

COMPLIANCE NOTE

by the Energy Community Secretariat

Ukraine – electricity transmission and dispatch tariff with respect to the tariffs for export and import

CN 01/2020 / 28 May 2020





COMPLIANCE NOTE No 1/2020

Ukraine – electricity transmission and dispatch tariff with respect to the tariffs for export and import

In this Compliance Note, the Secretariat reviewed:

- a. NEURC Resolution No.585 of 22.04.2019 "On approval of the procedure for establishment (formation) of the tariff for electricity transmission services" (https://zakon.rada.gov.ua/laws/show/v0585874-19)
- b. NEURC Resolution No.586 of 22.04.2019 "On approval of the procedure for forming the tariff for dispatch (operational and technological) control services" (https://zakon.rada.gov.ua/laws/show/v0586874-19)

1. Background

The Ukrainian electricity market was subject to significant changes in the course of 2019. Following the entry into force of the Law of Ukraine 'On electricity market' of 2017 (hereinafter, the Electricity Market Law) and the implementation of the new electricity market model as of 1 July 2019, a set of secondary and implementing legislation was promulgated. At the same time, some rules and decrees adopted long ago and based on the old primary law, remained in force. The present statement outlines the incompatibility of the rules related to transmission and dispatch tariff setting.

Article 6(6) of the Electricity Market Law entrusts the National Energy Utilities Regulatory Commission of Ukraine (hereinafter, NEURC) to approve (separate) methodologies on setting (forming) electricity transmission tariffs and on setting the tariff for dispatch (operational and technological) services. Article 6(7) entrusts it to set also (separate) tariffs for dispatch (operational and technological) services and tariffs for electricity transmission services.

Pursuant to the provisions of the Electricity Market Law and the Transmission Network Code, Ukrenergo as transmission system operator (hereinafter, TSO) is entitled to charge the costs of access and use of the network in line with the regulated transmission tariff, dispatch tariff, and the connection fee for connection to the transmission network.

NEURC adopted two tariff methodologies in April 2019, one on transmission tariff setting and another one on dispatch tariff setting, both of which were amended in December 2019.

In the absence of participation to the inter-TSO compensation mechanism by Ukrenergo, access to and use of cross-border capacity is charged to the users based on scheduled import and export. Such charges are not designed to cover only costs related to cross-border flows. They thus amount to charges having equivalent effect to customs duties, which are not compliant with the Energy Community acquis.



The Electricity Market Law defines that specific costs of the public service obligation (hereinafter, PSO) are also to be charged through the TSO tariffs. This is the case for the RES surcharge, i.e. the difference between the feed-in tariff and the market price earned by the Guaranteed Buyer. This is further detailed in the PSO Act adopted by the Cabinet of Ministers in June 2019, as amended and in the Transmission Network Code.

The new tariff level was applied since the new electricity market was launched in July 2019. It was already subject to court cases as the level of payments significantly increased (up to 20%) for the big industrial customers. In December 2019, NEURC amended the tariff methodologies in order to address the issues challenged in court. The Transmission Network Code was also amended in February 2020 in order to clarify who would bear which charges. These latest decisions to charge the dispatch tariff to importers and exporters, and to charge the transmission tariff to exporters are not in line with the Energy Community acquis, given that such charges include cost components not associated with cross-border services.

2. Review and preliminary findings

Considering that both methodologies (for transmission tariff and dispatch service) do not contain a clear distinction between assets and costs attributable to dispatch control services and transmission, and that certain items might be transferred from one to another service, the assessment is consolidated and applicable to both documents.

For recognition and allocation of specific costs included in the projected income, the methodologies rely on provisions included in the:

- Law on Electricity Market,
- Law on National Commission for State Regulation of Energy and Public utilities,
- Law on Natural Monopolies,
- Law on State Property Management,
- Law on Prices and Pricing,
- Law on Alternative Energy Sources No 555-IV, adopted in 2003, as amended,
- Sectoral methodological recommendations on the formation of the production cost, transmission and supply of electricity and heat energy No. 447 of 20 September 2001,
- Procedure of Forming the Forecast Balance of Electricity of the Integrated Power of Ukraine for the Settlement Year No 539 of 26.10.2018, approved by the Ministry of Fuel and Energy of Ukraine,
- Methodology for estimation of assets of natural monopoly entities No 293 of 12.03.2013 adopted by the State Property Fund of Ukraine,
- Accounting standards approved by the Ministry of Finance,
- Procedure of formation and implementation of the dividend policy of the State No 702 of 12.05.2007, amended 2013, approved by the Cabinet of Ministers,



and others.

In addition, for setting tariffs, NEURC uses also: the Transmission Network Code, Market Rules, the Procedure for determining the costs of labour remuneration, the Procedure for formation of investment program of licensees, the Procedure for determining the regulatory assets base, the Procedure for allocation of assets, expenditures and revenues between the licensee's activities, the Procedure for the purchase by a guaranteed buyer of electricity produced from alternative energy sources, and others.

According to the mentioned regulations, the projected revenue is allocated to the two types of services (transmission and dispatch) and charged to the different types of users.

- The costs of the transmission service, including the costs of the PSO related to compensation for RES producers (RES surcharge), are charged on a volume basis to domestic consumption and scheduled export. In addition to the PSO costs, the scheduled export pays a share of costs related to internal activity.
- The dispatch service is charged also on volume basis to domestic consumption, generation, scheduled export and import. Through this tariff, the scheduled import and export pays for services which are related to internal market activity.

The tariff rates are defined only based on the volume of electricity transmitted in UAH/MWh and are not payment for a service actually provided to a category of costumers in an amount proportionate to that service. Capacity charges are not considered, although from the definitions (tariff structure) this possibility exists.

Assessment

3.1 General observations

The approved methodologies are not applied in full scope.

The analysis of the submitted calculation shows that incentive regulation was not applied in the presented calculation for the tariff setting. Although both methodologies define a "transition period" as a period when incentive regulation shall not be applied, they do not define conditions for the duration of the transition period, its beginning and the conclusion.

One of the key elements, the projected profit on regulatory asset base, was not determined in accordance with the methodology and good international practice. Most importantly, there is no clear indication that the regulatory asset base is used for determination of the return on assets. Although the methodological instructions in the Section 5 of the methodologies explicitly define the parameters for determination of the necessary income, the description of data requirements in Section 2.1 indicates that the applicant may decide not to provide all these parameters.

Since Ukrenergo does not participate in the inter-TSO compensation mechanism, which would be the appropriate multilateral mechanism for covering the costs related to cross-border flows, the existing transmission and dispatch tariff methodologies charge scheduled import and exports disproportionally to the costs they cause, including components which are not related to cross-border flows.



Recommendations

The tariff methodologies should clearly indicate under which conditions any of the relevant provisions may be suspended from application. Which procedure and rules for tariff setting will be applied in such a case should also be clearly stipulated.

The methodologies should clearly stipulate which rules and procedures shall be applied before the transition period, during the transition period and after the transition period, what conditions should be fulfilled for the transition period to begin and to end, and who are the responsible parties to ensure that the transition period begins and ends in defined timeframes.

3.2. Costs of Public Service Obligation in transmission tariffs

The TSO is by nature obliged to provide a public service, which is to ensure safe and stable flow of electricity through its network at required standards and quality. This is a core and primary function of a TSO. However, the methodologies include cost items that cannot be reasonably attributed to transmission (such as costs for renewable energy support) or to dispatch control (i.e. costs of raw material, fuel and lubricants and similar) services.

In the transmission tariff methodology of Ukraine, costs for the PSO in the tariff methodology are simply indicated as "projected costs for fulfilling special obligations to ensure general public interests". They are included in the calculation under two items: costs to increase the share of electricity production from RES for households, and costs to increase the share of electricity production from RES for other customers than households. The methodology does not provide any instructions, source of data, procedure criteria for recognition and allocation of these costs for these two categories.

The same treatment is envisaged for support for combined heat and power plants (CHP).

The notion of costs of increasing the share of RES as a PSO within the transmission tariff can be found in the Electricity Market Law. Article 63(6) of the Law stipulates: "the universal service supplier along with fulfilling the obligation of purchasing electricity at the green tariff from private households the installed capacity of generating installations of which does not exceed 50 kW shall provide to the transmission system operator the service of ensuring the increase of the share of electricity production from alternative energy sources". Similarly, Article 65(7) of the Law reads: "To ensure coverage of economically reasonable costs incurred by the guaranteed buyer to fulfil special obligations as to electricity purchase at the green tariff and at the auction price, the guaranteed buyer shall provide to the transmission system operator the service for ensuring the increase of the share of electricity production from alternative energy sources". The final and transitional provisions (12.9) provide such a possibility for CHPs ("Producers subject to a decision of temporarily support shall provide to the transmission system operator the service for increasing the efficiency of combined heat and electricity production until 1 July 2024").

The Law on Alternative Energy Sources does not mention any task of the TSO, except in the context of nominations and balancing.

The methodology does not include rules or an explanation on how this type of costs was attributed to the TSO as a cost of transmission service at all and made it an integral part of the transmission service tariff. The share of PSO costs in the overall transmission tariff is so significant that it might



put at risk the financial ability of the TSO to perform its core function. It has to be reiterated that these costs are not related to transmission or dispatch activities, they are pass-through costs (surcharge) that have nothing to do with the operation of the TSO.

An additional component as a possible future part of the PSO compensation included in and charged through the transmission tariff is storage services. There is still no reasonable explanation nor legal basis to impose obligation on the TSO to bear the costs of storage capacity under public service obligations. The TSO has the responsibility to balance the system on a real-time basis, for which it procures ancillary services. The TSO should aim at procuring such or similar service in the market and such a cost, to the extent reasonable, may be recognized by NEURC in the tariff as part of the ancillary services component.

Recommendations

Recalling that the costs of RES related the PSO are included in the transmission service costs to reflect the obligation of the TSO to collect money from customers only to cover the costs of that PSO, a special PSO surcharge should be added on top of but outside the transmission tariff and be disclosed in the TSO's invoice to the customers. Such surcharge should not be charged to scheduled import or export.

The surcharge for RES should be separated from the TSO tariffs and the corresponding amounts automatically transferred to the account of the entity(ies) responsible for purchase of (and payment for) energy from RES (universal service suppliers and Guaranteed Buyer).

Regarding support of CHPs, it should be treated also as a pass-through cost for the TSO and disclosed as a surcharge in the invoice.

The obligation and responsibilities of the TSO should be clearly stated in the legal acts which imposed this task on the TSO (i.e. the PSO Act), including exemption of any financial liability apart from pure transfer of the collected surcharge to the designated account.

3.3 Criteria for recognition of costs

When fixing the tariffs, NEURC shall scrutinize the costs proposed to be covered by the tariffs. In this respect, Ukrainian law unduly limits the regulator's independence in tariff-setting.

However, the methodologies in numerous instances refer to the rules of NEURC or other state institutions for the establishment of a level of recognized costs. As an example, NEURC adopted rules to determine the costs of wages or costs of investments. In addition, other institutions adopted rules to determine values and prices of other items, such as valuation of state-owned property, plants and equipment (adopted by the State Property Fund), or rules on the appropriation of dividends, recommendations (adopted by the Cabinet of Ministers), etc.

In concrete terms, the wage coefficient for a regulated activity is not sufficient because the criteria for recognition of these costs should reflect both, the average wage per employee and the number of employees, to determine the total approved amount for costs of labour.

Similarly, the level of losses in the network is recognized in accordance with the Forecast balance of electricity and Methodological recommendations. NEURC does not do any further assessment or benchmark to evaluate the reasonableness of the level of losses and the respective costs.



The same is valid for investment costs. If certain investment is approved as justified, its costs still may be reviewed and checked by NEURC for reasonableness and prudency, including also the assessment of the impact of such investments in other areas, such as reduction of losses and overall efficiency.

The share and amount of dividends to be paid in the state budget is also defined by another institution. Notwithstanding the right of the owner to set profitability targets for management, these targets are not obliging the regulator, who has a responsibility to balance the legitimate interest of all parties in the longer time perspective.

Recommendations

The criteria for recognition of each type of costs should be clearly stipulated in the methodology.

The regulator is entitled to review and evaluate the unit and total costs included in the requested projected revenues to ensure that they are incurred prudently and with due care.

For rejections or changes of any item of costs declared by the applicant, NEURC should provide a substantiated explanation based on the predefined criteria for recognition.

3.4. Export and import charges

The transmission and dispatch tariff methodologies do not indicate the system users to whom tariffs adopted by NEURC will be applied. Instead, this information is implicitly indicated in the definition of the volumes of electricity, as a denominator for calculation of these rates, and in the definition of tariff for electricity transmission service and tariff for dispatch service. According to the methodology on the transmission tariff settings: the tariff for transmission services (transmission tariff) is the amount of payment per unit of electricity transmission (consumption) and scheduled export of electricity through electricity networks of a certain quality, which ensures the licensee's reasonable expenses for the activity, including profit. According to the methodology on the dispatch tariff settings: the tariff for dispatching (operational-technological) management services (dispatch tariff) is the amount of payment per unit of electricity transmission (consumption), volume of electricity output by electricity producers, scheduled import and export volumes of electricity, which is ensuring reimbursement to the entity of reasonable expenses for operating on the operational and technological management of the IPS of Ukraine, including profit. The amended Transmission Network Code stipulates clearly that transmission services shall be provided by the TSO to "suppliers - in the amount of export (if they are exporting electricity) and consumption of their consumers" and to "producers and traders - in the amount of export", whereas dispatching services shall be provided by the TSO to "producers - in the amount of generated electricity (output into network) + import and/or export (if they are exporting/importing electricity)" and "suppliers/traders - in the amount of exporting and/or importing electricity" in addition to other system users.

According to the current rules, exporters are obliged to pay the transmission tariff for the electricity scheduled as export from Ukraine at the same rate as any other system user, i.e. at the same rate as for domestic consumption. The dispatch tariff is charged on scheduled export and import at the same rate as to any other system users, i.e. at the same rate as for domestic consumption and generation.



By charging import and export with tariff components which are associated to internal activities and policies, the proposed scheme is not in line with Article 41 of the Energy Community Treaty, which provides that "Customs duties and quantitative restrictions on the import and export of Network Energy and all measures having equivalent effect, shall be prohibited between the Parties." In accordance with the case law of the European Court of Justice, this prohibition applies to customs duties, quantitative restrictions on the import and export, as well as all measures having equivalent effect. In particular relevant to the case of transmission and dispatch tariffs in Ukraine, in its judgment in Case C-305/17 FENS of 6 December 2018, the Court ruled that Slovakian legislation obliging exporters of electricity to pay transmission tariffs violates the EU law provision corresponding to Article 41 of the Energy Community Treaty. The Court has held that customs duties are prohibited "independently of any consideration of the purpose for which they were introduced and the destination of the revenue obtained therefrom" [...] because "any pecuniary charge, however small, imposed on goods by reason of the fact that they cross a frontier constitutes an obstacle to the movement of such goods." Such prohibition applies even if the charge "is not imposed for the benefit of the State, is not discriminatory or protective in effect and if the product on which the charge is imposed is not in competition with any domestic product."

The transmission and dispatch tariffs are pecuniary charges imposed unilaterally on a good, i.e electricity as the tariffs are "calculated on the basis of the number of kWh transmitted and not on the basis of the distance for which the electricity is transmitted or according to any other criterion directly connected with transmission." Furthermore, the charges are prohibited if they are "borne solely by a product which crosses a frontier, as such". While in principle Ukrainian transmission and dispatch tariffs apply to domestic transactions and exports/imports alike, such charges would be allowed only if they "represent payment for a service actually provided to an operator which he is required to pay in an amount proportionate to that service."

While Ukrenergo is entitled to be compensated for the costs of hosting cross-border flows, specifically in the case of Burshyn Island, the recovery of these costs should be done in accordance with the principles outlined in Regulation 838/2010 on laying down guidelines relating to the intertransmission system operator compensation mechanism and a common regulatory approach to transmission charging. However, Ukrenergo does not participate in the ITC mechanism to cover the costs related to cross-border flows. Therefore, it is a legitimate interest of network users in Ukraine to ensure that additional costs incurred to serve cross-border flows are adequately assigned to those involved in the cross-border activity.

NEURC should apply the principles arising from Regulation 838/2010 based on which it should assess the cost associated with hosting cross-border flows and recover them through a specific access fee on scheduled import and export. Such access fee should be set in accordance with the principles and recommendation for applying the access fee on scheduled import and export provided in the Annex to this report as a compensation for providing a service to exporters and importers (as elaborated in the following paragraph on allocation of costs.

Recommendations

The way the tariff is currently designed should not be applied on export and import, because it amounts to overcharging and is not in line with the Treaty.



Grounds for determination of tariffs for export and import should be explicitly defined in the methodologies, not only in the tariff calculation, in line with Energy Community rules, namely Regulation 838/2010.

The cross-border access fee should be paid on scheduled imports and exports of electricity via interconnections, based on costs attributable to it.

Costs attributable to cross-border flows should be identified in accordance with the principles of the inter-TSO compensation mechanism in line with the Annex to this Report, i.e. taking into account additional losses in the network caused by hosting cross-border flows and marginal cost of equipment intended specifically for hosting cross-border flows.

Fees on import and export from and to countries which are not Parties to the Energy Community may be applied.

3.5. Allocation of costs

The allocation of costs on transmission and dispatch services is not clearly defined in the methodologies. According to the explanation of NEURC, for the current tariff setting, a weighted average coefficient (defined by Ukrenergo) was applied for allocation of costs.

The current methodology is volume based. However, even if the tariff is volume based, costs allocation does not have to be volume based too.

The methodology does not define the system users to whom the transmission or dispatch tariffs will be charged. This information can be implicitly detected from the definitions on definition of tariff for electricity transmission service and tariff for dispatch service and the formula for determination of the tariff rate, where the definition of volume of electricity indicates the targeted users, namely the consumption, generation, export and import.

Allocation of costs of transmission or dispatch service (setting aside incorporation of the RES surcharge) on consumption, generation, export and import is not transparent and raises a serious question of cross subsidization and double charging for transit transactions, which is likely to amount to a discrimination or a measure having equivalent effect prohibited under Article 41 of the Treaty. To avoid that conclusion, it would be preferable to impose dispatch tariffs not on the basis of MWh but to the costs of specific dispatch services that Ukrenergo provides to importers and exporters in the same manner as it does for purely domestic transactions, and to avoid that for transit the same services are being paid twice.

Transmission tariff is a single tariff charged at the same rate to the network users:

- consumers connected to the transmission network for the electricity taken from the network for consumption, and distribution system operators for the electricity consumed in their respective network,
- exporters for the electricity scheduled as export from Ukraine.

The dispatch tariff is charged to the following system users:



- generators for electricity produced and delivered into the transmission and distribution network,
- consumers connected to the transmission network for the electricity taken from the network for consumption, and distribution system operators for the electricity consumed in their respective network,
- exporters for the electricity scheduled as export from Ukraine,
- importers for electricity scheduled as import to Ukraine.

In both cases, the calculated tariff is charged at the same rate to all users for each MWh of electricity, resulting in disproportionally high tariff (due to the fact that it includes components such as PSO on RES, etc.) for scheduled import and export compared to the costs caused by cross-border flows and double charging of electricity produced in Ukraine and exported and double charging of electricity imported and consumed in Ukraine. While in Ukraine, apparently both transmission and dispatch tariffs are required as payment for services, similarly as in the Slovak case, it cannot be substantiated what particular services are provided to the exporters and importers that represent a benefit to them specifically in order to escape the prohibition. Namely, those are services rendered also to other market participants and not specifically to exporters and/or importers. Moreover, being also linked with the value of the good, the amount of the transmission and dispatch fees is not related to the actual cost of the service. Finally, since transit in Ukraine is also considered as two separate transactions, it seems that traders transiting electricity through Ukraine would have to pay once the transmission fee (on the export) and twice the dispatch fee (on both export and import).

Recommendations

The cost included into the projected revenues have to be allocated on two core services identified in the Law - on tariff elements and on system users - which can be classified in more than one category.

The criteria for allocation of costs on dispatch and transmission activities must be clearly stated in the methodology, as well as for allocation of assets, loans and capital. Where such allocation is not feasible, allocation keys for common and shared services should be established and approved by NEURC.

A comprehensive reassessment should be conducted in order to identify the costs that can be reasonably attributed to dispatch service (especially as customer categories for dispatch and transmission are different).

Costs allocated on generation to set tariffs for producers should be determined in compliance with Guidelines for a Common Regulatory Approach to Transmission Charging.

Different categories of system users and network users must be clearly defined and explicitly stipulated in the methodology.

The criteria for allocation of costs on categories of users shall be clearly defined in the methodology, and if more than one tariff element is introduced (as an existing practice), than allocation on tariff elements shall be done first.

Allocation of costs among customer categories should be fair, transparent and non-discriminatory. The tariff rates charged to system users should reflect the costs they cause to the system.

Double charging of any category of network users is prohibited.



3.6. Determination of necessary income: specific items

The projected profit in the transmission and dispatch tariff methodology sets different parameters for calculation, whereas financial costs (which should be integrated in the regulatory norm for profit), are included as part of the total costs.

In the methodology, however, return is calculated by applying the rate of return ("regulatory norm") on the regulatory assets base. This regulatory norm should include the return on loan and the return on equity, because the value of all assets is included in the formula.

The methodology does not present the criteria for setting the rate of return, the recognition of interest rate, the rate of return on equity or the recognition of regulatory assets base.

According to the submitted calculation, the return on assets (net profit) was calculated as the sum of loan repayments, planned investments and dividends in the amount required for the state budget.

Planned investments as an item to increase the profit is difficult to understand. Incentives for investing, when considered, are usually in the form of inclusion of the investment in the regulatory assets base.

A particularity of the tariff setting and calculation of profit is the implementation of the Procedure of formation and implementation of the dividend policy of the State, whereas the state as the owner of the company defines the dividends to be paid in the state budget. In practice, the Ministry of Finance set the percentage of dividends which are then incorporated in the amount of recognized net profit. The key regulatory leverage to exert efficiency is undermined with this procedure.

Moreover, the profit for payment of dividends to the state budget (in both methodologies) is not defined by NEURC, and depends on the decision of the Cabinet of Ministers of Ukraine, which creates uncertainties in the tariff level.

According to the methodologies, the depreciation of assets is recognized in the amount of all assets in use before the transition to incentive tariffs. This includes assets obtained from connection fees, from grants or received for free/in kind, which normally would be taken out or offset through deduction for realized deferred revenues.

Revenues from congestion rent are shown as an additional cost item within the operational costs of the transmission service, increasing the required revenues, instead to offset the costs of guaranteeing the actual availability of allocated interconnection capacity, for investment in network or as a deductible item, to the extent approved by the regulator. As a matter of principle, this category should not be used by default to reduce the tariff. Based on Article 16(6) of Regulation 714/2009, "any revenues resulting from the allocation of interconnection shall be used for the following purposes:

- (a) guaranteeing the actual availability of the allocated capacity; and/or
- (b) maintaining or increasing interconnection capacities through network investments, in particular in new interconnectors."

Only if the revenues cannot be efficiently used for those purposes, they may be used, subject to approval by NEURC, up to a maximum amount to be decided by NEURC, as income to be taken



into account when approving the methodology for calculating network tariffs and/or fixing network tariffs.

Recommendations

Calculation of return on assets should be performed as per procedure defined in the methodologies.

The Methodology has to be improved to exclude the financial costs from the cost structure if calculation of return is based on the entirety of employed capital (equity and debt).

Improper intervention of the owner in the process of determination of the return on assets, primarily on equity, should be avoided.

Recognition of losses in the network should be based on the evidence of Ukrenergo and assessment of NEURC.

The methodologies should indicate in a clear manner the treatment of revenues earned using the assets that are included in the regulatory asset base. All such revenues, apart from revenues from regulated tariffs, should be taken into account for tariff setting.

In particular, the treatment of congestion revenues should be explicitly defined in accordance with the acquis, namely to guarantee the actual availability of allocated interconnection capacity and for investment in network infrastructure that eliminates structural congestion. Only if it cannot be efficiently used for this purposes, NEURC may decide to include a certain amount of congestion rent in the tariff calculation.

Costs of amortization and depreciation of assets received for free or purchased from connection fee should be offset in the deducted revenues.



ANNEX

Principles for charging cross-border flows in the absence of participation in the pan-European ITC mechanism for Ukrenergo

Objective

- 1. TSOs are entitled to be compensated for costs incurred due to hosting cross-border flows of electricity including providing cross-border access to the interconnected system.
- 2. Until Ukrenergo participates into the Inter-TSO Compensation Mechanism in line with Regulation 838/2010, it may set specific tariffs for the costs associated with hosting cross-border flows in line with principles of Regulation 838/2010, i.e. cross-border access tariff.

The cross-border access tariff shall provide compensation for:

- the costs for covering the losses incurred by Ukrenergo as a result of hosting cross-border flows of electricity; and
- the costs for making infrastructure available to host cross-border flows of electricity.
- 3. Until Ukrenergo participates into the Inter-TSO Compensation Mechanism in line with Regulation 838/2010, the transmission tariffs levied to generators (G) and load (L) in Ukraine should not include any component related to the impact of their activity in the cross-border flows.

Scope

- 4. The Ukrainian system is composed of two bidding zones and control areas physically disconnected: (1) Bursthyn Island, operating in synchronous mode with Continental Europe, interconnected with Slovakia, Hungary and Romania; and (2) the rest of the Ukrainian system, operating in synchronous mode and interconnected with Russia, Belarus and Moldova. This zone has an interconnection with Poland which operates on asynchronous mode.
- 5. The tariff principles outlined here apply to cross-border flows on the interconnections with EU Member States on the Burstyn Island/Ukraine.
- 6. The tariff principles should not apply to the cross-border flows on the interconnections with Moldova due to the fact that Moldova is interconnected only with Ukraine, therefore what one party may charge as import, the other would charge as export, creating unnecessary administration and pancaking effect. This should be reciprocal also from the Moldovan side.
- 7. These principles may also apply on other interconnections as well.

Charging principles

- 8. In line with the charging principle under Regulation 838/2010 and mirroring the reciprocal application, the cross-border access fee shall be paid on scheduled imports and exports of electricity via interconnections per MWh under the scope of this methodology to the participant that has scheduled flow as import and/or export, invoiced on a monthly basis.
- 9. The tariff for import and export should be the same and fixed based on calculation of the following parameters:



(1) Compensation for losses

The amount of losses incurred on a national transmission system associated with physical transit during a relevant period. ENTSO-E provided a methodology for calculation of losses associated with transit.

To assess the losses caused by transits, TSOs compute what would have been the losses without transit and compare the outcome with the metered values (with transits).

Losses caused by transit are determined for 6 monthly snapshots (3rd Wednesday of a month and preceding Sunday at 03:30h, 11:30h and 19:30h CET/CEST).

The value of losses incurred by a national transmission system as a result of the cross-border flow of electricity shall be calculated on the same basis as that approved by the regulatory authority in respect of all losses on the national transmission systems.

(2) Compensation for provision of infrastructure for cross-border flows of electricity

The annual cross-border infrastructure compensation sum shall include the costs incurred as a result of making infrastructure available to host cross-border flows of electricity.

The annual cross-border infrastructure compensation within ENTSO-E is currently done based on a capped figure. This is an amount set at EUR 100 mln., arbitrarily set, to be covered across the ITC geographic scope. Instead, Ukrenergo may use the overall costs of infrastructure assessed in respect of national internal tariffs.

Following the calculation of transit losses, their share in the overall volumes on the grid is used as the key on the total costs of infrastructure.

10. The sum of two figures (under para 10) is removed from the overall tariff calculation and is divided by the cumulative figure of expected import and export (assessment based on previous years) on the interconnections under the scope of these principles.