

Germany-Hamburg: Pre-feasibility study and technological demonstration  
OJ S 42/2017 01/03/2017  
Contract notice – utilities  
Services

Directive 2004/17/EC

Section I: Contracting entity

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I.1. Name and addresses

Official name: Vattenfall Europe Windkraft GmbH  
Postal address: Überseering 12  
Town: Hamburg  
Postal code: 22297  
Country: Germany  
For the attention of: Ron Sperber  
E-mail: [ron.sperber@vattenfall.com](mailto:ron.sperber@vattenfall.com)  
Telephone: +31 655697751

**Additional information can be obtained from:**

Official name: Vattenfall Europe Windkraft GmbH  
Postal address: Überseering 12  
Town: Hamburg  
Postal code: 22297  
Country: Germany  
For the attention of: Ron Sperber  
E-mail: [ron.sperber@vattenfall.com](mailto:ron.sperber@vattenfall.com)  
Telephone: +31 655697751

**Specifications and additional documents (including documents for a dynamic purchasing system) can be obtained from:** Official name: [https://portal.commerce-hub.com/index.cfm?action=sourcing\\_requestform.subscribe&document=F3A3E844-C3FA-0221-A2D0F50399765A0A](https://portal.commerce-hub.com/index.cfm?action=sourcing_requestform.subscribe&document=F3A3E844-C3FA-0221-A2D0F50399765A0A)

Postal address: Hoekenrode 8  
Town: Amsterdam  
Postal code: 1102 BR  
Country: Netherlands  
For the attention of: Ron Sperber  
E-mail: [ron.sperber@vattenfall.com](mailto:ron.sperber@vattenfall.com)  
Telephone: +31 655697751  
Internet address: [www.commerce-hub.com](http://www.commerce-hub.com)

**Tenders or requests to participate must be submitted:** Official name: [https://portal.commerce-hub.com/index.cfm?action=sourcing\\_requestform.subscribe&document=F3A3E844-C3FA-0221-A2D0F50399765A0A](https://portal.commerce-hub.com/index.cfm?action=sourcing_requestform.subscribe&document=F3A3E844-C3FA-0221-A2D0F50399765A0A)

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## **I.2. Main activity**

Electricity

## **I.3. Contract award on behalf of other contracting entities**

The contracting entity is purchasing on behalf of other contracting entities: no

## **Section II: Object of the contract**

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### **II.1. Description**

#### **II.1.1. Title attributed to the contract by the contracting entity**

Power Systems Studies.

#### **II.1.2. Type of contract and place of performance or delivery**

Services

Service category No 12: Architectural services; engineering services and integrated engineering services; urban planning and landscape engineering services; related scientific and technical consulting services; technical testing and analysis services

Main site or place of performance: DE, DK, NL, SE, UK.

NUTS code DK Danmark,DE Deutschland,NL Nederland,SE Sverige,UK United Kingdom

#### **II.1.3. Information about a framework agreement or a dynamic purchasing system**

The procurement involves the establishment of a framework agreement

#### **II.1.4. Information about framework agreement**

Framework agreement with several operators

Maximum number Envisaged maximum number of participants to the framework agreement  
: 5

#### **Duration of the framework agreement**

Duration in years: 4

#### **Estimated total value of purchases for the entire duration of the framework agreement**

Estimated value excluding VAT

Range: between 2 800 000 and 3 100 000 EUR

#### **II.1.5. Short description of the contract or purchase(s)**

This 'Power Systems Studies' tender concerns the performance of studies (and provision of study reports, models etc.) for pre-design, detailed design and grid compliance purposes. These studies may be performed for both Onshore and Offshore Wind Power Plant Projects. Pre-design studies are focused on main component rating such as cables, transformers, switchgear and compensation equipment and are needed to identify basic grid code compliance. Studies may include:

1. Loss calculations.
2. PQ capability studies.
3. Voltage and frequency range studies.
4. Harmonic studies.
5. Short circuit capability studies.

The results from these studies are used by Vattenfall to:

1. Evaluate the business case by incorporating the right balance between inter array losses

and cable costs.

2. Determine the proper split between compensation equipment and turbine performance (especially for PQ capability), enabling the setting of project specific requirements for tender material.

3. Evaluate the Turbine Electrical Performance in order to optimize the system.

Detailed design studies are primarily focused on protection requirements and may include:

1. Studying the short circuit protection and relay setting requirements.
2. Studying the insulation coordination for various operation aspects.
3. Studying the energisation of single turbines and arrays.
4. Studying the disconnection of Turbines and arrays.
5. Studying temporary over-voltage (especially for over flux and heating).
6. Harmonic emission studies (for design of potential grid filters).
7. Harmonic and sub-harmonic resonance studies.
8. Control stability studies (especially reactive power control response).

Results from these studies are used to complete and validate the design.

Grid compliance studies are required to prove compliance to grid code requirements. Most studies are concentrated around the turbine dynamic and transient performance such as:

1. Studying the Voltage and Frequency Ranges.
2. Studying Power and reactive power control performance.
3. Studying LVRT performance.
4. Studying Harmonics.
5. Studying Protection Setting.
6. Etc.

Results from these studies are used to evaluate the interaction between turbines, electrical infrastructure, substation power components, power transmission and the power grid in order to evaluate influence on grid stability and electromagnetic transients within the wind power plant.

Vattenfall's Wind Power Plant Projects will be steered mainly from Vattenfall's London (UK), Kolding (DK) or Hamburg (GER) offices and potentially Amsterdam (NL) and Solna (SE).

Although the majority of work will take place at Contractor's offices travel to Vattenfall's offices and other locations within Northern Europe will be required.

#### **II.1.6. CPV code(s)**

73420000 Pre-feasibility study and technological demonstration

#### **II.1.7. Information about the Government Procurement Agreement (GPA)**

The procurement is covered by the Government Procurement Agreement: no

#### **II.1.8. Information about lots**

This contract is divided into lots: no

#### **II.1.9. Information about variants**

Variants will be accepted: no

### **II.2. Scope of the procurement**

#### **II.2.1. Total quantity or scope**

#### **II.2.2. Information about options**

Options: no

#### **II.2.3. Information about renewals**

This contract is subject to renewal: yes

Number of possible renewals: 2

In the case of renewable contracts, estimated time-frame for subsequent calls for competition:

in months: 24 (from the award of the contract)

### **II.3. Duration of the contract or time limit for completion**

## **Section III: Legal, economic, financial and technical information**

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### **III.1. Conditions related to the contract**

#### **III.1.1. Deposits and guarantees required**

None.

#### **III.1.2. Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them**

Detailed information in the Selection Guide on the Commerce-Hub website.

#### **III.1.3. Legal form to be taken by the group of economic operators to whom the contract is to be awarded**

Detailed information in the Selection Guide on the Commerce-Hub website.

#### **III.1.4. Contract performance conditions**

The performance of the contract is subject to particular conditions: yes

Description of particular conditions: Detailed information in the Selection Guide on the Commerce-Hub website.

Your organisation must have a back office with key personnel in North/West Europe from which knowledge and lessons learned are transferred, and where there shall be a single point of contact for Vattenfall.

In order to fulfil Vattenfall's requirements candidates must:

- Have min. 3 years' experience in making system studies for Wind Power Plant connections and compliance;
- Have sufficient theoretical and practical knowledge including relevant formal qualification(s) such as an engineering degree or similar qualification(s);
- Be fluent in English (verbally and written) and preferably another language(s) depending on the location;
- Have or, if applicable, willing to get the necessary HSE certificates to carry out the Services;
- Have verifiable experience and understanding of short circuit calculations, load flow calculations, dynamic simulations, transient simulations and harmonic (stability) calculations.
- Have verifiable experience and understanding with simulation tools such as PowerFactory, PSCAD, Matlab.

Your organisation does not meet Vattenfall's minimum requirement if your organisation has no consultants directly employed (on your own payroll) meeting the above requirements.

### **III.2. Conditions for participation**

#### **III.2.1. Suitability to pursue the professional activity, including requirements relating to enrolment on professional or trade registers**

#### **III.2.2. Economic and financial ability**

List and brief description of conditions: Your company must have taken out liability insurance that at the time of application is valid for at least 6 more months, with a minimum cover of 1 000 000 EUR per event or you must provide for such insurance in case of contract award.

### **III.2.3. Technical and professional ability**

List and brief description of conditions: In order to fulfil the works candidates must:

- Have min. 3 years' experience in making system studies for Wind Power Plant connections and compliance;
- Have sufficient theoretical and practical knowledge including relevant formal qualification(s) such as an engineering degree or similar qualification(s);
- Be fluent in English (verbally and written) and preferably another language(s) depending on the location;
- Have or, if applicable, willing to get the necessary HSE certificates to carry out the Services;
- Have verifiable experience and understanding of short circuit calculations, load flow calculations, dynamic simulations, transient simulations and harmonic (stability) calculations.
- Have verifiable experience and understanding with simulation tools such as PowerFactory, PSCAD, Matlab.

Your organisation does not meet Vattenfall's minimum requirement if your organisation has no consultants directly employed (on your own payroll) meeting the above requirements. In the second phase of this tender Vattenfall will ask for CVs of these consultants, including the date when employment with your organisation started.

### **III.2.4. Information about reserved contracts**

#### **III.3. Conditions specific to services contracts**

##### **III.3.1. Information about a particular profession**

Execution of the service is reserved to a particular profession: no

##### **III.3.2. Information about staff responsible for the performance of the contract**

Obligation to indicate the names and professional qualifications of the staff assigned to performing the contract: no

## **Section IV: Procedure**

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### **IV.1. Type of procedure**

#### **IV.1.1. Type of procedure**

Negotiated

Some candidates have already been selected (if appropriate under certain types of negotiated procedures): no

### **IV.2. Award criteria**

#### **IV.2.1. Award criteria**

The most economically advantageous tender in terms of the criteria stated in the specifications or in the invitation to tender or to negotiate

#### **IV.2.2. Information about electronic auction**

An electronic auction will be used: no

### **IV.3. Administrative information**

#### **IV.3.1. File reference number attributed by the contracting entity**

Power Systems Studies

#### **IV.3.2. Previous publication concerning this procedure**

no

#### **IV.3.3. Conditions for obtaining specifications and additional documents**

(except for a DPS)

Time limit for receipt of requests for documents or for accessing documents: 28.3.2017 - 09:00

Payable documents: no

#### **IV.3.4. Time limit for receipt of tenders or requests to participate**

29.3.2017 - 09:00

#### **IV.3.5. Languages in which tenders or requests to participate may be submitted**

English.

#### **IV.3.6. Minimum time frame during which the tenderer must maintain the tender**

#### **IV.3.7. Conditions for opening of tenders**

### **Section VI: Complementary information**

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#### **VI.1. Information about recurrence**

This is a recurrent procurement: no

#### **VI.2. Information about European Union funds**

The procurement is related to a project and/or programme financed by European Union funds:

no

#### **VI.3. Additional information**

[https://portal.commerce-hub.com/index.cfm?action=sourcing:\\_requestform.subscribe&document=F3A3E844-C3FA-0221-A2D0F50399765A0A](https://portal.commerce-hub.com/index.cfm?action=sourcing:_requestform.subscribe&document=F3A3E844-C3FA-0221-A2D0F50399765A0A)

#### **VI.4. Procedures for review**

##### **VI.4.1. Review body**

Official name: Vergabekammer Hamburg, Finanzbehörde für die Vergabe von Lieferungen und Dienstleistungen

Postal address: Große Bleichen 27

Town: Hamburg

Postal code: 20354

Country: Germany

Telephone: +49 40428231448

Fax: +49 40428232020

##### **VI.4.2. Review procedure**

Precise information on deadline(s) for review procedures: According to § 160 III s. 1 No 1 — 4 German Competition Act (GWB) an appeal is inadmissible,

a) If the appellant has recognised the breach of tender rules prior to filing the appeal and did not claim this towards the contracting entity within 10 calendar days; the expiry of the deadline according to § 134 II remains unaffected (§ 160 III s. 1 No 1 GWB);

b) As far as breaches of tender rules, recognisable based on the tender notice, has not been claimed towards the contracting entity at the latest by the expiry of the deadline for filing the bid or for the request for participating notified in the notice (§ 160 III s. 1 No 2 GWB);

c) As far as breaches of tender rules which are recognisable only within the specifications / request for quotation have not been claimed towards the contracting entity at the latest by the

expiry of the deadline notified in the tender notice / request for quotation for filing the bid or for filing the request for participating (§160 III s. 1 No 3 GWB);

d) As far as more than 15 calendar days following the contracting entity's notice not to remedy the complaint have passed (§160 III s. 1 No 4 GWB).

**VI.4.3. Service from which information about the review procedure may be obtained**

Official name: Vergabekammer Hamburg, Finanzbehörde für die Vergabe von Lieferungen und Dienstleistungen

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Town: Hamburg

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Country: Germany

Telephone: +49 40428231448

Fax: +49 40428232020

**VI.5. Date of dispatch of this notice**

27.2.2017