



ELLEVIO



VATTENFALL 

Vattenfall Eldistribution

AGENDA sthlmflex-dialog 20

1. Vad har sthlmflex gjort och vad kommer hända framöver?
2. Affärsfrågor
3. Info om var de kan hitta statistik löpande – NODES hemsida, NODES mail, sthlmflex LinkedIn
Fråga: Hur ser ni som flexleverantörer på den kommunikation ni fått från sthlmflex (NODES) via mail jan-feb?
4. Betalning för februari (information)
5. Utvärdering av validering - regelbokens regler
6. Utvärdering av baseline – regelbokens regler
7. Utvärdering av mätdata (EDIEL eller egen mätning)
8. Annan återkoppling
9. Nästkommande möten

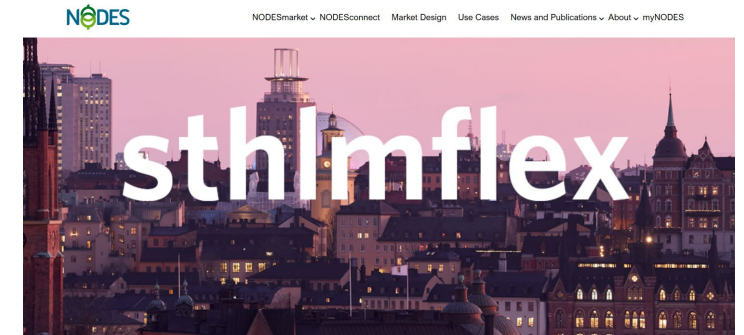
Vad har sthlmflex gjort och vad kommer hända framöver?

Vad har sthlmflex gjort?

- Öppen process för deltagande med **fria bud (shortflex)** med start 1 dec 2020 → flertalet började i januari
- Öppen process för **marknadsmässigt köp av tillgänglighetsavtal (longflex)** med start jan 2021

Vad kommer hända framöver?

- Pågående beslutsprocess om **förlängning av FoU sthlmflex med två år**, vi återkommer med **definitivt besked i april** samt information om **behovet av köp av flexibilitetstjänster vintern 21/22**
- Ambitionen att sthlmflex ska finnas framöver, utmaningar i regionnät fram till 2027-2030
- Vi jobbar med att **förbättra processen för och informationen vid kvalificering** av resurser och informationen från köparna om köpbehov, nya budfunktionaliteter utvecklas



sthlmflex: ShortFlex

These are the documents that are relevant for participation in the ShortFlex market for sthlmflex. To participate, the Registration form and the Membership Agreement need to be submitted to NODES. By signing the Membership Agreement, participants accept the NODES Rulebook. For sthlmflex, this includes adhering to the Svenska Kraftnät Code of conduct. The Operational Guide summarises the Rules that are relevant for participation in the ShortFlex sthlmflex market. The Power of Attorney for metering values needs to be submitted to Ellevio or Vattenfall Eldistribution.



Vattenfall - Availability contract (LongFlex) procurement as part of sthlmflex - registration



Vattenfall Eldistribution, who owns and operate the regional grid around Stockholm, will issue an Invitation to Tender (ITT) for flexibility in the Stockholm region as part of the sthlmflex project. sthlmflex is a joint R&D project between Svenska Kraftnät, Ellevio and Vattenfall Eldistribution.

- > Vattenfall Eldistribution wishes to purchase LongFlex contract for the period **January – March 2021**.
- > The initial aim is to acquire the following flexibility **Stockholm Norra (10 MW)** and **Stockholm Södra (30MW)** but the need for flexibility can increase.
- > Flexibility offered needs to be available **every day** in the period, between **08:00 to 12:00**, and **17:00 to 21:00**
- > The bids must be available at **08:30 the day before** activation day
- > The bidder must verify how many hours can be activated within the availability period.
- > The bids must be available at **08:30 the day before** activation day
- > Flexibility should be grouped into **0,5 MW steps**
- > Offered flexibility should be available during the full hour although metering will only be required for the hour.
- > The activation price for this first acquisition round has been set to **SEK 560/MWh**.
- > Availability price to be set by the bidder.

Marknadsdata

Week	Volume weighted average price	Min	Max
2	-	-	-
3	-	-	-
4	849.97	200.00	842.00
5	876.90	200.00	5000.00
6	457.14	200.00	2000.00
7	-	-	-
8	-	-	-
9	-	-	-

Price of temporary transmission connection capacity subscription* (SEK/MW*hour)

Week	Volume weighted average price	Min	Max
2	244.09	242.00	246.00
3	242.00	242.00	242.00
4	243.78	242.00	246.00
5	244.07	242.00	246.00
6	244.19	242.00	246.00
7	-	-	-
8	-	-	-
9	-	-	-

Senaste 30 dagarna

2021-01-25 - 2021-02-24

Intraday

Tot. erbjuden volym: **5 856,5** MWh

Tot. såld volym: **574,8** MWh

Högsta clearingpris: **5 000** kr

Lägsta clearingpris: **242** kr

Genomsnittspris: **713** kr

Senaste 30 dagarna

2021-01-25 - 2021-02-24

Intraday

Tot. erbjuden volym: **18 854,8** MWh

Tot. såld volym: **1 441,4** MWh

Högsta clearingpris: **2 000** kr

Lägsta clearingpris: **200** kr

Genomsnittspris: **570** kr

Köp av flex eller tillfälligt abonnemang: 18 dagar

Köp av flex: 9 dagar

Tillfälligt abonnemang gäller i en vecka.

Var finns löpande statistik

- <https://nodesmarket.com/nodesmarket/>
- NODES mail
- <https://www.linkedin.com/company/sthlmflex>

Fråga: Hur ser ni som flexleverantörer på den kommunikation ni fått från sthlmflex (NODES) via mail jan-feb?

Kommande aktiviteter

- Möte inför nästa vinter 20:e april
- Anmäla intresse senast i augusti
- Flexibilitetsmarknaden vintern 2021/2022 är öppen nov-mars
- Möte med erfarenheter och lärande från aggregator och flexibilitetsmarknad
 - Ta fram fullmaksstandardtext
- Möte med nätverk reservkraft
- Möte med kommuner
- Dialog med lokalnät som vill delta

Betalning för februari

- Betalning och valideringsunderlag skickas av NODES till flexleverantörer senast 2 april
- Innan dess:
 - Köparna & NODES går igenom fakturaunderlaget (mätdata och baselines)
 - NODES fakturerar köparna
- Valideringsunderlaget innehåller:
 - Per timma som avropats
MW, pris, baseline, mätdata, % leverans, % betalning

Settlement note

Settlement note details

Supplier invoice No: DEM01
 Settlement note date: 04-11-2020
 Reg. No: 223456-1234
 Vat. No: SE112233445566
 Your reference:
 Purchase number:

Payment details

Total to pay: -22 912,50 SEK

Trading counterpart (this settlement note corresponds to the transaction with the following buyer)

Company name: Ellevio AB
 Address: Vahellevägen 202, 115 77, Stockholm
 Reg. number: 556037-7326
 VAT number: SE556037732601

Item	Settled Qty (MW)	VWAP/MW	VAT rate	Amount (SEK)
Settlement note for invoice DEM01				
Short flex - supplied to Ellevio AB	-7.80	2 350,00	25%	-18 330,00

*Volume Weighted Average Price

Item	Amount
Subtotal	-18 330,00 SEK
VAT total	-4 582,50 SEK
Total to pay	-22 912,50 SEK

Please do not pay this settlement note. You will receive the amount (-22 912,50 SEK) settled by NODES within 7 days.

	A	B	C	D	E	F	G	H	I	J	K	L	M
	Organization Name	Asset Portfolio Name	Side	Period From [UTC]	Period To [UTC]	Baseline Quantity [MW]	Metered Quantity [MW*h]	Traded Quantity [MW]	Delivery [MW]	Delivery Percentage	Payment Rule	Weighted Unit Price [SEK]	Amount To Receive [SEK]
1													
2	Flexleverantören	Portfölj	Sell	2021-02-07T16:00:00	2021-02-07T17:00	-105	-100	5	5	100%	100%	1000	5000
3	Flexleverantören	Portfölj	Sell	2021-02-09T15:00:00	2021-02-09T16:00	-105	-105	5	0	0%	0%	1000	0
4	Flexleverantören	Portfölj	Sell	2021-02-10T16:00:00	2021-02-07T17:00	-105	-102.5	5	2.5	50%	25%	1000	1250
5													
6													
7													
8													
9													
10													

Validering och betalning - Regelboken



NODES MARKET RULEBOOK

SPECIFIC MARKET REGULATIONS

- Mätdata jämförs med baselines.
 - Leverans 80% eller mer: 100% betalning.
 - Leverans under 80%: Betalning dras ner linjärt till 0% betalning vid 40% leverans.

3.3 Delivery

- 3.3.1 NODES will validate Delivery for Contracts that are subject to Settlement under the Rules by comparing metering values to the Baseline Load for the Delivery Period and Assets of the relevant Contract, based on the hourly metering values received from the Buyers for the relevant Assets. NODES will with reasonable notice be available to review and discuss the validation of Delivery with the Network Operators prior to the issue of invoices to Buyers.
- 3.3.2 Members authorise NODES to collect metering data for their participating Assets from the Buyers, and to use such metering data to validate Delivery and perform its other rights and obligations in respect of Contracts that are subject to the Rules.
- 3.3.3 Members shall do all acts that are reasonably required for NODES to set up an automatic collection of metering data from their participating Assets for all hours of the day.
- 3.3.4 This includes that for each Asset, Sellers need to obtain authority for the Buyers or their representatives to collect and use metering data from the party that has subscribed to local network capacity for the Asset. The template attached as an Annex to this Schedule shall be used to that end. Subject to agreement with the Buyers, where the local network operator or owner does not have access to relevant meter data the Seller shall send meter data to the Buyers.
- 3.3.5 As part of the onboarding process the Buyers will engage with Sellers on the type and granularity of metering values that the Sellers can make available for their Assets.
- 3.3.6 The database(s) used by the Buyers for metering data shall be regarded a centralized database as set out in Section 6.2.4 of Schedule 2.
- 3.3.7 Section 6.3.1 of the Trading and Settlement Schedule is replaced by the following:
- a) In respect of the Activation Price (for ShortFlex Contracts, including those arising out of LongFlex Contracts):

Where Delivery is validated for 80% or more of the Contract Load of a ShortFlex Contract, the Seller will receive 100% of the Activation Price.

Where Delivery is validated for less than 80% of the Contract Load, the Seller shall pay a Delivery Default Cost of 2.5% of the Contract Price for every 1% that the Actual Load deviates from the Contract Load (calculated from 100% of the Contract Load), provided that the maximum Delivery Default Cost shall be the Activation Price.³

Baseline - Regelboken

- 2.1 Before registering Orders for an Asset Portfolio, Members must nominate the Baseline Load of the Asset Portfolio for the relevant Delivery Period(s) through use of the relevant functionality of the Platform and in accordance with such procedures as are notified by NODES from time to time. Baseline Load nominations will become available to other Members.
- 2.2 A Baseline Load nomination shall
 - (a) be based on the Electricity Load that the Member estimates in good faith would be applicable for the Asset Portfolio during the relevant Delivery Period(s) absent of Contracts; and
 - (b) correspond to the nominations made by the Member respect to balancing and orders in other Electricity Markets for the same Asset Portfolio and Delivery Periods;
 - (c) be updated as soon as the Member makes an updated estimation that deviates from what has previously been nominated.
 - It is the responsibility of the Member to ensure that the Member's various balancing arrangements and nominations are aligned and updated at all times.
- 2.3 NODES may at any time request a Member to explain and document how its Baseline Load nomination corresponds to the foregoing requirements. NODES may declare a Default under the Rules if
 - (d) the Member does not respond to NODES' request by the end of Working Hours on the Settlement Day immediately following NODES' request; or

Två alternativ:

- Egen baseline ska kunna förklaras och utvärderas
- Alternativ baseline görs av NODES (bygger på historisk data)

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Mätdata - Regelboken

Två alternativ:

- EDIEL data
- Egen mätning (behov av utvärdering med mätdata i lärandet)

Nästa möte

- Möte inför nästa vinter 20:e april