

CUTTING THE TENTACLES OF RUSSIAN ENERGY 'OCTOPUS'

DiXi Group follows on the series of materials aimed at exploring the foreign ties of key Russian energy companies for elaboration of proposals for expanding sanctions limiting the international influence of Russian energy sector.

INTER RAO

INTER RAO'S TENTACLES SORTED OUT



INTER RAO IS THE ONLY OPERATOR OF ELECTRICITY EXPORTS AND IMPORTS IN RUSSIA ENGAGED IN PRODUCING, SUPPLYING, AND DISTRIBUTING ELECTRICITY. YOU CAN FIND ALL CRUCIAL 'TENTACLES' OF THIS RUSSIAN ENERGY 'OCTOPUS' BELOW TO SEE WHERE THEY CAN BE CUT OFF.

Africa



ETHIOPIA



modernization of Melka Wakena HPP

North America



UNITED STATES



General Electric



CUBA



- construction of four new power units of 200 MW each
- modernization of 10 power units with 1 GW total installed capacity
- delivery of equipment



Energoinport

South America



PERU



possible modernization projects



ECUADOR



supply of equipment for power plants



Celec



ARGENTINA



Construction of Chihuido HPP

Asia & other



CHINA



26.2% of company's exports (2020) with the lasting increase



KAZAKHSTAN



10.8% of company's exports (2020), not commercial



Ekibastuz GRES-2 (50 % share)



possible JV to assure commercial supplies



ARMENIA



- Electric Networks of Armenia JSC (subsidiary)
- Hrazdan Energy Company (subsidiary)

- Please note only the most crucial connections are reflected
- Crossed marks reflect assets/connections the company has withdrawn/suspended



Distribution and retail



Partnership/companies



Engineering



Trading



Representative offices



Production



Europe



GERMANY



SAP



NORWAY



Trading



FINLAND



22.5% of company's exports (2020)



MOLDOVA



Kuchurgan power plant or MGRES (1,700 MW of available capacity), 90.3% of production in Moldova (2020)



• CJSC "Moldavskaya GRES" (subsidiary)
• S.A. Energocom



POLAND



1,825 million kWh (2020)



IRL Polska (subsidiary)



TURKEY



• Trakya Elektrik TPP (478-MW) concession
• Akkuyu NPP (share — 0.821%)



Trakya Elektrik (subsidiary)



LATVIA



26.9% of company's exports (2020)



INTER RAO Latvia (subsidiary)



AUSTRALIA



WorleyParsons



MONGOLIA



modernization of Ulaanbaatar CHP-3



2019: exports 372 million kWh, imports 27 million kWh



AZERBAIJAN



2019: exports 91 million kWh, imports 219 million kWh



TAJIKISTAN



Sangtuda 1 HPP (75%-1 shares together with Rosatom)



GEORGIA



6% of company's exports (2021 forecast)



2 HPPs of 227 MW (Khrami HPP-1, 2)



• 22% of the market (2020)
• 6,098 km of power networks
• 10 service offices



Telasi/Telmiko (subsidiary)



LITHUANIA



16% of the country's consumption (2021)



UAB Vydmantai Wind Park (30 MW)



ESTONIA



Trading



INTER RAO Eesti (subsidiary)



BELARUS



31 million kWh (2019)

HOW TO CUT? INTER RAO'S TENTACLES

TAKE ACTIONS TO CURB INTER RAO'S MARKET POWER IN MOLDOVA AND GEORGIA

Inter alia, Inter RAO subsidiary CJSC "Moldavskaya GRES" should be limited in the access to international financing and technologies, and further support for Ukrainian electricity export to Moldova should be provided. The Georgian subsidiary Telasi should be considered for asset acquisition (by nationalization or purchase), possibly based on results of the investigation into violation of market rules. Regulatory oversight over Telasi/Telmiko compliance with unbundling requirements should be also supported.

IMPOSE POLITICAL AND EXPAND PERSONAL SANCTIONS

Inter RAO should be delisted from the participants of the UN Global Compact and excluded from the Carbon Disclosure Project (CDP) international rating of the organization, and representatives of Board members and the managing team should be added to the sanction lists.

PREVENT FURTHER STRENGTHENING OF THE COMPANY'S POSITION IN OTHER MARKETS

(LATIN AMERICA, AFRICA, SOUTH
CAUCASUS, AND CENTRAL ASIA)

Inter alia, Inter RAO subsidiary CJSC "Moldavskaya GRES" should be limited in the access to international financing and technologies, and further support for Ukrainian electricity export to Moldova should be provided. The Georgian subsidiary Telasi should be considered for asset acquisition (by nationalization or purchase), possibly based on results of the investigation into violation of market rules. Regulatory oversight over Telasi/Telmiko compliance with unbundling requirements should be also supported.

LIMIT THE COMPANY'S TRADING CAPABILITIES, NOTABLY IN EUROPEAN DESTINATIONS

Following the Nord Pool example, other countries still involved in the electricity trading with Inter RAO, such as Georgia and Kazakhstan, should suspend operations. Inter RAO subsidiaries as Inter RAO – Export, RAO Nordic Oy, AB INTER RAO Lietuva, SIA INTER RAO Latvia, INTER RAO Eesti OU, IRL Polska Sp. z o.o., LLC Inter RAO Georgia should also be sanctioned.

DO NOT ALLOW PARALLEL IMPORTS OF GE TURBINES TO RUSSIA, INCREASING CONTROL OVER RELEVANT TRANSACTIONS

Western partners shall guarantee that GE gas turbines, its components, or technologies won't be brought to Russia via parallel imports as it is allowed by the Russian authorities. JV for the turbines production in Russia shall be suspended, so that Inter RAO would not relaunch it without the permission of GE as technology provider. requirements should be also supported.





PJSC “Inter RAO UES” (Inter RAO) is a Russian diversified electricity holding company. It ranks second in the Russian industry by installed capacity and third by electricity generation, accounting for more than 9.6% of Russian electricity production and less than 18.2% of the Russian retail electricity market¹.

With the proper place among the largest Russian energy players, Inter RAO was sidelined in the context of international sanctions. Such a decision was probably made since 83%² of the company’s revenues are the generation and supply exclusively in Russia, and the company has a relatively limited dependency on international financial instruments and technological support.

However, leaving Inter RAO out of sanctions talks and actions is not reasonable. Why should Inter RAO be sanctioned?

First, the company is the only participant in export-import operations in the Russian wholesale electricity and power market. With this unique license, it has a special market and political status, serving as a Russian electricity ‘envoy’ in the regional and, to a lesser extent, global arena. That was, in fact, the company’s original function back to its creation in 1997 as the subsidiary of OAO “RAO UES”, responsible for exports and imports of electricity³.

Second, the company still generates part of its revenues abroad, despite its well outlined recent

strategy of localization and withdrawal from foreign markets. Namely, in 2020 foreign assets brought 2% of revenues and 3% of EBITDA⁴ (in 2019 – 2% and 5%, respectively)⁵, and trading operations, mostly concentrated in Europe, generated 5% of revenues and 6% of EBITDA (in 2019 – 8% and 13%, respectively)⁶.

Third, even without rising foreign revenues, Inter RAO extensively exercises its influence abroad, especially in the former Soviet countries, often intending to undermine democratic transformations and energy reforms. Prominent examples of such behavior is halting the electricity supply to Finland after the country announced NATO accession plans⁷ as well as persistent influence on Moldova using major production facility in the breakaway region of Transnistria.

The company is listed as strategic on the state level⁸, and its publicly stated aim is to realize the strategic interests of the Russian Federation abroad⁹. The Kremlin’s political influence is the primary motivation for the company’s foreign economic activity, which poses threats for the countries where it operates.

1 Inter RAO Annual Report 2020, p. 39

2 Inter RAO. Strategy

3 Inter RAO Annual Report 2020, p. 29

4 Earnings Before Interest, Taxes, Depreciation, and Amortization

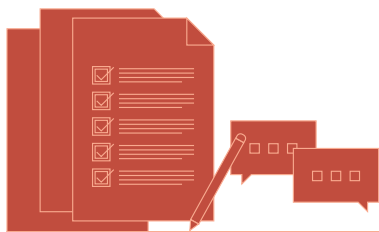
5 Inter RAO Annual Report 2020, p. 101

6 Ibid.

7 <https://www.bbc.com/news/business-61442432>

8 Inter RAO Annual Report 2020, p. 4

9 Ibid.



RECOMMENDATIONS

We can define five necessary aspects the Western community should work on to limit the ability of Inter RAO to support the Russian war machine and expand the Kremlin's political influence abroad.

1. TAKE ACTIONS TO CURB INTER RAO'S MARKET POWER IN MOLDOVA AND GEORGIA

Since the start of unprovoked and unjustified Russian full-scale aggression in Ukraine, both Moldova¹⁰ and Georgia¹¹ have not joined the Western sanctions, despite the apparent support of Ukraine by their societies. The blatant dependence of their energy systems on Russia is one of the reasons why the governments of these countries remained less vocal. Inter RAO activity plays a significant role in this regard.



MOLDOVA

Kuchurgan power plant or MGRES, de-facto owned by Inter RAO since 2005¹², is the source of 90.3%¹³ of electricity production in Moldova (2020) and app. two thirds of the country's consumption¹⁴. The facility is working entirely on gas supplied from Gazprom¹⁵ in the controlled by Russia breakaway region of Transnistria enabling Russia to limit or halt electricity supply as political leverage as it was in 1998, 2004, and 2005¹⁶.

Since May-June 2022, after successful synchronization with ENTSO-E of both Ukraine and Moldova power systems, Ukrainian companies

Ukrhydroenergo and Energoatom were able to cover up to 30% each of Moldova's electricity needs^{17, 18}. Even before the synchronization, imports from Ukraine allowed Moldova to balance its high dependency on supplies from MGRES. Also, the planned Vulcănești-Chișinău and Bălți-Suceava power lines¹⁹, connecting Moldovan and Romanian electricity systems would bring both commercial opportunities and security benefits.

However, even with additional imports from Ukraine and, in mid term, from Romania, Moldova's Energocom is forced to negotiate and maintain contact with Inter RAO to ensure electricity supply²⁰. Moreover, Russia still could impede electricity transmission from Ukraine to Moldova, as six out of seven high-voltage (330 kV) Ukraine-Moldova interconnection points are located in Transnistria, and four of these lines are connected to the MGRES transformer substation²¹. Meanwhile, Inter RAO abuses its power by neglecting the instructions of Moldelectrica (Moldovan TSO) and therefore being responsible for the major imbalances²², as well as by increasing the electricity cost for Chișinău²³.

Apart from further support for the technical and market integration of Ukrainian and Moldovan energy systems with the European grid, it is crucial to limit Russia's ability to perform energy blackmail against Moldova. Therefore, it is essential to limit access to the international financing and technologies for Inter RAO subsidiary CJSC «Moldavskaya GRES» and to provide further support for Ukrainian electricity exports to Moldova as a way to decrease the share of MGRES in the country's electricity supply and to strengthen Energocom's bargaining position towards Inter RAO.

10 Ukrinform. Sandu explains Moldova's move not to join Russia sanctions

11 Georgia Today. Irakli Garibashvili: Georgia Not Going to Join Sanctions against Russia

12 Интер РАО. Молдавская ГРЭС

13 Inter RAO Annual Report 2020, p. 100

14 Moldova 2019 Security of Supply Statement

15 Enerdata. Moldova energy report

16 Free Russia. Russian gas and the financing of separatism in Moldova

17 Interfax. UK Hydro Energy to cover 30% of Moldova's electricity shortages in May

18 Економічна правда. Молдова хоче покрити до 30% споживання електроенергією «Енергоатома»

19 Energy Community Secretariat. Electricity interconnection targets in the Energy Community Contracting parties (February 2021)

20 EurAsia Daily. Молдавия продлила контракт с российской «Интер РАО», другой альтернативы нет

21 Free Russia. Russian gas and the financing of separatism in Moldova

22 Nokta. Сергей Тофилат: Из-за шантажа Кучурганской ГРЭС мы рискуем переплачивать за электричество десятки миллионов евро

23 EurAsia Daily. Молдавия без электричества: контракт с «Интер РАО» продлят только на месяц



GEORGIA

Georgia is connected to Inter RAO on many levels, while the country receives up to 6% of the company's exports²⁴ and Inter RAO owns the Khrami HPP complex, responsible for 3.6% of Georgian generation²⁵ as well as 22% of supply via 75% ownership in Telasi²⁶ which controls distribution and sale (via Telmiko) of electricity in Tbilisi. Moreover, Georgia is also constrained by legal obligation, as the Stockholm arbitration ruled in favor of Inter RAO in case against Georgia (to pay \$80.5 million as compensation for losses due to GEL value depreciation by increasing the electricity tariff)^{27, 28}.





As for now, to limit the Russian influence on Georgian energy security, acquiring Telasi assets in Georgian jurisdiction (by nationalization or purchase) should be considered. In addition, Georgian authorities would need support for proper regulatory oversight over compliance²⁹ of Telasi as distribution system operator and Telmiko as universal supplier with applicable rules (unbundling was completed in 2021³⁰). This would be particularly important given the inspections run by the Georgia's Ministry of Finance after complaints of Telmiko consumers regarding miscalculated utility bills³¹. Georgia should also receive support in considering its ongoing appeal on the Stockholm arbitration decision³².

2. PREVENT FURTHER STRENGTHENING OF THE COMPANY'S POSITION IN OTHER MARKETS (LATIN AMERICA, AFRICA, SOUTH CAUCASUS, AND CENTRAL ASIA)

Outlying regions (Latin America & Africa)

In these regions, similarly to Rosatom³³, Inter

RAO methodically promotes itself as a provider of technology and engineering services. To limit Russia's ability to execute malign influence on the respective countries using major energy projects as a leverage, Western companies and governments should block or, under certain political conditions in such conflict-torn jurisdictions as Ethiopia³⁴, become competitors in those current or possible projects.

 ECUADOR (Celec ³⁵)	supply of equipment for power plants ³⁶
 ARGENTINA	construction of Chihuido HPP ³⁷
 PERU	possible modernization projects ³⁸
 ETHIOPIA	modernization of Melka Wakena HPP ³⁹

Neighboring regions (South Caucasus & Central Asia)

Countries neighboring Russia's energy system can be affected directly through export supplies and integration steps.

Inter RAO is active in Kazakhstan (destination of 10.8% of the company's exports in 2020, however on non-commercial principles of synchronous operation of power systems⁴⁰), trying to ensure commercial supplies⁴¹, in Tajikistan as a shareholder in Sangtuda 1 HPP (75%-1 shares together with Rosatom)⁴², and in Azerbaijan (electricity exports and imports⁴³). Also, special attention should be paid to Russia's integration plans within the Eurasian Economic Union to form a common electricity market with Armenia, Belarus, Kazakhstan, and Kyrgyzstan⁴⁴. Those connections could have political implications; therefore, Western partners should monitor them.

24 Neftegaz.ru. Интер PAO рассматривает возможность прекращения экспорта электроэнергии в ЕС

25 Inter RAO Annual Report 2020, p. 98

26 Ibid.

27 Civil.ge.Georgia Ordered to Pay USD 81 Mln to Russian Energy Company

28 Jus Mundi. Gardabani, Inter RAO and Telasi v. Georgia (II)

29 IPN.ge. GNERC to start monitoring in «Telasi» and «Telmiko» from today

30 Energy Community Annual Implementation Report 2021

31 Agenda.ge. Finance ministry investigators to inspect Tbilisi electricity distribution company

32 Zazidis.info.Russian Inter RAO demands Georgia to pay 80.5 \$ million

33 DiXi Group. Cutting the tentacles of Russian energy 'octopus' – Rosatom

34 US Department of State. A Perspective on the Ethiopian-U.S. Relationship After a Year of Conflict

35 ПЕРЕТОК.РУ. Россия и Эквадор договорились урегулировать разногласия по проектам «Интер PAO»

36 Ibid.

37 Риа Новости. Россия и Аргентина подписали протокол по проекту ГЭС «Чиуидо-1»

38 Inter RAO Annual Report 2020, p. 113

39 ТАСС. Эфиопия надеется на участие «Интер PAO» в реконструкции ГЭС в республике

40 KOREM. Current therapy: RF can double the supply of electricity to Kazakhstan

41 Интерфакс. «Интер PAO» создаст в Казахстане СП для поставок электроэнергии

42 Neftegaz.Ru. Россия и Таджикистан обсудили работу Сангтудинской ГЭС-1 и возможности экспорта электроэнергии

43 Inter RAO Annual Report 2020, pp. 38, 110

44 Ibid.

3. DO NOT ALLOW PARALLEL IMPORTS OF GE TURBINES TO RUSSIA, INCREASING CONTROL OVER RELEVANT TRANSACTIONS

Since 2017, Inter RAO has worked under government directives to deepen import substitution and localization⁴⁵. The most important project is own production of gas turbines.

In September 2020, Inter RAO and General Electric (GE) signed agreements providing for the expansion of partnership in localization of production and maintenance of large-capacity gas turbines in Russia. GE committed to sharing expertise, including the transfer of relevant technologies and expansion of activities of a joint venture with Inter RAO – Russian Gas Turbines (RGT).⁴⁶

RGT plant in Rybinsk was planned as the self-sufficient production facility for 6F.03 gas turbines with a single capacity of up to 88 MW and GT13E2 gas turbines with a capacity up to 210 MW, while RGT had to receive rights to produce, maintain and sell those gas turbines in Russia and abroad⁴⁷. As for now, the RGT facility in Rybinsk produces only 6F.03 gas turbines with a capacity of 14 turbines annually⁴⁸.

After Russia's invasion of Ukraine, General Electric announced the suspension of activities in Russia⁴⁹, and the mentioned agreement was not implemented to the full extent. Therefore, the facts that the Russian Ministry of Industry and Trade has included General Electric gas turbines in the list of goods allowed for parallel imports⁵⁰ is alarming. The document says that the import of goods under code 8411, which refers to turbojet and turboprop engines and gas turbines, is allowed.

In this context, parallel imports seem to be a loophole, supported and promoted by the Russian state with the newly introduced legislation⁵¹, for bypassing sanctions, and it has to be addressed by both GE and Western governments in terms of increasing control over relevant trade transactions. In this context, it is essential to ensure that the production

at Russian Gas Turbines is suspended and that Inter RAO does not relaunch production of the turbines based on Western technology without permission, as it would be treated as a theft of technology.

4. IMPOSE POLITICAL AND EXPAND PERSONAL SANCTIONS

Inter RAO should be a subject of political exclusion. For instance, the company should be delisted from the participants of the UN Global Compact⁵² and excluded from the Carbon Disclosure Project (CDP) international rating of the organization⁵³. Same should apply to business associations in the jurisdictions of the company's activity.

Despite Inter RAO officials - Chief Executive Boris Kovalchuk⁵⁴ and Chairman of the Board Igor Sechin⁵⁵ - being on the personal sanctions lists, such restrictions should also be expanded to other representatives of the Board members and the management team.

5. LIMIT THE COMPANY'S TRADING CAPABILITIES, NOTABLY IN EUROPEAN DESTINATIONS

After Russia halted electricity supply to Finland following the NATO accession announcements⁵⁶, Nord Pool has decided to stop trading operations with Inter RAO meaning that the Baltic states would not buy Russian electricity anymore. This fascinating example should also be set for other countries still involved in the electricity trading operations with Inter RAO, such as Georgia and Kazakhstan.

To limit Inter RAO's international activity and influence, the following Inter RAO subsidiaries should also be sanctioned:

45 Inter RAO Annual Report 2020, pp. 38, 179

46 Neftegaz.ru. Inter RAO and GE expand partnership in localization of production of high-capacity gas turbines in Russia

47 Ibid.

48 ООО «Русские Газовые Турбины»

49 Reuters. GE suspends its operations in Russia

50 Радио Свобода. Минпромторг опубликовал перечень брендов для «параллельного импорта»

51 Настоящее время. Госдума приняла законопроект, позволяющий импортировать в Россию товары без разрешения правообладателя

52 Inter RAO Annual Report 2020, pp. 38, 119

53 Ibid.

54 Коммерсантъ. «Интер РАО» может уйти с биржи

55 Forbes. Сірий кардинал Кремля. Як глава «Роснефти» Ігор Сечин сколотив нечуваний для держслужбовця капітал у \$800 млн. Історія від Forbes

56 BBC News. Russian operator to suspend electricity supply to Finland

	Inter RAO Export	Agent promoting Inter RAO products and technologies in the global markets ⁵⁷
	RAO Nordic Oy	Trading with Scandinavia/Nord Pool ⁵⁸
	AB INTER RAO Lietuva	Electricity supplier in Lithuania and other Baltic states ⁵⁹
	SIA INTER RAO Latvia	Electricity supplier in Latvia ⁶⁰
	INTER RAO Eesti OU	Electricity trade in Estonia ⁶¹
	IRL Polska Sp. z o.o.	Electricity trade in Poland ⁶²
	LLC Inter RAO Georgia	Electricity trade in Georgia ⁶³

57 Inter Rao. International Business

58 Inter RAO Annual Report 2020, pp. 38, 109

59 Delfi. Судьба компании Inter Rao Lietuva повисла на волоске, клиентов компании готовы перенять другие игроки

60 Inter RAO Annual Report 2020, pp. 38, 109

61 Ibid.

62 Ibid.

63 Ibid.

