#### VYSVĚTLENÍ ZADÁVACÍ DOKUMENTACE POŘ. Č. 19

## EXPLANATION OF THE TENDER DOCUMENTATION No. 19

V souladu s ustanovením § 98 zákona č. 134/2016 Sb., o zadávání veřejných zakázek, ve znění pozdějších předpisů, a s článkem 2.8.1 Pokynů pro zadání zakázek pro programy spolufinancované z rozpočtu SFŽP ČR, zadavatel poskytuje vysvětlení zadávací dokumentace k veřejné zakázce.

In accordance with Section 98 of Act No. 134/2016 Coll., the Public Procurement Act, as amended, and Article 2.8.1 the Procurement Guidelines for Programmes Co-financed from the Budget of the State Environmental Fund of the Czech Republic, the contracting entity hereby provides explanation to the tender documentation of the public contract.<sup>1</sup>

#### IDENTIFIKACE ZADÁVACÍHO ŘÍZENÍ / IDENTIFICATION OF THE TENDER PROCEDURE

Zadavatel: / ŠKO-ENERGO, s.r.o.

Contracting Entity: tř. Václava Klementa 869, Mladá Boleslav II, 293 01 Mladá Boleslav,

IČO: / Identification No.: 61675938

Název: / Name: "Modernizace teplárny ŠKO-ENERGO – OB2 Kotelny"

Druh zadávacího řízení: / Type of the tender procedure: otevřené řízení / open procedure

## ČÁST 1: PŘESNÉ ZNĚNÍ ŽÁDOSTI DODAVATELE O VYSVĚTLENÍ ZADÁVACÍ DOKUMENTACE / PART 1: EXACT WORDING OF THE REQUEST OF A SUPPLIER FOR EXPLANATION OF THE TENDER DOCUMENTATION

A 4.2 Electrical Part 2.2	There must be 15% space reserve and 30% equipped outlet reserve in the switchgear after the new technology is put into operation.	15% space reserve and 20% equipped outlet reserve mentioned in 1_11_Eelectricity 6.13
A 4.2 Electrical Part 2.4 & 2.5	The frequency converter installed in the substation must be of a switchgear mounting design. The design of the FM and its enclosure shall be carried out in accordance with the Protocol for the Determination of External Influences and in accordance with the requirements of the manufacturer Siemens.	We prefer mounting the frequency converters in a rack for better cooling. In this context, clarification, what does FM mean?
A 4.2 Electrical Part 2.4 & 2.5	The motor must be connected to the inverter with a shielded cable as recommended by the FC manufacturer (Siemens).	We use the products of our approved suppliers list and follow their instructions

Vysvětlení zadávací dokumentace Veřejná zakázka: "Modernizace teplárny ŠKO-ENERGO – OB2 Kotelny"

V souladu se zadávací dokumentací je rozhodujícím zněním poskytnutého vysvětlení zadávací dokumentace výhradně české znění. Překlad do anglického jazyka, pokud je poskytnut, má pouze informativní povahu. / In accordance with the Tender Documentation, exclusively the Czech wording of the provided explanation of the Tender Documentation shall prevail. The translation into the English language (if provided) is of an informative nature only.

<u> </u>		
VYSVĚTLENÍ ZADÁVACÍ DOKUMENTAC E POŘ. Č. 02	INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE: The Contracting Entity does not have any unified standards for electric motors, the Contracting Entity has different motors from different manufacturers on existing plants, but most are SIEMENS. The Contracting Entity has vibration measurements on large important motors (mostly at 6 kV) from ADASH. Regarding motor power at the existing objects, the Contracting Entity has motors: - up to 90 kW - on the 400 V AC voltage, -from about 250 kW and above - on the 6 kV level, - some pieces from 200 to 315 kW on 690 V AC. But design of new substation of K20 will be different. By general designer calculations – there will be only 400 V AC voltage. If there will be any technology whit higher voltage, there is a possibility to feed the largest motors from the existing 6 kV switchgears (Irodel), but only 1-2 outlets will be available for this purpose. This possibility is described in A4.2 and if your design will include this solution, you must mention it in your bid.	Clarification: No voltage level other than 400V is planned for the new boiler. In our plans, the largest engine size would be 630kW. Do you accept this?
A 4.2 Electrical Part 2.7	The maximum temperature of the cable cores and the ambient temperature must not exceed the permissible values set by the manufacturer. The temperature reserve of the cable cores must be at least 20%.	Selection of cables follow IEC 60364
A 4.2 Electrical Part 2.7	2.7.2 Marking of cabling  • The cabling will be marked with the KKS code.  • The cabling will be fitted with stainless steel metal labels stating:  o where the cable is routed from (KKS code of the switchgear, field and outlet),  o cable marking (KKS code),  o cable type - number of cores - cross-section of cores,  o where the cable is routed (KKS code of the powered device or KKS code of the switchgear, field and outlet)  • The cabling will be marked:  o on both ends,  o when passing through a wall, ceiling or firewall at both ends,  o when crossing routes.	Only Cable KKS-number will be shown for example: (A1UBA10GP001-W001), [pozn. zadavatele: název dodavatele byl začerněn] provide list of routed cables, Cables will be marked at both ends.

	Cabling will be divided into basic segregation	
	groups:	
	o HV power cables,	
	o LV power cables,	
	o control cables and analogue measurement	
	cables up to 60 V,	
	o control cables and analogue measurement	
	cables above 60 V,	
A 4.2 Electrical	o communication cables, serial	
Part 2.7	communication cables (optical and metallic),	
	o EFAS cables.	
	• The cables are laid in the cable routes in the	
	following order, always from top to bottom. In	
	justified cases where it is necessary to place	If needed, control cables up to 60
	HV cables under other cables, a bulkhead will	V can install same routes with
	be inserted between the HV cables and the	communication cables and LV
	other cables (see 2.7.4 Fire protection	power cables same routes with
	measures)	control cables above 60V.
	Type socket cabinets will be delivered	
A 4.2 Electrical	according to the technical specification of the	[pozn. zadavatele: název
Part 2.8	CLIENT. At the CLIENT's request, the	dodavatele byl začerněn] comply
Part 2.0	requirements for specific socket cabinets may	with requirements of technical
	be changed.	specification OB_2_A112.03
A 4.2 Electrical		The lighting is designed to work
		continuously in the production
Part 2.9	Interior lighting	facilities

1_11_Eelectricit y 10	The lighting of workplaces for finishing, repair inspections, etc. shall be governed by ITS 2.00, or the lighting concept for these workplaces shall be addressed in the technical specification.  The lighting of the machinery must correspond to the respective production operation according to ČSN EN 12464-1, see ITS 1.25, e.g. for normal production from 500 lux, workplace for fine operations 750-1000 lux. Stroboscopic effects must be avoided when using fluorescent or discharge lighting. Special emphasis should be placed on non-glare lighting. The Contractor shall provide lighting measurement reports, see ITS 2.00.  The lighting circuits for the machine must meet ČSN EN 60204-1 ed.3. The rebuildable luminaires must be suitable for workshop use with an anti-glare raster, must be 24V and must meet the protection for the given conditions. Lighting outage must not cause machine downtime. The equipment operator must be	
	consulted for the wiring of the lighting. Always connect the cabinet box lighting for the cabinet box via its own door positioning switch. It is necessary to ensure glare protection, e.g. during shielding gas welding and stud welding.	Power Plant is not production line, 200 lux is normally used Automation- IT and Switchgearrooms and 100 lux in Power plant area. The lighting is designed to work continuosly in the boiler room.
1_11_Eelectricit y 14.1	After connecting the machinery, it is necessary to conduct an electrical inspection. The machinery connection inspection shall be carried out by an inspection engineer (certified by the Czech Technical Inspectorate) before the machine commissioning.	Tests are performed according to standard EN 60204-1 by [pozn. zadavatele: název dodavatele byl začerněn] if the mentioned machines are included in the delivery
Annex 11 Drawings		what shall be height above the fuel silo reserved for the Fuel handling system (in scope of OB1 part)

In the Item 5.8.4 ID fan there is request to provide both Frequency Converter and Inlet Vanes for to controll the fan outpu. In Item 5.8.5 Flue Gas Recirculation Fan only Frequency Converter contol is required.

Is there as well specific requirement for to control the the boiler K20 combustion air fans?

### ČÁST 2: VYSVĚTLENÍ ZADÁVACÍ DOKUMENTACE / PART 2: EXPLANATION OF THE TENDER DOCUMENTATION<sup>2</sup>

Dotaz/request:		
	There must be 15% space reserve and 30% equipped outlet reserve	15% space reserve and 20% equipped outlet reserve
A 4.2 Electrical Part 2.2	in the switchgear after the new	mentioned in 1_11_Eelectricity
	technology is put into operation.	6.13
Odpověď Zadavatele:		
Rezerva 20 % dle požadavku ITS je dostačující.		
INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:		
A reserve of 20 % according to the ITS requirement is sufficient.		
Dotaz/request:		
	The frequency converter installed	
	in the authoration must be of a	

A 4.2	Electrical Part	2.4 8
2.5		

in the substation must be of a switchgear mounting design. The design of the FM and its enclosure shall be carried out in accordance Protocol with the for the Determination External of Influences and in accordance with the requirements of the manufacturer Siemens.

We prefer mounting the frequency converters in a rack for better cooling. In this context, clarification, what does FM mean?

#### Odpověď Zadavatele:

Pojmem FM je myšlen frekvenční měnič (anglická zkratka FC). Navrhované řešení je možné, zadavatel nicméně upozorňuje na nutný soulad s Protokolem o určení vnějších vlivů.

#### INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

The term FM means a frequency converter (English abbreviation FC, in Czech "frekvenční měnič"). The proposed solution is possible. The solution must be complied with the Protocol on determining external influences.

Dotaz/request:		
A 4.2 Electrical Part 2.4 & 2.5	The motor must be connected to the inverter with a shielded cable as recommended by the FC manufacturer (Siemens).	We use the products of our approved suppliers list and follow their instructions

#### Odpověď Zadavatele:

Připojení motoru musí být provedeno dle požadavku výrobce motoru a v souladu s platnými normami.

#### INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

Vysvětlení zadávací dokumentace Veřejná zakázka: "Modernizace teplárny ŠKO-ENERGO – OB2 Kotelny"

<sup>&</sup>lt;sup>2</sup> V souladu se zadávací dokumentací je rozhodujícím zněním poskytnutého vysvětlení zadávací dokumentace výhradně české znění. Překlad do anglického jazyka, pokud je poskytnut, má pouze informativní povahu. / In accordance with the Tender Documentation, exclusively the Czech wording of the provided explanation of the Tender Documentation shall prevail. The translation into the English language (if provided) is of an informative nature only.

The motor connection must be made according to the motor manufacturer's requirements and valid Czech standards.

INFORMATIVE TRANSLATION

#### Dotaz/request:

FROM THE CZECH LANGUAGE: The Contracting Entity does not have any unified standards for electric motors, the Contracting Entity has different motors from different manufacturers existing plants, but most are SIEMENS. The Contracting Entity has vibration measurements on large important motors (mostly at 6 kV) from ADASH. Regarding motor power at the existing objects, the Contracting Entity has motors: - up to 90 kW - on the 400 V AC voltage, - from about 250 kW and above - on the 6 kV level, some pieces from 200 to 315 kW on 690 V AC. But design of new substation of K20 will be different. By general designer calculations there will be only 400 V AC voltage. If there will be any technology with higher voltage, there is a possibility to feed the largest motors from the existing 6 kV switchgears (Irodel), but only 1-2 outlets will be available for this purpose. This possibility described in A4.2 and if your design will include this solution,

Clarification: No voltage level other than 400V is planned for the new boiler. In our plans, the largest engine size would be 630kW. Do you accept this?

Odpověď Zadavatele:

Ano, toto řešení je možné.

VYSVĚTLENÍ ZADÁVACÍ

DOKUMENTACE POŘ. Č.

02

INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

Yes, this solution is possible.

# Dotaz/request: The maximum temperature of the cable cores and the ambient temperature must not exceed the permissible values set by the manufacturer. The temperature reserve of the cable cores must be at least 20%. Odpověď Zadavatele:

you must mention it in your bid.

Kabel je dimenzován podle prostředí, ve kterém se nachází. Řešení musí být v souladu s normami a platnou legislativou v České republice.

#### INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

The cable is designed according to the area in which it is located. The solution must be in accordance with the standards and valid legislation in the Czech Republic.

#### Dotaz/request:

- 2.7.2 Marking of cabling
- The cabling will be marked with the KKS code.
- The cabling will be fitted with stainless steel metal labels stating: o where the cable is routed from (KKS code of the switchgear, field and outlet),
- o cable marking (KKS code), o cable type - number of cores cross-section of cores.
- o where the cable is routed (KKS code of the powered device or KKS code of the switchgear, field and outlet)
- The cabling will be marked:
- o on both ends, o when turning,
- o when passing through a wall, ceiling or firewall at both ends,
- o when crossing routes.

Only Cable KKS-number will be shown for example: (A1UBA10GP001-W001) , [pozn. zadavatele: název dodavatele byl začerněn] provide list of routed cables, Cables will be marked at both ends.

#### Odpověď Zadavatele:

A 4.2 Electrical Part 2.7

Zadavatel s navrženým řešením souhlasí; nicméně apeluje na důkladně zpracovaný kabelový list s kompletním odpovídajícím značením.

#### INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

The Contracting Entity agrees with the proposed solution; however, it requires a processed cable sheet with complete marking.

#### Dotaz/request:

• Cabling will be divided into basic segregation groups:

- o HV power cables,
- o LV power cables,
- o control cables and analogue measurement cables up to 60 V,
- A 4.2 Electrical Part 2.7
  - measurement cables above 60 V, o communication cables, serial communication cables (optical
  - and metallic), o EFAS cables.
  - The cables are laid in the cable routes in the following order,

If needed, control cables up to 60 V can install same routes with communication cables and LV power cables same routes with control cables above 60V.

#### Vysvětlení zadávací dokumentace Veřejná zakázka: "Modernizace teplárny ŠKO-ENERGO – OB2 Kotelny"

INFORMATIVE TRANSLATIO	always from top to bottom. In justified cases where it is necessary to place HV cables under other cables, a bulkhead will be inserted between the HV cables and the other cables (see 2.7.4 Fire protection measures) puladu s normami. Datová síť nesmí lon FROM THE CZECH LANGUAGE: ardance with the standards. The data	
Dotaz/request:		
A 4.2 Electrical Part 2.8	Type socket cabinets will be delivered according to the technical specification of the CLIENT. At the CLIENT's request, the requirements for specific socket cabinets may be changed.	[pozn. zadavatele: název dodavatele byl začerněn] comply with requirements of technical specification OB_2_A112.03
Odpověď Zadavatele: Zadavatel bere tuto informaci	na vědomí.	
The Contracting Entity takes	ON FROM THE CZECH LANGUAGE: note of this information.	
Dotaz/request:		
A 4.2 Electrical Part 2.9	Interior lighting	The lighting is designed to work continuously in the production facilities
Odpověď Zadavatele: Zadavatel bere tuto informaci	na vědomí.	
INFORMATIVE TRANSLATION The Contracting Entity takes in	ON FROM THE CZECH LANGUAGE:	
Dotaz/request:	note of time information	
1_11_Eelectricity 10	The lighting of workplaces for finishing, repair inspections, etc. shall be governed by ITS 2.00, or the lighting concept for these workplaces shall be addressed in the technical specification.  The lighting of the machinery must correspond to the respective production operation according to ČSN EN 12464-1, see ITS 1.25, e.g.	Power Plant is not production line, 200 lux is normally used Automation- IT and Switchgearrooms and 100 lux in Power plant area. The lighting is designed to work continuosly in the boiler room.

using

fluorescent or discharge lighting. Special emphasis should be placed on non-glare lighting. The Contractor shall provide lighting measurement reports, see ITS 2.00.

The lighting circuits for the machine must meet ČSN EN 60204-1 ed.3. The rebuildable luminaires must be suitable for workshop use with

an anti-glare raster, must be 24V and must meet the protection for the given conditions. Lighting outage must not cause machine

downtime. The equipment operator must be consulted for the wiring of the lighting.

Always connect the cabinet box lighting for the cabinet box via its own door positioning switch.

It is necessary to ensure glare protection, e.g. during shielding gas welding and stud welding.

#### Odpověď Zadavatele:

Zadavatel požaduje osvětlení teplárny na minimální úrovni 200 lux.

#### INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

The Contracting Entity requires heating plant lighting at a minimum level of 200 lux.

#### Dotaz/request:

#### 1\_11\_Eelectricity 14.1

After connecting the machinery, it is necessary to conduct an electrical inspection. The machinery connection inspection shall be carried out by an inspection engineer (certified by the Czech Technical Inspectorate) before the machine commissioning.

Tests are performed according to standard EN 60204-1 by [pozn. zadavatele: název dodavatele byl začerněn] if the mentioned machines are included in the delivery

#### Odpověď Zadavatele:

Požadavky musí být v souladu s českými normami a legislativou. Revizní zprávu vypracuje revizní technik s platným oprávněním. TIČR bude přítomen u uvedení zařízení do provozu.

#### INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

The requirements must be in accordance with Czech standards and legislation. The audit report will be done by an audit technician with a valid authorization. TIČR (Czech technical inspection) will be present at the commissioning of the technology.

#### Dotaz/request:

Annex 11 Drawings what shall be height above the fuel silo reserved for the Fuel handling system (in scope of OB1 part)

#### Odpověď Zadavatele:

Pro účely vypracování nabídky počítejte s výškovými rozměry totožnými jako je navrženo v příloze L zadávací dokumentace – Dokumentace pro stavební povolení. Konkrétní výkres je popsán v příloze L

zadávací dokumentace, složka D2, PS206, výkres S404T21\_DP205-019+020. Při realizaci bude záležet na konkrétním návrhu OB1 a následnou dohodou mezi zadavatelem, dodavatelem OB1 a dodavatelem OB2.

#### INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

For preparing the bid, take same height dimensions as proposed in Annex L of the Tender Documentation - The construction permit documentation. The specific drawing is described in Annex L of the Tender Documentation, folder D2, PS206, drawing S404T21\_DP205-019+020. The realization will depend on the specific design of OB1 and the agreement between the Contracting Entity, supplier of OB1 and supplier of OB2.

Dotaz/request:	
A 4.1 Machinery part	In the Item 5.8.4 ID fan there is request to provide both Frequency Converter and Inlet Vanes for to controll the fan outpu. In Item 5.8.5 Flue Gas Recirculation Fan - only Frequency Converter contol is required.
	Is there as well specific requirement for to control the the boiler K20
	combustion air fans ?

U všech ventilátorů na K20 požaduje pouze řízení pomocí frekvenčního měniče.

INFORMATIVE TRANSLATION FROM THE CZECH LANGUAGE:

For all fans on the K20, it only requires control using a frequency converter.