

# SCOPE OF WORK

## **APPOINTMENT OF A SERVICE PROVIDER TO PROVIDE ELECTRICAL MAINTENANCE, CONSTRUCTION AND PROJECTS SUPPORT SERVICES AT THE SANPC REFINERY**

### **1. INTRODUCTION.**

The scope of work detailed in this document is required for the construction, installation, testing, commissioning and maintenance of electrical equipment at the site for South African National Petroleum Company Refinery, hereinafter shall be known as "SANPC REFINERY".

### **2. SCOPE OF WORK**

#### **2.1. GENERAL SCOPE**

Contractor provides the following services: -

Assembly, configuration, fabrication and supply of Plant and Materials in accordance with fabrication quality control plans.

- Packaging, delivery, handling, offloading and installation of Plant and Materials.
- Site testing and commissioning, in accordance with the approved site acceptance testing specification and the Contractor's quality management system.
- Fabrication and construction supervision services.
- Fabrication, construction, testing, commissioning and handover documentation.
- The supply and / or removal of all Equipment required to provide the works including test equipment and commissioning tools.
- Handover documentation and all Red-Lined As-built drawings.
- Other work listed elsewhere in this document.
- Maintenance Scope

## **2.2. ELECTRICAL WORKS**

- Replace identified lighting at Office Block and buildings.
- Inspect power distribution systems and supply valid Electrical Certification of Compliance documents for COMPANY Buildings.
- Repair security lighting and street lighting
- Maintenance and repairs of electrical substations, plant and equipment.
- Supply, install and test Low Voltage cables (including earthing cables), and associated cable supports.
- Supply, install and test High Voltage cables (up to and including 33kV), and associated cable supports
- Low voltage cable jointing
- High voltage cable jointing (up to and including 33kV)
- Terminate low voltage cables
- Terminate high voltage cables (up to and including 33kV)
- Inspect and supply valid Electrical Certification of Compliance documents
- Install and/or replace RCU's.
- Install power distribution boards, transformers, switchgear, busducts.
- Install new lighting fixtures
- Demolition of Electrical equipment
- Provide engineering design support and construction for non-complex projects/repairs. Complex projects design will be provided by an Engineering Consultant

## **2.3. BATTERY LIMITS**

The battery limit for this scope is limited to day-to-day operations. The scope of work for Turnarounds will be detailed in separate documents.

## **2.4. GENERAL REQUIREMENTS FOR THE SCOPE**

Work activities as well as required manpower is agreed upon between the discipline Maintenance Lead or Project Managers of Employer and, where applicable the Engineering Consultant and CONTRACTOR before commencing the work.

Prior to submittal of any quotation for works at COMPANY, the CONTRACTOR conducts a Site visit to familiarize himself with all conditions regarding the works.

The CONTRACTOR's Site Manager reports progress of work and manpower weekly to the COMPANY Contract Holder. In addition, a report is issued to the Employer's focal point who requested the works i.e. Maintenance Lead, Project Manager or Engineering Consultant. In addition, partial and final completion of a work activity is reported on the agreed form and signed for confirmation by the nominated representatives of the Employer, Engineering Consultant and CONTRACTOR immediately after an activity is finished.

If an instruction is required for installation, commissioning or operation of equipment, the Engineering Consultant and/or Employer's staff advises CONTRACTOR's personnel as required to ensure suitable conditions and to avoid damage by incorrect/faulty handling of equipment.

The Employer shall provide all instructions in the form of a details Request for Quotation (RFQ) or provide a Site Instruction (SI) to the relevant Supervisor.

Any conflicts between the requirements and designs provided at part of the above-mentioned instructions are submitted to the Maintenance focal point or Project Manager for clarification prior to proceeding with any work that may be affected by the conflict. Contractor reviews the RFQ or SI documents and proposes alternative solutions it may deem improvement to the works.

CONTRACTOR arranges and chairs a RFQ and/or Site Instruction clarification meeting no later than one week after the starting date.

CONTRACTOR only executes works captured on the Maintenance Execution plan and COMPANY job cards, and Projects works which are captured in a separate RFQ document.

#### **2.4.1. LEGAL REQUIREMENTS**

The following legal requirements shall be adhered to by the CONTRACTORS:

- Valid registration with the Department of Labour (DoL) as an approved Electrical Installation Service Provider as per the requirements in the Electrical Installation Regulations (EIR), and
- The CONTRACTOR has a full-time Master Installation Electrician (MIE) employed permanently and registered as part of the company.

#### **2.4.2. RESOURCES AND COMPETENCY REQUIREMENTS**

The CONTRACTOR submits a detailed Organogram Structure to the Employer. This structure clearly indicates the proposed resources to conduct the scope of work and is made of the following:

- Direct Field Labour (DFL)
- Indirect Field Labour (IFL)

The DFL is comprised of key leadership roles i.e. Site Manager, Electrical Supervision, MIE, Quality Control Manager, etc.

The MIE shall have a minimum of 10 years of experience working in the Construction environment, within the Petrochemical Industry. Where required, the responsibility of Quality Control and Quality Assurance may be assigned to the MIE.

The Electrical Supervisor shall have a minimum of eight years of experience, of which five years shall be in a construction supervision role in the relevant trade.

CONTRACTOR shall be capable to perform mechanical installation work, which support the Electrical scope of work. This includes, but not limited to, fabrication of cable trays, lighting poles, checker plates, etc.

HV cable works shall be conducted by a cable specialist, deemed competent to work on HV cables. At COMPANY, this is limited to cables rated at 33kV voltage level, maximum. The CONTRACTOR shall ensure that the resource has a minimum of 10 years of experience with working on HV cables. This includes HV cable joints and HV cable terminations. In addition, the specialist shall also complete the COMPANY evaluation process to be deemed competent to provide works on COMPANY site.

### **3. PLANT AND MATERIALS**

#### **3.1. STANDARDS AND SPECIFICATIONS**

Plant and Materials are designed, constructed and certified in accordance with COMPANY specifications, SANS standards, IEC standards and the Occupational Health and Safety Act of South Africa.

Deviations from SANPC STANDARDS are subject to the acceptance of COMPANY.

#### **3.2. EXISTING SUBSTATION AND EQUIPMENT ROOM BUILDING CONSTRAINTS**

Contractor ensures that the works are designed in accordance with the physical constraints and interfaces in COMPANY's existing substations. All such constraints, including physical space, layout of existing cabling, clearances around equipment and interfaces to other equipment are evaluated during Site visits by the CONTRACTOR. CONTRACTOR requests from COMPANY, or the Engineering Consultant, any additional information required to provide the works which cannot be assessed during site visits, or not already provided in the Scope of Work. CONTRACTOR verifies all dimensions provided to it by COMPANY or the Engineering Consultant, as applicable.

#### **3.3. FREE ISSUE PLANT AND MATERIALS BY COMPANY**

CONTRACTOR may receive Free Issue Plant and Materials e.g.

- Buildings Lights, RCU's, Cables, Security and Street lights.
- Scaffolding required in areas that are out of reach

Where the CONTRACTOR is requested to purchase Plant and Materials. The CONTRACTOR proposes a fixed handling fee for these instances to procure and supply the Plant and Material throughout the contract period.

#### **3.4. PROTECTION AND TRANSPORT OF PLANT AND MATERIALS**

CONTRACTOR at all times provides protection for all Plant and Materials and Equipment from damage or loss due to weather, fire, theft, unexplained disappearance or other similar casualties.

CONTRACTOR at all times protect from damage due to CONTRACTORS' performance of the works, all Equipment, Materials, Paving, Structures and any and all items on the Site belonging to COMPANY or Others.

All other materials associated with the electrical works for construction, is transported to site by the CONTRACTOR, unless agreed otherwise with COMPANY or the Engineering Consultant.

## **4. ENGINEERING AND DESIGN**

### **4.1. ENGINEERING, DESIGN, REVIEWS AND QUALITY MANAGEMENT**

The CONTRACTOR discusses each engineering package for a particular milestone with COMPANY at a design review meeting chaired by the CONTRACTOR and held at COMPANY's premises. The purpose of the review meeting is to obtain final acceptance of the design for that particular milestone from COMPANY. Minutes of meeting are recorded by the CONTRACTOR and submitted to COMPANY for approval within two working days of the meeting.

CONTRACTOR incorporates all requirements received from COMPANY at each review meeting into its final milestone design package and issues the milestone design package to COMPANY prior to proceeding with the next stage. CONTRACTOR indicates if requirements specified by COMPANY are not in accordance with good engineering practice and/or will result in non-conformance with the scope.

CONTRACTOR may be requested to provide non-complex electrical engineering and design support including the following:

- Perform as built assessment on all DB's installed at COMPANY buildings and issue single
- line, layout and detailed drawings thereof.
- Issue design drawings for the new installation

## **5. PROCUREMENT, FABRICATION AND DELIVERY**

### **5.1. PROCUREMENT**

Where requested to by COMPANY and, where applicable, the Engineering Consultant, CONTRACTOR procures all identified materials and components necessary for the completion of the Electrical Construction works.

### **5.2. FABRICATION**

Plant and Materials are manufactured, assembled and configured in accordance with ISO and SANS quality standards. In all cases, the quality of assembly and construction work meet international standards.

Plant and Materials are manufactured using high-precision tools and techniques. Tools and equipment used to provide the works are certified to be calibrated to a traceable national standard.

CONTRACTOR conducts quality control checks during the assembly of Plant and Materials to verify the standard of work of construction personnel. Records of such quality control checks are kept for the review of the Supervisor as required. Quality control checks are accompanied by physical tests where appropriate.

Contractor disassembles and packages Plant and Materials in a manner facilitating easy site assembly without affecting materially the results of factory acceptance tests.

## **6. CONSTRUCTION AND ERECTION ON SITE**

### **6.1.1. GENERAL**

Plant and Materials are installed in accordance with Approved for Construction (AFC) drawings. Drawings used on site bare the "Approved for Construction" stamp and signature of the Engineering Consultant.

CONTRACTOR discusses deviations from AFC drawings with COMPANY and, where applicable, the Engineering Consultant, prior to their implementation. If such

deviations constitute deviations from this scope, such changes require the approval of the COMPANY Contract Holder prior to implementation.

CONTRACTOR inspects the site and substations prior to the commencement of fabrication activities to verify the suitability of site, substation and facilities for installation of the Plant and Materials. Any concerns noted by the CONTRACTOR during its inspections are immediately brought to the attention of COMPANY and, where applicable, the Engineering Consultant, for action.

CONTRACTOR prepares and submits a completed Risk Assessed Method Statement (RAMS) no later than two weeks prior to the commencement of construction.

Construction work is executed by experienced and competent personnel with extensive prior training and knowledge in Electrical Construction Works. Details of the knowledge and experience of CONTRACTOR's proposed construction personnel are submitted to COMPANY for acceptance prior to the final selection of personnel. CONTRACTOR appoints alternative personnel if in the opinion of COMPANY, the proposed personnel are unable to provide the works. Acceptance of installation by COMPANY and, where applicable, the Engineering Consultant does not relieve CONTRACTOR of his legal accountability designs.

## **7. CONSTRUCTION MANAGEMENT**

### **THE CONTRACTOR:**

- 7.1.** Establishes a site-based construction management service ensuring the construction is in accordance with the design and specifications.
- 7.2.** Manages his access to COMPANY work area and the Site.
- 7.3.** Manages his site activities ensuring that no interference takes place between his personnel/subcontractors and work of others working in COMPANY's plant areas.
- 7.4.** Manages the works ensuring that no work takes place outside the Working Areas.
- 7.5.** Maintains the Working Areas in a safe, clean and sanitary condition.

- 7.6.** Is responsible for all arrangements regarding the shipment, security clearance, offloading and storage of plant and materials and co-ordination with COMPANY and, where applicable, the Engineering Consultant.
- 7.7.** Keeps the premises and the vicinity thereof clean of any debris and rubbish resulting from the work and leave such premises clean and ready for use on completion of the work.
- 7.8.** Liaises with COMPANY regarding location of waste disposal sites and rubbish dumps and manages their use.
- 7.9.** Maintains labour harmony amongst his personnel/subcontractors involved in the execution of this contract as well as with others working in the area.
- 7.10.** Reports any potential labour disharmony to the COMPANY Contract Holder without delay.
- 7.11.** Ensures that all Equipment used for the performance of the works is in good operating condition, safe, fit for the use for which intended and suitable for the safe and efficient performance of the works. Such Equipment is subject to inspection and approval from time to time by the COMPANY. The Contractor promptly removes any Equipment which is rejected by the COMPANY and replaces it with equipment acceptable to the COMPANY without additional cost to COMPANY and without affecting the schedule.
- 7.12.** Notifies COMPANY and, where applicable, the Engineering Consultant, when it considers that a part of the works is ready for inspection and checkout. Prior to notification of COMPANY, CONTRACTOR conducts internal checkouts on equipment and records all defects on punch lists. On notification from the CONTRACTOR, COMPANY and, where applicable the Engineering Consultant, conducts checkouts on electrical equipment on standard checklists. Defects are noted as "punch items" and are categorised for correction by the CONTRACTOR. COMPANY terminates its checkouts if it becomes evident that CONTRACTOR has not conducted its' internal checkouts. Costs associated with delays for this reason are borne by the CONTRACTOR.
- 7.13.** Provides the services of a quality control inspector at the Site to conduct its internal construction verification actions. Contractor's quality control inspector collaborates with COMPANY and, where applicable during inspections and checkouts by the Supervisor.

## 8. GENERAL SITE SPECIFICATIONS

8.1 The description given below defines the general requirements particular to the scope of the **works** and is to be read in conjunction with the other documents forming the Tender and/or the agreement as the case may be. Procedures for job card shall follow the sequence of events as per Central the Planning Workflow and as outlined below:

### 8.1.1

- a) SANPC Refinery normally uses individual job card numbers to apportion the **works**. The **contractor** will be required to use the job card system for call-offs (pricing) and the SANPC Refinery **job card system** for progress reporting of the **works** in conjunction with the duly authorised SANPC Refinery **Zone Supervisor**. SANPC Refinery will provide the level 1 schedule (overall schedule – early start and late finish) for the contractors planning and execution.
- b) The contractor is required to provide man-hours expended to execute the work from the schedule of prices and compare against those listed in the man-hour norms for the job. The overall schedule will be compared against the initially agreed schedule.
- c) This information will be used in the KPI measures.

8.1.2 The **Area Engineer or the duly authorised person**, together with the **Zone Supervisor** identifies the required maintenance work, where after a priority is placed against each maintenance activity.

**MAINTENANCE PRIORITISATION TABLE**

<b>PRIORITY</b>	<b>PRIORITY/RISK LEVEL</b>	<b>START DATE</b>	<b>INITIAL COMPLETION PERIOD</b>
C	Routine	Request Date + 30 days	3 Months
B	Routine	Request Date + 14 days	1 Month
A	Schedule Breaker	Request Date + 1 days	1 Week
E	Emergency	Immediate	ASAP + Overtime

Priorities A, B, C & E are scoped by the respective Zone Scooper or the discipline Artisan.

A job card number is assigned to the scope and job card is issued to the contractor. Emergency Status Classification will be the 'A' and 'E' priority jobs. In such a case the Area Engineer agrees upon the staffing and general planning requirements with his execution Team (Scoper, Planner, Zone Supervisor and the Contractor). The Area Engineer confirms

the release of the works and identifies which lower priority job(s) can be postponed to accommodate the Emergency priority job.

- a) An 'E' priority job is supposed to commence immediately, and shift work is to be effected, and an 'A' priority job will require the contractor to commence within 24hrs of receiving the scoping form and order number. An 'A' priority job may require extended hours to be undertaken by the dayshift crew.
- b) In the event that the contractor resources in the Zone are insufficient for the Emergency Job, then the Area Engineer is to be consulted as he/she has overview of all resources and is in the position of suggesting what jobs across site could be postponed to accommodate the 'E' priority job.
- c) For an 'E' priority job after hours, the Planner is to immediately issue a Manual job card for the work to start. In the event the 'E' priority job occurs outside of normal working hours, the system generated job card with a valid job card number will be issued at the beginning of the next normal working day.
- d) The contractor is expected to obtain the necessary permits and proceed with the works. The workflow from here shall proceed in the same manner as for normal priority works.

8.1.3 For (A, B, C & E) priority work a scope of work package, in the form of a Contractor Work Request (CWR), is generated in SAGE by the Area Scoper. A job card is generated by the Zone Scoper and followed up with a manual scoping form to the contractor. The contractor estimates the cost and man hours for a CWR, in accordance with the Schedule of prices, and returns the estimated CWR in electronic format to the Area Engineer. The Area Engineer evaluates and awards the contractors estimated CWR.

- a) When awarded, the contractor compiles a Work Pack which includes the relevant drawings and Material Take-off's (MTO's) etc.
- b) The Contractor's supervisor is required to facilitate the generation of the Safety Certificate.

8.1.4 The contractor presents the compiled work pack to SANPC Refinery, which must be reviewed and verified in writing by the respective SANPC Refinery authorities. SANPC Refinery shall, at the same time, ensure that the material required is in stock or ordered. Central Planning draws up a 30-day look-ahead schedule, for review by the Area Execution Team including the

contractor. From time to time, SANPC Refinery may impose a limit to contractor numbers on site.

8.1.5 After confirmation with all relevant parties in the Weekly planning meeting, the Planner issues a seven-day look-ahead level 1 schedule. From that schedule, job cards will be issued to the relevant contractor. The seven-day schedule will be extracted from the monthly schedule.

a) The contractor is to ensure that the relevant QCP, Work-pack is approved and that the permits are obtained at the latest by close of business of the day prior to the planned start date.

c) Thereafter the contractor is to get daily clearances for each activity from the respective Maintenance Services Focal Point (MSFP) before commencing with the works.

8.1.6 In the event of any variations to the scope of the works, SANPC Refinery Authorised person (Area Engineer, the Zone Planner, the Zone Scoper) and the contractor shall identify such variation/s and this must be recorded. The contractor shall include such variations into the work pack. A variation order (VO) shall be raised and approval by the Area Engineer before the extra work commences.

Execution of works without a job cards will not be accepted.

8.1.7 The contractor must submit the job cards to the Planner for progress reporting. These job cards must be signed by the Discipline Supervisor as verification that the work is completed to the required standard and to process payments.

8.1.8 The Planner updates all progress and closes off the work upon issue of the handover/takeover certificate from the contractor.

8.1.9 Quality of workmanship must be verified by duly appointed persons for all categories of work which will be on record as part of the contractor workpacks.

8.1.10 All material specifications must be as per SANPC Refinery /ISO standards. If at any instance the specifications are not clear, then the SANPC Refinery Area Engineer is to be consulted for guidance and resolution.

8.2. SANPC Refinery may require the contractor to prepare a workpack prior to

commencement of the works, which may include:

- a) Health, Safety and Environment Action Plan.
- b) Method Statement.
- c) Quality Plan.
- d) Completion of the SANPC Refinery integrated Risk Assessed Method Statement ("RAMS"); and

## 9. HSSE AND RISK MANAGEMENT

- 9.1. The contractor and contractor personnel must, as far as reasonably practical comply with requirements prescribed by the OHS Act and OHS Regulations- Act 85 of 1993.
- 9.2. The contractor will also comply with the SANPC/ CEF rules and regulations
- 9.3. The contractor safety officer will ensure that regular audits are done on site to identify and intervene on unsafe situations and near miss acts during work execution. Any findings to be reported and recorded in the SANPC/ CEF incident management system
- 9.4. All incidents to be reported to the relevant clearance issuers and maintenance supervisors

### 9.5. Personal Protective Equipment (PPE)

The Contractor shall ensure that any worker required to wear PPE has received training in the proper use and care of the PPE. The following are minimum PPE requirements. Additional PPE may be required based on work location and task.

#### Category1

Minimum requirements for everyone entering an **Operating Area** including Visitors:

- a) Approved safety hat, safety shoes or boots, gloves and approved hearing protection in designated areas
- b) Safety spectacles shall be worn in ALL Operating Areas, but goggles are mandatory in caustic /amine areas/chemicals and when performing work

under furnaces.

- c) Goggles to be worn for activities which create a lot of dust (dismantling scaffolds, jack hammering, breaking concrete, catalyst loading etc) or where there is a risk of chemical splashes.
- d) Dust Glasses can be used when executing activities involving dusty environment.
- e) Persons with prescription glasses shall use PRESCRIPTION SAFETY GLASSES in Operating areas or Safety glasses (over specs) shall be placed over prescription lenses. This applies whether the lenses are hardened or not.
- f) **Fire Resistant** Overalls (one piece or two piece) as per SANPC Refinery specification. Overalls to be always zipped and buttoned up.
- g) Drawstrings from garments worn over overalls (e.g. rain jackets) must be tucked away. **No loose clothing to be worn around rotating equipment.**
- h) Long hair must be "tied up" or constrained (above the neck) upon entry to the process area. Fire resistant hair flaps to be used to cover synthetic hair extensions, long braided hair and dreadlocks.
- i) No hanging jewellery e.g. chains and long earrings are permitted.
- j) Other than overalls it is **recommended** that all other clothing including socks and under garments be of cotton and NOT Polyester or Nylon.
- k) Electrical personnel exposed to electrical flashes, explosion, fire (e.g.: testing, inspecting, maintenance of live switchboards) must use an approved fire-resistant arc protection suit. Over and above this requirement, a face shield and leather gloves must be used when fuses are removed from live switchboard
- l) Level 2 cut resistance gloves must be worn when working with sharp edges, glass and sharp tools. This includes working with cladding and cold cutting of pipes or plates.
- m) The use of shaded safety glasses in and outside work areas is recommended but must meet the specifications stipulated by the SHEQ Department.

Minimum requirements for everyone entering a **Workshop** including visitors

in addition to category 1 items:

- a) No special PPE is required when walking on the designated grey walkways.
- b) Use of hard hats are not compulsory in the workshop.

Ear protection is required when working in noisy areas of the workshop.

## **Category 2**

Minimum requirements for **special activities – flame cutting, grinding, soldering, drilling and welding:**

- The choice of attire should be selected and specified on the Clearance Certificate. Depending on whether exposure is to sparks or particles, PPE to be worn in addition to minimum PPE specified in category 1 is:
  - Double eye protection: Welding hoods over anti-flash goggles /face shield over tight dust goggles
  - Leather Gauntlet/gloves
  - Leather Aprons
  - Leather Spats
  - At least one person wearing a 4 Gas Monitor per cocoon.
- People working in the neighbourhood of the above-mentioned activities (within 3 m of the job) needs to wear tight dust goggles for protection against flying particles or anti-flash goggles/glasses for protection from electric arc.

## **Category 3**

Minimum requirements for **Amine and Caustic area, Acid and Chemical Storage areas:**

In addition to the requirements specified in **Category 1** the following is required:

- a) Approved chemical safety goggles
- b) PVC gloves when handling the chemical, chemical containers, or working on equipment.
- c) Sampling, opening equipment in chemical service then a PVC suit or

Microguard 3000 Disposable Overalls (Yellow in colour) or Neoprene suits, face shield, safety glasses and PVC gloves must be worn.

- d) Gum boots with steel toe caps to be worn if the possibility of splashing exists i.e. refer to the RAMS/LMRA.

## **10. ADMINISTRATION PROCEDURES**

### **10.1. Meetings**

- 10.1.1. The following meetings are compulsory for contractor's representative to attend when any work is in progress:
  - a) Daily planning and progress meetings as directed by Area Engineer and/or the Zone Planner.
  - b) Weekly look-ahead meetings as directed by Area Engineer and/or the Zone Planner.
- 10.1.2. The following meetings are compulsory for the contractor Site Manager to attend:
  - a) Monthly KPI review meeting
  - b) Quarterly performance and safety review meetings or as directed by the CCM.

### **10.2 Planning and Progress**

- 10.2.1. SANPC Refinery shall provide the contractor with a 30-day look-a-head schedule outlining planned windows for activities. The contractor is to manage and administer the manpower resources as such to enable him to comply with the defined service levels and meet the required works order completion dates, irrespective of absenteeism or leave. The contractor must ensure these objectives are fully understood and that management structures and procedures are in place to ensure timeous and successful execution under the above-mentioned constraints.
- 10.2.2. The contractor is responsible to plan, supply, coordinate and manage his manpower, logistics, equipment and materials resources for the works in accordance with the schedule from Central Planning as a guide. The coordination, progress monitoring and reporting is the responsibility of the contractor and shall take place at the daily progress meetings. These meetings shall be recorded (as per respective meeting's criteria) by the Zone Planner and

agreed to or signed by the contractor. The contractor shall update his plan, provide progress at the daily and weekly progress meetings.

- 10.2.3. The contractor is to arrange and coordinate with the required SANPC Refinery personnel, all RAMS sessions in order to ensure that work starts timeously.
- 10.2.4. The operations of SANPC Refinery and interconnecting facilities in outlying areas will be carried out continuously during the period of this agreement, and the contractor shall allow for working in close proximity to and in liaison with other contractors in order to minimise inconvenience and shall plan for flexibility in labour resources input and any other factors in complying with these restrictions.
- 10.2.5. Restrictions may be imposed upon the contractor in his execution of the works as a result of SANPC Refinery 's operations. The contractor is to immediately notify SANPC Refinery (Area Engineer and the CCM in writing, of such an interruption. The contractor along with the Area Engineer shall re-coordinate the manpower to other available sections, areas, items of equipment in order to minimise standing time.
- 10.2.6. All priority "E" and "A" work to be clearly defined by the Area Engineer and closely coordinated with the CCM. The Planner/Planning Manager will ensure that the necessary job cards are raised within 24 Hrs (or the next normal working shift). The contractor Supervisor and the Supervisor will both sign the Job Card for progressing purposes.
- 10.2.7. The contractor shall, at all times, demonstrate positive and proactive participation in the efficient execution of the works in order to achieve satisfactory levels of productivity.
- 10.2.8. The contractor is to note that whilst the overall scope of works must be completed in the required time, the contractor must ensure that by proper preparation and quality execution the planned man-hours are not exceeded.
- 10.2.9. The contractor's attention is drawn to the fact that the works to be executed may be in the vicinity of insulated pipework, equipment and electrical and instrument installations. The contractor shall be held responsible for any damage caused to these or any other installations by his operations. If damages are identified prior to commencing work, the Area Engineer or the Supervisor must be notified of such damages immediately.
- 10.2.10. Access to and from the worksite is by means of existing hard roads or temporary

access roads and will be through such gates and by such routes as will be defined by SANPC Refinery. The contractor is to operate his own vehicles with minimum of inconvenience to other traffic at the refinery sites.

- 10.2.11. All electrical equipment brought on site for work execution must be inspected and approved by the SANPC Refinery electrical department.

### **10.3. Contractor Organisation and Training**

- 10.3.1. SANPC Refinery will not pay for trainees. It is however acknowledged that consistency in staff qualifications is of mutual benefit. All workers are to undergo training through a SETA approved Training facility. For the manning of strategic positions, the contractor may present proposals for trainee-ships, for approval by the CCM.
- 10.3.2. In the event that the candidate is found to be not coping with the work, SANPC Refinery reserves the right to insist on change for a more suitable candidate.

### **10.4. Staff Issues**

- 10.4.1. As a control system the contractor is to supply a full organogram with functions and names of resources to SANPC Refinery. labour pool. SANPC Refinery reserves the right to assess all contractor supervisors before they report for work at the SANPC Refinery sites.
- 10.4.2. SANPC Refinery shall have the right to assess the contractor's core resources and performance on a continuous basis for the duration of this agreement.
- 10.4.3. Only approved resources may be used by the contractor. Changes in core resource staff shall be justified to and approved by the SANPC Refinery CCM, whose approval will not be unreasonably withheld. (This includes non-recoverable resources).

## **11. DIVISION OF RESPONSIBILITIES**

### **Definitions:**

E	Execute
P	Participate
A	Approve
S	Supply
M	Maintain

### **11.1. Division of Responsibilities - Work Descriptions**

The following work descriptions define the division of responsibilities with respect to the

work required and exclusions from the **agreement** scope of work: -

Work Description	By CONTRACTOR	By Others	By SANPC Refinery
Timeous Application for Work Permit	<b>E</b>		<b>P</b>
Issue of daily work permits			<b>A/E</b>
Gas Testing			<b>E</b>
Quality Checking	<b>E</b>		<b>P/A</b>

### 11.2. Division of Responsibilities - Provision of Construction and associated Equipment

The following defines the division of responsibility with respect to the provision of construction and associated equipment for the implementation of the **agreement** of work:

Task Description	By CONTRACTOR	By Others	By SANPC Refinery
Transportation	<b>S</b>		
Site huts, ablution facilities, storage and where required services	<b>M</b>		<b>S</b>
Lighting – General			<b>S/M</b>
Required protective clothing and equipment include. B.A. Compressor	<b>S/M</b>		
Cranage		<b>S/M</b>	
Lifting gear, ropes, slings and shackles			<b>S/M</b>
Safety Equipment	<b>S/M</b>		
Firefighting facilities			<b>S/M</b>
Resuscitator			<b>S/M</b>
Standby B.A. set			<b>S/M</b>

### 11.3. Division of Responsibilities - Supply of Installed Equipment and Materials

The following defines the division of responsibility with respect to the supply of installed equipment and materials required for the **agreement** of work:

<b>Task Description</b>	<b>By CONTRACTOR</b>	<b>By Others</b>	<b>By SANPC Refinery</b>
Identify work and raise Job card			<b>E/A</b>
Prepare and issue detailed scope work	<b>S/P</b>		<b>A</b>
Price	<b>E</b>		<b>A</b>
Rates for non-bill items	<b>E</b>		<b>A</b>
Plan sequence of work	<b>E</b>		<b>A</b>
Carry out the work	<b>E</b>		
Progress reporting	<b>E</b>		<b>A</b>
Prepare V.O.	<b>P</b>		<b>E/A</b>
Handover (ready to use)	<b>E</b>		<b>A</b>

The above noted items are intended to be indicative of the categories of work to be undertaken. They are not intended as a comprehensive list of the same.

## 12. PRELIMINARY AND GENERAL

- 12.1. The Service Provider shall make provision for all Preliminary and Generals in the Pricing Schedule.

## 13. PRICING SCHEDULE

This contract will be unit rates based as far as possible. Individual Call Off Orders (or Job Instructions) will be issued to the Service Provider according to the respective rates agreed upon. The Bidder shall complete the pricing schedule in Appendix B. All sheets of the spreadsheet i.e. "Pricing Summary", "Unit Rates" and "Mini-sub. Spec" must be completed by the Contractor.

## 14. EVALUATION CRITERIA

### 14.1 Phase 1

#### Mandatory Requirements

At this phase, bidder's responses are reviewed against the below Mandatory Requirements. **Failure to comply with any of the Mandatory Requirements will lead to the bidder being disqualified and not be considered for further evaluation on Technical Requirements.**

No.	Description of the Mandatory requirements	Comply	Not Comply
14.1.1.	Valid registration with the Department of Labour (DoL) as an approved Electrical Installation Contractor as per the requirements in the Electrical Installation Regulations (EIR)  <b>The Bidder to submit valid registration certificate issued by Department of Labour.</b>		
14.1.2.	The contractor has a full-time Master Installation Electrician (MIE) employed permanently by the company.  <b>The Bidder to submit proof of MIE registration with the Department of Labour.</b>		
14.1.3.	The service provider must submit a Letter of Good Standing with the Compensation for Occupational Injuries and Diseases (Act. No 130 of 1993 and Act. No61 of 1997) (COIDA).  <b>Submit a valid copy issued by the Compensation Fund of South Africa.</b>		

14.1.4.	<p>The service provider must submit proof of registration with the Construction Industry Development Board (CIDB) level 7EP or higher.</p> <p><b>Submit valid registration issued by the Construction Industry Development Board.</b></p>		
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## 14.2 Phase 2

### Technical evaluation

Bidders will be evaluated according to the below technical evaluation criteria. Minimum Technical Threshold is **70%**. It must be noted that if the Bidder does not meet the **70%** minimum threshold, the bidder will be disqualified and not be evaluated further.

#### **14.2.1. Company Experience**

The service provider is required to have the necessary experience in the provision of Electrical maintenance, construction and project support services in petrochemical industry. Please submit a minimum of three (3) relevant and contactable references of your current and/or previous petrochemical industry clients. The assignments/contracts/projects completed must be in the past 10 years.

**Please provide reference letters as proof of similar services or work done in the past 10 years. The reference letter must be signed, dated by the client, and must be on the client's letterhead and include the date when the work was executed, the company name and contact details.**

	Evaluation Criteria	Document as Evidence	Score	Weighting %
Experience in ELECTRICAL maintenance, construction and project support.	3 Reference letters submitted	Reference letters	5	20%
	2 Reference letters submitted		3	
	1 Reference letter submitted		2	
	No Reference letter Submitted		0	

**14.2.2. Master Installation Electrician (MIE) Experience**

The Master Installation Electrician (MIE) that will be assigned to SANPC Refinery must have a minimum of ten (10) years' experience in electrical construction and installation in potentially explosive environments.

**Provide CVs and qualifications for MIE, clearly indicating their roles and responsibilities.**

	Evaluation Criteria	Document as Evidence	Score	Weighting %
Master Installation Electrician (MIE) Experience	10 and more years of experience	CV of MIE clearly listing the name of clients and work done	5	20%
	9 years of experience		4	
	8 years of experience		3	
	7 years of experience		2	
	6 years of experience		1	
	Less than 6 years of experience		0	

**14.2.3. Electrical Supervisor Experience**

The Electrical Supervisor that will be assigned to SANPC Refinery must have a minimum of five (5) years' supervisory experience in electrical construction and installation.

**Provide CVs and qualifications for Electrical Supervisor, clearly indicating their roles and responsibilities.**

	Evaluation Criteria	Document as Evidence	Score	Weighting %
Electrical Supervisor Experience	5 and more years of supervisory experience	CV of Electrical Supervisor clearly listing the name of clients and work done	5	20%
	4 years of supervisory experience		4	
	3 years of supervisory experience		3	
	2 years of supervisory experience		2	
	1 years of supervisory experience		1	
	Less than 1 year of supervisory experience		0	

**14.2.4. Service Provider Team Experience**

The project team that will be assigned to SANPC Refinery must have a minimum of eight (8) years' experience on average in Electrical maintenance, construction and project support services

**Provide CVs and qualifications for each of the personnel that will be part of the team, clearly indicating their roles and responsibilities.**

	Evaluation Criteria	Document as Evidence	Score	Weighting %
Team Experience	8 and more years of experience	CVs of the Proposed team clearly listing the name of clients and work done	5	20%
	7 years of experience		4	
	6 years of experience		3	
	5 years of experience		2	
	4 years of experience		1	
	Less than 4 years of experience		0	

**14.2.5. The Services Provider to have Quality Management System (QMS) in place**

The bidder to submit a copy of its Quality Management System (QMS) which includes, specimen check sheets, reports and Quality Control Plans showing holding points, for Electrical maintenance, construction and project support services in potentially explosive environments

	Evaluation Criteria	Document as Evidence	Score	Weighting %
Quality Management System (QMS)	Bidder submitted three of the requested items	Specimen check sheets, reports and Quality Control Plans	5	20%
	Bidder submitted two of the requested items		3	
	Bidder submitted one of the requested items		1	
	Bidder did not submit the requested items		0	