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CONTRIBUTION

From:	General Secretariat of the Council
To:	Working Party on Energy
Subject:	SK, BG, HU, LV, PL Non paper on the unbundling options for the development of the hydrogen framework

In view of TTE-Energy Council on 25 October, delegations will find attached the SK, BG, HU, LV, PL non paper concerning the ITO model for hydrogen networks beyond 2030.

SK, BG, HU, LV, PL Non paper on the unbundling options for the development of the hydrogen framework

Introduction

On 15 December 2021, the Commission submitted proposals for the Directive on common rules for the internal markets in renewable and natural gases and in hydrogen and the Regulation on the internal markets for renewable and natural gases and for hydrogen (Gas Package) as a part of new EU framework to decarbonize gas markets, promote hydrogen and reduce methane emissions.

Whilst there are a number of differences between the gas and hydrogen networks, based notably on the fact that the gas network is an existing grid serving a mature market whereas the clean hydrogen grid is yet to be developed, the same basic regulatory issues arise with respect to both networks.

Unbundling is one of the key pillars of EU energy network regulation, alongside the effective oversight of network tariffs and access conditions by independent National Regulatory Authorities ('NRAs'). The objective behind unbundling is to ensure that grids are managed objectively, treating all clients equally, and not favouring 'in-house' production or sale of energy, notably through priority grid access (when capacity is limited) or favourable access conditions (through preferential tariffs).

ITO model for hydrogen networks

There are some objective differences between the future hydrogen grid and the existing gas and electricity networks.

Hydrogen market is only at an early stage of its development, whereas the rules set by the Internal Energy Market Directives were introduced to regulate an existing and mature market. It is not possible to reliably predict the exact size of the future hydrogen market, notably the demand from energy intensive industry and transport. Nor is it possible to forecast with certainty the speed at which demand for hydrogen transport services will evolve, even if we know that it will be significant over time. This means that attracting investment in the hydrogen network will be both essential and challenging – investments in the hydrogen networks will be accompanied by great uncertainty about the return on investment

Furthermore, the future hydrogen network will be to a very large extent made up from repurposed gas pipelines. This is a far cheaper option than building an entirely new grid. The operation of the hydrogen grid will require the same expertise as gas grids. There will be therefore huge synergies and inter-linkages between the existing natural gas and the future low and zero-carbon hydrogen grid.

Conclusions / Key points

- Development of the future hydrogen grid via the joint operation of a natural gas and hydrogen TSO offers a number of important advantages compared to two distinct TSO companies.
 - o The gas and hydrogen grids will be operated side-by-side for decades to come, and will require the same assets and skills. Undertaking their development, operation and maintenance jointly offers significant cost savings and thus has the potential to provide lower tariffs for hydrogen grid users.
- Repurposing of the natural gas grids to develop the hydrogen grid will nevertheless require significant investment. Predictable and stable regulatory environment will be absolutely crucial for investment decisions.
- Both the Commission and NRAs have confirmed in published reports that the ITO model works well in practice. Failure to provide the ITO option for hydrogen networks would therefore infringe EU legal principles of proportionality and subsidiary, effectively discriminating between Member States, and give rise to important issues of transfer of property rights.

- The application of the ISO model after 2030 does not represent a realistic alternative, especially not for an emerging network like the hydrogen network. Forcing either (i) the owner(s) of ITOs to abandon their supply or production activities or else to sell the ITOs or (ii) the ITO to sell the hydrogen network operator, in all cases by the end of 2030, can hardly be considered the least restrictive means to achieve the relevant objectives.
- Development of the future hydrogen market, in particular creation of a holistic functional system from the production to the final consumption point requires involvement of all stakeholders. Restriction in application of the ITO model would slow down the process of decarbonisation of gas sector, and in some cases might lead to a complete stop in any development activities. This would have negative effect on interconnected neighbour states including Ukraine which represents important EU partner for hydrogen development, as well as the whole European Hydrogen Backbone.

Bearing in mind the above mentioned facts, the future EU hydrogen regulatory framework does not provide for the existing choice of unbundling models for the hydrogen grid – ownership unbundling, ISO and ITO - Member States should not be deprived of the option of a common gas and hydrogen network operator and should be able to choose ITO model. This would lead to loss efficiencies, higher network costs and a significant delay in developing a clean hydrogen grid as well as limited opportunities for creating import corridors for clean hydrogen from third countries. Therefore, we propose to remove the time limitation for the ITO model provided in Article 62 (4) of the draft revised Gas Directive.