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Policy advice on low-carbon policies for Ukraine

Policy Briefing #17

Supported by:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

based on a decision of the German Bundestag

Risks of opening the Ukrainian Electricity Market

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Kyiv, 27 May 2019

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Ukrainian power markets are not ready to start in July 2019

- Crucial elements of market opening remain unprepared.
- If markets opened under current conditions, those players with significant market power will be able to exercise it.
- Opening the markets in July 2019 at current level of readiness adds no value and may lead to further inefficiencies and uncontrolled price increases.
- Direct regulations via price limitations or caps will distort market mechanisms and do not address the problem of market power.
- Mitigating risks ex ante is more effective than dealing with shocks ex post.
- Market opening during turbulent political period implies significant risks - it is important that a functioning government is in place that can tackle any arising issue quickly.

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Delay of auctions for bilateral agreements

Risks

- Secondary regulation on auctions for bilateral agreements for state-owned generation was adopted on May, 22, but there is risk it won't be implemented before July, 1.
- The regulation's adoption procedure might be legally challenged.
- No software for auctioning bilateral agreements with state-owned generators is in place. There is not enough time for testing.
- Thus bilateral agreements for state-owned generators might not be available at the market opening.
- All power from state-owned generation will be sold on DAM and IDM.

Consequences

- Suppliers cannot hedge their long-term obligations through long-term bilateral agreements, thus exposed to higher risks and higher prices.
- Bilateral agreements segment will be dominated by private companies, for the duration of the contacts signed.
- Higher volatility on DAM and shortage of supply on bilateral agreements segments can lead to increased average wholesale prices.
- Suppliers without access to long-term agreements may go bankrupt fast, can cause "chaos" and be reflected in prices.
- It's hard to operate conventional power plants based on DAM signals alone, which may lead to suboptimal dispatch and create risks to system stability.

Potential remedies

Establish effective bilateral agreements auctions

Allow for sufficient testing time of the auction mechanism

Open this segment simultaneously for every market participant

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Market power - generation

Risks

- 4 entities dominate 92% of the market in term of electricity generation. Of which state-owned enterprises - 67%, DTEK - 25%.
- DTEK is vertically integrated company, and might be inclined to sell power intragroup.
- If bilateral agreements auctions for state-owned enterprises are in place, only up to 15% of their output, or up to 10% of total output will be available on DAM and IDM.
- Fundamental data transparency and market monitoring functions are not yet in place.
- No import to increase competitive pressure will be available at the start of the market

Consequences

- The oligopolistic situation could lead to abuse of market power, potentially leading to increased prices.
- Without any safeguards in place, liquidity on DAM and IDM might be too low to give effective price signals.
- Without competition, prices on DAM and IDM might overshoot.

Potential remedies

Market maker obligations for generators with significant market shares

Partial intragroup supply restriction

Obligation to trade via power exchange only

Introduce strong market monitoring

Allow barrier-free cross-border trading at the moment of market opening

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Inefficiency of commercial metering data

Risks

- As DSOs are nominated as operators of commercial metering, they are responsible for submitting metering data on a daily basis.
- However, since January 2019 it became clear DSOs are not prepared to submit precise data and might be able to manipulate the data input.
- After opening the wholesale markets, rules require suppliers to bear the costs of imbalances based on metering operators data, exposing them to high costs and with a reconciliation period of 90 days without control over the situation.

Consequences

- Commercial metering operators are supposed to be impartial, while under the current model they are interested parties.
- Low quality data and 90-day lag in reviewing invoice might create too big financial pressure on smaller suppliers, pushing them out of the market.
- DSOs might exercise their power to submit data with mistakes, forcing small suppliers to bear higher balancing costs.
- With small suppliers quickly losing the access to the market, DSO-related suppliers might take over market shares. Concentration of market would lead to price increase for final consumers.
- Without efficient metering data flow, market prices will be distorted.

Potential remedies

Additional verification procedure for submitted metering data.

Introduce shorter timeframe for data reconciliation

Imposing significant fines for commercial metering operators for submitting wrongful data

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Market power - supply

Risks

- Without access to long-term PPAs and hedging instruments, independent suppliers will find it hard to compete with vertically integrated companies.
- Combined with risks from wrongful metering data and higher imbalances costs, suppliers might be forced out of the market in a matter of months.
- Default of some independent suppliers might undermine the credibility of all other independent suppliers.

Consequences

- Monopolisation of wholesale markets will potentially lead to monopolisation of retail market as well.
- Lower competition leads to higher retail prices.
- Rising difference between regulated universal supply tariffs and market prices might increase costs of PSO.
- Additional pressure on last resort supplier in case of sudden independent suppliers failure.
- Additional costs for customers of failed suppliers and switching to last resort supplier.

Potential remedies

Direct trading obligations for big generation companies

Incentives for independent suppliers access to state-owned power plant auctions

Lower guarantee requirements for independent suppliers

All combined with remedies for wholesale markets risks

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Public service obligations (PSO) for vulnerable consumers

Risks

- Opening the market without PSO mechanism in place might leave universal service suppliers without a source to finance their obligation to supply power to households under the regulated tariff.
- PSO mechanism was adopted by the CMU on May 22nd. It relies on the introduction of auctions for bilateral agreements for state-owned companies, thus bears the same risks identified for this market segment.
- The adoption of PSO regulation can be legally challenged as it has been not submitted by the Regulator, as foreseen in the article 62 of the Law of Ukraine "On the electricity market".
- Imposing PSO through auctions with regulated prices and volumes may negatively impact the liquidity of market segments and lead to suboptimal power plants dispatch.

Consequences

- Continuation of cross-subsidising within the power market might distort the price signals and hamper the proper functioning of the market.
- PSO should not be imposed through a direct obligation to sell, as it may distort market prices and increase their volatility.
- Ministry's vision of a PSO mechanism may lead to Energoatom being pushed out of base load share due to fragmentation of their portfolio.
- Without PSO, universal service suppliers are potentially exposed to losses without a source to cover them. This may incentivise them to raise prices to recover losses.
- In a competitive environment, a significant price increase will not be effective. Thus DSOs related to universal service suppliers might be willing to exercise their power over the quality of commercial metering in order to push out competition out of the market.

Potential remedies

Delay market introduction to avoid shock, combined with remedies for wholesale market

PSO mechanism through financial settlement makes more sense

Without bilateral agreements in place, sell all electricity on DAM and IDM – this will allow for efficient market price determination

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Debts and non-payments

Risks

- Debts from consumers as at the beginning of 2019 amounted to > UAH 33 bln and continue to rise, mainly – from state-owned companies and from Donetsk and Luhansk regions.
- Obtaining status of a protected consumer is complicated, which will lead to cut-off from power supply of coal mines and water supply companies.
- The underlying problem is that the non-payment of debts became tolerated, and in some cases a political decision to leave debtors connected place an uneven burden on power sector companies.
- Risk of default of the last resort supplier.

Consequences

- Debts could distort the market signals if recovering of the debt is done by incorporating additional risks into market prices.
- Potential disruption of usual business activities of companies (esp. the market operator if separate entity is not created before market opening) with debts on their balance sheets.
- Financial losses for grid operators, unable to disconnect debtors from supply, which will be forced to pay for power supplied on their account.
- If addressed through the budget – every citizen will pay for the state inefficiency.

Potential remedies

Delay market introduction to avoid shock

Address problem of non-payments rather than debt itself

Refinance state-owned entities with power debts

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Bidding zones issues

Risks

- While two separate bidding zones, one in Burshtyn island, and other for the rest of Ukraine, the former will be exposed to monopoly on the wholesale market.
- Market opening will not be combined with import operations to Burshtyn island.
- At the same time, combining whole Ukraine power system in one bidding zone will distort market prices on all segments and will discourage import-export and investment in the Bursthyn island power system.

Consequences

- Higher prices in Burshtyn zone compared to the rest of Ukraine.
- Limited access of suppliers to this bidding zone, leading to higher prices for final consumers.

Potential remedies

Allowing for import into Burshtyn island zone at the same moment as opening the market

Impose special prices regulations or/and special auctions for power sold in Burshtyn zone.

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Technical issues

Risks

- Separate entities for Market Operator and Guaranteed Buyers are not yet created.
- Market IT software tests are not complete.
- No cross-market software tests were conducted.
- Auxiliary services market structure is not ready, leading to no certified providers on the market at the start.
- Monopoly of one authorized bank for power market operations – state-owned Oschadbank.

Consequences

- Physical system stability might be affected.
- Running the market without robust IT infrastructure can stall the market completely or can lead to errors which are very difficult to recover afterwards.
- Higher interest rates for market participants from single bank monopoly, leading to higher power prices.

Potential remedies

Postpone market opening and address matters in due way

Allow for banks competition in the sector

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Conclusions

- At current conditions, opening the markets on July 1st, 2019 might have a huge negative impact on the sector and the whole economy.
- Do not open the markets before addressing critical issues.
- Bilateral agreements segment might be dominated by only large private power producer, which may lead to drastic changes in market shares and average price increase.
- Significant risks of monopolization of wholesale market and supply segments resulting in increased prices and necessity for the Regulator's interventions.
- Regulatory policy focus should be on mitigating market power.
- Postpone market opening for the time required, state responsible parties, deadlines and clear to-do list while adopting changes to the Law.
- LCU estimation – minimum 3 month postponement to address but most critical matters and ensure smooth market opening.

<u>Before market opening, ensure the following:</u>

- Reliable consumption data first. Low quality data and errors lead to significant overcompensations (or undercompensations) of balancing services and imbalances.
- Electricity trade contracts concluded before market opening are legally effective at the moment of market opening.
- Market opening should only be pursued after import is effective and Centrenergo privatised.

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Recommendation

The only way to postpone the market is by adopting changes to the Law of Ukraine "On electricity market".

Crucial risks can be addressed in the Law with the following provisions:

- Changes to Transitional provisions, p.2 – to allow for different segments of the market to be implemented in stages by the decision of the NEURC.
- Changes to Transitional provisions, p.1 and 2 – to postpone start of the market at least until 1/10/2019.
- Bilateral agreements segment should be allowed for opening only after auctions for state-owned generation are in place, are conducted, and agreements are signed and registered in the market IT system.
- Reinstate Coordination Centre with NEURC as a leader.
- Enforce participation of all market participants in test runs of software for market trading and auctions for bilateral agreements after the adoption of changes to the Law.

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