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Workshop 1 Alternative Countertrade Models



WORKSHOP 1 INITIATE THE DIALOG

Energinet to present developments in countertrade, and our initial thoughts on possible countertrade models and evaluation criteria.

Goal: Common understanding of the boundaries for assessing possible countertrade models.

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WORKSHOP 2 COLLECT THE INPUT

All stakeholders to present all their inputs to the countertrade models based on each criteria.

Goal: All inputs for all models are collected. Energinet will further process these inputs into a report.

AGENDA

#	Торіс
1	Welcome
2	Presentation of the background for the task
3	System security – Case from summer 2020
	BREAK
4	Presentation of alternative countertrade models
5	Presentation of evaluation criteria
6	Sum up and invitation to the second workshop

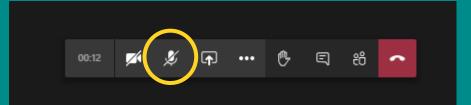


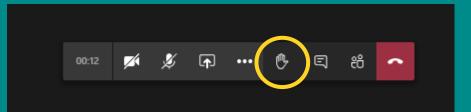
QUESTIONS & COMMENTS GUIDELINE

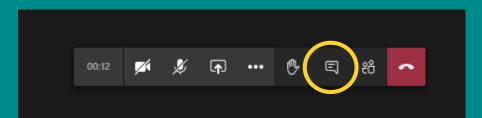
- After each agenda point we will open up for a "questions and comments session"
- If you have any questions or comments during the presentations please wait until we open up for "questions and comments session"
- However, during the presentations you can type in your question or comment in the chat box and we will adress it in the "questions and comments session"

TECHNICAL GUIDELINES

- Please mute your microphone whenever you are not speaking and please turn it on whenever you are speaking
- Please turn off your camera whenever you are not speaking and please turn it on whenever you are speaking
- If you have a question or a comment, please use the "raise your hand" function in teams. We will make sure everyone gets speaking time.
- Otherwise, you can ask a question or write a comment in the chat box









Presentation

Background for the task

DEFINITION OF COUNTERTRADE

Countertrade is defined as:

"a measure with the objective of relieving physical congestions between two bidding zones, where the precise generation or load patterns is not predefined".

Energinet is investigating a alternative countertrade model, meaning that the precise location within a bidding zone is not necessary.

Redispatch models are considered in other projects in Energinet.

ELECTRICITY TRANSMISSION GRID

- GAS TRANSMISSION GRID

ENERGINET

THE 70 % RULE

Regulation (EU) 2019/943 on the internal market for electricity

Article 16.8(a) og (b)

"....the minimum capacity shall be 70 % of the transmission capacity respecting operational security limits after deduction of contingencies....."

There will be a continued use of countertrade – on all borders – which a new countertrade model will have to reflect.

This will also imply capacity will have to be guarantee in the day-ahead market and countertraded later.



ACER PRICING PROPOSAL



In January 2024 ACER published their decision on pricing of balancing energy bids



The decision states, that all bids activated on the balancing energy platforms shall be paid at the same marginal price no matter the purpose of the activation



This decision of ACER changed the original All TSO pricing proposal, which suggested pay-as-bid for bids activated for other purposes than balancing and pay-as-cleared for bids activated for balancing.



Besides ACER's decision on pricing of balancing energy, Clean Energy Packages states that redispath and countertrade cannot influence the marginal price of balancing energy

EUROPEAN MARKET PLATFORMS



ACER's decision on princing of balancing energy on the balancing energy platforms has changed European TSOs willingness to have countertrade possibilities in the platform for mFRR energy activation (MARI).



This means that no matter the interpretation of ACER's decision a majority of TSOs do not want countertrade to be part of the MARI-platform, since it will influence the marginal price.



Countertrade needs arising from the 70%-rule of capacity allocation will not be part of the MARI-platform; hence the use of mFRR bids to cover the need for countertrade will not continue after implementing and onboarding the MARI-platform.



At the moment European TSOs are discussing whether or not sudden needs for countertrade should be possible to handle in the MARI platform



OPERATIONAL SECURITY

The need for countertrade has increased massively over the the last few years.



This creates a need for Energinet to evaluate if 'specialregulering' is the right tool to handle countertrade



From an operational security perspective massive amounts of countertrade in realtime higher the risk of failures and other system related incidents



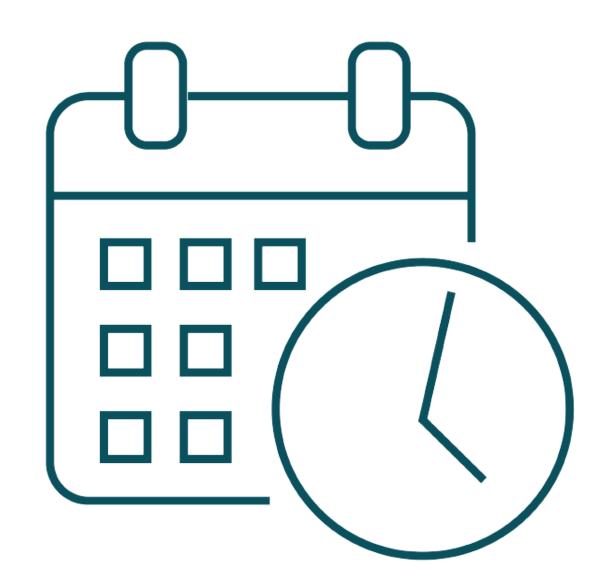
From a control center perspective it creates value to look at new solutions handling countertrade outside the balancing timeframe even though it makes netting impossible

ENERGINET

TIMING

When will 'specialregulering' end?

- Will the pricing proposal will be effective on national energy activation markets for TSOs onboarding the MARI-platform later than 2022?
- System security concerns can end up being a critical point and be the guiding factor in the timing of implementing a new countertrade model
- Energinet has other responsibilities being a guiding factor; i.e. welfunctioning markets.
- Energinet has not yet investigated implementation time of new possible countertrade models



Questions and comments



System security Summer 2020

CASE

THE REASON FOR RESTRICTING COUNTERTRADE

July and August 2020 have and will been characterized by:

- Many HVDC connection outages due to faults
- Many planned outages of thermal power plants
- Increased demand for upward regulation in DK1 and DK2 due to many planned outages in Sweden
- Several limitations in the internal German electricity grid announced by TenneT Germany.



LACK OF UPWARD REGULATION RESOURCES TO MITIGATE AN OUTAGE OF THE LARGEST UNIT (N-1).

Energinet has experienced several instances since the entry into force of the Joint Declaration.

The most recent example was June 24, 2020.

Energinet also experienced a few instances without N-1 redundancy in the summer of 2019, some instances even occurring in operating situations where the risk of a lack of upward regulation resources was found to be significantly smaller than that of July-August 2020.



THE SITUATION JUNE 24, 2020

In the morning TenneT contacted Energinet and requested countertrade in the form of upward regulation from 08:00 to 10:00, which was extended until 15:00.

As a result, in hour 9, only approx. 50 MW of upward regulation bids were left on the bidding list.

At the same time, there were only approx. 150 MW of upward regulation bids in Southern Sweden plus the Swedish gas turbines, which function as strategic reserves.

For the remainder of the day, there were approx. 200-400 MW of upward regulation bids in surplus, i.e. a lack of full N-1 redundancy.





TENNET HAS GUARANTEED THE MINIMUM CAPACITY

There have been a few hours where the need for upward regulation was handled before the delivery hour.

Energinet's decision to limit upward regulation has not, to Energinet's knowledge, reduced market capacities so far (until 13 August 2020).

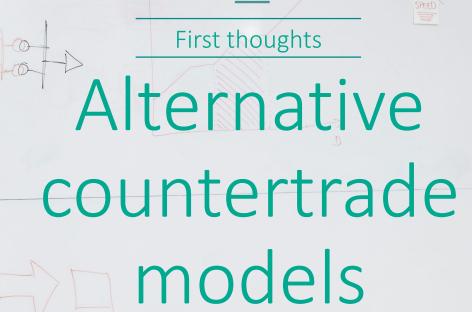
ENERGINET EXPECTS THE POWER SITUATION TO IMPROVE IN THE AUTUMN.

It should not be necessary to extend the period of countertrade limitation on the Western Denmark-Germany border beyond August 31 2020.

Questions and comments



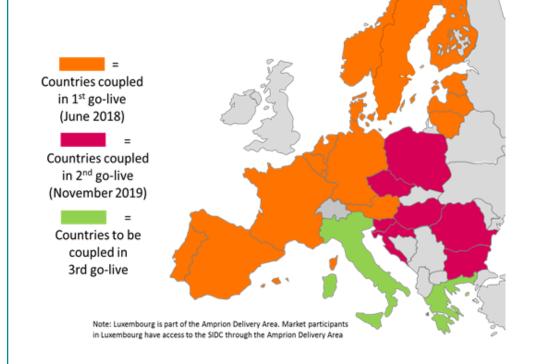




INTRADAY CONT. TRADING

Continuous market – currently 21 countries active.

- Bids in a bidding zone are either matched within the bidding zone or by orders submitted in any other bidding zone as far as transmission capacity is available
- First come first serve and pay-as-bid
- Energinet would place buy and/or sell bids into the SIDC, depending on the need for up- or down regulation
- Energinet might have to prevent allocation at specific borders to secure effect of countertrade
- Transparency would have to secured.
- Legal framework?



INTRADAY AUCTIONS

ACERs Decision on Algorithm Annex III (Decision 04/2020) implemention by 1st of January 2023

- In total there will be three intraday auctions, with marginal price, for the operational day.
 - 1. D-1 15:00 for whole operational day
 - 2. D-1 22:00 for whole operational day
 - 3. D+0 10:00 for last 12 hours of operational day.
- Energinet (or 3rd party) puts bid into the bidding zone that requires countertrade.
- Energinet might have to prevent allocation at specific borders to secure effect of countertrade
- Currently different times of capacity provision, what auction is relevant?
- Transparency would have to secured.
- Legal framework?



COMMON TSO COUNTERTRADE MODEL

What are the opportunities?

- Energinet is investigating if it is a possibility to develop a common TSO countertrade market
- A common TSO countertrade market would need all neighboring TSOs of Energinet to participate and join the market model in some way
- Initial thoughts are to make a copy of the New Nordic Energy Activation Market or the MARIplatform and use this platform for only countertrade purposes.
- A countertrade product would need to be designed from scratch what would it look like?
- The market would run at some point i time after the day-ahead market but before the balancing market when would that be?
- What legal regulation defines how such a market for countertrade can look like?

OPEN QUESTION

Any ideas to other countertrade models?

Questions and comments





SUGGESTED 5 EVALUATION CRITERIA





SYSTEM SECURITY

IMPLEMENTATION



MARKET ACCESS /RESOURCES



TRANSPARENCY



COST-EFFECTIVENESS

OPEN QUESTION

Any ideas to other evaluation criteria?

Questions and comments



THANK YOU!

The next workshop is scheduled for the **23rd of September 2020**

Format, material etc. will be forwarded in advance.

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