Effects of transmission tariffs to wholesale market development in the EU

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What’s the level of gas transmission tariffs in Europe?

- European cross-border tariffs are quite diverse as they result from differing regulatory choices and network cost factors
  
  e.g. valuation of the regulatory asset base, rates of return, tariff methodologies

  e.g. network size, configuration, capacity, topology, density

Source: ACER calculations in collaboration with ENTSOG and TSOs
What's the level of gas transmission tariffs in Europe?

As far as tariffs are transparent, cost-reflective and efficient their actual levels shall not be a concern.

Source: ACER calculations in collaboration with ENTSOG and TSOs
How do transmission tariffs effect on prices?

- Tariffs are a key element driving IPs utilisation. They:
  - can promote or deter market access from a given origin
    - This influences the competitive framework for price formation
  - can add-up on final MSs sourcing cost via pancaking of supply-route tariffs*
  - can be pivotal in hub price-spread formation

- However, concrete IP tariff effects on prices may vary in accordance to the distinct markets’ conditions and players’ strategies. It is important to look at aspects as:
  - Marginal price setter at each given market
  - Number and type of active suppliers
  - Suppliers’ possible determination to lower supply-price margins to compete in
    - e.g. final supply prices not adding-up tariffs entirely

*arguably, particularly when tariffs methodologies diverge or are not reflective
How do transmission tariffs effect on prices?

2017 supplier’ gas sourcing cost at EU MSs - euros/MWh

Setting the scene of MSs sourcing costs

Declining price differentials across MSs suggest that:

• Most regions are benefiting from fiercer supply-side competition.

• The development of the hub model plus sufficient IP capacity is backing stronger price convergence

• LNG sets marginal prices in many markets, whereas major pipe producers aim retaining market share via lowering margins and orienting sellings into hubs

Gas sourcing via hubs is generally more competitive. Non-hub indexed LTCs are more exposed to non-gas fundamentals

Source: ACER based on Eurostat Comext, Platts, and NRAs
How do transmission tariffs effect on prices?

Analysis of DA price convergence and price correlation levels among selected EU hubs – 2015 - 2017

- Price convergence between EU hubs continues to advance. Dissimilar levels among regions persist yet
- Upstreamers selling gas at distinct hubs at differences below transmission tariffs assist convergence. E.g. Equinor at NWE
- Contracting surpluses assist convergence; as those constitute sunk costs inter-hub arbitrage trade takes place around short run marginal costs
- Transportation costs, linked to physical distance can influence price differences, particularly when the specific IP sets the marginal market price – e.g TTF into Italy

Source: ACER based on Platts and ICIS Heren. Notes: Spreads in euros/MWh are calculated as the absolute price differential between pairs of hubs, independent of discount or premium
Tariffs are a pivotal price signalling factor for hub price spread formation. The type of direction may be dissimilar among hub pairs in accordance to markets’ specifics.

Day-ahead price convergence levels in selected EU hubs compared to yearly transmission tariffs – 2017

- Price spreads rarely exceed tariffs between hubs in NWE. Tariffs tend to be a defacto ceiling around which arbitrage trading occurs. SRMCs, direct access of common suppliers and the determination of others to compete in price seem to determine actual spreads.

- Hub pairs where spreads were higher than tariffs tend to include those with lower liquidity or may indicate capacity constraints at IPs.

- DA tariffs are higher than yearly ones limiting arbitrage opportunities on the spot at some markets.

Source: ACER based on Platts and hub operators’ data for prices and ENTSOG TP for transportation tariffs.
How do transmission tariffs effect on prices?

Tariffs are a pivotal price signalling factor for hub price spread formation -> A different way of presenting a similar analysis

Day- ahead price spreads compared to yearly transportation tariffs – 2017

Source: ACER based on Platts and hub operators’ data for prices and ENTSOG TP for transportation tariffs.
Some reflections about the future

- The EU gas sector is shifting towards shorter-term capacity and commodity contracting terms. This trend entails further hub-orientation and more profiled capacity bookings. NCs are playing a part in this.

- A number of opposing elements could drive the evolution of IP tariffs along next years:
  
  (-) The maturity of the European transportation systems could reduce the need for infrastructure expansion and result in lower tariffs
  (+) Declining demand and reduced bookings after the expiration of LTCs could increase tariff levels

- The implementation of the TAR NC could alter tariff levels at selected IPs affecting the direction of EU flows.

- Some tariff framework reorganization proposals are being studied:
  
  e.g. Quo Vadis: Suggestion of applying harmonised tariffs in all into-EU entry points, and the setting of all within-EU IPs reserve prices to zero. This could encourage supply competition and regional price convergence. The proposal would be accompanied by a new inter-TSO compensation fund to secure revenue recovery neutrality.
Thank you for your attention

See MMR 2017:

See ACER analyses of tariffs consultations:
Back-up
2017 EU gas hubs categorization on the basis of AGTM metrics

- **Established hubs**
  - Broad liquidity
  - Sizable forward markets which contribute to supply hedging
  - Price reference for other EU hubs and for long-term contracts indexation

- **Advanced hubs**
  - High liquidity
  - More reliant comparatively on spot products
  - Progress on supply hedging role but relatively lower liquidity levels of longer-term products

- **Emerging hubs**
  - Improving liquidity from a lower base taking advantage of enhanced interconnectivity and regulatory interventions
  - High reliance on long-term contracts and bilateral deals

- **Illiquid-incipient hubs**
  - Embryonic liquidity at a low level and mainly focused on spot
  - Core reliance on long-term contracts and bilateral deals
  - Diverse group with some jurisdictions having
    - organised markets in early stage
    - to develop entry-exit systems

Source: ACER
Note: Assessment made based on AGTM and other metrics