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WORKING TOWARDS A SINGLE ENERGY MARKET
TO THE BENEFIT OF ALL EU CONSUMERS!

Views on TYNDP 2017: Process and Concept

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Outline

- How ACER Opinion 11/2015 on TYNDP 2015 is being considered by ENTSOG in TYNDP 2017?
  - Points fully considered
  - Point partially considered, needs further work
  - Points where the approach should be changed
- Feedback from SJWS
  - Valuation of lost load, legal aspects of project submissions, commodity prices, sources and LNG, storylines
- Practical concerns concerning project data

How ACER Opinion 11/2015 on TYNDP 2015 is being considered by ENTSOG in TYNDP 2017?

Fully considered:

- Discard the high infrastructure scenario (unrealistic)
- More focused range (spectrum) of scenarios
- Better classification of project maturity:
  - Criteria for advanced "non-FID projects" in consultation with NRAs / ACER
- Transparency on consistency of NDPs vs. TYNDP:
  - TYNDPs to include a cross-reference check of TYNDP and NDP codes. For projects not in NDPs, promoters to provide a well-founded reasoning

…..Also acknowledged

- **Good communication and collaboration with ENTSOG**, even if some divergent views may persist

How ACER Opinion 11/2015 on TYNDP 2015 is being considered by ENTSOG in TYNDP 2017?

Partially considered, needs further work:

- Process and timeline of the TYNDP 2017 publication:
  - Acknowledged: ENTSOG's effort to deliver the TYNDP in Q4/2016 and to give a preview of gas demand and input data in Summer 2016
  - ….but final publication and approval of the TYNDP should be after the Agency's Opinion on the draft TYNDP
- Methodology for identification of infrastructure gaps:
  - Complete the task of identifying infrastructure gaps, <u>especially with respect to cross-border capacities.</u>
  - Evaluate the degree to which the TYNDP projects match infrastructure gaps at EU level
  - Provide more structure to the TYNDP by demonstrating the main issues and how projects may address them

How ACER Opinion 11/2015 on TYNDP 2015 is being considered by ENTSOG in TYNDP 2017?

Partially considered, needs further work:

- Quantification of benefits / monetization:
  - Proposal for valuation of security of supply is a fair attempt, but is simplistic
- Better process for scenario determination:
  - In particular regarding variables which are common to gas and electricity (joint scenario elaboration process), having in mind the interlinked E/G model
  - Consider ENTSO-e practice for scenario development
- LNG potential for diversification not fully captured
- Refine the modelling, which is still quite abstract (gas quality? perfect market? no transmission tariffs? no LT contracts? etc.)
- Clustering of projects
  - provide guidance "a priori" to promoters, in consultation with other stakeholders

How ACER Opinion 11/2015 on TYNDP 2015 is being considered by ENTSOG in TYNDP 2017?

Need for change of the approach:

- Use of CBA methodology:
  - Inclusion of costs (CAPEX and OPEX) in the TYNDP per project - essential part of CBA improvement
  - Improve the indicators of the cross-border effects of projects
- ACER expects publication of benefits and costs per project in the gas TYNDP
  - ENTSO-E publishes benefits and range of cost estimates per project (project fiches) as an Annex to the electricity TYNDP

ACER views (1/2)

- ENTSOG's monetization goes in the right direction, but has many shortcomings:
  - Boils down to assigning implicit unit value of gas "lost load" by dividing EU28 GDP by total energy consumption in EU28, i.e. disregards other inputs to GDP and is not gas-specific.
  - Unit value is ~600 EUR /MWh, about 30 times higher than a wholesale gas price of 20 EUR/MWh. Could be different (higher/lower), when considering where the disruptions could happen and which consumers could be affected
  - Important elements not considered, in particular demand-side measures, structure of gas demand in a given country, substitution of gas by other fuels, protected and non-protected customers, etc.
  - Fails to reveal the actual value of the "loss", i.e. the specific negative impact which the absence of gas causes in the economy
  - Does not differentiate by duration of disruption and does not allow scaling of disruption (e.g. 25% lost load vs. 100%)
  - **No monetization is preferable to overly simplistic monetization**

ACER views (2/2)

- Possible improvements for monetization:
  - Refine the approach to determine firstly which categories of consumers would be interrupted
  - Use **demand-side effects / behaviour change approach**: estimate the value of uninterrupted gas supply via willingness of consumers to pay or to accept disruptions (WTP/WTA), as in electricity, based on customer surveys
  - Use of a **refined GDP loss approach**: avoided cost estimate via loss of value by users of gas (e.g. the economic value of output not produced due to the absence of gas)
  - Combinations of both, maybe

ACER encourages ENTSOG to improve the proposal, noting NRA/ACER concerns:

- **Recommends ENTSOG further work/investigation on the topic. Starting point must be breakdown of disrupted volumes per MS and type of consumers (power generation, industrial, household, etc.; protected and non-protected consumers)**
- **Recommends ENTSOG open consultation on the topic (look for a better methodology)**

Possible reference sources

- Study to support the definition of a CBA methodology for gas, prepared for European Commission by Frontier Economics, June 2014. *(p. 37-39)*

https://ec.europa.eu/energy/sites/ener/files/documents/Study%20to%20support%20the%20definition%20of%20a%20CBA%20methodology%20for%20gas.pdf

- Estimating Value of Lost Load (VoLL), Final report to OFGEM, London Economics, 5 July 2011 *(example of WTA/WTP approach for UK)*

https://www.ofgem.gov.uk/sites/default/files/docs/2011/11/london-economics%2C-estimating-value-of-lost-load---final-report-to-ofgem.pdf

- Poyry-ILEX, Economic implications of a gas supply interruption to the UK industry, January 2006 *(input-output analysis)*

http://webarchive.nationalarchives.gov.uk/+/http:/www.berr.gov.uk/files/file28936.pdf

- Oxera, an assessment of the potential measures to improve gas security of supply in UK, May 2007

http://www.oxera.com/Oxera/media/Oxera/An-assessment-of-the-potential-measures-to-improve-gas-security-of-supply.pdf?ext=.pdf

Feedback on SWS4: Legal aspects of project submissions

ENTSOG legal note for submissions

> Information related to CAPEX and OPEX will be treated confidentially by ENTSOG. Such data will be used to calculate and publish aggregated cost information in a way, that no individual project data can be identified

> Other information submitted during the data collection in the framework of the Regulation 715/2009 and 347/2013 will be treated non-confidential by nature and will be published in the TYNDP, as it has been the case in the past. Such data could be transmitted to ACER, EC and NRAs

- Legal notice beneficial to clarify ENTSOG / promoters responsibilities, but some of the clauses go against NRA/ACER expectations for TYNDP
- ACER expects publication of benefits and costs per-project in gas TYNDP
- ENTSOG may consider using unit investment costs at project level in the TYNDP and compare with cost information provided by promoters

Agency's Opinion on TYNDP 2015

The Agency recommends to ENTSOG and all stakeholders to make sure that cost information for each project is submitted to ENTSOG and included in future TYNDPs on a project-per-project basis, similar to what is already done in the electricity TYNDP. The Agency also suggests that for each TYNDP project, relevant reference cost value(s) be published by ENTSOG alongside the project promoter's actual cost estimate.

Feedback on SWS4: Commodity prices, sources and LNG

ACER views

- On prices, sources and storylines:
  - Coherence needed among marginal, reference and import prices
  - ENTSOG's proposal to use WEO 2015 of IEA for commodity prices (gas, coal, CO2) seems reasonable
  - Import price configuration based on real prices (e.g. from Market Monitoring report) particularly useful as source for current prices / prices during first years
  - Transparency and justification on data delivered by TSOs according to the story lines
- On LNG:
  - Upward supply trend is OK, but the volume used as a starting point is higher than in the WEO. Thus, volume range in mid- to long run may be too optimistic
  - Supply configuration: ENTSOG's modelling (LNG is considered as one source for all Europe) does not fully capture the market reality and the supply diversification which LNG may bring

Practical concerns re project data

- In TYNDP 2015 (especially in the Addendum file dated 25 June 2015) certain pipeline projects are described in numerous variants making project representation difficult to decode.
- It is understandable that there could be different options (variants) for projects. In case there is a good reason to submit more variants, project promoters should indicate what are the conditions which would trigger a given variant.
- In general, all project descriptions should include the justifications underlying the project (if the project is decided) or the conditions upon which the project could be decided (if under consideration/study).
- If such description and justifications are not included, ENTSOG should react at the time of the project submission.


Thank you for your attention!
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