Norges vassdrags- og energidirektorat

NVE

TENDER DOCUMENT

Competition of the Public Procurement Act and the Regulations relating to public procurement part I (below NOK 1.300.000)

For

A study on how a more intraday driven market affects the day-ahead market and the consequences of this for the overall efficiency of the electricity market

Case no.
201834170

Submission date:
31.05.2018
12:00

Delivery date:
05.10.2018

May 2018

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Innhold

May 2018

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1 GENERAL DESCRIPTION

1.1 *Contracting authority*

The Norwegian Water Resources and Energy Directorate (NVE) is a directorate under the Ministry of Petroleum and Energy. The mandate of NVE is to ensure an integrated and environmentally sound management of the country's water and energy resources, promote efficient energy markets and cost-effective energy systems and contribute to efficient energy use.

For more information about NVE, visit our website www.nve.no

1.2 *Scope*

NVE wish to understand potential consequences and challenges for the current market design if more trading happens closer to real time in the intraday market and other markets close to real time; will this be at the sacrifice of a liquid day-ahead market?

1.3 *Partial Tenders*

Partial tenders will not be accepted. Tenders for part of the agreement will not be considered.

1.4 *Pricing*

The offered price of this project is fixed, and firm. The fixed price is NOK 500.000 ex VAT.

1.5 *Delivery date*

Delivery date: 05.10.2018

1.6 *Announcement*

The competition is announced in the MERCELL-database.

1.7 *Important deadlines*

The following deadlines will apply for this assignment:

Activity	Deadline
Submission of tender	31.05.2018, 12:00
Evaluation	Week 23/24
Notification of award	Week 24
Signing of contract	Week 24
Period of validity of tenders	1 month
Delivery date	05.10.2018

The deadlines after the tender opening are preliminary. An extension of the period of validity of tenders must be agreed with the supplier.

2 REGULATIONS FOR TENDER COMPETITION AND TENDER REQUIREMENTS

2.1 *Procurement procedure*

The procurement is conducted in accordance with the Norwegian Public Procurement Act of 17 June 2016 (LOA) and Public Procurement Regulations (FOA) FOR 2016-08-12-974, Part I.

The contracting authority plans to award a contract without having any contact with the suppliers except for minor clarifications / corrections of the tenders.
Negotiations can still be completed if, after receiving the offer, the contracting authority considers it appropriate. In this case, the selection will be made in accordance with an assessment of the award criteria. It is emphasized that suppliers cannot expect dialogue about their tender and therefore they must deliver their best tender.

The supplier is strongly encouraged to follow the instructions given in this tender document with attachments, and eventually ask if something is unclear.

2.2 *Confidentiality*

The Norwegian Freedom of Information Act regulates the public access to the documents relating to a public procurement. The contracting authority and its employees are obliged to prevent others from gaining access to knowledge of information about technical installations and procedures or operating and business conditions that due to commercial importance are confidential, cf. FOA §§ 7-3 and 7-4 and, cf. the Norwegian Public Administration Act § 13.

2.3 *Period of validity of tenders*

Tenders shall remain valid for the period as specified in item 1.5.

2.4 *Communication*

All communication regarding this procurement shall take place via Mercell, www.mercell.no
Questions/inquiries that are received later than five (5) working days prior to the tender submission will not be answered.

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3 QUALIFICATION CRITERIA

The suppliers have to confirm that they fulfill the following qualification criteria.

3.1 *Supplier's registration, authorization etc.*

Criteria	Documentation requirements
Supplier must be registered in a professional or trade register in the country where the company is established.	• For Norwegian companies: Firmaattest • For foreign companies: Documentation that the company is registered in a professional or trade register as required by law in the country where the company is legally established.
Supplier must fulfill the requirements with regard to payment of taxes, payroll taxes and value added taxes.	• For Norwegian suppliers: Tax certificate, not older than 6 months. • For foreign companies: Other documentation/confirmation.

4 AWARD CRITERIA

The successful vendor will present a well thought through work plan. NVE will emphasise qualifications of the personnel and specifically knowledge of the European and Nordic power market as well as knowledge of relevant European legislation, i.e. Network Codes and Commission Guidelines under the third energy package, and the relevant regulations in the "Clean Energy Package". In the vendor process, the following will be weighted:

Criteria	Weight	Documentation requirements
Problem description and execution plan	60 %	Substantive description of the research and methodology. Work plan should be properly described. (see project description)
Qualifications of personnel offered	40 %	Names and brief CV of the consultants (maximum 4 pages per CV): page 5 onwards will not be taken into account). Experience and knowledge of the European and Nordic power market, including knowledge of relevant legislation will be weighted.

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5 TENDER SUBMISSION AND FORMAT

All tenders shall be submitted electronically and in English language via the Mercell portal, **www.mercell.no** by the tender deadline. Tenders delivered after the deadline will not be accepted. (The system does not permit tenders to be sent electronically via Mercell after the tender deadline.)
If you are not a Mercell customer, or you have questions regarding how the application functions, e.g how to submit a tender, please contact Mercell Support at tel +47 21 01 88 60, or by e-mail to support@mercell.com. It is recommended to submit the tender in adequate time before the deadline. A minimum of 1 hour before the deadline is suggested.

If the authority should provide additional information that results in you wanting to change your tender before the deadline, you can access your offer, open it, make the necessary changes and send it again right up to the deadline. The last submitted tender will be regarded as the final one.

6 ANNEXES/ATTACHMENTS

- Project specifications
- Project time line
- Tender letter
- NVE's General Terms and Conditions (uploaded in Mercell).

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Annex 1- Project specification

Background

NVE wish to understand potential consequences for the current market design if more trading happens closer to real time, e.g. in the intraday market and other markets close to real time; will this be at the sacrifice of a liquid day-ahead market?

The Nordic power market is characterised by a high share of hydropower. Furthermore, the market is divided into relatively small bidding zones in order to get more accurate price signals and to handle congestions through the market. Based on these characteristics, the Nordic energy market model is designed with a day-ahead auction as the main market followed by continuous intraday market and a balancing market. The latter are mainly used as adjustment markets. In the Nordics, this model has suited its purpose well, and around 90 per cent of consumption is traded on the day ahead market.

From a regulatory perspective, NVE observe drivers, which might influence the Nordic market design as described above, in particular:

a) **Technology:** Fast moving technological development that affects all parts of the energy market;
    a. Consumer needs and behaviour
    b. Development of new production sources and more efficient use of existing energy sources
    c. New market solutions
    d. New trading solutions and behaviour
    e. New participants in the market

b) **Renewables:** The European market is characterised by thermal and nuclear capacity and an increasing share of intermittent power generation. We observe that the volumes traded intraday are comparably much larger in Continental Europe and Great Britain than in the Nordics.

c) **European integration:** The European market is highly and increasingly integrated and European legislation is implemented across all member states affecting all parts of the electricity market.

d) **New legislation:** The drive for further harmonisation, technological development, and at the same time large scale integration of renewable energy sources has led to a push for new legislation. The European Commission's Clean Energy Package foresees many changes to the wholesale electricity market that might affect the day-ahead and intraday market. E.g. proposals

regarding allocation of cross-zonal capacity across timeframes, including from day-ahead to the intraday timeframe.

e) **New trading solutions in the intraday timeframe:** A common European intraday platform is planned to be released (XBID). This will enable continuous cross-border trading across 15 European countries in the first release, with more countries to be included in the future In addition, intraday auctions may be introduced after the day-ahead auction as a tool for pricing cross border capacity intraday.

f) **Financial hedging:** The Norwegian TSO does not issue long term transmission rights. Instead, purely financial hedging is in place. Without speculating in any causes for this, we see indications that the liquidity in the financial market is on a downward sloping trend. The Nordic system price has traditionally been a robust reference price for the financial market, and the physical and the financial market have been closely connected.

Scope of study

The scope of this study is to map the wider consequences for the Nordic market of larger share of trade closer to real time, in particular higher traded volumes in intraday and the potential allocation of transmission capacity to the intraday timeframe.

Questions to be considered

The consultant should consider the following in the course of the study:

1. The consultant should give an overall description of the effect the trends listed above may have on the efficiency of the Nordic market design and the trading patterns of Nordic market actors, taking into account the specificities of the Norwegian market, such as the application of bidding zones and a market characterised by hydro generation

2. An analysis of transfer of traded volumes from the day-ahead market to the intraday market or other markets, with two different underlying assumptions:

    a. An analysis of the efficiency of implementing structures which would allow TSOs to allocate parts of the transmission capacity directly to the intraday market, instead of allocating all available cross-zonal capacity directly to the day-ahead market, and in a continuous manner update the available capacity from each auction to the next trading solution with respect to:
        i. Efficient use of the production sources

ii. Efficient use of the cross-zonal capacity
iii. Price formation and liquidity in the day-ahead market
iv. Price formation and liquidity in the intraday market
v. System price in the Nordic area
vi. Operations planning for the Norwegian TSO
    1. Congestion income
    2. Other potential consequences

b. An analysis based on the assumption that more traded volumes are moved from the day-ahead market to the continuous or other markets without any changes in the capacity allocation, with respect to:
    i. Efficient use of the production sources
    ii. Efficient use of the cross-zonal capacity
    iii. Price formation and liquidity in the day-ahead market
    iv. Price formation and liquidity in the intraday market
    v. System price in the Nordic area
    vi. Operations planning for the Norwegian TSO
        1. Congestion income
        2. Other potential consequences

c. General assessment of the efficiency and benefits of allowing TSOs to allocate parts of the transmission capacity directly to the day-ahead market

2) An assessment of the efficiency of keeping arrangements for continuous intraday trading in place alongside intraday auctions, taking into account different choices with respect to the number of auctions in the intraday timeframe and the timing of these auctions, such as implementation of closing auctions e.g. one hour before the delivery period

3) Effect on the financial hedging market, with a potential loss of importance of the system price, and less trading in the day-ahead market
    a. A qualitative assessment of potential impact on the financial market
    b. The trend of decreased volumes in the Nordic financial market – a qualitative assessment of consequences

The successful vendor will present a well thought through work plan. NVE will emphasise qualifications of the personnel and specifically knowledge of the European and Nordic power market as well as knowledge of relevant European legislation, i.e. Network Codes and Commission Guidelines under the third energy package, and the relevant regulations in the “Clean Energy Package”. In the vendor process, the following will be weighted:

- 60 per cent: problem description with a well thought through project execution plan
- 40 per cent: experience and knowledge of the European and Nordic power market, including knowledge of relevant legislation.

The final report should be in English.
The total budget of the project is not to exceed 500.000 NOK, VAT not included.

Annex 2 – Project time line

Project duration 4 months after approval and signed contracts. In this period the following process should be followed (changes may occur):

- Week 1: start-up meeting (during week 24)
- Week 9: mid-meeting 1 (during week 33)
- Week 12: mid-meeting 2 (during week 36)
- Week 16: Presentation of final report from consultants and delivery (during week 40)

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Tender letter

Supplier shall complete the table below and sign under the table.

Company name:			
Company number:			
Address:			
Visiting address:			
Telephone number:			

Contact person:			
Telephone number:		Mobile number:	
E-mail address:			

The supplier hereby confirms that the submitted tender is in accordance with the terms and conditions that are given in the tender documents.

☐ We stand by our tender until the date given in the tender document. The tender can be accepted by the contracting authority anytime up to the end of the period of validity of tenders.

☐ We declare that we satisfy the competition's qualification requirements.

Place	Date	Signature
		Name in block capitals

May 2018