



KUSILE POWER STATION

PROJECT SITE REGULATIONS & GENERAL REQUIREMENTS

Part 3
Annexure X.4
Rev 4_0121

1. General Requirements

1.1 Work Co-ordination Process

The *Contractor* complies with the requirements set out in [Site Access and Mobilisation, Work Coordination Process and Work Coordination Plan] of the *Employer* Policies and Procedures.

1.2 Other Project Contractor's Works

Except as directed by the *Project Manager*, the *Contractor* in no way interfere with, remove, adjust or operate plant, materials and/or equipment of or being supplied or operated by Other Project *Contractors*. Without derogating from the foregoing, the *Contractor* does not cut reinforcing steel, remove concrete, drill holes into concrete or structural steel, weld on to reinforcing bars or structural steel without the approval of the *Project Manager*.

The *Contractor*, at all times, keep the work of Other Project *Contractors* free from dropping, dripping and spattering of materials used in the Works.

1.3 Interruption of Existing System Facilities

The performance of the Works which affects the *Employer's* operations or the systems of Other Project *Contractors* is scheduled to be performed only at times approved by the *Project Manager*. The procedure for carrying out work which of necessity interrupts the *Employer's* operations, or the systems of Other Project *Contractors*, or imposes abnormal operating conditions on their systems, is subject to the Work Co-ordination Process and the approval of the *Project Manager*.

1.4 Protection of Existing Services

Information, if any, on existing services and structures, including

underground installations ("services and installations"), at the Project Site (and/or at other places, if any, as may be specified under the Contract as forming part of the Site) is made available solely to assist the *Contractor* in the execution of the Works. The *Contractor* carries out the Works on the basis that services and installations may exist that are not indicated on drawings provided.

The *Contractor* is responsible for locating and identifying all services and installations (such as, but not limited to, oil, water, air, and gas lines, sewers and other drains, circulating water lines, oil separators, septic tanks, telephone lines, electrical duct banks and racking or buried structures within the Project Site and/or at other places, if any, as may be specified under the Contract as forming part of the Site) where any penetration (such as, but not limited to, excavation, ploughing, trenching, driving of well points, or insertion of any tool or device below the surface) is anticipated or required or where construction operations may subject services and installations to damage, prior to the performance of such work. The *Contractor* hand excavates and positively identifies all services and installations. All information relative to the services and installations are recorded by the *Contractor* and incorporated into the construction records in accordance with the requirements of the Contract.

The *Contractor* ensures that any services and installations damaged in the execution of the Works are repaired and fully restored, by suitably qualified and competent persons, to a condition at least equal to that which existed just prior to the time of damage. All such repair and restoration work are carried out at the cost of the *Contractor* and is done to the satisfaction of the *Project Manager*.

1.5 Opportunity for *Employer's* Staff to Witness Erection

In order to allow the *Employer's* personnel to gain first-hand experience of the Permanent Works, the *Contractor* affords every opportunity for authorised *Employer's* personnel to witness erection.

1.6 Delivery and Off-Loading of Goods at Project Site

In addition to the requirements of [*Transport of Goods*], the *Contractor* co-ordinate with the *Project Manager* regarding the arrival, unloading and inspection of Goods and the release of carriers equipment at the Project Site. The *Contractor* promptly:

- 1.6.1 off-load all Goods upon their arrival at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site); and
- 1.6.2 releases carriers equipment.

If the *Contractor* is unable to promptly off-load Goods he (without derogating from the foregoing) notify the *Project Manager* accordingly, in writing, at least 21 days prior to the scheduled arrival date of such Goods.

2. Security & Access

2.1 General

The *Employer* provides perimeter security and access control for the Project Site. Strict access control is implemented 24 hours a day at all entrances to the Project Site. All persons and vehicles entering or exiting the Project Site may be subjected to searches and the *Employer* reserves the right to refuse entrance to Project Site to any person not meeting security and/or access requirements.

From time to time, and as required, the *Project Manager* issues policies and procedures regarding Project Site security and access control. These policies and procedures are strictly adhered to by the *Contractor*. The *Project Manager* is entitled, at his discretion, to amend or relax the Project Site security and/or access requirements to deal with emergencies or other circumstances justifying such amendment or relaxation.

Any breach of security must be reported to the *Project Manager* immediately.

2.2 Access Control for Persons

The *Contractor's* Personnel and any visitors on the Project Site is in possession of a valid identification card supplied by the *Employer*. Applications for identification cards are made in the form prescribed by the *Project Manager*. The identification cards and finger print identification be used to gain access to the Project Site and only persons with legitimate business on the Project Site and in possession of such identification cards are allowed access.

Applications for identification cards and finger print imaging are made in good time prior to access being required.

Lost, stolen or damaged cards are reported to the *Project Manager* immediately. A fee is charged for replacement cards.

Identification card holders are required to produce their identification cards for a photo-to-face and finger print check at the security check points.

Where a card holder's right of access to the Project Site is withdrawn, his identification card is electronically cancelled. It is the responsibility of the *Contractor* to ensure the card is returned to the *Project Manager*.

2.3 Removal of Persons from the Project Site and other places, if any, as may be specified under the Contract as forming part of the Site

The *Project Manager* removes from the Project Site (or from any other places, if any, as may be specified under the Contract as forming part of the Site) any person who poses a risk to the Project Works or to the progress thereof, or who poses a risk to security or to the health and safety of persons at the Project Site (or at such other places, if any, as may be specified under the Contract as forming part of the Site).

The *Project Manager* furthermore remove from the Project Site (or from any other places, if any, as may be specified under the Contract as forming part of the Site) any person who ceases, for any reason, to have legitimate business thereon.

If any such person was permitted access as *Contractor's* Personnel or as a visitor of the *Contractor*, the *Contractor*, at the request of the *Project Manager*, take all steps necessary to procure his removal from the Project Site (or from such other places forming part of the Site, as the case may be).

2.4 Removal of Goods from the Project Site

All persons removing *inter alia* materials, equipment, toolboxes, and temporary facilities etc. from the Project Site is in possession of a valid gate release permit. Applications for general or specific gate release permits are made in the form prescribed by the *Project Manager*.

2.5 Access Control for Vehicles

Only a limited number of *Contractor* and Subcontractor non-construction vehicles are allowed onto the Project Site. As a general rule, however, *Contractors'* and visitors' personal vehicles are not allowed within the Project Site and are parked in the designated area and the *Contractor* is required to collect his visitors from the access point.

Vehicle entry discs are issued at the discretion of the *Project Manager* on receipt of an application signed by the *Contractor*. Applications for vehicle entry discs are made in a form prescribed by the *Project Manager*.

2.6 Visitors

Before entering the Project Site, visitors (meaning any person other than the *Contractor's* Personnel) are in possession of a valid identification card as provided for in clause 2.2 above. Applications be made in a form prescribed by the *Project Manager* prior to access being required and visitors must be in possession of positive identification.

The *Contractor's* visitors are subject to all Project Site rules and regulations including those related to Health & Safety and discipline. As a minimum requirement, visitors must wear safety shoes, hard hats and any other personal protective equipment as required by the *Project Manager* and is accompanied by their hosts at all times whilst on the Project Site.

2.7 Fire-arms

Fire-arms are not permitted on the Project Site (nor at other places, if any, as may be specified under the Contract as forming part of the Site). This restriction does not, however, apply to the South African Police Services in the pursuance of official duties.

2.8 Project Site Fences

The modification or removal of Project Site fences is strictly prohibited unless otherwise instructed by the *Project Manager*.

2.9 Helicopter Traffic

In addition to compliance with applicable Law, helicopter landings at the Project Site (except emergency aid Helicopters) require the prior approval of the *Project Manager*. Applications for landing are submitted in the form prescribed by the *Project Manager*. Applications include the following details, as a minimum:

- 2.9.1 purpose of visit;
- 2.9.2 date of landing;
- 2.9.3 estimated time of arrival on and departure from Project Site;
- 2.9.4 number and names of passengers;
- 2.9.5 company represented and registration number of helicopter.

2.10 Contractor's Security

The *Contractor* is solely responsible for the protection and security of the Works and all areas allocated to him, including his allocated lay-down areas and areas outside the Project Site, if any, which are specified under the Contract as forming part of the Site.

For areas outside the Project Site which are specified under the Contract as forming part of the Site, the *Contractor* is also responsible for implementing access control for persons (including *Contractor's* Personnel and visitors) and vehicles. Such access control is to the satisfaction of the *Project Manager* and is subject to the direction and control of the *Project Manager*.

3. Cleanliness and Housekeeping

3.1 General

The *Contractor* maintains a high standard of cleanliness during the conduct of his activities on the Project Site (and at other places, if any, as may be specified under the Contract as forming part of the Site). The *Contractor*, at all times maintain, clean and attend to the upkeep of the Site and such other areas as may be allocated for storage of materials, site offices, etc. to the satisfaction of the *Project Manager*. The *Contractor* at all times keeps these areas, clean and free from accumulation of waste materials and refuse regardless of the source.

During sweeping and dusting, the *Contractor* ensures that a minimum amount of dust is liberated into the atmosphere. Cleaning by vacuum cleaners is preferred and the use of compressed air for cleaning is prohibited.

Where the application of thermal insulation and painting work are in progress, all Plant and Materials in the vicinity are adequately protected while such work is being carried out.

Plant and drain trenches within the Site and such other areas as may be

allocated by the *Employer* are likewise periodically cleaned by the *Contractor* to the satisfaction of the *Project Manager*. All pipes, heaters, oil systems, tanks and similar items of Plant are kept thoroughly clean.

These cleanliness requirements are in addition to and do not derogate from the *Contractor's* other cleanliness obligations under the Contract.

3.2 Plant Cleaning

All Plant installed by *Contractor* is cleaned of all sand, dirt, and other foreign materials immediately after removal from storage and before the Plant is brought inside the facility or to the installation site. Before initial operation of individual items of Plant, and prior to taking over by the *Employer*, the *Contractor* removes all dirt, mortar, and other material that has been spilled, misplaced, or otherwise has been allowed to mar the finish surfaces. The interior of all electrical equipment, including relays and electrical contacts, are thoroughly wiped and vacuumed clean. All debris is removed and disposed of.

3.3 Cleanup prior to Taking Over

The *Contractor*, prior to the issue of the Taking-Over Certificate for the Works or for the Section in question, leave the Site clean and restored to its original condition to the maximum extent practicable and to the satisfaction of the *Project Manager*. The *Contractor* also thoroughly clean the Permanent Works, removing all accumulations of dust, scraps, waste, oil, grease, weld spatter, insulation, paint and other foreign substances. Surfaces damaged by deposits of insulation, concrete, paint, weld metal or other adhering materials are restored by *Contractor*.

3.4 Waste Removal and Disposal

The *Contractor* is responsible for the prompt removal of all waste to a designated disposal area. The disposal area is on or in the vicinity of the Project Site and is designated by the *Project Manager*. Waste is only disposed of at a designated area.

For the purpose hereof, "waste" means any matter, whether liquid or solid or any combination thereof, which is a by-product, emission, residue or remainder of any process or activity carried out in connection with the Works and which is not reused on the Site in the ordinary course of carrying out the Works within 7 (seven) days of production.

The *Contractor* provides an adequate number of marked bins and containers at offices, in yards, at workshops and on the Site for the temporary storage of waste. These bins and containers are to the satisfaction of the *Project Manager*. The *Contractor* is required to segregate certain items of waste by type as designated by the *Project Manager*.

Bins and containers are emptied and waste removed to the designated area at least once a week. All the temporary storage areas for bins and containers are kept tidy and not constitute a nuisance to others. The *Contractor* takes all steps required to avoid the spillage of waste alongside the bins and containers and during removal and disposal.

All waste that cannot be contained in either a bin or container must be placed on a temporary waste site the position of which is to the satisfaction of the *Project Manager*. The waste is removed as soon as possible but in any event at least once a week. No burning of waste is allowed on the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) unless otherwise approved by the *Project Manager*.

Hazardous waste is dealt with in accordance with the safety, health and/or environmental requirements of the Contract, as applicable, and the *Contractor* is solely responsible for the proper disposal thereof in accordance therewith.

4. Signage

No signage is erected by the *Contractor* at the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) without the prior specific or general approval of the *Project Manager*. The positioning and content of signage, whether required by applicable Law and/or otherwise required to be displayed by the *Contractor* under the Contract, is subject to applicable policies and procedures issued by the *Project Manager* from time to time.

No *Contractor* notice boards are allowed on the main road, other than signs necessary to facilitate deliveries, but the *Contractor* is permitted to erect his own notice board on the Project Site, in the vicinity of the Site, or at other places, if any, as may be specified under the Contract as forming part of the Site, the positioning of which, must have the prior approval of the *Project Manager*.

5. Grouting

The *Contractor* controls and record all grouting of Plant and base plates in accordance with the *Employer's* specification for grouting. Where the grouting of installed Plant or base plates does not form part of the *Contractor's* scope of Works, the *Contractor* when requesting grouting, complete the grouting request form as prescribed by the *Project Manager*. Where the grouting of installed Plant or base plates does form part of the *Contractor's* scope of Works, the *Contractor* need not complete this form.

6. Use of Cranes

The *Contractor* is not allowed to use mobile or tower cranes on the Project Site (or at other places, if any, as may be specified under the Contract as forming part of the Site) without the prior approval of the *Project Manager*. This approval is requested under the Work Co-ordination Process and includes, as a minimum, the following:

- 6.1 make and identification of the crane;
- 6.2 the part of the Works which need the assistance of the crane;
- 6.3 estimated arrival date on and departure date from the Project Site (or from such other places as forming part of the Site);
- 6.4 a detailed sketch indicating all movements and areas used for operation (i.e. maximum hook radius relevant to other structures, hook heights, etc.).

Note to tenderers: A List of cranes and anticipated arrival date and departure date from the Project Site for each crane necessary for the Works must be prepared and submitted with the Tender.

7. Works Area Limits

The *Project Manager* designates the working area boundary limits and assign for the *Contractor's* use access roads, parking areas, storage areas, existing facilities areas and construction areas. The *Contractor* do not trespass in or on areas not so designated.

The *Contractor* is responsible for keeping *Contractor's* Personnel out of areas not designated for *Contractor's* use, except, in the case of isolated work located within such areas for which the *Contractor* has been authorised under the Work Co-ordination Process.

8. Project Site Traffic

The *Contractor* complies with the *Project Manager's* directions for the movement of traffic, vehicular or pedestrian, at the Project Site.

The *Contractor* interferes as little as possible with Project Site traffic, vehicular or pedestrian, during the performance of the Works. When necessary to cross, obstruct or close roadways or walks, the *Contractor* provides advance notice to the *Project Manager*, obtain the permission from the *Project Manager* and maintain suitable detours or other expedients for the accommodation of other Project Site traffic. In making open cuts across traffic paths, the *Contractor*, unless otherwise approved by the *Project Manager*, only cut one-half of the traffic paths at a time.

These Project Site traffic provisions likewise apply to places, if any, outside the Project Site as may be specified under the Contract as forming part of the Site.

9. Dust suppression

Except as otherwise directed by the *Project Manager*, the *Contractor* provides dust suppression for the *Contractor's* yard and for the *Contractor's* working areas. The *Employer*, however, provides dust suppression for roads and other common areas which are not used exclusively or primarily by the *Contractor*.

10. Protection of Equipment and Surfaces

10.1 Protection of Concrete Surfaces

During the performance of the Project Works, completed concrete floors and other concrete surfaces are protected from chipping, gouging, scratching, staining and other damage. Heavy planks and mats are placed under Plant and Materials being stored, moved, assembled or installed on or above concrete floor surfaces. Non-flammable, oil-resistant coverings are used to protect concrete surfaces from staining. Damaged sections, at *Contractor's* expense and subject to the *Project Manager's* discretion and approval, are repaired or removed and replaced to the satisfaction of the *Project Manager*.

10.2 Protection of Grating and Stair Treads

During the performance of the Project Works, floor gratings and stair treads are protected against damage from heavy loads, movement of Plant and Materials and/or *Contractors* Equipment, flame cutting, welding, and other such construction damage. Where heavy equipment or material loads are stored or moved over gratings, such loads are be supported directly from the structural supports and not be allowed to bear on the gratings. Damaged sections, at *Contractor's* expense and subject to the *Project Manager's* discretion and approval, are repaired or removed and replaced to the satisfaction of the *Project Manager*.

10.3 Protection of Electrical Racking, Cable, and Lighting Fixtures

The *Contractor* protects electrical racking, cable, lighting fixtures, and associated support systems against damage from movement of Plant and Materials and/or *Contractors* Equipment, welding, flame cutting, and other construction damage. Racking and supporting structures for racking and lighting fixtures are not used as access scaffolding at any time. Whenever welding or flame cutting operations occur above or near racking, cables or lighting fixtures not shielded from such operations by concrete floors or other protective covers, the *Contractor* protect the racking, cables and lighting fixtures from damage by means of fire-resistant boards or blankets. Damaged sections, at *Contractor's* expense and subject to the *Project Manager's* discretion and approval, are repaired or removed and replaced to the satisfaction of the *Project Manager*.

10.4 Repair of Painted Surfaces

After erection, touch-up coatings are furnished and applied to all abraded or damaged areas on shop-coated equipment surfaces installed by the *Contractor*. Surfaces are properly prepared before application of coatings. The touch-up coatings are of a type equivalent to the shop coatings. Where touch-up coatings are provided by the equipment supplier, those coatings are used for touch-up and all surface preparation and coating application procedures furnished by the supplier is followed.

10.5 Galvanized Surface Coatings

All galvanized surfaces on which the galvanizing is removed by cutting, drilling or by any other operation are re-galvanized with a galvanized coating as approved by the *Project Manager*. The *Contractor* furnishes this protective material and applies it in the field to any surface where the galvanized coating is broken or removed.

10.6 Sewers and Drains

The *Contractor* exercise particular care to prevent concrete, mortar, plaster, paint or other foreign materials from entering or damaging the sewers and other parts of the drainage system and satisfy the *Project Manager* that no such materials are lodged therein, or remove same as directed.

11. Initial Operation and Commissioning

- 11.1 The *Contractor* renders all services and do all work required to place each item of Plant, including all auxiliaries, piping, and wiring, in operating condition to the satisfaction of the *Project Manager*. The *Contractor* provides sufficient proof that the Plant is operational, including, but not limited to, documented test and inspection reports, and other related documentation as deemed necessary by the *Project Manager*. The *Contractor* provides all temporary instrumentation and other devices required during checkout and operation of the equipment. Individual items of Plant are completed in a sequence that permit systematic checkout and trial operation of each such component before it is incorporated in the initial system operation.
- 11.2 The *Contractor* complies with each equipment manufacturer's specifications and instructions. All rotating machinery shafts are in as nearly perfect alignment as practicable. Rotating machinery is free from excessive vibration, overheating bearings, and other conditions resulting in a shortened life span of the machinery. Bearings, shafts, and other moving parts are checked for proper alignment, cleaned, and lubricated before the equipment is initially started.
- 11.3 The *Employer* furnishes operating personnel during checkout and initial operation. The *Contractor* provides all other personnel required to make adjustments and correct deficiencies during the initial equipment checking. The *Contractor* is considered to have allowed for checkout and initial operation activities occurring during and after normal working hours.
- 11.3.1 Operation Control
- The *Project Manager* establish an operation control system (OCS) to protect personnel and equipment as the individual equipment and functional systems are completed and capable of energization. The OCS procedures establish control over the placement of appropriate tags on equipment and functional system components to indicate their status and the required mandatory clearance procedures to allow operation, testing, energization, or removal from service of the equipment or system. The *Contractor* ensures the OCS procedures are strictly followed by all personnel performing the Work under this Contract.
- 11.3.2 System Turnover Packages
- The *Project Manager* provides subsystem and system turnover packages and schedule to facilitate the sequential initial testing and operation of equipment groupings and systems. The individual components of equipment groups and systems are identified in turnover packages issued to the *Contractor*. The *Contractor* finish the part of the Works for each turnover packages in a manner to support the overall sequence and schedule of testing and initial operation of subsystems and systems to allow timely turnover for extended operation. The *Contractor* participates in meetings, walk downs, corrections, and punch list completion to support the established turnover for initial operation process.
12. Final Grading

Prior to the issue of the Taking-Over Certificate for the Works or for the Section in question, all holes, ruts, settlements and depressions resulting from the Works or use of areas are filled and graded to match elevations of adjacent surfaces, and all areas disturbed by the Works (including lay-down areas) are restored to their original condition to the maximum extent practicable and to the satisfaction of the *Project Manager*.