CORRIGENDUM No. 1 to the TENDER DOSSIER

Construction and commissioning of the new Waste Water Treatment Plant at TPP Nikola Tesla B Serbia, Obrenovac

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The following alterations and/ or modifications are made to the Tender Dossier:

Volume 2, Section 2 - Particular Conditions

The former text:

1.1.6.11 WWTP

Additional new sub-clause1.1.6.11

"**WWTP**", means the new Waste Water Treatment Plant for treatment of the waste water streams of the Thermal Power Plant Nikola Tesla B which consists of:

1. Section 1

(a) The new Station S1 for the treatment of the oily contaminated waste water streams;

(b) The new Station S2 for the treatment of the lignite contaminated waste water streams;

(c) The new Station S3 for the treatment of the waste water from the FGD plant blow-down.

2. Section 2

(a) The new Station S3 for the treatment of the waste water from the FGD plant blow-down.

Shall read as new text:

1.1.6.11 WWTP

Additional new sub-clause1.1.6.11

"**WWTP**", means the new Waste Water Treatment Plant for treatment of the waste water streams of the Thermal Power Plant Nikola Tesla B which consists of:

1. Section 1

(a) The new Station S1 for the treatment of the oily contaminated waste water streams;

(b) The new Station S2 for the treatment of the lignite contaminated waste water streams;
(c) Rehabilitation of existing sanitary waste water biological treatment installations PUTOX-1 and PUTOX-2.

2. Section 2

(a) The new Station S3 for the treatment of the waste water from the FGD plant blow-down.

Volume 2, Section 2 - Particular Conditions

Annex II – Warranties and Remedies

Performance Damages

The former text:

WWTP/S3

For WWTP/S3 production x < 125 m3/h

Shall read as new text:

For WWTP/S3 production x < 40 m3/h

Volume 3 - EMPLOYER'S REQUIREMENTS

1.3 New WWTP Conceptual Design

2nd paragraph:

The former text:

1. The ***Oily Waste Water Treatment Plant***, which will be called ***Station 1 (S1)*** where the HFO and mineral oil and lubricants contaminated waste water streams, as well as the boilers blow down waters, will be treated. The S1 Station will be constructed, according to the municipality of Obrenovac General Regulation, in the area adjacent to the rails HFO unloading station.

Shall read as new text:

1. The ***Oily Waste Water Treatment Plant***, which will be called ***Station 1 (S1)*** where the HFO and mineral oil and lubricants contaminated waste water streams will be treated. The S1 Station will be constructed, according to the municipality of Obrenovac General Regulation, in the area adjacent to the rails HFO unloading station.

Chapter 5 Existing waste water streams state

Sub-article 5.4.2.5. Boilers Blow Down waste waters

The former text:

Annually, 10 start ups are taken place plus one start up after the annual overhaul. The Boilers blow downs are currently directed to the breaking chamber of the main cooling water return line and therefore have to be re-directed to the S1 Station starting their treatment from the

collection basin.

Power plant is elaborated a project for the blow down waters recovery. This is achievable depending on the pollutants concentrations and the water chemical treatment plant capabilities.

The proposed design is foreseen the installation of a new blow down buffer tank and the related coolers for blow down cooling. Afterwards the blow downs will be directed either to the S1 collection basin for treatment as wastes or will be directed to the blow down recovery system (this system is expected to be constructed as a new Project in the future by the TESLA Plant). All the a.m. selections will be done remotely through the use of motorized valves and the respective graphic screens in the WWTP HMI operator stations.

Shall read as new text:

Annually, 10 start ups are taken place plus one start up after the annual overhaul. The Boilers blow downs are currently directed to the breaking chamber of the main cooling water return line.

Power plant is elaborated a project for the blow down waters recovery. This is achievable depending on the pollutants concentrations and the water chemical treatment plant capabilities.

The proposed design is foreseen the installation of a new blow down buffer tank and the related coolers for blow down cooling. Afterwards the blow downs will be directed to the blow down recovery system (this system is expected to be constructed as a new Project in the future by the TESLA Plant).

Chapter 5, Sub-article 5.15 Storm waste water

The former text:

The following storm waters flow into Collector II:

Shall read as new text:

The following storm waters flow into Collector I:

The former text:

The Collector **I** with capacity of 650 m3/h covers the area from the cooling water discharge pipe up to the Plant fence.

Shall read as new text:

The Collector **II** with capacity of 650 m3/h covers the area from the cooling water discharge pipe up to the Plant fence.

Chapter 7, Sub-article 7.11 Serbian legislation:

The following bullet point:

Law on waters (Official Gazette No 46/91, 53/93, 48/94, 54/96)

Shall read be replaced with the bullet point:

Law on Waters (Official Gazette No. 30/10).

All other terms and conditions of the Tender Dossier remain unchanged.
The above alterations and /or corrections to the Tender Dossier are integral part of the Tender Dossier.

The following bullet point shall be added to sub-article 7.1.1. Serbian legislation:

Ordinance on emission limit values of pollutants in waters and deadlines for their achievement (Official Gazette No. 62/11).

Chapter 7, article 7.2 Emission Limit Values for the Waste Water emissions

The former text:

In defining the emission limit values (ELVs) relating to the TENT B waste water has been considered and taken into account the Ordinance on the determination and maintenance of sanitary protection zones of water supply sources of the city of Belgrade (RS Official Gazette No 92/08).

Shall read as new text:

In defining the emission limit values (ELVs) relating to the TENT B waste water has been considered and taken into account the Ordinance on the determination and maintenance of sanitary protection zones of water supply sources (RS Official Gazette No 92/08).

Chapter 8, article 8.3 New Waste Water Treatment Plant Conceptual Design

The former text:

1. The *Oily Waste Water Treatment Plant*, which will be called *Station 1 (WWTP/S1)* where the HFO and mineral oil and lubricants contaminated waste water streams and the boilers blow down waters, will be treated.

Shall read as new text:

1. The *Oily Waste Water Treatment Plant*, which will be called *Station 1 (WWTP/S1)* where the HFO and mineral oil and lubricants contaminated waste water streams will be treated.

Chapter 8, sub-article 8.3.1.2 Mineral oil and lubricants contaminated water streams

The former text:

The mineral oil contaminated waste water streams are the following:

- The drainages, leakages, floors washing waters, condensate chemical treatment backwash effluents, etc collected in the three MH drain pits at the elevations -5,00m and -8,00m of each Unit. Currently these wastes are discharged to the breaking chamber of the main cooling water return line and causing the cooling water contamination. The existing drain pumps can be re-used to redirect these waste water streams to the new oily water treatment plant for treatment before their disposal. New piping has to be installed using the existing trenches / galleries interconnecting the Units MHs with the water chemical treatment plant.

Shall read as new text:

The mineral oil contaminated waste water streams are the following:

- The drainages, leakages, floors washing waters, condensate chemical treatment backwash effluents, etc collected in the three MH drain pits at the elevations -5,00m and -8,00m of each Unit. Currently these wastes are discharged to the breaking chamber of the main cooling water return line and causing the cooling water

contamination. The existing drain pumps could be re-used, if their head and capacity are sufficient, to redirect these waste water streams to the new oily water treatment plant for treatment before their disposal. New piping has to be installed using the existing trenches / galleries interconnecting the Units MHs with the HFO pumping station.

Chapter 8, article 8.3.2 Lignite coal contaminated waste water streams:

The following bullet point shall be added to sub-article 8.3.2:

- Waste water from wagons defrosting. New concrete channel will be constructed to direct by gravity subject waste water streams to the new coal yard peripheral concrete channel.

Chapter 8: Delete the sub-article 8.3.5 Boilers Blow Down Waste Waters

The sub-article 8.3.5 Boilers Blow Down Waste Waters shall be deleted entirely.

Chapter 9: In the sub-article 9.2.2 Station WWTP/S1 Functional Description :

The following sentence shall be deleted from sub-article 9.2.2 Station WWTP/S1 Function:

The boilers blow down will be also transferred to the a.m. collection basin for treatment.

The former text:

The clean water will be disposed off, by gravity, through the existing sewage system (Collector II) to the river SAVA.

Shall read as new text:

The clean water will be disposed off, by gravity, through the existing sewage system (Collector I) to the river SAVA.

Chapter 9, article 9.3.2 – Lignite Contaminated Waste Water Treatment Plant,

The former text:

All wastes containing lignite particles from the lignite yard storage area, the lignite handling area and the bulldozers building will be collected in the new coal yard peripheral concrete channel and will be discharged to an open pit serving as entrance to the S2 treatment station.

Shall read as new text:

All wastes containing lignite particles from the lignite yard storage area, the lignite handling area, **the wagons defrosting station** and the bulldozers building will be collected in the new coal yard peripheral concrete channel and will be discharged to an open pit serving as entrance to the S2 treatment station.

Chapter 9, article 9.4.2 – Station 3 – FGD Waste Water Treatment Plant:

The former text:

The clean water will be disposed off, by gravity, through the existing sewage system

(Collector II) to the river SAVA.

Shall read as new text:

The clean water will be disposed off, by gravity, through the existing sewage system (Collector I) to the river SAVA.

Chapter 10, sub-article 10.2.1 Mechanical System Limits of Responsibility,

The former text:

Machine Hall waste water sources

The existing pumps in the pits at -5,00m and -8,00m in the Units MH will be reused. The limit of supply in the redirection of the waste water streams will be in the common pipe where all three pits effluents are collected before its exit from the Machine Hall to the breaking chamber. The existing piping gallery connecting the Water Chemical Treatment building with the Machine Hall may be used for the pipes running up to Water Chemical Treatment building.

Boiler Blow Down waste water

The limit of supply in the redirection of the Boiler's blow down waste waters will be the discharge flange of the existing pumps. These effluents will be initially collected to a tank near the Water Chemical Treatment Plant and depending on their quality either will be recovered or directed to the S1 station for treatment. The limit of supply for the purpose of this project will be aforesaid tank.

Shall read as new text:

Machine Hall waste water sources

The existing pumps in the pits at -5,00m and -8,00m in the Units MH could be reused if their capacity and head are sufficient. The limit of supply in the redirection of the waste water streams will be the Machine Hall drenage pits.

The following text is deleted completed:

Boiler Blow Down waste water

The limit of supply in the redirection of the Boiler's blow down waste waters will be the discharge flange of the existing pumps. These effluents will be initially collected to a tank near the Water Chemical Treatment Plant and depending on their quality either will be recovered or directed to the S1 station for treatment. The limit of supply for the purpose of this project will be aforesaid tank.

Chapter 9, Annex 1: Emission Limit Values

The following note shall be added at the bottom of the Chapter 16 Annex 1:

Contractor should bear in mind that new WWTP should be in line with relevant Serbian legislation related to the waste water effluent quality. Where Serbian standards or local regulations are more stringent than other applicable European standards then the Serbian standards and regulations shall prevail. E.g. Ordinance on emission limit values of pollutants in waters and deadlines for their achievement (Official Gazette No. 62/11).

Volume 4 Financial Offer, file V4.1_d4_w_finoffer_4.2_en:

The following item shall be deleted:

3.16 Blow down buffer tank basement (in unit LS),

Volume 4, Financial Offer, file V4.1_d4_w_finoffer_4.2_en:

The former text:

Tanks (oil, oily sludge, buffer tank of boiler blow-down condensate, etc).

Shall read as new text:

Tanks (oil, oily sludge, etc).

Volume 5 Design Documents, including Drawings

The following list of drawings is added to the initial volume 5 and attached to the present corrigendum:

1. Putox 1&2 - Refurbishment.dwg

2. Plant layout - storm and sanitary WW network – eng.dwg

3. Plant layout - coal and oil 2 – eng.dwg

All other terms and conditions of the Tender Dossier remain unchanged.