ASSESSMENT OF REQUIREMENTS OF THEORETICAL IMPLEMENTATION OF PROPOSED NEW REGULATION - REPEALING DIR: 2004/67/EC

Energy Community Secretariat
www.energy-community.org

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Zagreb
GAS CRISIS: REGULAR FLOWS

Source: Institute of Energy Economics at the University of Cologne (EWI)
GAS CRISIS: ROUTE FACTOR

SOURCE: ECA, SEE Regional Gasification Study, World Bank, and KfW
GAS CRISIS: STORAGE FACTOR

Source: GdF Suez: Russian Gas Crisis / Q1 2009 “What worked/what did not work – focus on SEE”
GAS CRISIS: 7. JAN.–IMMEDIATE RESPONSE GAS FLOWS

- Interconnector UK-BE reversed
- BBL NL-UK reduced
- Yamal increase
- Blue Stream increase

Source: IEA
Supply Cost Increases and Disruptions

GAS CRISIS: INCREASE OF MARGINAL COSTS

Source: Institute of Energy Economics at the University of Cologne (EWI)

Locational short-run marginal costs indicate the costs for the whole system of supplying one additional cubic meter of gas at the respective time and location (the marginal units' commodity cost at the import point plus variable transport/storage cost). This map illustrates the relative increase in the short-run marginal cost during the crisis compared to a “normal” January day.
Implementing additional reverse flows...

Source: own illustration based on simulations by the Institute of Energy Economics at the University of Cologne (EWI)

This map illustrates the relative increase in the short-run marginal cost during an identical crisis compared to a “normal” January day, assuming that all pipelines can be operated bi-directionally.

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CRISIS: INCREASE MARGINAL COSTS- GRID EXTENSION

... and grid expansion, especially in CEE

Source: own illustration based on GTE+ Reverse Flow Study
GAS CRISIS: 18th JAN. REVERSE FLOWS TOOK PLACE

- BBL NL-UK reduced
- Interconnector UK-BE reversed
- Yamal increase
- Blue Stream increase
- Increase Germany - Croatia
- Hungary increase to Serbia & Bosnia
- Increasing Croatian production share off-take
- Reverse flow Czech to Slovakia
- Reverse flow from Greece to Bulgaria
- Additional spot LNG to Greece & Turkey

Source: IEA
According to the Croatian Association of Employers (HUP):

- 45.4% enterprises connected to gas network system had consequences
- 14% replaced gas to other energy source - had an increase in costs due to the use of substitute fuel
- 11% stopped production - which caused indirect losses
- 10.3% reduced production - caused indirect losses
- 7.6% disrupted production in full with plants losses and send workers on forced outrage
- 1.7% worked without heating - some workers are sick

Damage: in fYRoM of € 5.8 Mio; gas consumption 100 Mio.Nm3/a
- **Infrastructurstandard:**
  
  - N – 1 RULE (CPs having a gas market):
    
    - BiH cannot fulfill
    - Croatia cannot fulfill
    - former Yugoslav Republic of Macedonia can fulfill
    - Serbia cannot fulfill
Supplystandard:

- Supply to protected customers [60 days (1 in 20) – also in „Emergency“:
  - BiH cannot fulfill
  - Croatia can fulfill
  - f. Yugoslav Republic of Macedonia cannot fulfill without demand side measures
  - Serbia cannot fulfill

- Supply to protected customers [7 days (1 in 20)]
  - BiH might be difficult
  - Croatia can ensure (significant domestic production)
  - f. Yugoslav Republic of Macedonia can ensure (sufficient capacity)
  - Serbia can probably be ensured
Source: EC
Next Steps:

- Provision of initial assessment by all CPs (gas market)
- Discussion with ECS
- Development of common regional approach
- Assessment of regional approach
- Information to PHLG (next PHLG meeting)
THANK YOU FOR YOUR ATTENTION

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