established in an interdependent system, creating confusion about how they would coexist. Lithuania asked how Latvian authorities would distinguish between Russian and Belarusian electricity imports as the latter cannot enter the Lithuanian electricity system, eventually paving the way for consultations about 'certificates of origin'.

The second problem was in the South. In 2019, Ukrainian electricity market liberalisation allowed for electricity trading with Belarus, allowing Minsk to export 0.85 TWh that year for $45.6 million. Given the promising start, Belarus hoped to export 2.1 TWh to Ukraine next year as the Ukrainian energy balance provided for such a quota, but it only amounted to 0.15 TWh due to the COVID-19 pandemic. In April 2020, Lithuanian President Gitanas Nausėda met his Ukrainian peer Volodymyr Zelensky and asked not to import electricity from Belarus (President of the Republic of Lithuania 2020). Local Ukrainian producers were already complaining about unequal competition with electricity imports, but it was not entirely clear how the Ukrainian position would change in the future (Manenok 2020 a).

Finally, Lithuania faced difficulties in mustering international support for its opposition against Ostrovets NPP as Belarus successfully reapproached with the USA and the EU. Observing Lukashenko's willingness to resist Russian demands for enhanced military presence and establishment of the Union State, Washington and Brussels eventually softened their sanctions on Belarus and increased diplomatic engagement with Minsk. Lithuania's most important allies continuously avoided making demands to stop the construction of Ostrovets NPP and encouraged Vilnius to rely on international nuclear safety instruments, namely IAEA and EU's stress tests.

Since the West was reapproaching Belarus and Lithuania was also interested in limiting Russian influence on its neighbour, avoiding high-level political engagement with Minsk seemed counterproductive. At the same time, it was unclear what intensified bilateral engagement might mean for the nuclear dispute when one country was determined to maintain an electricity embargo while another aimed to re-establish electricity trade. Not surprisingly, Belarus and Lithuania have not achieved a compromise regarding Ostrovets NPP.

The falsified Belarusian Presidential election in August 2020 and subsequent repression of protesters effectively ended Lukashenko's rapprochement with the West and steered Ostrovets NPP on the path to energy isolation. One month after the violence erupted in Minsk, Latvia and Estonia joined the Lithuanian

trade embargo on Belarusian electricity. The Baltic States agreed to maintain trade with Russia using Latvian – Russian interconnection with Latvia demanding 'certificates of origin' from the electricity traders.

Even though there were difficulties with this arrangement, as Lithuanian officials declared that Belarusian electricity managed to enter the Nord Pool market, this problem was eventually mitigated by reducing trade capacity with Russia on 3 March 2022. Since November 2020, the Baltic States traded electricity with Russia through Latvian (Russian mainland – 600 MW) and Lithuanian (Kaliningrad – 600 MW) interconnections. Now, only 300 MW trading capacity remains, with 150 MW allocated for trade with the Russian mainland and 150 MW with Kaliningrad. In essence, such an arrangement denies Belarus chances of selling electricity to the Baltic States through Russian interconnections as the capacity is too small to fit Russian and Belarusian electricity exports simultaneously.

Finally, Russia's war of aggression against Ukraine closed the last remaining export direction. On 24 February 2022, Ukraine and Moldova started their isolated power system test and have not synchronised back to the IPS/UPS due to the Russian military invasion. Instead, Ukraine and Moldova worked closely with ENTSO-E to join the Continental European Network. They have managed to do so by 16 March, a year earlier than initially planned. Since the main effort of the initial Russian military advance towards Kyiv began from the Belarusian territory and Minsk continues to support Russian armed forces, it does not seem likely that Belarus would re-establish electricity trade with Ukraine. Hence, after years of diplomatic battles, Ostrovets NPP remains firmly isolated from international markets, but what does it mean for the Belarusian economy?

6. Economic implications of Ostrovets NPP

The brief provides a somewhat abstract answer to the question raised in the last chapter. Given the limited data availability, unpredictable nature of international politics and fluctuations in energy prices, the calculations and assumptions presented below are not definitive. Instead, they provide an analytical framework for further debate. However, the analysis does argue that Ostrovets NPP will not reap economic benefits – it will establish a significant burden on the Belarusian households.

To support the thesis presented above, one first must grasp the magnitude of initial investment and associated capital costs. Here, the Russian loan is the crucial variable. Belarus renegotiated the loan agreement in March 2021. Russia has reduced an annual interest rate to 3.3 % for the entire credit line (up to $10 billion) and postponed the start of the repayment period from April 2021 to April 2023. Earlier loan agreement stipulated that the loan must be repaid in 25 years, counting from late 2011 and leaving 15 years for making payments. Belarus wanted to extend the repayment period to 35 years, but Russia rejected the proposed extension (Schneider and Fragot et al. 2021). One should also remember that the funding of Ostrovets NPP is divided into two segments, where 90 % of the construction costs is covered by the Russian credit described above, and 10 % of the final estimate is paid by the Belarusian budget.

The problem here is that one does not know how much credit Belarus will ultimately use. In April 2020, Rosatom announced that Belarus had used $4.33 billion of its total $10 billion credit line (Interfax 2020). Russian state-owned corporation also claimed that final construction costs of Ostrovets NPP are not going to exceed $6 billion, while Alexander Lukashenko once stated that the respective costs should be below $7 billion, but the precise number is a 'commercial secret' (Manenok 2020 b). Contrary to these figures, some claimed that expenditures would be higher due to currency fluctuations (Schneider and Fragot et al. 2021).

Let us take the Belarusian and Russian numbers at their face value. From the available information, one infers that Ostrovets NPP would use $5.4 billion of the Russian credit line if the total construction costs are $6 billion (first scenario) and $6.3 billion if the total costs reach $7 billion (second scenario). The math tells us that Belarus will have to repay Russia $7.949 billion ($2.549 billion interest) in the first scenario and $9.274 billion ($2.974 billion interest) in the second scenario. If Belarus repays the loan in 15 years starting from 2023, it will need to make annual payments to Russia worth between ~ $530 million and ~ $618 million. Assuming that the Russian credit line would be used in full, the capital costs amount to $14.72 billion ($10 billion – loan, $4.72 billion – interests). The total usage of the Russian credit line would lead to ~ $981 million in yearly payments to Russia. Compared to the calculations presented above, Belarusian analyst Yuri Tsarik estimated that Belarus would have to repay $7.927 billion to Russia (2021), amounting to $528 million in annual payments over 15 years. Hence, the exact capital costs are unclear, but Belarusian yearly payments should not be lower than $500 million.

To accommodate Ostrovets NPP in its energy system, Belarus made additional investments, partly financed by loans. First, Belarus has spent $340.86 million on upgrading its transmission system while covering the central part of the total project costs (95 %) with a loan from the Export-Import Bank of China (Manenok 2020 c). Second, Belarus is making additional investments in its reserve capacities (800 MW) and electric boilers (836 MW) to balance the production and consumption of electricity. With other measures aiming to increase the domestic demand for electricity until 2025, Belarus might spend $3.31 billion. Important to note that Belarus aims to increase the domestic consumption of electricity by 4.5 TWh to utilise Ostrovets NPP better, indicating a plan to extract more payments for electricity from Belarusian households and industry (Tsarik 2021). Finally, Belarus took another $500 million credit from Russia's VEB bank in March 2014 to cover the costs of its supposedly national contribution to the construction of Ostrovets NPP (Konończuk 2018).

On top of a growing list of expenditures, Belarusian officials clarified that introducing nuclear generation will not lead to quick shutdowns of Belarusian natural gas generation capacities. On the one hand, the introduction of 2400 MW nuclear generation requires keeping a respective reserve capacity. On the other hand, the particularities of the Belarusian power system require limiting the utilisation of existing natural gas generation capacity, not shutting it down entirely. About half of Belarusian generation capacity produces electricity and heat, while the other half produces electricity. Belarus plans to use the former during the cold and the latter during warm periods. Hence, Belarusian natural gas-fired power plants will lose their revenue stream due to the introduction of Ostrovets NPP, likely requiring state subsidies to keep them afloat (Manenok 2020 b).

Having considered the expenditures, one needs to look at the revenue. The critical variable here is the price that Ostrovets NPP will charge for its electricity production. According to a recent estimate, Ostrovets NPP should sell electricity at $38.64 per MWh on average to break even over 60 years.[9] If Ostrovets NPP produces 18 TWh annually, such a price will lead to annual revenue of $695.52 million per year. Given the repayment calendar, Belarus will need to accumulate more capital from 2023 to 2037, making it necessary to increase the price first. The problem here is that Belarus can only extract revenue from Belarusian households and industry. It seems that local consumers are not capable of paying larger electricity bills due to the low incomes in Belarus and its economic recession. However, the regime is moving in this direction. Contrary to initial promises to reduce electricity prices by introducing nuclear generation, Belarus has raised electricity tariffs in 2017, 2020 and 2021. With the payment deadline approaching, further increases are likely.

The final piece of the puzzle is natural gas. Belarus has made the case that introduction of nuclear generation allows for saving 5 billion m^3, a figure later reduced to 4.5 billion m^3. Currently, Belarus pays Russia $128.5 for 1000 m^3 of its natural gas. Taking the last numbers at their face values, reducing 4.5 billion m^3 of natural gas imports could save Belarus $576 million annually.

On the surface, it seems that the saved amount combined with higher electricity prices might accumulate enough capital to repay the debt. However, the situation is more complex. First, one must consider that reducing natural gas imports from Russia does not change the overall Belarusian import structure, where Russia still holds its monopoly. Such a situation leaves an open door for Gazprom's attempts to compensate for the lost revenue by raising natural gas prices for Belarus, for example, going back to the $170 price tag. In such a scenario, Belarus would only see the savings on paper as its total natural gas import bill will be much higher.

The Russian – Belarusian natural gas trade dynamics also puts the 'savings' argument in a critical light. If the history of Belarusian natural gas imports taught us anything, Minsk has long struggled to pay Russia for its natural gas. In some cases, the debts are repaid by making concessions in other areas, selling critical Belarusian energy infrastructure or are covered by taking other debts from Russia (for a comprehensive historical analysis, see Balmaceda 2014). For example, Alexander Lukashenko secured a $1.5 billion loan from Russia on 14 September 2020 but committed using $330 million of the total amount for paying Belarusian debt for 'Gazprom' (Radio Free Europe – Radio Liberty 2020).

Even though the data is somewhat ambiguous, in the end, one could expect the following. First, repaying the loan to Russia for the construction of a nuclear power plant will be challenging, considering the closed access to export markets and other factors such as sanctions and low-income population. Here, the Belarusian plan to accommodate Ostrovets NPP in its power system is somewhat unorthodox as it

9 Even here, the numbers are somewhat speculative. One source argues that an average price of $58.1 per MWh is required to break even (World Nuclear Association 2021), while another estimates it at $80.3 per MWh (International Atomic Energy Agency 2013).

aims to increase the electricity consumption in the country, rather than only focusing on changing the generation source. Second, Russian natural gas import prices are constantly changing for Belarus. Since Russia maintains its natural gas monopoly, it is unclear whether a reduction in import quantity will lead to a smaller import bill in the long term. Third, Russia might demand transferring shares of Ostrovets NPP or making other concessions if Belarus fails to pay out the debt.

7. Concluding remarks

Looking from the Lithuanian perspective, the isolation of Ostrovets NPP seems like a Pyrrhic victory. The electricity embargo was intended to halt the emergence of a dangerous infrastructure object close to the Lithuanian border and its capital city, not to punish Belarusians with higher electricity tariffs. With the Belarusian regime determined to continue operating Ostrovets NPP, Lithuania will need to invest in emergency preparedness and response continuously. When the Belarusian government goes as far as weaponising people by instigating a migration crisis on Lithuanian, Latvian and Polish borders, one cannot expect transparency from Belarus in getting timely and comprehensive information about the day-to-day operations of Ostrovets NPP while Lukashenko's regime is in power.

The launch of Ostrovets NPP does not reflect well on the EU's external policies either. By utilising Russia's political and financial resources, Lukashenko created a permanent source of risk close to the EU's border without encountering much opposition from Brussels. Given the already established isolation of the Belarusian electricity system and Russian military presence in the country, there is not much that the EU can do to change Lukashenko's behaviour regarding Ostrovets NPP. However, the EU's support would still be valuable elsewhere.

The EU should continue to recognise Ostrovets NPP as a common European issue, pooling its resources and political weight. For example, Lithuania would benefit from long-term financial assistance for strengthening and maintaining its emergency preparedness and response system. The Baltic States need more support to sustain and facilitate the momentum of the synchronisation project as they are dealing with increasing inflationary pressure, disrupted supply chains and a volatile geopolitical environment. The synchronisation of the Baltic States' power systems with the Continental European Network makes it possible to *de facto* unbundle from the Russian and Belarusian power systems, permanently cutting ties with Ostrovets NPP.

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