



THE REPUBLIC OF CROATIA
THE CROATIAN ENERGY
REGULATORY AGENCY
Ulica grada Vukovara 14
10000 Zagreb

Class: 310-34/18-06/71

File no.: 371-01-18-5

Zagreb, 15 June 2018

Pursuant to Article 11, par. 1, item 10 of the Act on the Energy Activity Regulation (Official Gazette of the Republic of Croatia, number 120/12) and Article 29 of the Energy Act (Official Gazette No. 120/12, 14/14 and 102/15) in the administrative procedure of determining the indicative amounts of tariff items for the regasification of liquefied natural gas according to the Methodology for the determination of the amounts tariff items for the regasification of liquefied natural gas (Official Gazette No. 110/17), initiated at the request of the energy entity LNG Hrvatska d.o.o., Radnička cesta 80, Zagreb, at the 16th session of the Board of Commissioners of the Croatian Energy Regulatory Agency held on 15 June 2018, hereby issues a

DECISION

1. The indicative amounts of tariff items are determined for the regasification of liquefied natural gas by applying the regulatory account model for the energy entity LNG Hrvatska d.o.o., Radnička cesta 80, Zagreb, for the purpose of carrying out the binding phase of the Open Season procedure for the project of the Krk liquefied natural gas terminal, from the Request for determining the indicative amounts of tariff items for the regasification of liquefied natural gas according to the Methodology for the Determination of the Amounts of Tariff Items for the Regasification of Liquefied Natural Gas of the energy entity LNG Hrvatska d.o.o., Radnička cesta 80, Zagreb of 28 May 2018 and 11 June 2018, as indicated in Table 1.

Table 1 Indicative amounts of tariff items for the regasification of liquefied natural gas by applying the regulatory account model for the period 2021 - 2040, according to the planned scenarios for the regasification of liquefied natural gas for the energy entity LNG Hrvatska d.o.o., Radnička cesta 80, Zagreb

LNG regasification	Unit (@NCV)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
S1	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S2	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S3	EUR/MWh	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
S4	EUR/MWh	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Scenario of LNG regasification	Unit (@NCV)	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
S1	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S2	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S3	EUR/MWh	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
S4	EUR/MWh	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05

2. The indicative amounts of tariff items for the regasification of liquefied natural gas for the energy entity referred to in item 1 of this Decision shall be adopted by the Croatian Energy Regulatory Agency in a separate decision to be published in the Official Gazette.
3. This Decision shall be delivered to the energy entity LNG Hrvatska d.o.o., Radnička cesta 80, Zagreb.
4. This Decision shall be published on the website of the Croatian Energy Regulatory Agency.

Statement of grounds

Pursuant to Article 29, par. 7 of the Energy Act, the energy entity LNG Hrvatska d.o.o., Radnička cesta 80, Zagreb (hereinafter: LNG d.o.o.) submitted on 29 May 2018 to the Croatian Energy Regulatory Agency (hereinafter: HERA) the Request for determining the indicative amounts of tariff items for the regasification of liquefied natural gas, Class: 310-34/18-06/71, file no.: 372-18-2, of 28 May 2018., (hereinafter: Request) pursuant to Article 49 of the Methodology for the Determination of the Tariff Items for the Regasification of Liquefied Natural Gas (hereinafter: the Methodology). Further, the energy entity LNG d.o.o. submitted a supplement to the request of 11 June 2018, class: to HERA on 14 June 2018 Class: 310-34/18-06/71, file no.: 372-18-4 requesting the determination of the indicative amounts of tariff items for the regasification of liquefied natural gas by applying the regulatory account model for a period of 20 years, i.e. the period 2021 – 2040., pursuant to Article 35 of the Methodology.

Having examined and analysed the documents that the energy entity LNG d.o.o. submitted with the request, HERA found that the request contained all information set out in Article 38 of the Methodology.

Introductory remarks

At the request of the energy entity LNG d.o.o., on 15 December 2017 HERA adopted the Decision on determining the indicative amounts of tariff items for the regasification of liquefied natural gas, Class: Class: 310-03/17-28/09, file no.: 371-01-17-01. Further, at the request of the energy entity LNG d.o.o., on 16 March 2018 HERA adopted a new Decision on determining the indicative amounts of tariff items for the regasification of liquefied natural gas, Class: Class: 310-34/17-03/03, file no.: 371-01-18-55 determining the indicative amounts of tariff items by applying the regulatory account model for the purpose of carrying out the binding phase of the Open Season procedure.

As specified in the request by the energy entity LNG d.o.o., the new decision on indicative amounts of tariff items shall be adopted for the following reasons:

- Four planned scenarios concerning the liquefied natural gas terminal capacity booking (hereinafter: LNG Terminal), i.e. S1 scenario - 1.50 billion m³/year, S2 scenario - 1,70 billion m³/year, S3 scenario - 2.00 billion m³/year and S4 scenario - 2.63 billion m³/year,
- the total amount of the investment has been reduced from EUR 350 million to EUR 230 million, whereby the value of the FSRU vessel is proposed in the amount of EUR 160 million,
- The planned start of LNG terminal operation has been postponed by one year, i.e. From 1 October 2019 to 1 October 2020, whereby the planned utilisation of regulated funds has been changed in the Request,
- the indicative tariff referred to in the Request proposed in the regulatory account model has been set up to EUR 1.39/MWh, and since the indicated amount has been assessed by the energy entity LNG d.o.o. as the maximum tariff acceptable on the market, and since the introduction of an additional revenue category is proposed in the LNG terminal capacity booking scenarios in which the allowed revenue would result in a tariff higher than the indicated, i.e. in S1 and S2 scenarios, whereby the additional revenue would not be provided from the tariff, but from other sources.

In accordance with the provisions of Article 38 of the Methodology, LNG d.o.o. delivered to HERA data and documents for the calculation of the indicative amounts of tariff items for the period 2021 - 2040, whereby the changes due to which the energy entity LNG d.o.o. submitted the request have been indicated in the statement of grounds of this Decision.

Further, the LNG terminal capacity lease scenarios correspond to certain gas transmission system capacity lease scenarios for the transmission of gas from the LNG terminal, as follows:

- S1 scenario – gas quantity of 1.50 billion m³/year (14.40 TWh),
- S2 scenario – gas quantity of 1.70 billion m³/year (16.32 TWh),
- S3 scenario – gas quantity of 2.00 billion m³/year (19.20 TWh),
- S4 scenario – gas quantity of 2.63 billion m³/year (25.23 TWh).

The planned contracted LNG terminal capacities for the period 2021 – 2040 are listed in Table 2.

Table 2 Planned contracted LNG terminal capacities for the period 2021 - 2040 according to the LNG terminal capacity booking scenarios

<i>LNG regasification scenario</i>	<i>Unit (@NCV)</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>	<i>2028</i>	<i>2029</i>	<i>2030</i>
S1	TWh	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40
S2	TWh	16.32	16.32	16.32	16.32	16.32	16.32	16.32	16.32	16.32	16.32
S3	TWh	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20
S4	TWh	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23
<i>LNG regasification scenario</i>	<i>Unit (@NCV)</i>	<i>2031</i>	<i>2032</i>	<i>2033</i>	<i>2034</i>	<i>2035</i>	<i>2036</i>	<i>2037</i>	<i>2038</i>	<i>2039</i>	<i>2040</i>
S1	TWh	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40	14.40
S2	TWh	16.32	16.32	16.32	16.32	16.32	16.32	16.32	16.32	16.32	16.32
S3	TWh	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20	19.20
S4	TWh	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23	25.23

1 PLANNED ALLOWED REVENUE (UNREVIEWED REVENUE)

The Methodology prescribes that projected allowed revenue should cover justified operating expenses incurred in the performance of the energy activity of LGN terminal management and ensure a yield on regulated assets. The planned allowed revenue (hereinafter: unreviewed revenue) are defined for all years of the regulatory account in accordance with the provisions on determining the planned allowed revenue referred to in Articles 9 to 14 of the Methodology.

2 CURRENT VALUE OF THE UNREVIEWED REVENUE

After determining the unreviewed revenue for all years of the regulatory account, their net present value is calculated, reduced to the value from the start of the first year of the regulatory account according to the formula referred to in the Methodology:

$$NPV_{NRP} = \sum_{i=1}^n \frac{DP_{nrev,T+i-1}}{(1+WACC^P)^i}$$

3 TARIFF ITEM FOR THE REGASIFICATION OF LIQUEFIED NATURAL GAS FOR THE FIRST YEAR OF THE REGULATORY ACCOUNT (INITIAL TARIFF)

The tariff item for LNG regasification for the first year of the regulatory account (hereinafter: initial tariff) is determined as the highest possible tariff item to result in competitive prices of the operator services with regard to the prices of LNG terminal operator services in the Republic of Croatia. In accordance with the Request, and with the aim of providing a competitive, but also a firm tariff in the 20 year period, the initial tariff for 2021 for each LNG terminal capacity booking scenario has been determined as indicated in Table 3.

Table 3 Initial tariff for LNG regasification by applying the regulatory account model for 2021 according to the planned LNG regasification scenarios

LNG regasification scenario	Unit (@NCV)	2021
S1	EUR/MWh	1.39
S2	EUR/MWh	1.39
S3	EUR/MWh	1.37
S4	EUR/MWh	1.05

4 MAXIMUM ALLOWED TARIFF ITEM FOR THE REGASIFICATION OF LIQUEFIED NATURAL GAS (MAXIMUM TARIFF)

The maximum allowed tariff item for LNG regasification (hereinafter: maximum tariff) for all years of the regulatory account is calculated by increasing the previously defined initial tariff by the planned consumer price index. Therefore, the maximum tariff amounts for all years of the regulatory account have been defined for each LNG capacity booking scenario as indicated in Table 4. For the planned consumer price index, a projection of the growth rate of the consumer price index for the period 2018 -2020 was used, as published by the Ministry of Finance of the Republic of Croatia in the document “Smjernice ekonomske i fiskalne politike za razdoblje 2018.-2020., srpanj 2017.” (“Economic and Fiscal Policy Guidelines for the Period 2018-2020, July 2017”).

Table 4 Maximum tariff for the regasification of liquefied natural gas by applying the regulatory account model for the period 2021 - 2040 according to the planned LNG regasification scenarios

LNG regasification scenario	Unit (@NCV)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
S1	EUR/MWh	1.39	1.41	1.43	1.45	1.47	1.49	1.51	1.53	1.55	1.58
S2	EUR/MWh	1.39	1.41	1.43	1.45	1.47	1.49	1.51	1.53	1.55	1.58
S3	EUR/MWh	1.37	1.39	1.41	1.43	1.45	1.47	1.49	1.51	1.53	1.55
S4	EUR/MWh	1.05	1.06	1.08	1.09	1.11	1.12	1.14	1.16	1.17	1.19
LNG regasification scenario	Unit (@NCV)	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
S1	EUR/MWh	1.60	1.62	1.64	1.67	1.69	1.71	1.74	1.76	1.79	1.81
S2	EUR/MWh	1.60	1.62	1.64	1.67	1.69	1.71	1.74	1.76	1.79	1.81
S3	EUR/MWh	1.57	1.60	1.62	1.64	1.66	1.69	1.71	1.73	1.76	1.78
S4	EUR/MWh	1.20	1.22	1.24	1.26	1.27	1.29	1.31	1.33	1.35	1.36

5 REVIEWED TARIFF ITEM FOR THE REGASIFICATION OF LIQUEFIED NATURAL GAS (INDICATIVE TARIFF)

In accordance with the Methodology, the reviewed tariff item (hereinafter: reviewed tariff) for all years of the regulatory account is calculated by increasing the previously defined initial tariff by the adjustment coefficient. Further, the adjustment coefficient is determined by an iterative procedure so that the following conditions are met:

- the reviewed tariff is less than or equal to the maximum tariff in all the years of the regulatory account,

- the net present value of the revenue resulting from the product of the reviewed tariff and the total annual gas quantity that the LNG terminal operator plans to deliver to the gas transmission system for all the years of the regulatory account (hereinafter: reviewed revenue) is equal to the net present value of the unreviewed revenue, as indicated in the following formulas:

$$NPV_{RP} = NPV_{NRP}$$

$$NPV_{RP} = \sum_{i=1}^n \frac{Q_{uk,T+i-1} \times T_{rev,T+i-1}}{(1+WACC^P)^i}$$

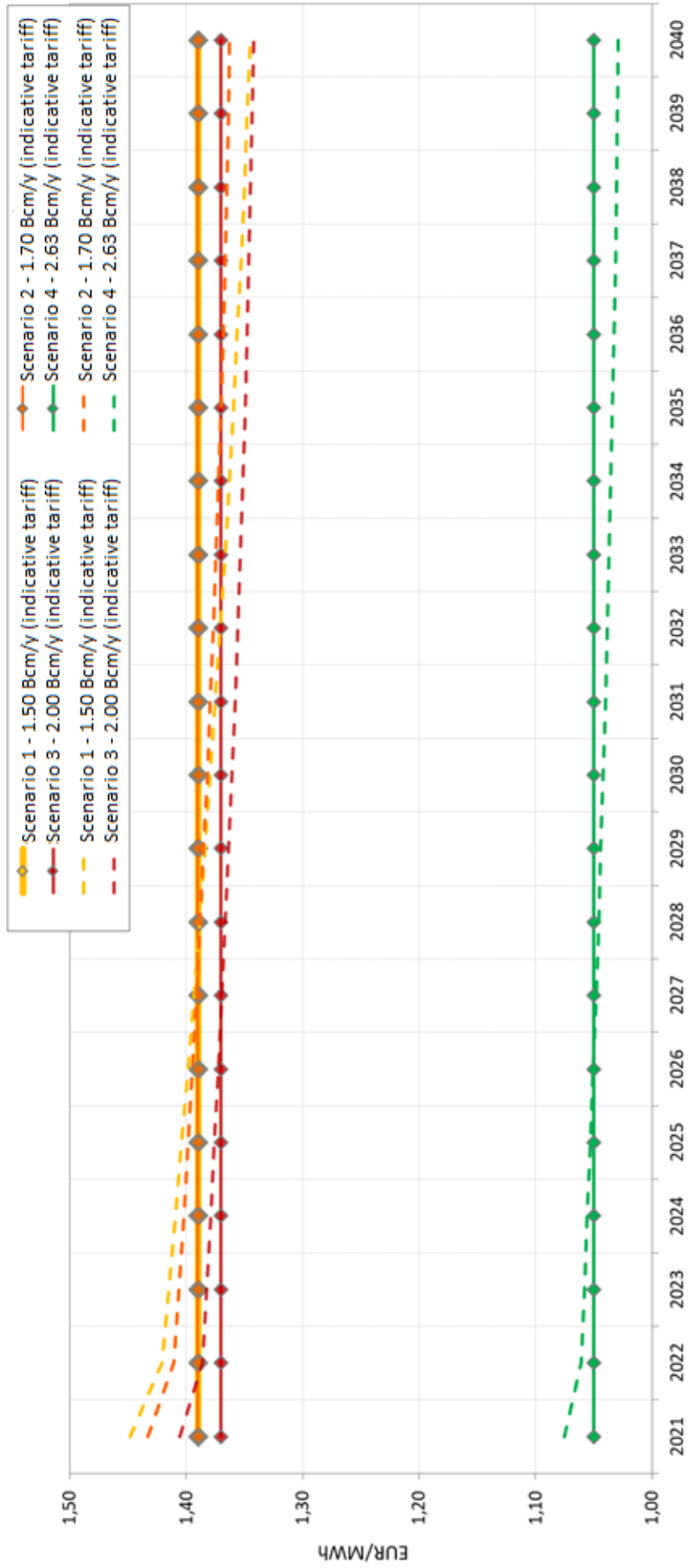
Further to the foregoing, taking into account the two conditions indicated, the amounts of the reviewed tariffs that present the indicative amount of tariff items for all years of the regulatory account for the energy entity LNG Hrvatska d.o.o. have been defined.

The indicative amounts of tariff items calculated for the four defined scenarios of LNG terminal capacity booking for the period 2021 – 2040 are listed in Table 5. Further, the indicative amounts of the tariff items and the amounts of tariff resulting from the unreviewed revenue (hereinafter: unreviewed tariff) for each defined scenario of LNG terminal capacity booking for the period 2021 – 2040 are presented as graphs in Figure 1.

Table 5 Indicative amounts of tariff items by applying the regulatory account model for the period 2021 - 2040 for the planned LNG terminal capacity booking scenarios

Scenario	Unit	Calorific value	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
S1	EUR/MWh	@ NCV	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	
		@ GCV	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
S2	EUR/MWh	@ NCV	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
		@ GCV	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
S3	EUR/MWh	@ NCV	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
		@ GCV	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23
S4	EUR/MWh	@ NCV	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
		@ GCV	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95

Figure 1 Indicative amounts of tariff items by applying the regulatory account model for the period 2021 - 2040 for the planned LNG terminal capacity booking scenarios) (@NCV)



6 CONCLUSION

Further to the explanations provided in this Decision, HERA holds that it is justifiable to approve the indicative amounts of tariff items for LNG regasification for the energy entity LNG d.o.o. as shown in Table 6.

Furthermore, it shall be emphasized that, if the LNG terminal starts its operation prior to 1 October 2020, the amounts of tariff items that are approximately equal to the amounts of tariff items for 2021 are expected for the period from 1 October until 31 December 2020. HERA shall define the indicated amounts of tariff items in accordance with the Methodology prior to the start of the LNG terminal operation.

Table 6 Indicative amounts of tariff items for the regasification of liquefied natural gas by applying the regulatory account model for the period 2021 - 2040 according to the planned LNG regasification scenarios

<i>LNG regasification scenario</i>	<i>Unit (@NCV)</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>	<i>2028</i>	<i>2029</i>	<i>2030</i>
S1	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S2	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S3	EUR/MWh	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
S4	EUR/MWh	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
<i>LNG regasification scenario</i>	<i>Unit (@NCV)</i>	<i>2031</i>	<i>2032</i>	<i>2033</i>	<i>2034</i>	<i>2035</i>	<i>2036</i>	<i>2037</i>	<i>2038</i>	<i>2039</i>	<i>2040</i>
S1	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S2	EUR/MWh	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
S3	EUR/MWh	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
S4	EUR/MWh	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05

Further to the foregoing, it has been decided as set out in item 1 of the operative part of this Decision.

Pursuant to Article 29, paragraphs 10 and 11 of the Energy Act, HERA shall adopt the indicative amounts of tariff items in a separate decision to be published in the Official Gazette, and therefore, it has been decided as in item 2 of the operative part of this Decision.

Pursuant to Article 29, par. 8 of the Energy Act, HERA shall deliver to the energy entity the decision on approval or rejection of the request for determining or changing the amount of tariff items, and therefore, it has been decided as in item 3 of the operative part of this Decision.

Pursuant to Article 27, par. 9 of the Act on the Regulation of Energy Activity it is stipulated that individual decisions taken by the Board of Commissioners of HERA in exercising public authorities are announced on the HERA website, and therefore, it has been decided as in item 4 of the operative part of this Decision.

President of the Board of Commissioners

Tomislav Jureković, B.Sc.

Instruction on legal remedy

This Decision is enforceable.

This Decision shall not be subject to an appeal, however, it is possible to initiate an administrative action through a lawsuit with the Administrative Court in Zagreb, within 30 days from the day of delivery of this Decision.

To be submitted to:

1. LNG d.o.o., Radnička cesta 80, Zagreb
2. Files of sessions of the Board of Commissioners
3. Records, here