



PT SKS LISTRIK KALIMANTAN

IPP 3: PLTU Kalteng 1 (2X100 MW)

## General and Technical Requirements

**Package Name:**

**Electrical & Instrument Inspection, Repair, and Calibration Unit-2 2025**

**PT SKS Listrik Kalimantan**

Desa Tumbang Kajuei, Kecamatan Rungan, Kabupaten Gunung Mas  
Kalimantan Tengah 74561, Indonesia

25 June 2025

Revision: 0



Manajemen Sistem  
ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018  
ISO 50001:2018



0	25 June 2025	First Issued	Fathul Rizal A.	Kariyanto / Anton	Subhan Hasisi	Ikhlas Mappatunru
Rev.	Date	Description	Prepared by	Checked by	Reviewed by	Approved by

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**1. Definition**

All capitalized terms used in this document shall have the meaning as specified in this section.

**“Contractor”** shall mean a party with whom Owner has entered into a contract or contracts for carrying out the work under this package.

**“Good Utility Practice”** shall mean, at a particular time, those practices, methods and acts conforming to legal requirements and which are in accordance with standards of prudence applicable to the coal-fired electric utility industry which would have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety and expedition.

**“International Standard Engineering and Maintenance Practice”** shall mean, at a particular time, those standards, practices, methods and procedures conforming to legal requirements and that degree of skill, diligence, prudence and foresight which would reasonably be expected from a skilled and experienced maintenance contractor, and/or engineer participating in electrical power generation industry and engaged in the same type of undertaking under the same or similar circumstances which would have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety and expedition and in accordance with the standards and instructions referred to in the Scope of Work.

**“Owner”** shall mean PT SKS Lisrik Kalimantan

**“Plant”** shall mean Kalteng-1 coal fired steam power plant namely PLTU Kalteng-1 (2x100 MW) which consist of Unit 1, Unit2, and common facilities and having gross output 2x115 MW.

**“PPA”** shall mean Power Purchase Agreement between PT PLN (Persero) and Owner

**“Project Document”** shall mean any drawing, specification, datasheet, calculation sheet, design description, P&ID, process flow diagram, and any other documents issued by Owner as a reference for contractor in relation with the works to be performed under this document.

**“Transmission Lines”** shall mean 150 kV transmission line to connect the plant and 150 kV Kuala Kurun - Kasongan transmission line

**“Unit”** shall mean unit 1 or unit 2 of Kalteng-1 2x100 MW coal fired steam power plant



## 2. Introduction

PT SKS Listrik Kalimantan owns and operates a coal fired steam power plant with gross capacity 2x115 MW and sells electricity to PT PLN (Persero) under Power Purchase Agreement (PPA). The Plant is located in Tumbang Kajuei, Kecamatan Rungan, Gunung Mas Regency, and Central Kalimantan Province at coordinated 1 22' 27,6" S and 113 33' 59,1" S. The location is approximately 3.5 hours transportation by car from Centra Kalimantan capital, Palangkaraya.

The plant consists of Circulating Fluidized Bed (CFB) boiler, steam turbine-generator, generator transformer, and complete auxiliaries package, amenities, electrical equipment, control equipment and site facilities. Electrical and Instrument-Control consists several equipment such as Motor MV/LV, Main Control Centre Panel (MCC), DC System, ESP, DCS (Distributed Control System), Panel Local Control, Junction Box, Motorized Valve and pneumatic valve, Transmitter, Analyzer, Switchs, and local indicator (pressure gauge, level, and temperature gauge).

The power plant started its first commercial operation since November 2020. According to the company's and power system industry specifications and combined with the company's unit operating conditions, it is planned to perform a comprehensive inspection, measurement and defect rectification of electrical and instrument-control Unit 2.

## 3. Bidder Requirements

The bidder must posses proven experience in maintenance, services, commissioning, testing and inspection with the following qualifications:

- a. The bidder must posses no less than 5 years of experiences for service, maintenance, calibration and inspection of electrical and instrument control in coal fired power plant.
- b. The bidder must have safety management system and preferably to hold relevance national and/or international certification related to health, safety and environmental.
- c. The bidder's project manager, engineer, supervisor, quality control and other similar positions must posses no less than 5 years' experience in operation, construction and/or maintenance of power generation with minimum 5 years' experience in coal fired power plant with no less than 100 MW capacity.
- d. Bidder shall, by submitting a tender, acknowledge that they have adequate knowledge of the site constraints and proposed installation details, consulted with all relevant authorities having jurisdiction over the project, and have assessed their full liabilities for all such works and costs required in carrying out the works specified and shown. No recognition will be granted of any claims for additional costs resulting from the Contractor's failure to comply with the above.
- e. The bidder shall provide all information, documents and fill in all forms as required in, Instruction to Bidder as

Appendix-1.



## 4. Objective of the Works

The objective of the works under this package is to measure, inspect, rectify, test, calibrate and observe all physical, Electrical/instrument and parameter of equipment and compare those parameters with design stated in Project Document and relevant international standard approved by the Owner as well as to take necessary actions to repair any non conformity or finding so that upon completion of maintenance activities under this package the equipment (electrical and instrument-control) can operate within normal operation parameter.

## 5. Scope of Works

The Contractor shall carry out preparation of maintenance, perform inspections, measurements, cleaning, testing, dismantle and reassembly of electrical and instrument-control, and support commissioning of Unit 2 until the unit 2 start up and declare to PLN.

The Contractor shall do, and shall provide all things necessary things for the successful achievement of the objective stated in the Objective of the Works above and its obligation are not limited to the matters expressly stipulated in this document. The Services shall include all items of supply and services required to, or that can reasonably be inferred from this document even though not expressly mentioned herein, to be necessary to complete the works in accordance with the requirements of the Owner.

Without limiting the generality of the paragraphs above, the Contractor shall provide services for maintenance, inspection, measurement, testing and commissioning, quality control and quality assurance, project management and reporting of the project including but not limited to the following:

- i. The Contractor must supply manpower which consist of Site Manager (Coordinator), Engineer, Supervisor, Health, Safety, and Environment (HSE) administration officer, technician, general worker (helper), and other relevant manpower to perform the works under this package.
- ii. The Contractor must provide all required tools, measurement tools, special tools, and consumable for inspection of electrical and instrument-control.
- iii. The Contractor shall be responsible for mobilization and demobilization of equipment and tools from its origin point to the Plant, including for loading and unloading its own tools and equipment.
- iv. The Contractor must prepare consumables such as wiping cloth (“kain majun”), sealant, seal tape, isolation tape , cleaning agent, and other similar consumables.
- v. The Contractor must be responsible for project management such as preparation of detailed schedule of works, inspection and testing plan, daily reports, inspection report, testing report and work completion report, and other reports as may be requested by the Owner.





- vi. In order to give a better understanding for detailed scope of work, the Owner has prepared a Job List of *Electrical & Instrument Inspection, Repair and Calibration of Unit #2 2025* attached to this document in Appendix-2. However, this document may not specify all detailed of works to be performed by the Contractor. Therefore, all other works which may not be specifically described in such document but such works are required to be carried out in order to achieve the objective of the work and scope of work described under this document then such works shall be deemed to have included into contractor scope of works, provided that if any finding in any parts which required to be replaced then spare parts to rectify such defect must be supplied by the Owner.

## 6. General Warranty

The Contractor shall warrant and guarantee that the Works shall be: (i) free from any defect; (ii) in accordance with International Standard Engineering and Maintenance Practice and Good Utility Practice, and (iii) conform to General Technical and Requirement and its Appendices. The duration of warranty shall be 12 months calculated from the date of the works acceptance by the Owner.

## 7. General Requirement of the Works

### i. Work location and no interference with operation unit

The Plant consist of 2 units i.e. Unit 1 and Unit 2. During maintenance of Unit 2 under this package, Unit 1 is scheduled to be under normal operation. The Contractor and all its personnel or its subcontractor or its supplier shall only perform the works at the location designated by the Owner. It shall not in anyway interrupt or causes interruption to normal operation of Unit 1. The Contractor personnel, its subcontractor or supplier personnel shall not enter into Unit 1 operation or shall not cross any barricade installed by the Owner or on behalf of the Owner. In case any Contractor personnel is necessary to enter any operating unit or other area other than the area designated for the Contractor for purpose of completion of work under this document, then it shall prior apply a written permit to the Owner. If such permit granted, any such access or activity shall be accompanied by Owner personnel.

### ii. Health, Safety, and Environment

The Contractor shall perform the works in accordance with applicable government rules and regulations including rules and regulation related with health, safety, and environment. The Contractor must ensure that the Works be performed safely and without any harm to environment. The Contractor must ensure that the execution of the Work by the Contractor shall not caused harm to any other personnel, including but not limited to Owner's personnel, other contractor's personnel, or any third party personnel. The Contractor shall at all times comply with Health, Safety, and Environmental regulation as attached to



this document, HSE Requirement as Appendix-3. The Contractor shall ensure a respectful of safety and mitigate the potential distractions by limiting mobile phone utilization in Works area. The use of mobile phone in work area is prohibited unless specifically authorized for reporting conducted by supervisor (with written permission by Owner authorized representative). The Owner may impose penalty to any Contractor's personnel who failed to comply with the Owner's regulations. The Owner may also expel the Contractor's personnel who in the opinion of the Owner does not comply with the Owner HSE requirements. Such as using handphone/playing game at workplace/workhours, smoking at workplace, etc.

### iii. Quality of Work

The Contractor shall perform the Works with the highest quality standard and in accordance with Project Document, Good Utility Practice, International Standard Engineering and Maintenance Practice. The Contractor must provide adequate and competent quality control personnel to ensure that the quality of the Works meets with the requirements under this document. The Contractor must submit an Inspection and Testing Plan (ITP) for Owner review and approval. The Owner may reject any works if in the opinion of the Owner that such works does not meet the quality requirement under this document, Project Document or Good Utility Practice, International Standard Engineering and Maintenance Practice. If any works rejected by the Owner, the Contractor shall promptly take necessary action to rectify the works so that such works meet with quality requirements. Upon completion of rectification works, the Contractor must submit notification to the Owner for further inspection. Any and all cost incurred for reworks shall be borne by the Contractor. In the case any rejected Works can not be rectified timely by the Contractor, the Owner at its own discretion may rectify by themselves or assign another contractor to perform such work and the cost incurred due to such step in by the Owner shall be borne by the contractor and may be deducted from any contractor's invoice.

Upon completion of the Works and Unit commissioning, the Owner will evaluate the result and quality of the Work. The acceptance criteria for acceptance of the works shall be based on the following documents:

- OEM equipment standards.
- International standards or power industry standards.
- If there is no relevant quality standard for the above two items, both parties shall negotiate to solve the problem and be approved by the Owner.
- Main technical indexes of parameters after maintenance shall reach or close to the design level.





- If the maintenance quality acceptance standard concedes or exempts the maintenance item, the Contractor shall submit a special report to the Owner for approval.
- In the maintenance process, the Contractor shall fill in the concession release application form in case of any deviation, and then proceed to the next maintenance operation after signing the approval. After the end of the project, the whole acceptance can be carried out after the completion of the partial trial operation and the professional acceptance.

**iv. Schedule of Works**

The outage is scheduled to be 20 days calculated from the Unit 2 de-synchronized with the grid until Unit 2 successfully re-start up and synchronizes with the grid and declare to PLN. The Contractor shall comply with general schedule as provided in Schedule of Work Appendix-4. If the Contractor is unable to complete the Work in accordance with the schedule in Appendix-4, the Contractor shall pay liquidated damage (LD) to the Owner. The liquidated damage shall be 2% (two percent) per day of work delay provided that maximum Liquidated Damage (LD) shall be 10% of contract price.

The Contractor shall propose a detailed schedule of work according to its own assessment based on the scope of work described in this document and job list provided in Appendix 2. The contractor's resources mobilization and demobilization may be adjusted based on the agreed schedule.

In no less than 21 days prior to execution of the Work, the Contractor must submit detailed schedule for Owner review and approval. The schedule shall indicate in detailed each step of works and duration of work for such step.

**v. Owner's access for supervision of works**

The Owner must at all times have full access to the Contractor work. The Owner's personnel must have full access to witness any and all of the Contractor's work.

The witness, approval or signing any inspection report by any of the Owner representative shall be not interpreted as the Owner acceptance of the works. The Contractor shall take full responsibility anliability for the quality of work, including for any judgement, assessment setting up or adjustment any component of electrical and instrument equipment.

**vi. Contractor's personnel**

Contractor must provide qualified and experienced personnel for execution of the Work. The Contractor must provide the manpower consist of project management, safety officer, quality control, project control and administration, general labor, and other personnel required to complete the Works. The Project



Manager, quality control, Electrical engineer, and Instrument engineer (hereafter referred to as “Key Personnel”) must have at least 5 years’ experience in construction, maintenance and commissioning of power generation, provided that such key personel shall have minimum 5 years experiences in steam turbine and generator with capacity no less than 100 MW.

In no less than 21 days prior to execution of the Work, the Contractor must submit curriculum vitae of any Key Personnel and Safety Officer for Owner review. The Owner may, at its own discretion, reject any Key Personnel if in the opinion of the Owner that such personnel is considered not competent or not having enough experience to carry out the Work. In such case, the Contractor must resubmit replacement personnel CV to the Owner within 3 days of the Owner rejection notice. The Contractor must submit its organization chart for Owner review and comment.

#### **vii. Procedure of work**

In no less than 21 days prior to outage schedule, the Contractor shall submit all works procedure for Owner review and comments. If the Owner make comments to any procedure of works, the Contractor must arrange revisions of such procedure to address the Owner’s comment and must resubmit it to the Owner within 3 days of Owner comment.

The Works procedures shall indicate detailed step of work, tools and equipment, and method of work. It shall also indicate all tools & equipment and specification of such tools & equipment used during execution of works.

#### **viii. Contractor Tools and equipment**

The Contractor must ensure that all tools and equipment used for execution of the Works must be in good conditions. Measurement tools must meet accuracy in accordance with relevant international standard. All measurement tools must be completed with valid inspection and calibration certificate. The inspection and calibration certificate must be submitted for Owner review prior to mobilization of such tool to site. If any tools and/or equipment is found to be not meeting the above requirement, such tools must be removed from Site. The Contractor must immediately provide replacement without causing any delay to the Work schedule.

#### **ix. Inspection Notice and Report**

The Contractor must submit daily report, inspection report, and completion report in accordance with format acceptable to the Owner. The Owner has the right to review and make comment to the report submitted by the Contractor. If the Owner make comment to any report, the Contractor must revise such report and resubmit it to the Owner with 2 days of the Owner’s comment.





The Contractor must submit inspection request in the form of Request for Inspection (RFI) in accordance with Inspection and Testing Plan approved by the Owner. Any RFI must be submitted by the Contractor to the Owner in no less than 24 hours prior to inspection schedule.

**x. Compliance with statute and regulations**

The Contractor shall at all times comply with any statute and regulation issued by government of Indonesia. The Owner may at any time request the Contractor to submit copy of any documents required to evidence that the Contractor have complied statutes and regulations. If any works shall be postponed due to inspection by government authority as a result of non compliance by the Contractor, then the schedule impact shall be under responsibility of the Contractor.

**xi. Subcontracting**

In principle, the Contractor must not subcontract the whole or part of the Works. If for very specific purpose the Contractor intend to subcontract parts of a specific Works, the Contractor must prior obtain Owner's return approval

**xii. Work acceptance by Owner**

Upon completion of the Works, the Contractor may propose completion certificate to certify that the Works have been completed by the Contractor in accordance with General and Technical Requirement and Project Documents. The Owner may review or comments the completion certificate or sign off on such completion certificate if in the opinion of the Owner that all Works have been completed by the Contractor in accordance with General and Technical Requirement and Project Documents.

**8. Detailed Objective**

**i. Schedule objective**

The Contractor shall complete the works within time frame described in Section 7, point iv and Appendix 4 of this document.

**ii. Health, Safety, and Environment Objective**

The Contractor shall all times comply with health, safety and environmental regulation and HSE requirement with the objective as follows:

- No minor personal injury,
- No major personal injury and fatality,
- No equipment damage accidents,



- No fire accident at maintenance site,
- No traffic accidents,
- No environmental events will occur;
- No serious violation of regulations,
- The site shall not be ordered to stop work due to HSE violation by Contractor.

### iii. Maintenance quality objectives

The Contractor shall perform the Works in accordance with the requirement and Project Document. The Contractor shall achieve the quality objective as follows:

- The completion rate of maintenance projects reaches 100%;
- The completion rate of maintenance test plan reaches 100%;
- The completion rate of unit defect elimination plan reaches 100%;
- Maintenance test partial trial operation success rate reached 100%;
- After repair, the unit reaches “**Four None**” : That is, (i) There is no equipment defect affecting the normal operation mode and normal operation parameters of the unit in the main and auxiliary equipment and others system, (ii) No hidden danger of safety in the main and auxiliary equipment and others system, (iii) No general defect that cannot be eliminated within 24 hours, and the whole unit reaches the standard and , (iv) No leakage either dust, oil, water or steam..
- Upon the completion of the Works, the Contractor shall clean the site and restore all tools and equipment and used spareparts to the location designated by the Owner. The Contractor shall maintain the good housekeeping.

### iv. Environmental technology objectives

During execution of the Works, the Contractor shall fully comply to the applicable environmental regulations. The Contractor shall ensure the implementation of compliance but not limited to:

- Pollutant discharge in accordance with Indonesian national environmental standards or local government environmental standards;
- No environmental pollution event occurs during maintenance.

## 9. Detailed Technical Specifications and Standards

The Contractor shall perform the Works in accordance with requirement and Project Document, including but without limitation to the following documents:

- Scope of work for electrical and instrument-control inspection





- Installation and operation manual of electrical
- Installation and operation manual of instrument & control
- Manual book of electrical and instrument-control
- Piping and diagram drawing
- Electrical diagram/drawing
- Drawing of instrument and control
- Electrical safety work regulations
- Preventive maintenance for electrical equipment
- Preventive maintenance for instrument and control equipment
- Electrical equipment installation engineering quality inspection and assessment regulations
- Manufacturer's original materials, drawings, specifications
- Regulation standard of installation and operation instrument and control such as API, ASME, IEC standard, etc.

#### 10. Owner's responsibilities

Unless explicitly specified in this document or contract, the Owner shall have no any other responsibility with regard to execution of the Work. The Owner's responsibility shall be limited for the following items:

- Providing all technical drawings, manufacturers and equipment specifications of the unit, and providing relevant operation records of the unit at the request of the Contractor.
- Coordinating the technical support of equipment manufacturers for clarification any manufacturer standard.
- Providing all spare parts and main consumables required for maintenance (scaffolding, insulation material, paint, lubricating grease, spare parts for replacement due to operational defects).
- Providing dormitory for Contractor's personnel but excluding food and drink water.
- Providing electricity for maintenance activities.
- Providing instrument air source for maintenance.
- Providing water supply for maintenance and cleaning activities, excluding drinking water.

**11. Annexes**

Appendix (1): *Instruction to Bidders*

Appendix (2): *Job List*

Appendix (3): *HSE Requirements*

Appendix (4): *Schedule of Work*

Appendix (5): *List of Special Tools – Not Applicable for this package*

Appendix (6): *Drawing and Technical Documents – if applicable*



IPP 3: PLTU Kalteng 1 (2X100 MW)

## Appendix-1 - Instruction to Bidders

**Package Name:**

**Electrical & Instrument Inspection, Repair, and Calibration Unit-2 2025**

**PT SKS Listrik Kalimantan**

Desa Tumbang Kajuei, Kecamatan Rungan, Kabupaten Gunung Mas  
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## Appendix-1 Instruction to Bidders

### TABLE OF CONTENT

	Page
1. Bidder Document Confirmation	3
2. Technical Document	3
3. Commercial Proposal	4

#### Attachment:

- Form 1 - Company General Administration
- Form 2 - Company License and Certificate
- Form 3 - Company director and commissioner
- Form 4 - Statement letter of complying with General and Technical Requirement and its appendix
- Form 5 - General Time Schedule
- Form 6 - Work Method Statement
- Form 7 - Quality plan
- Form 8 - Health, Safety, and Environment plan
- Form 9 - List of Manpower and key personel CV
- Form 10 - List of Proposed Tools and Equipment
- Form 11 - List of Consumables
- Form 12 - List of Company Experience
- Form 13 - Copy of client acceptance certificate for similar Works.
- Form 14 - List of Deviation
- Form 15 - Price and Commercial Proposal





## Appendix-1 Instruction to Bidders

### 1. BIDDER DOCUMENT REQUIREMENT

The Bidders shall arrange its proposal in full compliance with General and Technical Requirements and its Appendix. The Bidders shall arrange its proposal in two separate package documents i.e. (i) Technical proposal which consists of form 1 - 14 and (ii) Commercial proposal form 15. The Bidders proposal documents shall be confirmed with a letter signed by Bidder's company Director.

During bidding process, the Owner will give opportunity for Bidder for Site visit to give opportunity for bidders to familiarize with actual condition of equipment. The Bidder shall asses and make themselves well informed regarding special tool to be provided by the Owner. In case any bidder opts for not doing Site visit, the Owner will assume that such bidder has fully understand as if that such bidder has participated in Site visit and all responsibilities for any inaccurate assumption shall be under such bidder responsibilities.

Unless explicitly stated in the List of Deviation, the Bidders confirm that its respective proposal is in full compliance with General and Technical Requirements and its Appendices. Except for Deviation List, in case any discrepancy between General and Technical Requirements and its appendices and Bidder's proposal, the General and Technical Requirements shall take precedence order.

### 2. TECHNICAL PROPOSAL

a) Bidder shall submit a Technical Proposal which clearly describes all non-commercial matters that form of Bidder's proposal.

b) The Technical Proposal shall be prepared with table of contents and consist of following sections:

Form 1 - Company General Administration

Form 2 - Company License and Certificate

Form 3 - Company director and commissioner

Form 4 - Statement letter of complying with General and Technical Requirement and its appendix

Form 5 - General Time Schedule

Form 6 - Work Method Statement

Form 7 - Quality plan

Form 8 - Health, Safety, and Environment plan

Form 9 - List of Manpower and key personel CV



## Appendix-1 Instruction to Bidders

Form 10 - List of Proposed Tools and Equipment

Form 11 - List of Consumables

Form 12 - List of Company Experience

Form 13 - Copy of client acceptance certificate for similar Works.

Form 14 - List of Deviation

Form 15 - Price and Commercial Proposal

### 3 COMMERCIAL PROPOSAL

The Bidders shall prepare commercial proposal in a separate package to Technical Proposal. The Commercial proposal shall consist of price, term of payment, and any other information as bidder consider necessary. The proposal shall be valid for Owner acceptance for period of not less than 60 (sixty) days from the date of submission.





## Appendix-1 Instruction to Bidders

**Form 1:****COMPANY GENERAL ADMINISTRATION****A. COMPANY GENERAL INFORMATION**

1. Company Name	: .....
2. Domicile Certificate	: .....
Company's address	: .....
Telephone (mandatory)	: .....
Facsimile (mandatory)	: .....
E-mail	: .....
Representative Contact	: .....
3. Company Status	: <input type="checkbox"/> Main Office <input type="checkbox"/> Branch
4. Name of Association	: .....
No. Member	: .....
Validity Date	: .....
5. Tax Identification Number / NPWP	: .....
6. VAT enterprise number / PKP	: .....
7 . Bank Information	
No. account (Currency)	: .....
Account Owner Name company)	: .....
Name of the Bank	: .....
Complete Bank Address	: .....



## Appendix-1 Instruction to Bidders

### B. LEGAL BASIS OF COMPANY ESTABLISHMENT

1. Deed of Incorporation a. Notary Public b. Address c. Deed Number d. Date/month/year of founding of the company	: ..... : ..... : ..... : .....
2. Latest Amendment Deed a. Notary Public b. Address c. Number d. Date	: ..... : ..... : ..... : .....
3. Deed Registration in District Court a. Name b. Number/date	: ..... : .....
4. Validation by the Minister of Justice Number/date	: .....
5. Foreign Investment Company (PMA) / Domestic Investment Company (PMDN) Company (copy attached) a. Permit Number b. Date	: ..... : .....

### C. CONTRACT SIGNING INFORMATON

6. Official for Contract Signing In accordance with what is written in the last NOTARIAL DEED a. Name _ b. Position c. Signature specimen d. Company Stamp Specimen	: ..... : ..... : ..... : .....
---	--

..... 2025

(.....)  
Signature and Stamp





## Appendix-1 Instruction to Bidders

**Form 2:**

COMPANY LOGO

## COMPANY LICENSE AND CERTIFICATE

Attachment Number	Certificate Name	Certified by	Certification Year	Active / Expired
1				
2				
....				
....				
....				

..... 2025

(.....)  
Signature and Stamp



## Appendix-1 Instruction to Bidders

**Form 3 :**

COMPANY LOGO

COMPANY DIRECTOR AND COMMISSIONER

**1. Commissioner/Director/Person in Charge of the Company**

No	Name	ID Card /Identity No	Position in the Company

**2. Company Owner**

No	Name	ID Card /Identity No	Position in the Company

Note: Submit and comply with the Deed and Amendments.

..... 2025

(.....)  
Signature and Seal

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**Appendix-1**  
**Instruction to Bidders****Form 4:**

STATEMENT LETTER OF COMPLYING WITH GENERAL AND TECHNICAL REQUIREMENTS AND ITS APPENDIX

**COMPANY LETTERHEAD****STATEMENT LETTER OF FULFILLING THE SCOPE OF WORK AND TECHNICAL SPECIFICATIONS**

We, the undersigned

Name of Company Responsible Person : .....  
Company name : .....  
Company's address : .....  
Telephone / Fax : .....  
Position in the Company : .....

In this case, representing and acting on behalf of our Company above, we hereby declare that our bid has fulfilled all the General and Technical Requirements along with its Appendix and attachments contained in Bidding Document No..... which has been determined by PT. SKS Listrik Kalimantan for package work

If in the future it is found that the above statement is not true, then I am willing to be subject to unilateral termination of the agreement and be removed from list of selected goods/services providers of PT. SKS Listrik Kalimantan, and is willing to compensate for any losses resulting from it.

Thus, we have made this Statement Letter truly without any pressure from any party and so that it can be used properly.

....., ..... 2025

PT/CV .....

President Director / Person in Charge

duty stamp  
Rp. 10,000 ,-  
Company Mark

(Clear name)





## Appendix-1 Instruction to Bidders

**Form 5 :****COMPANY LOGO****GENERAL TIME SCHEDULE**

Package NUMBER : .....  
Package NAME : .....  
Package LOCATION : .....  
NAME OF BIDDER : .....

Sections No.	Description	WORKS in %)	DAYS						
			1	2	3	4	5	6	>>
1									
2									
3									
4									
5									
6									
7									
8									
9									
10	Reports and Documentation								
	TOTAL WORKS	100%							
	CURRENT PROGRESS	(in %)							
	CUMULATIVE PROGRESS	(in %)							

Note: 1. S- Curve and Bar – Chart should be plotted  
2. Microsoft Project or Primavera is preferable

..... 2025

(.....)  
Signature and Stamp



## Appendix-1 Instruction to Bidders

**Form 6 :**

COMPANY LOGO

### WORK METHOD STATEMENT

The Work Method Statement shall be created and filled in by the Contractor and signed by the company director. The contents of the Work Method Statement are as follows:

1. **Title and Project Information:** Clearly state the title of the method statement and provide details about the project, including location, date, and project reference numbers.
2. **Objective:** Define the specific objectives of the works and what is expected to be achieved.
3. **Scope of Work:** Detail the scope of the activities, specifying the tasks, phases, and areas covered by the method statement.
4. **Project Organization:** Outline the organizational structure for the project, including roles and responsibilities of key personnel.
5. **Equipment and Tools:** Define the equipment and tools required to perform the works.
6. **Work Procedures:** Provide step-by-step procedures for each task, highlighting the sequence of activities, necessary equipment, materials, and resources.
7. **Work Schedule and Milestone:** Provide working schedule in accordance with step-by-step of works and create a mutually agreed milestone schedule
8. **Health, Safety and Environment Measures:** Emphasize health, safety and environment considerations, including risk assessments, protective measures, and compliance with safety regulations.
9. **Quality Control and Assurance:** Describe the quality control and assurance measures to be implemented, ensuring that the work meets specified standards and requirements.
10. **Environmental Considerations:** Address any environmental impact concerns and detail measures to mitigate and manage environmental risks.



## Appendix-1 Instruction to Bidders

11. **Monitoring and Inspection:** Define the monitoring and inspection protocols, specifying how the work will be supervised and evaluated for compliance.
12. **Emergency Procedures:** Clearly outline emergency procedures and contingency plans in case of unexpected events or incidents.
13. **Testing and Commissioning:** Detail the procedures for testing and commissioning, ensuring that the completed work meets the required standards and specifications.
14. **Documentation:** Specify the documentation requirements, including record-keeping, reports, and any other relevant paperwork.
15. **Approval and Sign-Off:** Include a section for approvals and sign-offs, indicating the responsible parties and the process for obtaining authorization to proceed with the work.



**Form 7:**

COMPANY LOGO

**QUALITY PLAN**

The Quality Plan shall be created and filled in by the Contractor and signed by the company director. The contents of the Quality Plan are as follows:

**1. Quality standard**

Document any industry or product quality standards that apply to the project.  
For example, ASME (American Society of Mechanical Engineering), Etc.

**2. Quality Objective**

Provide the quality targets for the overall project. Be as specific and include how to measure.

**3. Quality Roles and Responsibilities**

Provide the roles and responsibilities that are needed to manage quality on the project.

**4. Deliverables and Processes Subject to Quality Review**

List the project deliverables and processes that will be quality reviewed.

**5. Quality Control Approach**

Describe when and how quality will be checked.

**6. Inspection Test Plan**

Provide table of Inspection Test Plan regarding the Joblist and Scope of Work

**Form 8:**



**HEALTH, SAFETY, AND ENVIRONMENT PLAN**

The Health, Safety and Environment (HSE) Plan shall be created and filled in by the Contractor and signed by the company director. The contents of the HSE Plan are as follows:

1. PROJECT HEALTH AND SAFETY PLAN
  - 1.1. Organization and Responsibilities
  - 1.2. Development and Implementation of HSE Management System
  - 1.3. HSE Policy, Objectives, and Commitment
2. PROJECT HEALTH AND SAFETY RULES
3. ENVIRONMENT MANAGEMENT PLAN
4. EMERGENCY RESPONSE PLAN

**Form 9:**

**COMPANY LOGO**

**LIST OF PROPOSED CONTRACTOR'S MANPOWER**  
(Completed by Bidder)

PACKAGE NUMBER : .....  
 PACKAGE NAME : .....  
 PACKAGE LOCATION : .....  
 NAME OF BIDDER : .....

No.	Post to be held	Name	Nationality	Age	Education *)	Year of Service in Company	Year of Experience in ..... Work	Other Years Experience in ..... Work
1.								
2.								
3.								
4.								
5.								
6.								
	Etc.							

\*) Insert University / Academy, High School or Secondary and year of completion

..... 2025

(.....)  
Signature and Stamp







## Appendix-1 Instruction to Bidders

**Form 11:****COMPANY LOGO****LIST OF CONSUMABLES**  
(To be completed by Bidder)

PACKAGE NUMBER : .....  
PACKAGE NAME : .....  
PACKAGE LOCATION : .....  
NAME OF BIDDER : .....

No	Description of Consumables	Brand / Manufacture	Quantity		Plan to Delivery	Remarks
			QTY	Unit		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

..... 2025

(.....)  
Signature and Stamp





**Form 13:**

**COMPANY LOGO**

**COPY OF CLIENT ACCEPTANCE CERTIFICATE FOR SIMILAR WORKS.**

This page related into *Form 12. LIST OF COMPANY EXPERIENCE*. All of Bidder shall attach Acceptance Certificate from Project Client and summarize as per table follow:

No	Name of Project	Client	Certification Year
1			
2			
....			
....			
....			

....., ..... 2025

(.....)  
Signature and Stamp

Form 14:

COMPANY LOGO

LIST OF DEVIATIONS

No	Document No. / Clause No.	Specification / Requirement	Deviation	Reason for Deviation

..... 2025

(.....)  
Signature and Stamp

Form 15 :

COMPANY LOGO

PRICE AND COMMERCIAL PROPOSAL

( Package Title )  
( BIDDERS NAME )

No	Description	Qty	Unit	Total Days	Overtime (hour)	Unit Price /day	Total Price (a)	Unit Price Over Time	Total Price over time (b)	Total Price (a + b)	Remarks
1	Mobilization										
	Manpower		person								
	Equipment & Tools		lot								
2	Demobilization										
	Manpower		person								
	Equipment & Tools		lot								
3	Manpower										
	Please fill the manpower position and quantity include price		person								
	.....		person								
	.....		person								
4	Equipment & Tools										
	Please fill the Equipment & tools include price										
	.....										
	.....										
5	Consumables										
	Please fill the Consumables include price										
	.....										
	.....										
6	Others										
	Please fill if needed include price										
	.....										
TOTAL										-	
Tax 11%										-	
GRAND TOTAL										-	

..... 2025

( ..... )  
Signature and Stamp





PT SKS LISTRIK KALIMANTAN

## Appendix-2 – Job List

**Package Name:**

**Electrical & Instrument inspection, Repair, and Calibration Unit-2**

**PT SKS Listrik Kalimantan**

Desa Tumbang Kajuei, Kecamatan Rungan, Kabupaten Gunung Mas  
Kalimantan Tengah 74561, Indonesia

25 June 2025

Document number :

Revision : 0



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ISO 14001:2015  
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ID 01 100 2135350  
ID 824 104 22202



0	25 June 2025	Issued	Fathul Rizal A	Kariyanto/Anton	Subhan Hasisi	Ikhlas Mappatunru
Rev.	Date	Description	Prepared by	Checked by	Reviewed by	Approved by

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**A. Location**

PT. SKS Listrik Kalimantan ("SLK")

**B. Definition**

1. Project or Work : Electrical & Instrument inspection, Repair, and Calibration Unit-2 2025
2. Owner : PT. SKS Listrik Kalimantan ("SLK")
3. Vendor : Party or Parties who have the contract with PT. SKS Listrik Kalimantan to provide material and/or services of the work under this specification
4. Plant Location : IPP Kalteng-I 2x100MW, Desa Tumbang Kajuei, Kalimantan Tengah

**C. Job List for Electrical****1. Inspection, Services and Maintenance of Electrical & Motor Inspection and Service**

During Outage session, SLK plan to conduct Inspection and maintenance for electrical main equipment on Unit #2. This work carried out to inspect, testing, cleaning and repair any findings to ensure the reliability of all equipment after long period of operation.

As for Electrical & motor inspection consists of 4 (four) main work as follows:

- 1.1. Scope Electrical Inspection
- 1.2. Scope of Inspection Motor MV & LV
- 1.3. Scope of Cleaning Cable Tray
- 1.4. Scope of assist commissioning and startup

**1.1. Electrical Inspection****1.1.1. Inspection Switchgear 6 kV**

Perform necessary actions of inspection switchgear 6 kV but not limited to:

- a. Check the connection of terminal (retight, cleaning and repair if any damaged)
- b. Insulation Resistance (IR) & Contact Resistance test of VCB
- c. Cleaning & Resistance Test MV fuses
- d. Check the seal and hole of panel.
- e. Clean all parts of switchgear panel and VCB.
- f. Check and test mechanical system of grounding system panel (Repair grounding mechanism if any abnormal during check)
- g. Cleaning switchgear body surface & the switchgear 6kV room (wall & floor)



- h. Replace lighting at switchgear room if any damaged.
- i. Replace small part of VCB if any finding during inspection
- j. Retighten rear cover of switchgear / Earthing switch
- k. Check functional of cabinet heater

**1.1.2. Inspection MCC 400V**

Perform necessary actions of inspection MCC 400V but not limited to:

- a. Check cable terminal connection (tighten, clean and repair if any findings)
- b. Check mechanical function of drawer (breaker) and repair if any abnormal during check
- c. Check the seal and hole of panel, and leaking point of panel
- d. Cleaning the MCC room (wall, floor and window)
- e. Cleaning surface of MCC, cleaning drawer in power off condition
- f. Replace drawer switch if or other parts if found any damaged
- g. Replace metering, lamp indicator, push button of drawer if found any damaged
- h. Replace lighting at MCC room if any damaged
- i. Tightening grounding cable connection and measure earthing/grounding resistance

**1.1.3. Inspection DC System**

Perform necessary actions of inspection DC System but not limited to:

- a. Inspection DC panel (cleaning panel and part, check connection terminal and check the sealing hole)
- b. Grounding test on DC panel
- c. Cleaning DC panel room
- d. Replace lighting at DC room if any broken
- e. Inspection UPS System (cleaning UPS Cabinet, replaced modules, cleaning UPS distribution cabinet)
- f. Inspection Battery System (Cleaning battery, check terminal connection)
- g. Check voltage and resistance battery using "Battery Tester Tools"
- h. Discharge test battery system, using "load bank and discharge test tools"
- i. Replace battery if any abnormal or found battery drop <2V during discharge test battery
- j. Cleaning battery room
- k. Replace lighting at Battery room if any broken



**1.1.4. Inspection Terminal Box 6 kV (NPB)**

Perform necessary actions of inspection MCC 400V but not limited to:

- a. Inspection and cleaning terminal box of 6 kV NPB
- b. Inspection and check connection terminal
- c. Tightening Bolt use torque wrench

**1.1.5. Inspection ESP**

Perform necessary actions of inspection ESP but not limited to:

- a. Inspection of HV rectifier transformer of ESP (Cleaning transformer, check terminal connection, and check leakage of oil HV rectifier transformer)
- b. Insulation Resistance test of ESP transformer
- c. Inspection of ESP rapper, and replace if any damaged. (Resistance check, terminal connection check)
- d. Inspection of cable tray, cable at roof top ESP (cleaning and repair cable, repair or replace if any damaged)
- e. Inspection and check heater insulator (resistance test, cleaning heater, and repair if any abnormal finding)
- f. Inspection of ceramic insulator at Top Room ESP. (Check condition of insulator, cleaning, and repair if any abnormal finding)
- g. Inspection of shaft insulator (check condition, and replace if any crack for shaft insulator)
- h. Inspection local panel of ESP and rapper (cleaning, check terminal connection, and check sealing hole)
- i. Inspection grounding shaft insulator (repair if any damaged)
- j. Inspection CE & DE wire inside of ESP (repair if any damaged)
- k. Inspection hopper heater and replace if any abnormal finding (resistance check)
- l. Replace part of ESP panel if any finding or broken part (Lighting indicator, SCR or other part inside panel)
- m. Install additional grounding at ESP panel unit #2
- n. Replace lighting at MCC ESP room if any broken
- o. Perform No Load test of ESP

**1.1.6. Inspection Dry Transformer 6 kV / 400V**

Perform necessary actions of inspection dry transformer 6 kV/400V but not limited to:

- a. Cleaning dry transformer
- b. Check terminal connection
- c. Insulation resistance test of dry transformer
- d. Winding resistance test of dry transformer
- e. Ratio test of dry transformer
- f. Check and testing fan cooling dry transformer

**1.2. Inspection Motor MV & LV****1.2.1. Inspection MV Motor 6 kV Unit #2 and Common**

Perform necessary actions of inspection MV Motor 6 kV but not limited to:

- a. Check motor terminals, cable lug & cable condition and retightening connection
- b. Check leaking point in the motor terminal box and sealing
- c. Check power cables and the other control cables include the gland cables
- d. Check heater motor
- e. Solo run after repair bearing or other finding (if required)
- f. Electrical Test (IR, DAR, PI & Winding Resistance) of motor and power cable
- g. Cleaning motor bearing (using inner motor cleaner) and replace grease of motor bearing (if necessary)
- h. Clean the motor body
- i. Cleaning and inspection of motor cooling system
- j. Cleaning local control panel and repainting if any rusty condition
- k. Check cable stator inside terminal box and repair if any finding
- l. Final inspection after finish all item job

**1.2.2. Inspection LV Motor (400 V) Unit #2 and Common**

Perform necessary actions of inspection of LV motor 400V but not limited to:

- a. Check motor terminals, cable lug & cable condition and retightening connection
- b. Check leaking point in the motor terminal box, local control panel and sealing
- c. Check power cables and the other control cables include the gland cables
- d. Clean the motor body included blade cooling fan motor
- e. Check heater motor, resistance & functional



- f. Clean corrosion at body and repainting (if any finding)
- g. Inspect grease if any request
- h. Replace motor bearing (if any finding or request)
- i. Performed Electrical Test: IR, DAR & Winding Resistance
- j. Inspect & cleaning terminals connection, cables & electric equipment inside the panel
- k. Cleaning local control panel and repainting if any rusty condition
- l. Final inspection after finish all item job

**1.3. Cleaning Cable Tray**

- a. Cleaning cable tunnel underground MPH Unit #2
  - Under Switchgear 6kV unit #2
  - Under MCC 400V Auxiliary unit #2
- b. Cleaning cable trench MCC
  - CWP MCC
  - CHS MCC
  - PC Chemical WTP
- c. Inspection and Cleaning cable tray unit #2
  - Cable tray MPH elevation 4.5m
  - Cable tray boiler area unit #2 (See Drawing Attachment)
  - Cable tray under fly ash silo (fine)
  - Cable tray under fly ash silo (coarse)
  - Cable tray under bottom ash unit #2
  - Cable tray turbine area unit #2 (See Drawing Attachment)
- d. Fabrication and install cover of cable shaft tray
  - Boiler unit #2 area
  - Turbine unit #2 area

**1.4. Assist Commissioning and Start-Up Preparation**

- a. Assist commissioning for ESP before start-up
- b. Assist commissioning for each equipment before start up and troubleshoot if any abnormal
- c. Assist for testing before energize of transformer (Insulation Test)

Detailed job list of electrical works is provided in Appendix 2C.



**D. Job List for Instrument & Control System****1. Inspection Of Instrument & Control Equipment**

During Outage session, SLK planned to conduct Inspection and maintenance for all Instrument and Control equipment in Unit 2. This work is carried out to repair and involve the reliability of all equipment after long period of operation. As for Instrument and Control inspection consists of several work as follows:

- 1.1. Cleaning Instrument and Control equipment, such as:
  - 1.1.1. Cleaning Marshalling, Control Room, Local Panel, & Junction Box
  - 1.1.2. Cleaning Motorized Valve (MOV) & Pneumatic Valve
  - 1.1.3. Cleaning Transmitter, such as Pressure Transmitter, DP Transmitter, Flow Transmitter, Level Transmitter, Vibration sensor, Speed sensor, Switch, Temperature Sensor, etc.
  - 1.1.4. Cleaning Local Indicator, such as Pressure Gauge, Temperature Gauge, Level Gauge, etc.
  - 1.1.5. Inspection and cleaning Cable tray refer to job list
- 1.2. Inspection condition Instrument and Control
  - 1.2.1. Checking, measuring of condition Panel or Marshalling, such as check the voltage, module condition, Fan, etc.
  - 1.2.2. Checking, Measuring condition of Motorized Valve (MOV) and Pneumatic Valve
  - 1.2.3. Checking, Measuring condition of Transmitter
  - 1.2.4. Checking condition of Local Indicator, such check Pressure gauge, Temperature gauge, and level gauge.
- 1.3. Support Rectification Instrument and Control if any finding.
  - 1.3.1. Support rectification Marshalling or Panel
  - 1.3.2. Support rectification Motorized Valve and Control Valve
  - 1.3.3. Support rectification Transmitter
  - 1.3.4. Support rectification Local Indicator (Pressure Gauge ,Temp Gauge, etc)
  - 1.3.5. Support rectification of any other instrument works which found damage during inspection.

There are estimated 20 system or area which will be inspected as attached (Appendix- 2B). Upon completion of inspection, rectification, and testing, the Contactor must clean all area, remove all rubbish, relocate all material and unused spare parts, and return back all equipment and tools to designated locations.

## 2. Calibration Work

Besides the Inspection work, SLK planned to calibrate several priority equipment to ensure that the equipment work properly. Several Transmitter, Pressure Switch, and Temperature sensor will be conducted calibration. The list and quantity of these equipment attached (Appendix- 2B).

## 3. Support Commissioning

Contractor must be supported the commissioning session until start up unit after do inspection, rectification, and calibration of electrical and Instrument-control equipment.

Detailed Job List for Instruments Works is provided in Appendix 2B.

## E. Consumables & Tool Scope by Contractor

The Contractor shall asses list of tools of tools and consumables required to perform the works as outlined in General Technical Requirement and Job List. It is responsibility of contractor to provide such tools and consumables so that the works can be performed effectively. The Owner provide its assessment on minimum tools and consumables to be provided by the Contractor (but this list is not conclusive and does not release Contractor responsibility to provide any other tools and consumables in order to perform the work as per General Technical Requirement and Job List).

### 1. General Tools

- Ring Pass Key
- Adjustable Wrench
- Torque Wrench
- Socket Wrench
- All type of screwdriver and plier
- Vacuum Cleaner
- Cable Extension/Cable Roll 40M minimum 4 PC
- Portable Lighting & electrical sources
- General Tools and Consumable for E/I Inspection
- General Tools and Consumable for Calibration
- General tools for cleaning Panel, Junction Box, MOV, Transmitter, and Local Indicator
- Tools for all Quality Inspection



## 2. General Consumable

- Alcohol
- Cotton Rag (*Majun*)
- Contact Cleaner
- Contact Grease
- Sand Paper
- Bearing Cleaner (SEYTON)
- Consumable for cleaning, inspection, calibrations and replace tubing

## 3. Special Tools

- Insulation Resistance Tester (Propose Brand “MEGGER” type “MT515”)
- Winding Resistance Tester
- Load Bank 150A
- Battery Resistance Tester
- Tools for ratio test Dry Transformer
- Tools for winding resistance dry transformer
- Multi meter
- Grounding Clamp Tester





PT SKS LISTRIK KALIMANTAN

IPP 3: PLTU Kalteng 1 (2X100 MW)

## Appendix-3 – HSE Requirements

**Package Name:**

**Electrical & Instrument Inspection, Repair, and Calibration Unit-2 2025**

**PT SKS Listrik Kalimantan**

Desa Tumbang Kajuei, Kecamatan Rungan, Kabupaten Gunung Mas  
Kalimantan Tengah 74561, Indonesia

25 June 2025

Revision: 0



Manajemen Sistem  
ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018  
ISO 50001:2018  
KALIMANTAN  
12 3800010779



0	25 June 2025	First Issued	HSE	Nanang K	Nanang Kasim	Ikhlas Mappatunru
Rev.	Date	Description	Prepared by	Checked by	Reviewed by	Approved by

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**TABLE OF CONTENTS**

<b>1</b>	<b>Introduction .....</b>	<b>5</b>
<b>2</b>	<b>Contractor/Subcontractor General HSE Requirements .....</b>	<b>5</b>
<b>3</b>	<b>HSE Golden rules .....</b>	<b>6</b>
<b>4</b>	<b>HSE Plan and HSE Management System Requirements .....</b>	<b>6</b>
4.1	General .....	6
4.2	Roles and Responsibilities .....	6
4.3	HSE Management .....	6
4.4	Worksites .....	7
4.5	HSE Staff to Worker Ratio .....	7
4.6	HSE Reporting .....	8
4.7	Worksite Inspections .....	8
4.8	Instruction to Stop Work .....	8
<b>5</b>	<b>Safety and Environmental Management .....</b>	<b>8</b>
5.1	HSE Training and Awareness .....	8
5.2	HSE Signage .....	9
5.3	Road Safety .....	9
5.4	Personal Protective Equipment and Safety Devices/Facilities .....	9
5.5	Illumination for Working Area .....	10
5.6	Emergency Preparedness .....	10
<b>6</b>	<b>Health and hygiene Management .....</b>	<b>11</b>
6.1	Substances Hazardous to Health .....	11
6.2	Welfare and Sanitation Provision .....	11
6.3	Medical and First Aid Provision .....	12
<b>7</b>	<b>Environmental Management .....</b>	<b>12</b>
7.1	Contractor's/Subcontractor's Worksites .....	12
7.2	Waste Management Plan .....	12
<b>8</b>	<b>Equipment and Operating Standards .....</b>	<b>13</b>





## Appendix-3 HSE Requirements

Rev. 0

Page : 4 of 19

8.1 Tools and Equipment .....	13
8.2 Abrasive Wheels (Including Portable Grinders) .....	14
8.3 Diesel Engine Driven Pumps, Compressors, Welding Set, Etc. ....	14
8.4 Electrical Power Portable Tools and Equipment.....	14
8.5 Hand Tools .....	15
8.6 Crane, Over Head Crane, Hoist Crane.....	15
8.7 Lifting Appliances and Loose Lifting Tackle .....	16
8.8 Scaffolding and Access .....	16
8.9 Working at Height.....	17
8.10 Hot Work Activity .....	17
8.11 Pressurize Gas Cylinder .....	17
9 Security Management.....	18
9.1 Security .....	18
10 Verification and Audit .....	18
10.1 Observed Deficiencies .....	18
10.2 Punishment.....	19
10.3 Disciplinary Action .....	19

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**1 INTRODUCTION**

The Contractor/Subcontractor shall have full responsibility for the adequacy of and comply with any and all HSE requirements particularly of the Owner, PT SKS Listrik Kalimantan (SLK) (hereinafter "CLIENT") and rules and regulations and/or instructions in conjunction with his performance of the work.

The Contractor/Subcontractor shall perform, provide and supply all safety equipment required in the scope of work for the Health Safety and Environment. To protect all property and employees on site to satisfy all HSE condition set forth in the CLIENT HSE Regulations for Contractor along with client procedure and other regulations required when and where necessary. To protect all personnel on CLIENT operation and project sites from harm by issuing all appropriate protective equipment to their work force, and to maintain good safety practices and safety conditions.

**2 CONTRACTOR/SUBCONTRACTOR GENERAL HSE REQUIREMENTS**

The Contractor/Subcontractor general HSE requirements are listed but not limited to;

- a. Participating in the CLIENT's and/or HSE Induction course and specialize training.
- b. Participating in SLK HSE committee and designated meeting
- c. Conducting the necessary and appropriate HSE training and education including regular tool box meeting and keeping the records to their own personnel
- d. Supervising all personnel assigned at the Site to ensure that they abide by HSE rules and regulations.
- e. Supplying necessary personal protective equipment, device and facilities.
- f. Running routine checks on the Subcontractor's own first aid and medical facilities to ensure adequacy of supplies and services, if any
- g. Conducting regular and periodical site inspection
- h. Reporting the results of site inspections and its remedial actions and measures taken
- i. Reporting regular HSE performance including the Contractor's/Subcontractor's manpower
- j. The Contractor's/Subcontractor shall immediately, without any delay, report to client any and all accidents, death and/or injuries to any person whatsoever, fire, explosion, any loss or damage to any part of the Work, the Plant and/or the Construction equipment



**3 HSE GOLDEN RULES**

The Contractor/Subcontractor shall follow HSE Golden Rules from the Owner are listed but not limited to;

- a. It is prohibited of working before identifying the hazards.
- b. It is prohibited of working if no supervisor the job
- c. It is prohibited of working using portable electrical equipment without any inspection
- d. It is prohibited of working at height more than 1.8 meters without full body harness and fall protection
- e. It is prohibited of working without work permit
- f. It is prohibited of operating heavy equipment without SIO (Operator License)
- g. It is prohibited of consuming drugs and alcohol
- h. It is prohibited of smoking except in designated smoking area
- i. It is prohibited of working in confined space without buddy system
- j. It is prohibited of removing LOTO without authority
- k. It is prohibited of operating company vehicles without authority at working area.

**4 HSE PLAN AND HSE MANAGEMENT SYSTEM REQUIREMENTS****4.1 General**

- 4.1.1 The Contractor/Subcontractor shall perform its work under its HSE Plan and in accordance with the Contractual Agreement and of Owner HSE requirements.
- 4.1.2 The HSE Plan shall be adequately documented and shown to be effective in implementing the aims and objectives of the Contractor's/Subcontractor in HSE Management.

**4.2 Roles and Responsibilities**

- 4.2.1 The Contractor's/Subcontractor shall be responsible for the health, safety and security of all Personnel employed on the Worksites that are under its direct control, whether they are direct employees, employees of its Contractor's/Subcontractors or employees of other companies working on its Worksite and for all visitors.
- 4.2.2 In details Contractor's/Subcontractor shall:
- a. Comply with the requirements of Owner HSE rules and regulations
  - b. Manage HSE matters as top priority and critical business activity
  - c. Pursue ZERO accident goals and ZERO Environmental Incident.
  - d. Provide Project Specific HSE Plan and Procedures.

**4.3 HSE Management**

- 4.3.1 The Contractor's/Subcontractor shall nominate competent HSE personnel who shall be responsible for maintaining communications and key interfaces to Owner HSE Manager on HSE matters. The competent person shall also be responsible for





## Appendix-3 HSE Requirements

ensuring any HSE incident which takes place during the performance of the Contractor's/Subcontractor is fully investigated in a timely manner and all findings of the investigation are provided to Owner HSE Manager.

- 4.3.2 The Contractors/Subcontractor personnel shall be familiar with the actions required in an emergency and participate in all drills conducted at Owner Power Plant Site.
- 4.3.3 The Contractor's/Subcontractor shall have appropriate HSE-related plans and procedures in effect for all the Contractor/Subcontractor personnel during the entire time that any of the Contractor/Subcontractor personnel are on SLK power plant Site, wherever located. The plans and procedures shall address and clearly declare accountability for the Contractor/Subcontractor.

### 4.4 Worksites

- 4.4.1 The Contractor/Subcontractor shall ensure that all its personnel are fully conversant with the working conditions at each worksite. This shall include the rules and standards related to the working environment and the hazards and risks associated with performing the work at any worksite.
- 4.4.2 The Contractor/Subcontractor shall ensure that all its personnel are fully aware that they are expected to bring to the immediate notice of their immediate supervisor all health, safety, security and environmental risks which they believe not to be under adequate control, so that action may be taken to prevent injuries or other losses and provide a healthy, safe and secure workplace. It should be clear that all personnel have the right to stop any of the work that they consider unsafe.
- 4.4.3 The Contractor/Subcontractor shall make sure that all their visitors, suppliers and vendors are only allowed to enter or access the site with or without their vehicles on final approval of SLK HSE Department, and all those visitors are obliged to wear their appropriate PPE while at the worksites.
- 4.4.4 The Contractors/Subcontractor shall be responsible for providing the appropriate level of training to all of its personnel to ensure that the HSE requirements can be achieved for all worksites.

### 4.5 HSE Staff to Worker Ratio

- 4.5.1 For services involving greater than 50 but less than 70 Contractor/Subcontractor personnel onsite, Contractor/Subcontractor shall provide a fulltime, experienced (minimum of three years safety experience) "Site HSE Officer" to enforce SLK HSE requirements.
- 4.5.2 For services involving greater than 50 Contractor/Subcontractor personnel onsite, Contractor/Subcontractor shall provide one fulltime experienced "Site HSE Officer" for each 50 individuals to monitor SLK HSE requirements. Contractor/Subcontractor shall nominate a fulltime and experienced "Senior Site HSE Representative" (Manager / Engineer / Supervisor) when Contractor or its Subcontractor totals exceed 200 who shall have overall responsibility for each of the site HSE representatives and HSE requirements.
- 4.5.3 The ratio of HSE Staff to Workers are subjected to change as per Owner requirements



### 4.6 HSE Reporting

The Contractor/Subcontractor shall submit report to SLK HSE Department the HSE status of the work via the Daily, weekly/monthly report. The detail level of Daily, weekly/monthly HSE reporting shall be agreed between SLK HSE Department before commencement of any part of the Work.

### 4.7 Worksite Inspections

- 4.7.1 The Contractor/Subcontractor shall ensure that regular management inspections of the worksites are carried out to observe and respond to unsafe acts and conditions.
- 4.7.2 The Contractor/Subcontractor shall implement a system for regular inspection (color coding), testing and commissioning of equipment of all its worksites to verify that they are safe for all of the planned work to be carried out.

### 4.8 Instruction to Stop Work

If SLK is made aware of the Contractor/Subcontractor performing (or intending to perform) an activity that is unsafe, pose a risk of injury or death or hazard or unacceptable impact to the environment, health and well-being of the personnel, SLK shall have the right to notify the Contractor/Subcontractor of same and to direct the Contractor/Subcontractor to stop such activity. The Contractor/Subcontractor shall not recommence the affected activity until proper measures to solve the issue and an agreement in writing from SLK HSE Department Head has been received. All cost involved with the stoppage shall be for the Contractor/Subcontractor account. Time lost as a consequence of any such stoppage shall not excuse the Contractor/Subcontractor from its obligation to complete the work in accordance with the requirements of the Sub-Contract.

## 5 SAFETY AND ENVIRONMENTAL MANAGEMENT

In addition to the foregoing, the Contractor/Subcontractor shall implement project specific safety management measures in accordance with SLK HSE Requirements and to ISO 45001:2018 OHS Management System, ISO 14001:2015 Environmental Management System and in compliance to relevant local laws and regulations to include the following SMK2 and SMK3.

### 5.1 HSE Training and Awareness

- 5.1.1 All site personnel including visitors, suppliers and vendors must undergo HSE induction training to be conducted by SLK HSE Department or his authorized representative before they commence work on power plant. Access to site shall be denied to those who have not been inducted.
- 5.1.2 The Contractor/Subcontractor shall ensure that all its Managers, Engineers, Supervisors, Foreman including those of its Subcontractors are trained in HSE Management.
- 5.1.3 The Contractor/Subcontractor shall be responsible for identifying any trade and skill training (Specialized Training) which may be required for the performance of the work



## Appendix-3 HSE Requirements

e.g. Confined Space, Working at Heights, Lifting and Rigging, Hot work etc.

- 5.1.4 The Contractor/Subcontractor shall ensure that all their workers are competent in their assigned task and attend to their own specialized training conducted competent HSE Training Instructor or third party Training institution.

### 5.2 HSE Signage

- 5.2.1 SLK will install appropriate HSE informative signs in various strategic location of the power plant site..
- 5.2.2 The Contractor/Subcontractor shall install appropriate bilingual (English – Local) HSE informative signs, board, banners charts and other items wherever and whenever required or asked by SLK including temporary barricades and warning tapes.

### 5.3 Road Safety

- 5.3.1 The Subcontractors shall make sure that all its vehicle drivers and heavy equipment operators are in good health and shall have a valid license for driving & operating those equipment issued by Local Government and all heavy equipment operators e.g. Forklift, Crane, Boom Truck, Loader, etc. shall have a 3rd Party competency certificate along with the heavy equipment operator's license. These evidences shall be furnished to SLK HSE office prior to mobilization of operators and drivers at the project site.
- 5.3.2 Along with the above requirements, prior to issuance of entry pass at the power plant site, Contractor/Subcontractor are required to get their equipment inspected by SLK HSE staff for approval to entry. And provide as a minimum, the following evidence of those vehicle's/equipment;
- a. 3rd Party Certificate of Inspection
  - b. Certificate of Registration from local authority
  - c. Copy of Insurance & Ownership
  - d. Previous inspection and maintenance record

### 5.4 Personal Protective Equipment and Safety Devices/Facilities

- 5.4.1 Contractor/Subcontractor shall provide appropriate PPE for its personnel and visitors in accordance with the hazards and risk of the work and in compliance with recognized international standard
- 5.4.2 The Contractor/Subcontractor shall ensure that its personnel always wear the appropriate PPE required for the type of work being carried out.
- 5.4.3 The Contractor/Subcontractor shall ensure his employees understand the need for PPE and safety devices/facilities are provided with necessary instruction and training in its correct use.
- 5.4.4 The Contractor/Subcontractor shall replace free of charge to the employee, any PPE and safety devices/facilities which become defective/deficient in any way through normal work usage or wear and tear, such that all times the workers have adequate protection.
- 5.4.5 If Contractor/Subcontractor cannot follow HSE regulations, SLK can provide





appropriate adequate personal protective equipment and device/facilities to Contractor/Subcontractor based on SLK's own discretion, and all expenses shall be deducted from Contractor/Subcontractor's payment.

- 5.4.6 Prior to commencement of project, any costs related to safety shall be included in contract or quotation. In case of unexpected costs occur, Contractor/subcontractor shall discuss it with SLK in advance prior to its implementation or execution.

The requirement Personal Protective Equipment such as a mention below:

1. Contractor shall comply with SLK PPE Standard. Required PPE including but not limited to:
  - Safety Helmet complete with company logo, Chin strap, with yellow colour (Safety Helmet Not expired)
  - Uniform with reflector
  - Safety shoes with steel cap toe and good condition
  - Additional high visibility vest shall be wearing if working at coal yard area
  - Specific PPE Full body Harness shall be double lanyard and completed with absorber.
2. Contractor shall provide required additional specific PPE, which decided, based on risk assessment.
3. Contractor shall provide PPE to their entire employee and maintain their PPE stock 10% more than manpower planning.
4. All PPE shall be Inspected by SLK prior to use

## **5.5 Illumination for Working Area**

- 5.5.1 The Contractor/Subcontractor shall provide suitable and sufficient temporary illumination and emergency lighting for maintaining safe working conditions for all areas requiring access including platforms, under platforms, underpasses, excavations, etc. and shall be in accordance with the relevant legislation (International and Local).
- 5.5.2 The Contractor/Subcontractor shall provide temporary general illumination with a lighting level of not less than 75 LUX. Where work is performed in areas with insufficient lighting, suitable floodlights shall be provided, to include fixed and portable lighting, to enable work to be carried out safely.
- 5.5.3 An adequate number of lamps shall be located at the work area.
- 5.5.4 The contractor / sub contractor shall implement ISO 50001:2018 energy management system by implementing energy conservation in selecting electrical devices.

## **5.6 Emergency Preparedness**

- 5.6.1 SLK will establish the Site Emergency Response Plan for the project. The Contractor/Subcontractor shall submit site specific Emergency Response Plan to SLK for approval within 30 days of contract effective date. The basic and essential features of any emergency plan/procedures includes:
- a. Establishment and maintain effective communications to SLK HSE Department which includes Local Government Units such as Fire Station, Police Department and Emergency Response Services.



- b. Appointment of Emergency Response Team (ERT) personnel and specifying their duties and responsibility.
  - c. Emergency Response and action items for various that incident that could happen during the Project such as but not limited to;
    - Work site accidents including severe injuries and fatalities
    - Facility Emergencies such as fire, explosion, toxic gas leakage, hazardous material spillage etc.
    - Road Traffic Accident (RTA) Utility Failure (telephone, water, gas, electricity)
    - Fire in workers camps/accommodation
    - Workplace Violence, Criminal Activities, intentional sabotage or civil disturbances
    - Electrical shock
    - Working at height incidents
  - d. Testing and maintenance of emergency response equipment (fire extinguisher, fire alarm system, etc.)
  - e. Training and drills (table top exercise, actual/practical training, evacuation)
  - f. Designation of evacuation plan and muster/assembly areas.
- 5.6.2 The Subcontractor shall provide necessary equipment in case of fire, personal injury, damage to property, chemical spill and so on.

## **6 HEALTH AND HYGIENE MANAGEMENT**

### **6.1 Substances Hazardous to Health**

- 6.1.1 The Contractor/Subcontractor shall ensure that all hazardous substances supplied or used must have relevant and up to date MSDS (Material Safety Data Sheets) or GHS (Globally Harmonized System of Classification and Labelling of Chemicals) and safety assessments are conducted relating to any substance that may be hazardous to health or to the environment and adequate controls are put in place.
- 6.1.2 The Subcontractor shall give copy of MSDS to SLK HSE Department or any related documents for all hazardous chemical that will be utilized at the worksite.
- 6.1.3 The Subcontractor shall provide proper storage area for all Hazardous chemical and all personnel shall be familiar and trained with its characteristic and emergency response.

### **6.2 Welfare and Sanitation Provision**

The Contractor/Subcontractor shall provide suitable and sufficient welfare facilities on site which are readily accessible taking into account the number and distribution of workers throughout its entire work site. These facilities shall include:

- a. Drinking station with supply of adequate clean drinking water. Drinking water must meet the criteria for all personnel to drink. Common drinking cups or dips are prohibited.
- b. Sheltered rest areas, to include seating, segregated from the worksite so that workers may safely remove helmets and other items of PPE. Such rest areas shall have sufficient waste bins. Such location must be away from SLK Process Area, properly equipped with shelter and signs posted.
- c. Where necessary safe smoking area must be provided with the approval of SLK



Management.

### 6.3 Medical and First Aid Provision

- |       |   |
|-------|---|
| 6.3.1 | All Contractor/Subcontractor employee shall be passed medical fitness to work from doctor before working at worksite. The record medical fitness to work shall submitted to SLK   |
| 6.3.2 | The Contractor/Subcontractor shall provide trained first aid personnel and maintain first aid box/kits to give effective first aid to cover its work site. Where work is to be carried out during extended hours or on a shift system. The Contractor/Subcontractor shall ensure that there are sufficient trained first aider personnel on work site to give effective cover at all hours. |
| 6.3.3 | The Contractor/Subcontractor shall ensure proper medical evacuation of personnel suffers serious injury that needs further medical treatment to the nearest hospital/medical facilities.  |
| 6.3.4 | The Contractor/Subcontractor shall ensure compliance with medical insurance (BPJS Ketenaga Kerjaan) of all their workers and staff at site according to local regulations from relevant government organization or local laws, the records shall be available to SLK on request.  |

## 7 ENVIRONMENTAL MANAGEMENT

### 7.1 Contractor's/Subcontractor's Worksites

- 7.1.1 The Contractor/Subcontractor shall develop, implement and submit to SLK for approval its own Environmental Management Plan within 30 days of contract effective date in accordance with SLK Environmental Management System and to International Standards Organization ISO 14001:2015 and in compliance to relevant local laws and regulations.
- 7.1.2 The Contractor/Subcontractor main responsibility in environmental management are;
- a. Manage the operation in a way that ensures continual improvement in environmental performance and compliance with legislation.
  - b. Identify all potential hazards associated with the execution of the project such as dust, noise, light, odors, working hours and general disruption on the local community and to develop prevention, control and mitigation measures to eliminate or minimize harm to people, damage to plant or equipment or adverse impact on the environment.
  - c. Assess any relevant task to ensure adequate controls are in place to minimize the impact of hazardous substances on individuals and to protect the environment.

## 7.2 Waste Management Plan

The Contractor/Subcontractor shall develop, implement and submit to SLK for approval its own Waste Management Plan within 30 days of contract effective date for all waste created as a direct result of its operation. In particular the Subcontractor must:





- a. Ensure good housekeeping is maintained throughout the duration of the work.
- b. Minimize the environmental impact of chemicals through correct storage, deployment and disposal;
- c. Manage all waste according to the following hierarchy: eliminate where possible, reduce at source, reduce, reuse, recycle (3R) and dispose. Disposal shall be in accordance with "duty of care" principles and disposal records shall be maintained by the Contractor/Subcontractor and available for audit by SLK.
- d. Contractor shall sort the type of waste; organic waste, anorganic waste and hazardous waste.

## **8 Equipment And Operating Standards**

For the following items, Contractor/Subcontractor shall approved SLK operational standards which shall be used during the performance of the Services. The following descriptions are intended as minimum guidelines to be used in assessing these standards. Upon Contractor's agreement of the standards, they shall be included as Attachments to this document and covered in a bridging document that links the Contractor and Subcontractor standards and procedures. The Contractor/Subcontractor shall apply such agreed standards through out the course of the Services. Equipment proposed for the Services shall be subject to Client pre- mobilization inspection and Client shall reject and require the replacement of any equipment it deemed unfit, unsafe or inadequate for the Services.

### **8.1 Tools and Equipment**

All Contractor and Subcontractor equipment and tools shall only be operated by competent personnel.

Contractor/Subcontractor shall ensure that all machinery, equipment, facilities, and other items associated with or utilized in the Services are maintained in a safe, sound and proper condition, and comply with laws, regulations, and the Client requirement.

Contractor/Subcontractor shall ensure that all tools and equipment and temporary facilities and other items used in the Services, whether purchased, rented or other wise provided by Contractor/Subcontractor are in a safe, sound and good condition and are capable of performing the function for which they are intended.

Contractor/Subcontractor shall ensure that all rotating or moving parts of all tools and equipment are adequately guarded to prevent accidental contact by personnel. Every power-driven machine should be provided with adequate means, immediately accessible and readily identify able to the operator of stopping it quickly, and preventing it being started again.

**8.2 Abrasive Wheels (Including Portable Grinders)**

Contractor/Subcontractor shall ensure that safety protection in the form of goggles and/or shields are provided and utilized by the personnel working with grinding machines and/or abrasive wheels.

Contractor/Subcontractor shall ensure that only trained and competent personnel are permitted to carry out grinding work and change out discs on portable grinders. When changing discs on a portable grinder, it is imperative that a suitable replacement disc is fitted and in the correct manner.

Contractor/Subcontractor shall maintain a complete and current list of such authorized and competent personnel. Contractor/Subcontractor shall make the list available to Client when required.

**8.3 Diesel Engine Driven Pumps, Compressors, Welding Set, Etc.**

Diesel engine driven pumps, compressors, welding sets, and any other diesel engine driven equipment must be located in a safe area. If such equipment is to be used in hazardous area, Subcontractor shall ensure the equipment complies fully with EEMUA 107 requirements (Recommendations for the Protection of Diesel Engines Operating in Hazardous Areas). Any such equipment must be well maintained and in good operational order and prior to use maybe inspected by Client Representative.

**8.4 Electrical Power Portable Tools and Equipment**

Contractor/Subcontractor shall implement ISO 50001:2018 Energy management system.

Contractor/Subcontractor shall ensure only trained and competent personnel shall use portable electrically powered tools and equipment, waterproof socket and terminal.

Contractor/Subcontractor shall ensure that all portable equipment is disconnected from the power supply when not in use. All flexible cables shall be in good and safe working condition. Taped joints in cables shall not be permitted.

Contractor/Subcontractor shall have a written procedure for checking and maintaining portable electrically powered hand tools and equipment in place. Any defective electrical tool and equipment shall be immediately prohibited from further use until it has been satisfactorily repaired. Defective items which are no longer service able shall be removed from storage or use and scrapped. Cable and the connection shall be similar type.

Contractor/Subcontractor shall maintain accurate records regarding the







maintenance and disposal of such equipment. The Subcontractor shall appoint a person(s) to be responsible for such maintenance. All Electrical power portable tools and equipment shall be passed inspection from the Client.

The Electrical power portable tools and equipment shall be follow requirement such as mention below:

- a. No modification allowed for all electrical equipment unless by certified personnel
- b. Out of service, electrical tools/equipment shall be tagged with out of service tag or danger tag.
- c. Any electrical equipment shall be pass SLK inspection after modification or maintenance
- d. Electrical cable not allowed laying in open water and should be lay up (suspended above head)
- e. All electrical appliances shall pass SLK Inspection
- f. All electrical panel shall provide with ELCB (as much as possible using 30mA)
- g. All electrical panel and power sources should be provide with proper grounding
- h. Hand and power tools such as Grinding Machine shall have Dead Man Switch
- i. LOTO devices should be provided and implemented as SLK LOTO Procedure

### 8.5 Hand Tools

Contractor/Subcontractor shall ensure that all tools supplied are in good condition and fit for their intended use. Damaged tools which are unfit for use must be removed from service immediately and if they can not be repaired, they must be scrapped. Inspection should be conducted monthly, inspected by competent person.

### 8.6 Crane, Over Head Crane, Hoist Crane

All cranes used shall have a valid equipment operating license (SILO) and operators shall also have a valid operator license (SIO) and must be in accordance with the class / type of crane used. Cranes should be checked periodically and reports are made.

The Lifting Rigging shall be follow requirement such as follows:

- a. All lifting works will require a lifting plan for approval prior to performing the lift.
- b. If the lift is over than 50 tons or classified as critical (exceeding 80 % of crane capacity chart), the Contractors/Subcontractor shall submit detailed rigging plan with all applicable supporting calculations to Owner for approval prior to the lift.
- c. Qualified rigger and signal man shall have valid KEMENAKER certificate

**8.7 Lifting Appliances and Loose Lifting Tackle**

Contractor/Subcontractor shall ensure that any lifting appliances shall, be load tested, inspected by a qualified certifying person in accordance with government regulation prior to mobilization. In addition to these items being inspected before use, they shall be subjected to a six (6) monthly inspection by a third party or by a person trained and duly authorized in writing to be competent to inspect lifting appliances. All Lifting appliances or rigging tools shall be passed inspected from the client.

Safe Working Load (SWL) and radius charts shall be available for all lifting equipment and shall be marked on the equipment. Contractor/Subcontractor shall note its responsibilities to ensure the safety of the lifting appliances for the duration of this Contract.

**8.8 Scaffolding and Access**

All work performed at height of over 1.8 Meter above ground or deck or permanent access platform level or if a pre job risks assessment identifies a hazardous situation/activity that requires this type of mitigation (i.e. working overboard), shall be executed from suitable means of access. This will require the use of ladders and/or scaffolding dependent on the nature of the work. Where scaffold materials are used they shall be clean and corrosion free and free of incipient faults.

Scaffold boards will be free from twists and splits and will not be painted. Scaffolding, when required, will only be erected by persons who have received training in scaffolding and are deemed competent person by Contractor by virtue of this training and a physical assessment of their capabilities and inspected and tagged by Certified Inspector/Supervisor Scaffolding, completed with toe board, middle and top handrail, and no gap for platform. Refer to Ministry of Manpower Labor Republic of Indonesia regulation No. 9 year 2016 about Safety Work at Height.

Contractor/Subcontractor scaffolding installation shall follow requirement as follows:

1. Only Contractor and Sub-contractors Personnel trained and certified as competent in scaffold erection may erect, modify, or dismantle scaffolds.
2. Scaffold Material shall be galvanized, not rusted, bended/damage as JIS standard (diameter 48.3 mm, thickness 2.4 mm - 4 mm)
3. Scaffolding structure shall use 1 standard material (Can not be mixed)
4. Scaffolding type: Tube
5. The scaffold group / team consist:
  - shall be lead by 1 certified Scaffolding Supervisor (KEMENAKER),



- certified scaffolder (KEMENAKER)
  - helper (certificate not required)
6. Frame type scaffolding is prohibited.
  7. The supervisor of the crew working on the scaffold will be responsible for maintaining a clean scaffold work area and clear access.
  8. Scaffolding decks must be constructed from metal plank
  9. An SRL (Self-retracting lifelines) will be used even if the potentially hazardous fall condition exists even if the entire fall distance is less than 1.8 m (i.e. exposed rotating equipment in use, etc.). If this type of potential hazard cannot be mitigated then an SRL may be required.

### 8.9 Working at Height

All work performed at a height of over 1.8 Meters (or where there is a risk of fall) shall require fall protection. Contractor/Subcontractor must ensure that the members of the Contractor/Subcontractor Group required to work at height are trained in safe work at height practices. Contractor/Subcontractors must ensure that fall restraint and fall protection equipment is provided for all work at height, and that this equipment is inspected and in a safe operable condition. Full Body Harness should be double lanyard, for >6 meters should be equipped with shock absorber following Government Regulations, Ministry of Manpower Labor Republic of Indonesia regulation No. 9 year 2016 about Occupational Health and Safety of Working at Height.

Fall protection equipment must be inspected for wear and damage, and have a current inspection tag from an authorized inspector. Every time before doing high-level work there must be an inspection from the relevant team or competent to ensure safe conditions for work.

### 8.10 Hot Work Activity

Contractor/Subcontractor performed hot wok activity (Welding, Grinding.Etc). The Contractor/Subcontractor shall be follow requirement such as mention below:

- a. Identified the risk of fire or explosion and mitigate before execution the work.
- b. Applying permit to work system and approve from authorized Personnel before execution the work
- c. Trained personnel hot work activity
- d. Standby fire watch during performed the hot work and ensure no hot sources before leaving the work site.
- e. Removed the flammable material before hot work activity
- f. Provide fire blanket to prevent spark spread to other site.
- g. Stand by fire extinguisher nearest the hot work activity

### 8.11 Pressurize Gas Cylinder

Contractor/Subcontractor shall be follow the pressurize gas cylinder requirement as a mention below:

- a. All pressurized cylinder shall be stand in cage, tied off / chained, upright position, flammable gasses sign in place.





- b. Contractor shall provide adequate number of cylinder cradle/ trolley
- c. Contractor shall provide Flashback arrestor both side for all flammable & oxygen gasses connection
- d. All Gas Cylinders must have a trolley for mobilization, shelves during use in the project site, secure with chains and in an upright position
- e. Every time using of Oxygen & acetylene/ LPG shall be completed with Fire Extinguisher.
- f. Pressure vessel with working pressure 1 kg/cm<sup>2</sup> or more shall meet requirement of applicable Indonesia regulation (Regulation of Minister of Manpower No. 37, 2016 – About Occupational Safety and Health of Pressure Vessels and Storage Tanks), as minimum
- g. Cylinders color code should in accordance with Ministry of Manpower No 37, 2016 regarding pressure vessel and storage tank
- h. all Cylinders shall be leak test before use
- i. Oxygen and acetylene cylinder shall be stored separately. A minimum distance of 6 meter or 2 meter with flame-proof wall.
- j. Cylinders shall be stored in areas away from operation activities in conspicuously marked racks indicating type of gas and whether cylinder is full or empty.
- k. Wheeled carts or racks with fork skids shall be used to transport cylinders. Cylinders cannot be transported manually.
- l. Check valves shall be installed on all cutting torches. Flash arrestors shall be installed on the downstream side of oxygen and fuel gas regulators as well as at the hand torch itself, to which the appropriate hoses will be attached.
- m. Appropriate hoses and fittings shall be purchased for the type of fuel gas utilized

## **9 Security Management**

### **9.1 Security**

9.1.1 SLK will establish Security Plan for the project

9.1.2 The Contractor/Subcontractor in coordination with SLK security to ensure safeguard their tools, materials, equipment vehicle and facilities from any threat, damage or theft of properties.

## **10 Verification and Audit**

### **10.1 Observed Deficiencies**

In the event that SLK observes any deficiencies in the Contractor/Subcontractor compliance with the HSE requirements defined herein, SLK will notify the Contractor/Subcontractor, and the Contractor/Subcontractor shall immediately make corrective action to the noted deficiencies. In case that Contractor/Subcontractor fails to make corrective action to any deficiencies, SLK can suspend the Contractor/Subcontractor performance of services or any part thereof until such time as the Contractor/Subcontractor is in full compliance with the terms of this agreement.



No standby charges or other charges shall be applicable during the suspension. All costs incurred by the Contractor/Subcontractor during or as a result of such suspension shall be for the Contractor/Subcontractor's account.

**10.2 Punishment**

Contractor/Subcontractor If there is a case of death and LTI caused by a worker from Contractor, and then the contractor will be excluded from the project and not allowed to take part in the tender process in SLK for 2 years.

Contractor/Sub contractor should follow SLK Golden Rules, and SLK rules. Such as if smoking not in smoking area will punish with penalty IDR 1.000.000.

**10.3 Disciplinary Action**

All employees in the project shall comply with SLK HSE rules and regulations for the Project.

Any employees who violate HSE work practices and procedures repeatedly or seriously will be removed from the project/worksites.



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#### APPENDIX-4

##### Schedule of Work

##### Electrical & Instrument inspection, Repair, and Calibration Unit-2

No.	Detail Job List	Working Duration	DAY H-4	DAY H-3	DAY H-2	DAY H-1	DAY 0	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10	DAY 11	DAY 12	DAY 13	DAY 14	DAY 15	DAY 16	DAY 17
1	Preparation	-																						
2	Mobilization man power and tools	-																						
3	Safety Induction	1 Days																						
5	Unit desynchronize with grid	0																						
6	Electrical Inspection*)	11 - 13 days																						
7	Instrument & Control Inspection*)	11 - 13 days																						
8	Calibration Work*)	11 - 13 days																						
9	Pre-commissioning and commissioning	1 days																						
10	Unit readiness for start up and synchr onization**)																							
11	Unit start up and synchronization	2 days																						
12	Unit readiness for normal operation	1 day																						

Note: Unit #2 OFF for 20 Days, 4 - 23 Nov 2025 (tentative)

\*) The duration schedule can be changed based on the Contractor manpower strategy, however the works shall be completed no later by day 13th from the Unit

\*\*) This activity is subject to Liquidated Damage in accordance with General and Technical Requirements and Contract.