PUBLIC ENTERPRIZE ELECTRIC POWER INDUSTRY OF SERBIA, BELGRADE

PE EPS HQ

Carice Milice 2

Number: 12.01.131044/18~16

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Subject: Amendments to Tender Documents no.2 pursuant to Article 63 paragraph 1 of Public Procurement Law (Official Gazette of the Republic of Serbia, 124/12, 14/15 and 68/15), in the open procedure for public procurement of services "Support and Maintenance of Information System to Support the Sale of Electricity", PP/1000/0152/2016, for which the Invitation to Tender was published on Public Procurement Portal on 27.04.2016.

On the page 27/64 of Tender Documents, in Serbian and English version, in an open procedure of public procurement no. PP/1000/0152/2016, Item 5.1. "Subject of Invitation" below the table - "Table 1: ISSSE – Scope and specification of IPESOFT software used by the Employer" the following text has been added and reads as follows:

- revision functionality that enables monitoring of changes made in ISSSE system
- contract processing functionality that processes the contracts in various currencies with automatic calculation of current exchange rate
- access functionality that enables that all users are fully enabled to access the ISSSE
- solution functionality, whereby these access rights are managed (determined/forbidden/cancelled) by ISSSE administrator from EPS.
- recording and managing of trading contracts/agreements including all relevant information in the contract (contract type, contract provisions, payment conditions, etc.)
- support provision for the contracts regarding other relevant goods (e.g. electricity, transfer capacity, ancillary services, CO2, etc.)
- Collection, recording and management of business information regarding other parties that perform trading in fully standardized forms (addresses, bank accounts, VAT, take over places, profiles, employees, subsidiaries, relationships with other companies, etc.)
- Conclusion of businesses with the forms that user may configure or forms that are defined in advance (markets without direct interfaces)
- · conclusion of internal transaction (operations within the company) within the group
- conclusion of bilateral transactions
- support to physically traded products
- · support to financially traded products
- support to products traded in standard way
- support to products traded individually
- support to products traded in different time intervals (15 minutes, hours, month, year,
- support to different types of fees (transit, export, import, brokerage fees, etc.)
- definition of confirmation of work flow in order to standardize confirmation processing
- Production of forms for confirmations upon work conclusion
- Monitoring of the existing confirmation of the work flow status regarding single works

- (unconfirmed, confirmed, invoiced, etc.)
- Import of market data from different markets (stock exchanges, OTC, trading platforms, etc.)
- Import forward curves, basic curves, interest rates, incremental and final calculations of index, etc.
- Import of exchange rate lists
- Import of time data from selected sources
- Calculation and forecast of electricity consumption and necessary electricity generation based on the existing and historical data (short, middle and long term forecasts)
- Collection and processing of data regarding the allocation of transfer capacities
- Recording and management of auctions for transfer capacities
- Administration of allocation of cross-border capacities
- Management of physical position regarding bilateral operations, physical options and other physical positions
- support of data exchange with TSO in standard forms ENTSO-E
- support of data exchange with TSO via email with the attachments in Excel (as support)
- support of data exchange with TSO via interface with platforms of TSO (if interface with TSO is provided)
- Automatic preparation of the balance for the previously defined contract groups
- Partition of overall trading portfolio in sub portfolios/ trading books
- Proposals for purchasing ensured by IT system for open positions based on the available wholesale data and prices
- Analysis of physical positions that provide chronological overview of the positions of the trader in all parts of the portfolio and evaluation of trading positions according to different attributes (partners, place of delivery, suppliers, etc.)
- Analysis of financial positions that provide chronological overview of the traders' positions in all parts of the portfolio and evaluation of trading positions according to different attributes (partners, place of delivery, suppliers, etc.)
- Comparison of the positions at any two points in time
- Automized production of portfolios for given trading chart by the combination of different products with the aim to realize optimum coverage of trading chart from available resources
- Previously defined structure for definition of risks and risk management
- Analysis from market to market and cash flows calculated on the payment date
- Definition of trading limits in virtually unlimited combination of attribute positions (e.g. Delta, from the side of one party, MTM from the side of the other party, etc.)
- Monitoring positions in real time and downloading automatic notifications related to faults and limits
- · Concluding transactions with trading partners and brokers
- Monitoring and conclusion of positions that have been confirmed and showing those that have to be further processed
- Preparation of pro-forma invoices, invoices and amendments of invoices by using standard patterns or the patterns adjusted by the use of data on business or price made within IT system
- Providing standard reports and analytical tools included into system
- Planned reports and reports in real time

- Interface with export reports into other systems (e.g. Excel)
- "Functionality of revision" in order to follow changes made within IT system
- Fully equipped administration of the users and concept of access rights in order to provide IT security
- Adding special notes and attaching files in different forms into separate files
- Interfaces with trading systems of the selected markets
- Acquisition and statistic processing of the entered data
- Provision of the standard models and methodologies for market data processing
- Interface with production of IT systems for automatic input of production data
- Provision of standard models and methodologies for evaluation of portfolio and risk assessment
- Obtaining statistic models and methodologies for portfolio evaluation and risk assessment
- Obtaining data on energy demand from the members of balance group (large customers, public supplier, DSO etc.)
- Interfaces that allow automatic collection of data from external trading partners (specification of chart – real, planned and differences)
- Support of payment evidence and their connection with the issued and received invoices
- Creating invoices in different currencies
- · Creating reports defined by the users and analysis based on the data within the system
- Contracts with different currencies with automatic calculation according to the actual currency value
- ISSSE is implemented in PE EPS DATA CENTER in the following production softwarehardware environment:

Client system:

- OS MS Windows (Proposed Win7 or Win8.1 64bit version)
- Processor 2x1.6Ghz
- RAM 4GB
- HDD 20GB
- SW MS Office 2007, 2010, 2013 (proposed 64bit version)
- Resolution of monitors 1680x1050 (min. 1280x1024)

Server system:

Database system

Oracle 11g R2 EE with Oracle Data Guard.

Application server:

- OS MS Windows Server 2008 R2 (or later)
- MS Office 2010 English (Excel, Word)
- not Virtual (it will be a physical server)
- IBM Flex System x240 Compute Node, 2x Xeon 6C E5-2640
 2.5GHz/1333MHz/15MB, 192GB RAM, 2x FC5022 2-port 16Gb FC Adapter

Application Computer Server

- OS MS Windows Server 2008 R2 (or later)
- MS Office 2010 English (Excel, Word)
- not Virtual (it will be a physical server)
- IBM Flex System x240 Compute Node, 2x Xeon 6C E5-2640
 2.5GHz/1333MHz/15MB, 192GB RAM, 2x FC5022 2-port 16Gb FC Adapter

Server database

- OS Oracle Enterprise Linux or MS Windows Server 2008 R2 (or later)
 No Virtual (it will be a physical server)
- IBM Flex System x240 Compute Node, 2x Xeon 6C E5-2640
 2.5GHz/1333MHz/15MB, 192GB RAM, 2x FC5022 2-port 16Gb FC Adapter

WEB server

- OS MS Windows Server 2008 R2 (or later)
- It may be virtual (MS Hyper-V platform)
- Virtual (proposed lower resources that can be increased if necessary)
 - 4 vCPU, 16GB vRAM, 128GB vHDD

File/Backup server

- OS MS Windows Server 2008 R2 (or later)
- It may be virtual (MS Hyper-V platform)
- Virtual (proposed lower resources that can be increased if necessary
 - 4 vCPU, 16GB vRAM, 2TB vHDD

Directory Server

- OS MS Windows Server 2008 R2 (or later)
- It may be virtual (MS Hyper-V platform)
- Virtual (proposed lower resources that can be increased if necessary
 - 4 vCPU, 16GB vRAM, 128GB vHDD

Development environment in which ISSSE is implemented includes the following:

Application Server

- OS MS Windows Server 2008 R2 (or later)
- MS Office 2010 English (Excel, Word) (we do not support a version newer than 2013!!!)
- It may be virtual (MS Hyper-V platform)
- Virtual (proposed lower resources that can be increased if necessary
 - 16 vCPU, 64GB vRAM, 128GB vHDD

Database server

- OS Oracle Enterprise Linux or MS Windows Server 2008 R2 (or later)
- It may be virtual (Oracle VM 3.X)
- Virtual (proposed lower resources that can be increased if necessary
 - 16 vCPU, 96GB vRAM, 600GB vHDD

WEB server

- MS Windows Server 2008 R2 (or later)
- It may be virtual (Server 2008 R2 (or later)
- It may be virtual (MS Hyper-V platform)
- Virtual (proposed lower resources that can be increased if necessary
 - o 2 vCPU, 16GB vRAM, 128GB vHDD

This amendment to tender documents is published on Public Procurement Portal and website of the Employer.

PUBLIC PROCUREMENT COMMITTEE