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**90MKA10-PB401**

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*Sheet of*

Проект  
*Project*

**MARITZA EAST III POWER PLANT**

Код  
*Security Index*

Име  
*Title*

**Tests, inspections and conservation of spare rotor at Contour Global Maritza East 3**  
**TECHNICAL SPECIFICATION**

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- All mobilization, daily allowances, transportation and accommodation costs must be included.

<b>Spare Rotor Tests and Measurements</b>	
1	Visual Inspection
2	Measurement of Insulation Resistance
3	Measurement of Winding Resistance
4	Measurement of Impedance
5	RSO
6	Pole Voltage Drop Test

**Table 1. Scope of the Spare rotor's tests to be executed by the Supplier**

#### **5.1.2 Working time**

Working time will be on shift (normally work week will be 5 days, 8 hour), according program.

Consequently, the Supplier is authorized to work in shifts since the beginning, also continuously and including not normal working days (Saturday, Sunday, national holidays, etc), in order to respect the schedule.

In case of modification of starting data, the Supplier will be informed adequately; the modification of starting data is not giving rights to Supplier for claiming any additional cost.

#### **5.1.3 Schedule**

Before starting the Supplier will provide, in conjunction with the other contractor, a schedule where it will be detailed the entire activities. A weekly meeting will be held between the parties in order to monitor the progress and to solve critical items that are limiting the executions.

The Supplier will cooperate with Owner for the optimization of generator maintenance schedule in order to minimize the generator outage. The Customer will inform Supplier at least 14 days before the planned date for the start of the project.

#### **5.1.4 Cleaning**

It is required the Supplier to keep clean daily its own place of work, if place is not given by Owner, to see chapter 5.2 Owner.

#### **5.1.5 Site facilities**

The Supplier shall provide portable Site accommodation for his own and sub-contractors staff, if required, in addition to Owner provided facilities.

The Owner operates a Site security system. All staff employed at Site will be issued with Security passes by the Owner to permit access to and from the Site. It shall be the Supplier's senior representatives responsibility to ensure that security rules are complied with. The Supplier shall ensure that at least one person amongst the Site staff during Site working hours is trained in first aid and a first aid facility with all the basic needs shall be maintained.

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### 5.1.6 Catering

No catering facilities for the Supplier are provided on the Site. The Supplier shall provide all his own catering requirements.

### 5.1.7 Site electricity supplies

Owner will provide only power outlet near the site. All extension cables and sub distribution boards if needed, are in the scope of the Supplier.

### 5.1.8 Compressed air supply

Not applicable.

### 5.1.9 Consumables

All consumables and materials required for proper execution of the Supplier's site works should be considered and delivered as a part of Supplier's scope.

### 5.1.10 Safety

The work must be carried out in accordance with Bulgarian National and local Site Health and Safety Regulations, which govern the general duties of those involved in work as employers, Subcontractors, employees and those who control premises where work is to be carried out; and protects those involved in the work and others who may be affected.

There are hazards associated with the Site or the Owner's occupation or use of it. Some will be present at all times: others may be intermittent or may not exist until work has been carried out by the Supplier or others or operational plant has been commissioned.

Before commencing work at any point, the location of the nearest telephone which can be used in an emergency should be noted, and each man should know how to use it to summon assistance.

Before commencing work, Owner representative will inform the Supplier about:

- Specific working environmental risks.
- Specific risks from interface with other possible works in same area

In the area there are other suppliers working contemporaneously and to coordination meeting with suppliers will be held on for minimizing risks.

The safety representative of specialized company will take the responsibility to coordinate mentioned meetings.

Therefore, a continuous dialog and connection must be between safety representatives. Breach of safety will be not tolerated.

The Supplier has to obtain the work permit, according to Owner procedure, before commencing any work.

The Supplier has to submit before commencing any activity at site a Method Statement document, where is described the work organization, tools used, safety precautions adopted for preventing any injury and what ever is necessary for giving to Owner Safety Manager full view in terms of safety and to Owner Operation Manager full view of the system to include in work permit.

Weekly safety coordination meeting will be held by Owner Safety Manager, the presence of supplier's safety representative is required.

#### 5.1.10.1 Equipments

Before starting work all the appropriate safety equipment and the first-aid kit should be assembled and checked as being in working order.

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The Supplier shall provide all safety equipment for use on the Works. Where such equipment is subject to statutory inspections, the Supplier shall be provided with copies of the inspection reports.

Safety clothing and equipment as helmets, eye protection, air dust mask protection, safety footwear, shall be worn at all times on the Site.

The Supplier shall comply at all times with the Owners site rules, which may include, but not be limited to, safety and operational rules.

Where sound levels cannot be reduced at source, the provision of suitable ear protection is required when noise levels indicate a level of more than 85 dB (A). When ear protection is used, arrangements should be made to ensure the wearers can be warned of other hazards.

## 5.2 OWNER

During the execution of the scope, Owner, if available, will provide an empty office space (room) to Supplier. In case of not availability of such office space (room), the Supplier will provide independently as per item 5.1.5.

## 6. TESTS

The Supplier should issue and submit reports and protocols for each done by him supervision and testing/inspection activity described in 5.1.1 Scope of Supplier's activities.

## 7. WARRANTY

The Supplier shall grant 12-months of guarantee on rotor conservation counting from the date of the undersigned final protocol.

## 8. DOCUMENT OF REFERENCE

- 30MKA10-GB001 – Technical-operational documentation of turbo generator TWW 227, 1-2A.
- 90MKA00-GB401-0 – Instruction for conservation, packing and storing of synchronous generator rotor.
- 90MKA00-GG001-1 – Maintenance instruction for turbo generator TWW 227, 1-2A.
- EMG-1 Generator Maintenance

## 9. ATTACHMENTS

None.

