European Union Agency for the Cooperation of Energy Regulators

ACER Webinar on Electricity Network Tariffs

19 March 2021



European Union Agency for the Cooperation of Energy Regulators

### Tariff Setting: Ensuring Transparency, Predictability and Stakeholder involvement

Nico Keyaerts

19 March 2021, ACER Webinar on Electricity Network Tariffs





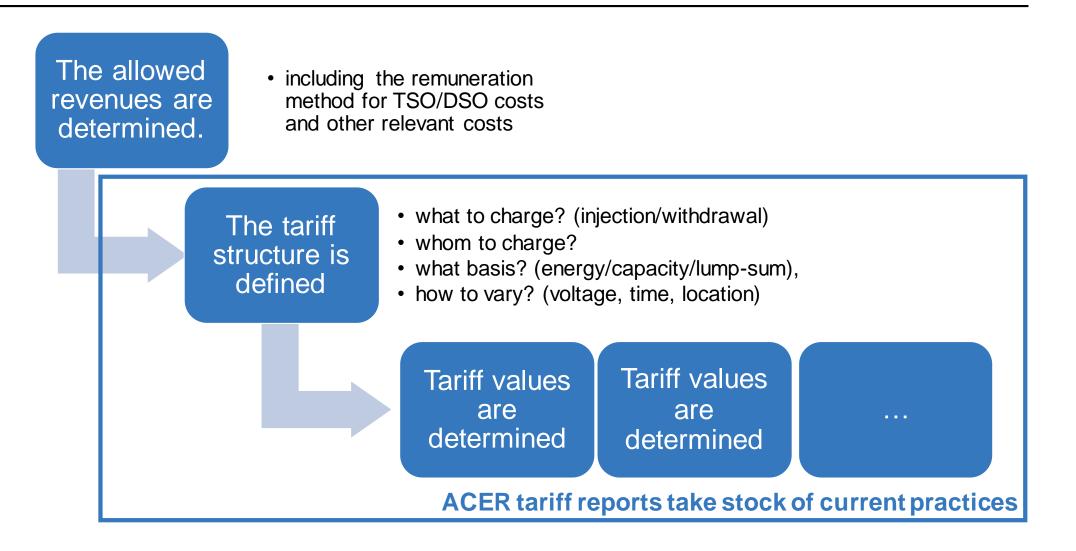
- General approach ACER network tariff reports
- Stakeholder involvement in tariff setting
- Transparency of tariffs
- Comparability of tariffs
- Predictability and stability of tariffs



- Regulation (EU) 2019/943 assigns the duty to ACER to issue (and update every 2 years) a best practices report on tariff methodologies.
- It should contribute to increase transparency and comparability in tariff-setting
- NRAs shall duly take it into consideration when fixing or approving tariffs or their methodologies



#### General approach Allowed revenues, tariff structure and tariff values





- ACER strongly supports the systematic use of public consultations to interact transparently and inclusively with stakeholders to improve the quality of tariff methodologies
  - What is a good consultation? Frequency, content, duration, reach...

Stakeholder involvement action	Transmission	Distribution
Public consultation	Widespread practice (~80%)	Widespread practice (~80%)
Consultation of key stakeholders	Few countries	Few countries
No systematic stakeholder involvement		Few countries



- Transparent tariff setting allows current or future network users to understand the tariff values to a reasonable degree in order to incorporate that information into their decision-making and market participation
- ACER recommends to publish at least a minimum set of tariff information on annual tariff values, the methodology with covered cost categories, and the amounts recovered by each tariff element
  - What is transparent? Availability, understandability...

Availability of tariff information	Transmission	Distribution
Annual tariff values	All	All
Methodology with covered cost categories	Almost all	Almost all
Amounts recovered by each tariff element	Not always publicly available	Not always publicly available



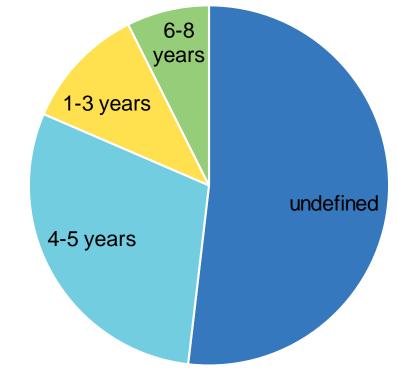
- Comparability is hindered by lack of common terminology and lack of common understanding of terminology, e.g., different mapping of costs to tariff elements
- Caution when interpreting data

<ul> <li>ACER identifies the following costs (potentially) paid by network users</li> <li>Distribution network costs</li> <li>Transmission network costs</li> <li>System services costs</li> <li>Metering costs</li> <li>Non-network-related policy costs: (non-VAT) taxes, levies, costs of support schemes</li> </ul>	<ul> <li>ACER suggests using the following terms when setting or approving the next tariff methodology :         <ul> <li>Distribution tariffs / tariff elements (separate element losses)</li> <li>Transmission tariffs / tariff elements</li> <li>Tariffs / tariff elements for purchasing system services</li> <li>Tariffs / tariff elements for metering services (where applicable)</li> </ul> </li> </ul>
	<ul> <li>Non-network related policy costs should not be covered by tariffs</li> </ul>



#### **Predictability and stability**

- ACER recommends setting the tariff methodology for multiple years (at least 4 years) to have tariff stability and predictability
- ACER recommends tariff values are updated yearly based on variations of the drivers defined by the tariff methodology and on inflation to maintain cost reflectivity



Source: ACER distribution report

How often does the tariff methodology change?



- Few recent significant changes in tariff methodologies, indicating that tariff stability has been so far a key objective pursued when setting distribution tariffs
- Much wider number of ongoing possible changes of distribution tariff frameworks (in more than half of the Member States), often related to better controlling network investment costs

Examples of ongoing changes and considerations

- Changing the tariff component split (energy vs power vs lump-sum)
- Introduction or elimination of injection charges
- Preliminary considerations on EV integration and local energy communities

# Thank you. Any questions?



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## Tariff setting: cost reflectivity and avoiding distortions

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19 March 2021, ACER Webinar on Electricity Network Tariffs



#### Outline

- General considerations
- Injection charges
- Withdrawal charges
- Time-of-use signals
- Different treatment of network users



- Cost reflective network tariffs are required to ensure the overall system efficiency: (i.e. lowest cost for serving the electricity needs of network users over the long run)
  - Tariff methodologies shall provide incentives to system operators for efficient investments and system operation

 Tariff methodologies shall provide price signals to network users to adapt their behaviour





#### • Cost caused by a network user should be properly reflected in its tariff:

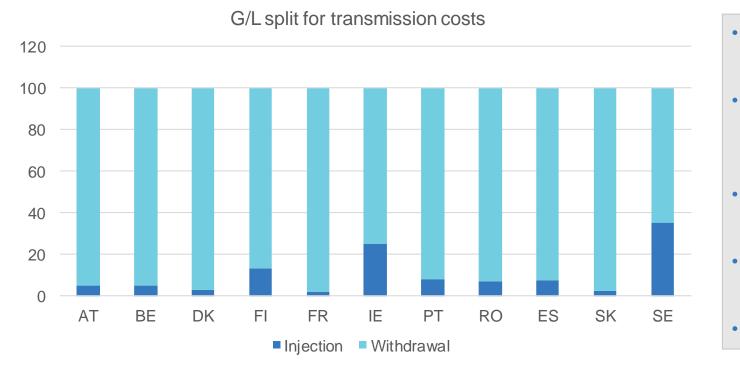
- If only withdraws or injects, in principle, only the costs relevant for withdrawal or injection should be attributed to this user
- If both withdraws and injects, both should be considered, by properly taking into account cost-offsetting effect and overall cost impact to the network
- Uses of several regulated networks should be charged separately according to the costs and/or benefits in each network
- Tariff basis should reflect cost drivers: some costs (e.g. infrastructure costs) show strong correlation with capacity usage, while other costs (e.g. losses) may significantly depend on the volume of energy



- Pursuing cost reflectivity is not an easy task. There are several challenges and limitations:
  - Identification of costs attributed to a particular user and its cost drivers
  - Ability or willingness of network users to react to signals
  - Competition of generators across borders in the EU internal market
  - Non-cost reflective alternatives to electricity
  - Potential conflict with other tariff principles (e.g. cost recovery, predictability, transparency)



 The recovery of network costs is based heavily on withdrawal charges. In distribution, only up to a few percent is covered by generators



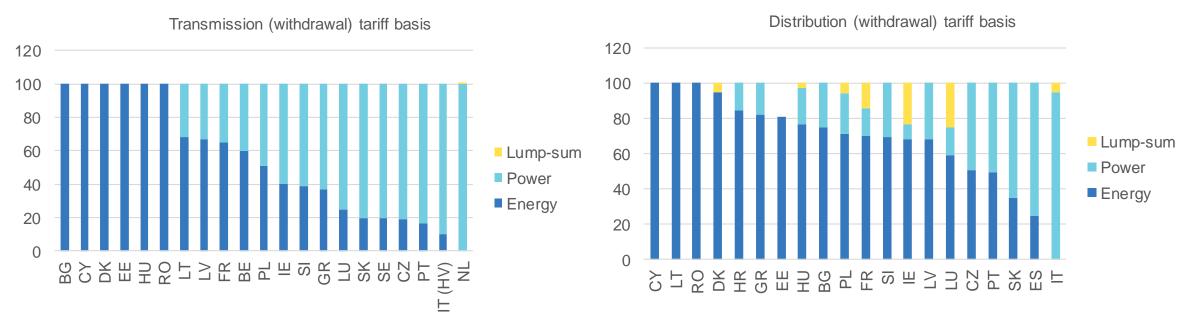
- Most Member States who apply injection tariffs, apply it both in transmission and distribution
- Some apply injection tariffs only in transmission or only in distribution (e.g. explained by different impacts of the injection into those networks)
- The tariff basis in transmission is typically energy based vs. a variety of tariff basis in distribution
- Germany applies a negative injection charge (in distribution only) for avoided network costs
- Various reasons behind application/non-application

Source: ACER transmission tariff report, 2019



### Withdrawal charges in the EU

 Typically withdrawal charges have a combined tariff basis. For distribution, energy based charges have a significantly higher weight in the cost recovery in most Member States. For transmission, energy and power based charges are more balanced.



 Recent gradual move to increasingly power-based tariffs to recover those costs which show correlation with contracted or peak capacity is deemed appropriate. (Time-differentiated tariffs with sufficient granularity may achieve similar cost reflectivity)

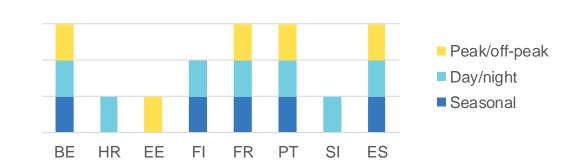


- "Time-of-use" gains a higher importance than in the past:
  - Increasing distributed generation, electricity demand and capability of network users to respond to time signals
  - In some cases, cost-reflective distribution tariff may require to be time-differentiated
  - Time-of-use tariffs, especially for larger consumers, can be a useful tool for reducing system peakload, which is a main driver for network investments
  - Care should be given to the potentially conflicting time signals given by the time-of-use energy prices

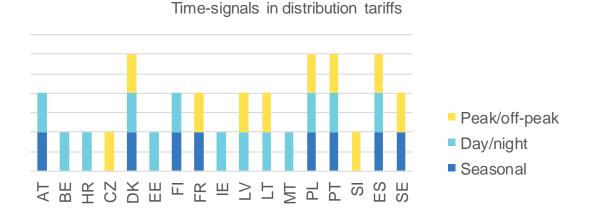


### Time-of-use signals in the EU

- Time-of-use tariffs are widely used in distribution, less in transmission:
  - Most Member States apply time-of-use tariffs (9 for distribution only, 8 for both networks)
  - Typically withdrawal charges are timedifferentiated (rare for injection charges)
  - Several time signals types often coexist. Most commonly used is day/night
  - The time-element is typically embedded in the energy component, or in both the energy and the power components



Time-signals in transmission tariffs

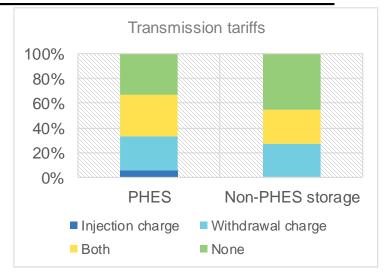


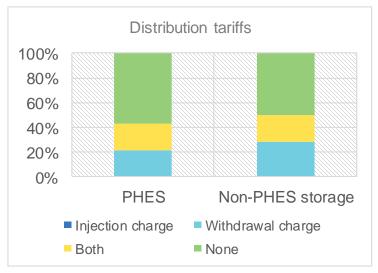


- While applying exemptions may be reasonable in certain instances, they shall be applied in a non-discriminatory manner
- Exemptions, partial exemptions or discounts from the payment of the reflective costs by a network user should be provided only if justified reasons exist
- Therefore the necessity of any different treatment should be carefully considered and reassessed over time by the NRAs
- Energy-based charges for users which both withdraw from and inject into the grid should account separately for the electricity fed into the grid and the electricity consumed from the grid



- Difference in treatment of some of the network users was reported in several Member States:
  - To various network users (e.g. RES-, smaller-, LV-connected generators/storage facilities; largest industrial or agricultural users; households, prosumers, auxiliary services, energy communities, operators of public EV re-charging stations, etc.)
  - In various forms (e.g. full or partial exemption; discount; different (weight of) tariff basis or calculation; application of time-signals; net metering, etc.)
  - For various reasons (e.g. national law, administrative burden, simplification, promotion of technologies or active consumers, ensuring adequacy, historical reasons, metering capabilities, interruptibility, but also better cost-reflectivity)





# Thank you. Any questions?



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### **POLL QUESTIONS**



# 1. What is your view on transparency of electricity network tariff setting?

- Transparency is rather OK, no particular action needed
- Tariffs are too complex and need to be simplified
- Need to run or to improve public consultations
- Need for additional stakeholder involvement (e.g. individual hearing)
- Need for better public availability of tariff related information
- More actions are needed regarding tariff comparability across EU



## 2. Are there distortions due to electricity network tariffs? If yes, which is the most important from this list?

- No particular distortions exist
- Distortions regarding the current injection charges and their lack
- The tariff basis (e.g. energy, power) does not properly reflect the cost drivers
- Distortions regarding time-of-use signals to network users or their lack
- Distortions due to exemptions or discounts to some network users



#### **POLL QUESTION 3**

### **3.** If ACER would ask your views on electricity network tariffs, would you contribute? What would be your most preferred way of interaction?

- Further ACER short webinars, with online contributions by participants
- Full-day ACER workshops with physical participation, when possible
- Joint webinar/workshops by ACER & ENTSO-E and by ACER & EU-DSO
- o Bilateral hearings
- Meeting with selected groups (e.g. consumers, generators, storage)
- Online surveys or public consultation
- Not interested to contribute