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**CROATIAN ENERGY REGULATORY AGENCY (HERA)**
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REG NO: 3-300/DB-21-01

**RE:** **Derogation from the provisions stipulated under Article 16, paragraph 8, in accordance with Article 16, paragraph 9 of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity**
**- Submission of the request**

Dear Sir/Madam,

In Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (hereinafter: Regulation), Article 16, paragraph 8 prescribes:

> *Transmission system operators shall not limit the volume of interconnection capacity to be made available to market participants as a means of solving congestion inside their own bidding zone or as a means of managing flows resulting from transactions internal to bidding zones. Without prejudice to the application of the derogations under paragraphs 3 and 9 of this Article and to the application of Article 15(2), this paragraph shall be considered to be complied with where the following minimum levels of available capacity for cross-zonal trade are reached:*
>
> *(a) for borders using a coordinated net transmission capacity approach, the minimum capacity shall be 70% of the transmission capacity respecting operational security limits after deduction of contingencies, as determined in accordance with the capacity allocation and congestion management guideline adopted on the basis of Article 18(5) of Regulation (EC) No 714/2009;*
>
> *(b) for borders using a flow-based approach, the minimum capacity shall be a margin set in the capacity calculation process as available for flows induced by cross-zonal exchange. The margin shall be 70 % of the capacity respecting operational security limits of internal and cross-zonal critical network elements, taking into account contingencies, as determined in accordance with the capacity allocation and congestion management guideline adopted on the basis of Article 18(5) of Regulation (EC) No 714/2009.*
>
> *The total amount of 30% can be used for the reliability margins, loop flows and internal flows on each critical network element.*

Hereinafter, compliance with Article 16, paragraph 8 shall be referred to as compliance with the 70% target.

The said Regulation has been in effect since 1 January 2020, and as of that date, compliance with the 70% target is required at Croatian borders with its neighbouring EU Member States (HR-SI and HR-HU), i.e., at bidding zone borders that fall within the area of application of the Regulation.

Based on the available data, the Croatian System Transmission Operator Ltd. (hereinafter: HOPS), has assessed that the **70% target is not met** at either of these two stated borders, and pursuant to Article 16, paragraph 9 of the Regulation, which stipulates:

> *At the request of the transmission system operators in a capacity calculation region, the relevant regulatory authorities may grant a derogation from paragraph 8 on foreseeable grounds where necessary for maintaining operational security. Such derogations, which shall not relate to the curtailment of capacities already allocated pursuant to paragraph 2, shall be granted for no more than one-year at a time, or, provided that the extent of the derogation decreases significantly after the first year, up to a maximum of two years. The extent of such derogations shall be strictly limited to what is necessary to maintain operational security and they shall avoid discrimination between internal and cross-zonal exchanges.*
>
> *Before granting a derogation, the relevant regulatory authority shall consult the regulatory authorities of other Member States forming part of the affected capacity calculation regions. Where a regulatory authority disagrees with the proposed derogation, ACER shall decide whether it should be granted pursuant to point (a) of Article 6(10) of Regulation (EU) 2019/942. The justification and reasons for the derogation shall be published. Where a derogation is granted, the relevant transmission system operators shall develop and publish a methodology and projects that shall provide a long-term solution to the issue that the derogation seeks to address. The derogation shall expire when the time limit for the derogation is reached or when the solution is applied, whichever is earlier.*

on 28 October 2019, submitted to the Croatian Energy Regulatory Agency (hereinafter: HERA) the request for derogation from the requirements prescribed under Article 16(8) of the Regulation, in the sense of application to the borders between Croatia and Slovenia, and between Croatian and Hungary, to all critical transmission network elements, for a period of one year, beginning on 1 January 2020 to 31 December 2020, or until the start of application of the methodology prescribed under Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline for capacity allocation and congestion management (hereinafter: CACM Regulation) in the Core region for capacity calculation (hereinafter: Core CCR), with regard to the regional day-ahead capacity calculation, and the manner of activation and of cost-sharing for redispatching and countertrading (hereinafter: Application).

Following consultations with other regulators within the ARAWG Working Group, on 17 December 2019, HERA approved the HOPS request for derogation from the requirements prescribed under Article 16(8) of the Regulation for the period from 1 January to 31 December 2020. In the *Decision approving the request of the Croatian System Transmission Operator Ltd for derogation from the requirements prescribed under Article 16(8) of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity,* HOPS was ordered to adopt a methodology and projects that would provide a long-term solution to the causes of the derogations from the requirements prescribed in Article 16(8) of the Regulation by 31 March 2020, as envisaged in Article 16(9) of the Regulation.

On 23 March 2020, HOPS adopted the document entitled *Methodology and projects providing a long-term solution for the causes of derogation from the requirements prescribed in Article 16(8) of Regulation (EU) 2019/943* (hereinafter: Methodology).

In the said Methodology, HOPS analysed the following reasons for approval of the derogations from the requirements prescribed in Article 16(8) of Regulation (EU) 2019/943, which it is attempting to remove independently, or in cooperation with other transmission system operators:

a. **uncertainty in the calculation for determining the 70% target** of transmission capacities while abiding by the operational security limits, after deductions of Margin Available for Cross Zonal Trade (hereinafter: MACZT),
b. **limited redispatching activation potential**,
c. **planning long-term network element disconnections**.

Since HOPS assessed that by the end of 2020, the reasons would not be removed for approval of the derogation from the requirements prescribed under Article 16(8) of Regulation (EU) 2019/943 as outlined in the Application and the Methodology, on 2 October 2020, HERA submitted an application for derogation from the requirements prescribed under Article 16(8) of the Regulation in the sense of application to the borders between Croatia and Slovenia, and between Croatian and Hungary, to all critical transmission network elements, for the period beginning on 1 January 2021 to 31 December 2021 (hereinafter: New request).

Following consultations with other regulators within the ARAWG Working Group, on 24 November 2020, HERA approved the HOPS request for derogation from the requirements prescribed under Article 16(8) of the Regulation for the period from 1 January to 31 December 2021. In the *Decision approving the request of the Croatian System Transmission Operator Ltd for derogation from the requirements prescribed under Article 16(8) of the Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity,* HOPS was ordered to adopt a methodology and projects that would provide a long-term solution to the causes of the derogations from the requirements prescribed in Article 16(8) of the Regulation by 30 April 2021, as envisaged in Article 16(9) of the Regulation.

On 27 April 2021, HOPS adopted the document entitled *Methodology and projects providing a long-term solution for the causes of derogation from the requirements prescribed in Article 16(8) of Regulation (EU) 2019/943* (hereinafter: New Methodology).

In the New Methodology, HOPS analysed the following reasons for approval of the derogations from the requirements prescribed in Article 16(8) of Regulation (EU) 2019/943, which it is attempting to remove independently, or in cooperation with other transmission system operators:

a. **period of time to build the necessary tools so as to adequately take into account the power flows within and outside the Core CCR,**
b. **limited redispatching activation potential**,
c. **planning long-term network element disconnections**.

Through the New request and New methodology, HOPS has envisaged and committed to the systematic monitoring of the minimum cross-zonal capacity at the relevant CNECs where the 70% criteria is not met, regardless of the method used to calculate the capacity.

Pursuant to systematic monitoring of the minimum cross-zonal capacity at the relevant CNECs and the 2018 Bidding Zone Configuration Technical Report drafted by ENTSO-E for the period 2015–2017, HOPS concluded that the Croatian transmission network is faced with structural congestion, and it submitted the Structural Congestion Report (hereinafter: Report) to HERA for approval. The Report proposed the resolution of this structural congestion by means of an action plan, in line with Article 14(7) of the Regulation. Taking into account the usual time for HERA approval, the Report is expected to be approved by the end of 2021.

In accordance with Article 17(7) of the Regulation, HOPS will immediately notify the Ministry of the Economy and Sustainable Development of the approval of the Report, and will forward it for

the purpose of passing the decision on establishing national and multinational action plans in accordance with Article 15 of the Regulation, or the decision on reconsideration or changes to the trading zone configurations.

**At the time of submission of this request, it is assessed that it will not be possible to comply with the 70% target during 2022.**

**Therefore, HOPS is submitting this request for derogation from the requirements prescribed under Article 16(8) in accordance with Article 16(9) of the Regulation, in the sense of application to the borders between Croatia and Slovenia, and between Croatian and Hungary, to all critical transmission network elements, for the period beginning on 1 January 2022 to 31 December 2022 or until the entry into force of the action plan adopted in accordance with Article 14(7) of the Regulation, whichever comes first (hereinafter: Request for derogation).**

The main reasons for derogations from the 70% criteria are:

1. Time necessary to build the required tools to adequately take into account power flows within and outside the Core CCR;
2. Limited redispatching activation potential;
3. Long-term planned network element disconnections;
4. Time needed for adoption of the action plan.

## 1. Time necessary to build the required tools to adequately take into account for the power flows within and outside the Core CCR

Currently at all borders (HR-SI, HR-HU, HR-BA, HR-RS), HOPS determines the amount of available cross-zonal capacities **at the annual and monthly level** using the **net transmission capacity** approach (hereinafter: bilateral NTC calculation).

The above **uncoordinated** manner of capacity calculation enables an individual transmission system operator (hereinafter: TSO) to take into account all elements of the transmission network during the NTC calculation (including internal network elements), including those that are not directly associated with cross-zonal trading. The only coordination that exists between two TSOs, in the sense of determining cross-zonal capacities, is that after the independent NTC calculations, the lower value is taken as the joint NTC offered at auction.

An important shortcoming of the bilateral NTC calculation is that it does not necessary adequately consider the simultaneous loads on individual CNECs resulting from the bilateral NTC calculation separately for each border. In the event that the same CNEC is limiting for the allocation of capacity at two borders, then it is clear that in that case, a coordinated multilateral NTC calculation should be made, at least for those two borders so as to enable more accurate determination of the cross-zonal capacities. For that reason, it can be noted that compliance with the 70% target is much better in the trial calculations in Core CCR of day-ahead flow-based cross-border capacities, than in the bilateral NTC calculations.

The NTC value **for the day-ahead (DA) market is not calculated** as there is no reference (D-2) model to use for this calculation. The values of capacities offered on the day-ahead market are

determined on the basis of the monthly NTC values, in which the monthly values determine the manner in which the security criteria are met for each market unit in that month.

HOPS, like any other individual TSO, cannot independently accomplish a coordinated day-ahead capacity calculation. Establishing a day-ahead capacity calculation process requires coordination with neighbouring TSOs. Since the start of application of the flow-based direct approach in Core CCR is expected by 28 February 2022, it would not be effective to establish a fully coordinated NTC calculation, as the TSOs in Core CCR have recognised, and have since ceased any activities in that direction.

Developing and using a common grid model for (all) TSOs in the European Union (hereinafter: EU) is stipulated in the following documents (methodologies):

a. All TSO proposals for a common grid model methodology in accordance with Article 17 of Commission Regulation (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management,
b. All TSO proposals for a common grid model methodology in accordance with Article 18 of Commission Regulation (EU) 2016/1719 of 26 September 2016 establishing a guideline on forward capacity allocation,
c. All TSO proposals for a common grid model methodology in accordance with Articles 67(1) and 70(1) of Commission Regulation (EU) 2017/1485 of 02 August 2017 establishing a guideline on electricity transmission system operation.

Of the above methodologies, only the first (a) is representative for a correct assessment of possible day-ahead cross-border trading. The reference models under (b) and (c) cannot be used as representative models, since they pertain to the long-term allocation of capacities (b) and the process of ensuring operational security (c), whose quality is not at a satisfactory level for the assessment.

All TSOs within the Core CCR will ensure the operational procedure of creating a common model, in accordance with methodology (a) as defined in Article 2(2) of the CACM Regulation. This procedure will simultaneously be in effect with the start of the operational process for flow-based day-ahead cross-border capacity calculation in Core CCR.

In the meantime, until the start of the regional calculation, HOPS uses models that are insufficiently representative to assess the status of the network in every market unit. Such models are, more or less, only good estimations of the state in the neighbouring LFC areas, since there is no systematic data exchange on network topology, production disposition, generation shift keys (GSKs) or cross-border exchanges, which are prerequisites to independently develop such a model. Their use can result in:

– an underestimation of the transmission capability of the network, and then not all cross-border capacities that could be offered with satisfactory operational security are offered, or
– an overestimation of the transmission capability of the network, allocating cross-border capacities in amounts that jeopardise operational security.

As a responsible TSO, HOPS cannot permit the overestimation of capacities of the transmission network, as this could lead to threats to system security.

HOPS actively participates in the preparation of the joint calculation of flow-based day-ahead cross-border capacities in the Core CCR, which is currently in the phase of an “external run” that includes a trial merger of individual grid models for each market units for each day. According to

the data published on the JAO website, the common grid model have satisfactory quality and the quality of the models will not present a barrier for the start of application of Core DA FB CC.

Pursuant to its internal calculations, HOPS deems that upon implementation of the Core DA FB project, it will be able to offer greater values of capacities for cross-zonal trading. However, the results of testing the regional calculations obtained in the “external run” should be taken with a dose of reserve, as it is not possible to fully predict the behaviour of market participants that is seen in market trading orders on the day-ahead market.

Since it is evident that the Core DA FB CC will be in effect no earlier than the end of February 2022, HOPS will not have access to the confirmed common grid model for assessment of cross-border trading during the assessment of meeting the requirement stipulated in Article 16(8) of the Regulation for at least part of the period that pertains to this Request for derogation.

HOPS is investing in the procurement of the appropriate software, in order to better assess compliance with the 70% target. This software uses the data that are used during the testing of the Core FB method. The tool enables analysis of different situations and states in the transmission network when meeting the minimum transmission capacity while respecting the operational security limits. Based on the output results, it will be possible to safely achieve the requirement for minimum transmission capacities, aimed at 70%, i.e., more accurate calculation of the MACZT. This will enable HOPS to more objectively compare the calculations obtained based on the bilateral NTC approach with those obtained from the flow-based approach.

Though the bilateral NTC calculation and trial regional day-ahead flow-based capacity calculations both indicate the same transmission network elements where congestion occurs, HOPS believes that it will achieve greater compliance with the requirement from Article 16(8) by applying the flow-based calculation in comparison with the currently applied bilateral NTC calculation. Furthermore, HOPS does not deem it justified to invest in network development that would be necessary to meet the 70% target using the NTC calculation, but would not be necessary with flow-based calculations.

It could be said that there is a strong risk of over-investment in the development of the transmission network. When the cross-border day-ahead flow-based capacity calculation in Core CCR is established, HOPS will have a more accurate overview of the situation concerning compliance with the 70% target, i.e., an overview of the justification of such investments into network development.

In the letter of the European Commission to ACER and ENTSO-E of 16 July 2019 concerning capacity calculations and third (non-EU) countries, it expressed concerns regarding how third country flows are taken into account in the capacity calculation process pursuant to the CACM Regulation. Namely, there is the possibility that flows that are the result of trading with and between third countries could have privileged access to the interconnected network of the EU Member States, as they are not required to apply the relevant EU regulations (including the CACM Regulation) that do not permit privileged access. Therefore, the position of the European Commission is that the results of trading with and between third countries can only be considered if an agreement has been concluded between all the TSOs of the CCR with the TSO of the third country. Such an agreement would have to encompass at least the following:

a. consideration of internal third country constraints for intra-EU capacity calculation,
b. consideration of EU internal constraints for capacity calculation on the border with the third country, and
c. cost-sharing of remedial actions.

In line with that request, ENTSO-E with its member TSOs from the EU and TSOs from non-EU countries created a working group tasked with preparing such agreements. HOPS, as the TSO of an EU Member State bordering with two third countries, will be significantly affected by flows with and between third countries, and therefore joined this working group to help in resolving these uncertainties in determining the MACZT as soon as possible. Negotiations are in the advanced stage with the Swiss TSO (Swissgrid). However, considering the dynamics of negotiations, it is certain that agreement between the Core CCR and TSOs of thirds countries whose flows impact HOPS (EMS, NOSBiH and CGES) will not be reached by the start of the period requested for derogation through this Request for derogation (i.e., 1 January 2022), and it is uncertain whether such an agreement will be concluded by the end of the requested derogation period (31 December 2022).

Of the four cross-zonal borders, Croatia has two borders with non-EU countries (Serbia and Bosnia and Herzegovina), and their influence on the internal cross-zonal trading within the Core CCR is significant.

An example is the zone-to-hub PTDF for individual bidding zones in the Core CCR on the cross-zonal high voltage transmission line between Croatia and Serbia, OHL 400 kV Ernestinovo – Mitrovica [OPP]. This CNEC proposed by HOPS is included on the list of all CNECs used for internal testing of day-ahead calculations for Core CCR.

| PTDF_AT | PTDF_BE | PTDF_CZ | PTDF_DE | PTDF_FR | PTDF_HR | PTDF_HU | PTDF_NL | PTDF_PL | PTDF_RO | PTDF_SI | PTDF_SK |
|---|---|---|---|---|---|---|---|---|---|---|---|
| -0.3207 | -0.31351 | -0.31053 | -0.31274 | -0.3147 | -0.28686 | -0.31177 | -0.31302 | -0.29599 | -0.05639 | -0.33272 | -0.29874 |

The above zone-to-slack PTDFs can be expressed as zone-to-zone PTDFs. The zone-to-slack $PTDF_{A,l}$ represents the effect of net position variations in bidding zone A on the CNEC I, and indicates the commercial exchange between the zone to slack, clearly showing the significance and influence of the OHL 400 kV Ernestinovo – Mitrovica [OPP] on the Core CCR. The zone-to-zone $PTDF_{A\rightarrow B,l}$ represents the influence of change of commercial exchanges from bidding zone A to bidding zone B on the CNEC I. The zone-to-zone $PTDF_{A\rightarrow B,l}$ can be calculated from the zone-to-slack PTDFs using the following equation:

$$PTDF_{A\rightarrow B,l} = PTDF_{A,l} - PTDF_{B,l}$$

Accordingly, it is possible to calculate the influence of the changes of commercial exchanges from Romania to Croatia on the DV 400 kV Ernestinovo – Mitrovica (CNEC I):

$$PTDF_{RO\rightarrow HR,l} = PTDF_{RO,l} - PTDF_{HR,l} = -0.05639 - (-0.28686) = 0.23047$$

The result shows the significant influence (23%) on the commercial exchange coming from Eastern and Southeast Europe (Romania, Serbia, Bosnia and Herzegovina). Also, a significant non-Core influence on the DV 400 kV Ernestinovo – Mitrovica [OPP] can also be seen according to the following formula:

| F_0core | F_0all |
|---|---|
| -226 | 20 |

$$\vec{F}_{uaf} = \vec{F}_{0,Core} - \vec{F}_{0,all} = -226 - 20 = -246MW$$

where:
- $\vec{F}_{uaf}$ is the flow on the said CNEC that is the result of commercial exchange outside the Core CCR
- $\vec{F}_{0,Core}$ is the flow on the said CNEC in a situation where there is no commercial exchange within the Core CCR (using a zero-balanced Core),
- $\vec{F}_{0,all}$ is the flow on the said CNEC in a situation where there is no commercial exchange at any cross-zonal border in continental Europe, or at other cross-zonal borders in other synchronous areas (using the zero-balanced model for continental Europe (RG CE)).

A similar situation to this, with the influence of third countries, is seen in the influence of other regions for the capacity calculation (CCR), i.e., the HVDC submarine cable between Montenegro and Italy (MONITA), which is part of the Italian LFC region.

The MONITA cable has a transmission capacity of 600 MW and it commenced commercial operation in late 2019. The planned day-ahead flow values are published on the ENTSO-E Transparency platform (https://transparency.entsoe.eu), facilitating day-ahead planning. However, there are still issues with the uncoordinated flow changes on the cable on transmission day, i.e., the allocation of intra-day transmission capacities, which significantly alter the flow in the cable, and accordingly influence the HOPS network. A coordination procedure is currently under development between the Italian TSO TERNA, the Montenegrin TSO CGES and HOPS on flow adjustments on the cable, with the aim of at least partially resolving the recognised and/or resulting threats. However, a permanent solution implies the need for coordinated work, not only between the TSOs, but also between the competent regional security coordinators to remove threats in the interconnected system. This can only be expected following the implementation of methodology for a coordinated analysis of operational security.

The critical influence that power flows could have outside the Core CCR was also confirmed in the analysis of disturbances that occurred in the synchronised part of continental Europe on 8 January 2021, when high unplanned flows from other regions played a key role in that disturbance. In that period, during the trial regional flow-based day-ahead capacity calculation, exceptionally high values of Fuaf were observed at the relevant CNECs, to a maximum value of 668 MW. The unpredictability of this significant flow from third countries without a coordinated approach cannot be taken into account with certainty in meeting the 70% criteria.

For that reason, HOPS has to retain substantial security margins in the allocation of cross-border capacities, with the aim of preserving operational security. That means the 70% target is not met, and the submission of this Request for derogation is deemed justifiable for the above reasons.

System security will be threatened if HOPS commits to offering the required minimal capacity for cross-zonal trading every hour, and is not able to properly taking flows outside the Core CCR into account, particularly given the lack of an adequate network model for the capacity calculations for the day-ahead market at its EU borders with Slovenia and Hungary.

With the development of IT tools, HOPS will be able to more precisely asses the influence of trading outside the Core CCR on the loading of its network elements that are important for trading within the Core CCR.

## 2. Limited redispatching activation potential

HOPS deems that it does not dispose of sufficient redispatching resources within Croatia to comply with the 70% target within every market unit.

Since HOPS has successfully prevented the appearance of congestion in real time under the existing circumstances of bilateral NTC agreements with neighbouring TSOs, there was previously no need to conclude agreements with other TSOs concerning the use of cross-border redispatching.

However, given the quantity of cross-border capacity required for allocation with the aim of compliance with the 70% target, it can be concluded that under the lack of the announced multilateral coordinated redispatching system, the only reliable method to remove short-term congestion would be bilateral cross-border redispatching.

HOPS has already undertaken activities to conclude agreements on bilateral cross-border redispatching with other TSOs. An agreement has already been concluded with Slovenia's ELES and Austria's APG (and ELES as the transit TSO), and an agreement is currently under preparation with Hungary's MAVIR, and signing this agreement would resolve the reason for the limited redispatching activation potential.

In addition to such agreements, it should also be stated that there is a need to have representative models for assessing redispatching potentials sufficiently in advance, i.e., prior to the allocation of cross-border capacities at the D-1 level. Though redispatching can be applied in near real time conditions, if cross-border capacities are allocated in quantities that could imply redispatching activation in the case of nomination of greater capacity quantities, then it is necessary to reliably know the redispatching potential, which is contained only in the D-2 common network models.

HOPS is of the opinion that if, due to the lack of a representative network model, it is currently not possible to determine the redispatching potential for the needs of the D-1 capacity allocations, then redispatching can only be used at the intra-day level to increase intra-day capacities. HOPS believes that this should be taken into account in assessing compliance with the 70% target.

In conclusion, since it is not certain that this bilateral cross-border redispatching agreements with MAVIR will be signed by the end of the year, HOPS believes that the operational security could be jeopardised without the existence of such a tool, and therefore has preventatively submitted this Request for derogation. In the case of the signing of this agreement, HOPS deems that this reason for approval of the derogation will no longer be valid.

It should be stated that HOPS is currently participating in the voluntary multilateral redispatching initiative of TSCNET, though only to the restricted total financial limit approved by HERA. Since TSO participation is voluntary, multilateral redispatching cannot be considered a reliable method, as some TSOs, whose active participation would facilitate the resolution of congestion in the HOPS LFC region, either are not participating in the initiative or, like HOPS, are participating to their financial limit. Should this initiative remain in such a form in the future, this reason for the limited redispatching activation potential will continue to remain in effect.

For this reason, HOPS considered that the lack of bilateral agreements with other TSOs, in the sense of the use of cross-border redispatching, is a justified reason for this Request for derogation, as there are currently no significant corrective measures available to influence the excessively allocated cross-border capacities. HOPS is not able to use the topological measures at the 220 kV and 400 kV charge levels due to the configurations of the Croatian transmission network. Among other corrective measures, HOPS is currently using the phase shifting transformer at the Žerjavinec substation. However, it does not have a significant influence on the redistribution of flows in the transmission network.

Furthermore, though ACER has issued the decision on regional rules for coordinated redispatching activation and countertrading in the Core CCR pursuant to Article 35 of the CACM Regional, and the decision on the rules of distribution of costs pursuant to Article 74 of the CACM Regulation, whose application will enable HOPS to have access to additional redispatching potential outside the borders of its LFC region, due to the complexity of the process itself and the necessary ICT infrastructure, the implementation of the processes resulting from the above regional rules is not expected to be completed within the forthcoming 24 months.

## 3. Planning long-term network element disconnections

Following adoption of the Regulation, the assessment of fulfilment the requirements prescribed by the Regulation is based on the ACER document "Recommendation No 01/2019 of the European Union Agency for the Cooperation of Energy Regulators of 08 August 2019 on the implementation of the minimum margin available for cross-zonal trade pursuant to Article 16(8) of Regulation (EU) 2019/943" (hereinafter: ACER Recommendation), which is aimed at achieving a uniform approach to implementation of the Regulation.

HOPS deems that the ACER recommendation does not clearly stipulate whether the assessment of compliance with the 70% target will adequately take into account the circumstances of the planned network disconnections, which will have a real reduction of network transmission capacities, which in turn negatively impacts system security, if the transmission capacities are allocated at a level as though there are no such disconnections.

Since the process of regional coordination of disconnections for 2022 will continue until 1 December of this year, at the time of submission of this Request, it cannot be ascertained with any certainty in which period the disconnections will be that will result in a reduction in cross-border capacities.

However, HOPS is planning the following disconnections with a high degree of certainty:

- 28 March – 22 April 2022 – OHL 400 kV Velebit – Melina – disconnection due to replacement of the secondary system in the Velebit substation
- 25 April – 20 May 2022 – OHL 400 kV Velebit – Konjsko - disconnection due to replacement of the secondary system in the Velebit substation
- 15 May – 30 September 2022 – OHL 220 kV Melina – Senj – disconnection due to reconstruction and increase of the admissible transmission loading of the overhead line.

HOPS will pay particular attention to planning and shortening the duration of works on all grid elements whose unavailability causes or may cause reductions in transmission capacity.

Pursuant to the above, HOPS is preventatively submitting this Request for derogation for the whole of the year 2022, such that the derogation for this reason would not be considered justified were there to be no disconnections of elements the transmission network that significantly impact the capacities available for cross-zone trading.

HOPS believes that the above planned long-term disconnections would influence the cross-zonal capacities to be offered to market participants, such that the disconnection of the OHL 220kV Melina – Senj is aimed at increasing the transmission capacity of the network, which will positively affect internal trading and cross-zonal trading (revitalisation of this overhead line will increase its admissible transmission loading, which will directly affect an increase in cross-zonal capacities). Furthermore, HOPS believes that due to the long-term disconnection, this reason for derogation

is justified, since ensuring the minimum capacity prescribed by the Regulation, while simultaneously having this network element unavailable, would negatively impact system security.

HOPS will consider all other short-term and unplanned disconnections during the process of capacity validation at the time of offering cross-zonal capacities at monthly and/or daily auctions, and in intra-day capacity allocations.

# 4. Time needed to adopt the action plan

Based on the systematic monitoring of the minimum cross-zonal capacities at the relevant CNECs and the 2018 Bidding Zone Configuration Technical Report drafted by ENTSO-E for the period 2015–2017, HOPS has concluded that the Croatian transmission network is faced with structural congestion, and has submitted the Structural Congestion Report to HERA for approval. The Report proposes that structural congestion be removed via the action plan, in accordance with Article 14(7) of the Regulation. Based on the usual time needed for HERA approval, the approval of the Report is expected by the end of 2021.

In accordance with Article 14(7) of the Regulation, on the approval of the structural congestion report, the member states are notified and within six months from receipt of that report are required to pass a decision establishing the national or multinational action plans in line with Article 15 of the Regulation, or a decision on reconsideration and amendments of the bidding zone configuration.

Taking into account that:

- HOPS assesses that the Report will be approved as it has proven the existence of structural congestion in multiple ways,
- HOPS assesses that the decision to establish the action plan is the only realistic option, as the process of reconsideration and amendments to the bidding zone configuration is a long-term process, in which it does not unequivocally determine the benefits for achieving the abidance of the requirements as prescribed in Article 16(8) of the Regulation,
- The action plan should be adopted within six months of receipt of the Report,
- From the time of notification of the line ministry to the end of the period of the approved derogation pursuant to the HERA decision, which on 24 November 2020 approved HOPS the derogation from the requirements prescribed in Article 16(8) of the Regulation in the period from 1 January to 31 December 2021, only two months remains, it is expected that the action plan will be adopted after 1 January 2022,

HOPS deems that the only suitable course of action is to preventatively submit this Request for derogation for the period from 1 January 2022 until the time of entry into force of the action plan. Though at this time HOPS is not able to know the content of the future action plan, the assumption is that the action plan will take into account the appropriate linear trajectory in accordance with Article 15(2) of the Regulation, thereby enabling HOPS to abide by the requirements as stipulated in Article 16(8) of the Regulation.

# 5. Securing the minimum capacity and monitoring the compliance with the 70% target

With the aim of more objective monitoring progress, HOPS is committed to submit the necessary data to HERA for monitoring its compliance with the 70% target for the entire period of the

requested derogation. This will include at least the following information, and other data as requested by HERA or ACER for each border and direction for which the derogation is requested under this Request:

- allocated capacity for each market unit in the period from 2019 to 2021,
- allocated capacity on daily auctions for each market unit during 2022,
- capacity that should be allocated on daily auctions in order to comply with the 70% target on all critical grid elements in 2022,
- nominated capacity for each market unit in 2022,
- activated redispatching, and other corrective measures in each market unit in 2022,
- duration of all planned long-term grid element disconnections, as listed in this Request for derogation,
- monitoring the minimum cross-zonal capacity at the relevant CNECs at which the 70% target was not met, regardless of the capacity calculation method until the establishment of the regional flow-based coordinated calculation, after which time the monitoring will be based only on monitoring the minimum cross-zonal capacity in the flow-based approach.

For the duration of the approval derogation, HOPS is committed to allocating capacities no less than the minimum capacity allocated for each market unit in the period 2019 to 2021, and no less than the capacity that corresponds to 20% of the load for each CNEC.

**Conclusions**

**Following the above, HOPS is hereby submitting the Request for derogation from the requirements prescribed in Article 16, paragraph 8, in accordance with Article 16, paragraph 9, of Regulation (EU) 2019/943 from 1 January 2022 to 31 December 2022, or to the date of approval of the action plan, whichever comes first.**

We are available to provide any additional documentation or explanation as required.

Sincerely,

**President of the Management Board:**

Tomislav Plavšić, PhD

Co:
- System Operation Department
- Executive office
- Archive