PT SKS LISTRIK KALIMANTAN

IPP 3: PLTU Kalteng 1 (2X100 MW)

General and Technical Requirements

Package Name:
Mehanical Inspection and Repair Work Unit-1 2025

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

31 Jan 2025
Revision: 0

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Rev.	Date	Description	Prepared by	Checked by	Reviewed by	Approved by

Paraf

Created By

Reviewer

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, mechanical equipment and site facilities. Mechanical consists of several equipment such as Pressure part, Pump, Conveyor, Rotary Slag Cooler, ESP, Pipe line, Valve, Coal feeder, Drum, Refractory, Sand feeding, Air Compressor, Sootblower, Purifier, Strainer, Condenser, Deaerator, Stacker/Reclaimer, Coal Crusher, Painting, Fabrication, Insulation, and equipment cleaning, etc.

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 mechanical equipment of Unit 1.

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, mechanical inspection and repairing work 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. The bidder must perform site visit to familiarize itself with location of the Plant, condition of equipment, condition of dormitory for Contractor, special tools availability, and other site conditions to enable a bidder to form a comphrehensive proposal under this package. In case a bidder opts not to do site visit, then the bidder is deemed to have satisfied itself with site condition as mentioned above and all and risks associated with descrepency or inadequacy of data for forming a complete proposal shall be borne by themselves.

e. 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.

f. 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, and observe all physical, and mechanical parameters of equipment and compare those parameters with the design stated in the Project Document and relevant international standards 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 (mechanical) can operate within normal operation parameters.

5. Scope of Works

The Contractor shall carry out preparation of maintenance, perform inspections, measurements, testing, dismantling and reassembly of mechanical, and support commissioning of unit 1 until the unit 1 synchronizing.

The Contractor shall do, and shall provide all 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 consists of Engineer, Supervisor (boiler and rotating), QA/QC engineer (boiler and welding), Health, Safety, and Environmental (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 mechanical.

iii. The Contractor shall be responsible for the 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 the preparation of a 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 Mechanical Inspection Unit #1 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 Intenational Standard Engineering and Maintenance Practice and Good Utility Practice, and (iii) conform to General Technical and Requirements 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 1 under this package, Unit 2 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 2. The Contractor personnel, its subcontractor or supplier personnel shall not enter into Unit 2 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 the purpose of completion of work under this document, then it shall prior apply a written permit to the Owner. If such permit is 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 are performed safely and without any harm to the 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 HSE 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 approve. 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 1 de-synchronized with the grid until Unit 1 succesfully re-start up and synchronizes with the grid. 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 detail each step of works and duration of work for such step.

v. Owner's access for supervision of works

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

The witness, approval or signing of any inspection report by any of the Owner's representative shall be not interpreted as the Owner's acceptance of the works. The Contractor shall take full responsibility and

liability for the quality of work, including for any judgment, assessment setting up or adjustment of any component of mechanical equipment.

vi. Contractor's personnel

The contractor must provide qualified and experienced personnel for the execution of the Work. The Contractor must provide the manpower consisting of project management, safety officer, quality control, project control and administration, supervisor, general labor, and other personnel required to complete the Works. The Project Manager, site manager, quality control, rotating engineer and supervisor (hereafter referred to as "Key Personnel") must have at least 10 years' experience in construction, maintenance and commissioning of power generation, provided that such key personel shall have minimum 5 years experiences in steam turbine with capacity no less than 100 MW.

In no less than 21 days prior to execution of the Work, the Contractor must submit the 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 the outage schedule, the Contractor shall submit all works procedures for Owner review and comments. If the Owner makes 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's 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 condition. Measurement tools must meet accuracy in accordance with relevance international standard. All lifting tools must be inspected and pass inspection prior to usage. 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 comments to the report submitted by the Contractor. If the Owner makes 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 statute and regulation. 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 intends 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 the time frame described in Appendix 4 of this document.

ii. Health, Safety, and Environment Objective

The Contractor shall at 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 requirement and project document. The Contractor shall achieve 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 standards, 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 Constractor 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 Mechanical Inspection
- Installation and operation manual of mechanical
- Manual book of mechanical equipment
- Piping and diagram drawing
- Drawing of mechanical
- Power plant steam turbine maintenance regulations
- Electrical safety work regulations
- Preventive maintenance for mechanical equipment
- Mechanical equipment installation engineering quality inspection and assessment regulations
- Manufacturer's original materials, drawings, specifications
- Ragulation 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:

i. 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.

ii. Coordinating the technical support of equipment manufacturers for clarification any manufacturer standard.

iii. Providing all spare parts and main consumables required for maintenance (scaffolding, insulation material, paint, lubricating grease, spare parts for replacement due to operational defects).

iv. Providing dormitory for Contractor's personnel but excluding food and drinking water.

v. Providing electricity for maintenance activities.

vi. Providing instrument air source for maintenance.

vii. 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

PT SKS LISTRIK KALIMANTAN

Appendix-1 - Instruction to Bidders

Package Name:

Mechanical Inspection and Repair Outage Unit-1 2025

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

31 Jan 2025
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Management System ISO 9001:2015 ISO 14001:2015 www.tuv.com ID 91 109 2135350 ID 924 104 22002

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Rev.	Date	Information	Writer	Checked by	Review by	Approved by

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	Created By
	Reviewer

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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 explicitely 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

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.

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	: ☐ Main Office ☐ 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	 : ..... : ..... : ..... : .....

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

Form 2:

COMPANY LOGO

COMPANY LICENSE AND CERTIFICATE

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

....., ... 2025

(.....)
Signature and Stamp

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

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)

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

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. **Work Procedures:** Provide step-by-step procedures for each task, highlighting the sequence of activities, necessary equipment, materials, and resources.
6. **Work Schedule and Milestone:** Provide working schedule in accordance with step-by-step of works and create a mutually agreed milestone schedule
7. **Health, Safety and Environment Measures:** Emphasize health, safety and environment considerations, including risk assessments, protective measures, and compliance with safety regulations.
8. **Quality Control and Assurance:** Describe the quality control and assurance measures to be implemented, ensuring that the work meets specified standards and requirements.
9. **Environmental Considerations:** Address any environmental impact concerns and detail measures to mitigate and manage environmental risks.
10. **Monitoring and Inspection:** Define the monitoring and inspection protocols, specifying how the work will be supervised and evaluated for compliance.

11. **Emergency Procedures:** Clearly outline emergency procedures and contingency plans in case of unexpected events or incidents.

12. **Testing and Commissioning:** Detail the procedures for testing and commissioning, ensuring that the completed work meets the required standards and specifications.

13. **Documentation:** Specify the documentation requirements, including record-keeping, reports, and any other relevant paperwork.

14. **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:

COMPANY LOGO

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

Form 10:

COMPANY LOGO

LIST OF PROPOSED TOOLS & EQUIPMENT
(To be completed by Bidder)

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

Quantity	Description	Size Capacity	Owned or to be Purchased or Leased	Manufacture and Model	Year of Manufacture	Condition	Present Location

....., ... 2025

(.....)
Signature and Stamp

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 12 :

COMPANY LOGO

LIST OF COMPANY EXPERIENCE

No	Name & Type of Job	Clint	Job Value IDR	Project / Employment Period	
				Start	Finished

....., ... 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:
Mechanical inspection and Repair Work Unit-1 2025

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

31 Jan 2025
Revision : 0

Management System
ISO 9001:2015
ISO 14001:2015
www.tuv.com
ID 01 100 2135350
ID 924 104 22002

0	31 Jan 2025	First Issued	AAS	MSZ	Subhan Hasisi	Ikhlas Mappatunru
Rev.	Date	Description	Prepared by	Checked by	Reviewed by	Approved by

Paraf

Created By

Reviewer

Package- Supply Manpower, Consumables & Tools for Mechanical Inspection and Repair.
Rev.0

NO	WORK DESCRIPTION
1	Inside part boiler
1.1	Inspection & Replace the primary air nozzles furnace if any loose or abbrasive (furnace)
1.2	Inspection & Replace the primary air nozzles loopseal if any loose or abbrasive (loopseal A & B)
1.3	Inspection, Repair/ Replace cover shield, tie bar FSH if any damage (final superheater)
1.4	Inspection, Repair/ Replace cover shield, tie bar Cold Reheater if any damage
1.5	Inspection, Repair/ Replace cover shield, tie bar PSH if any damage. (primary superheater)
1.6	Inspection, Repair/ Replace cover shield Economizer if any damage (economizer)
1.7	Inspection, Repair/ Replace cover shield APH if any damage (Air preheater)
1.8	Check & repair dent tube after chipping (boiler) (If Any)
1.9	Inspection & Repair Vortex Finder of Cyclone (vortex finder of cyclone) Check the deformation of the central cylinder, opening welding of the sealing plate, and support fracture, and repair It
1.10	Inspection & Repair Lance Tube of Sootblower (HRA)
1.11	Inspect & repair waterwall if any damage
1.12	Hydrotest including assembly, disassembly hydrotest block valve & cleaning
2	Fan system
2.1	HPF A, B, and C
2.1.1	Cleaning/replace air filter
2.1.2	Cleaning/flushing water cooler pipeline
2.1.3	Replace oil and Replace seal on drain nut bearing housing
2.1.4	Check tension / Replace V-Belt and Alignment HPF
2.1.5	Check condition & clearance DE and NDE bearing
2.1.6	Clean inside of the rotor and the casing, add circulation ventilation of enclosure
2.1.7	Inspection damage of gear, if necessary replace the gears
2.1.8	Replace Outlet HPFF Rubber DN300
2.2	PAF A & PAF B
2.2.1	Inspect bearing and its clearance & replace oil bearing. Repair / replace if any abnormal
2.2.2	Cleaning water cooler pipeline bearing fan
2.2.3	Open and close Manhole Fan & Replace Packing if needed
2.2.4	Check the corrosion, crackle, and cleaning of impeller.
2.2.5	Inspection and regreasing all bearing damper
2.2.6	Check open/close damper, include cleaning, smooth movement knife gate
2.2.7	Check coupling & shaft alignment
2.2.8	Inspection ducting fan
2.2.9	Replace bearing motor PAF-1A bearing DE SKF 6228, NU228ECJ & NDE NU226ECP
2.3	SAF A & SAF B
2.3.1	Deep Inspect bearing and its clearance & replace oil bearing. Repair / replace if any abnormal
2.3.2	Cleaning water cooler pipeline bearing fan
2.3.3	Open and close Manhole Fan & Check Packing (Coordination wit I&C & OP team to calibrate the damper)
2.3.4	Check the corrosion, crackle, and cleaning of impeller.
2.3.5	Inspection and regreasing all bearing damper
2.3.6	Check open/close damper, include cleaning, smooth movement knife gate
2.3.7	Check coupling & shaft alignment
2.3.8	Replace bearing motor SAF-1A DE SKF 6228, NU228ECJ & NDE NU226ECP
2.3.9	Inspection ducting manhole SAF, repair if any leakage
2.4	IDF A & IDF B
2.4.1	Inspect bearing and its clearance & replace oil bearing. Repair / replace if any abnormal
2.4.2	Cleaning water cooler pipeline bearing fan
2.4.3	Open and close Manhole Fan & Check Packing (Coordination wit I&C & OP team to calibrate the damper)
2.4.4	Check the corrosion, crackle, and cleaning of impeller.
2.4.5	Inspection and regreasing all bearing damper
2.4.6	Check open/close damper, include cleaning and smooth movement
2.4.7	Check coupling & shaft alignment
2.4.8	Inspection ducting flue gas IDF
2.4.9	Replace expansion join outlet IDF-1A (notif 1100040282)
2.4.10	Replace bearing motor IDF-1A bearing DE SKF 6234 & NDE SKF NU234ECM
3	Fuel oil system
3.1	Check or cleaning fuel filter supply (1), (2), (3), (4)
3.2	Replace lubrication supply & unloading pump A, B
3.3	Rectify leakage on Fuel Oil Supply Pump A & B
3.4	Cleaning oil gun burner and strainer. Atomizing test & igniter test
3.5	Inspect and repair mobile polluted fuel purifier
4	Bottom ash handling
4.1	Inspection on double mixer loading & repair if any abnormal
4.2	Inspection on dry ash unloading ash system & repair if any abnormal
4.3	Cleaning / replace bag filter
4.4	Rectify blockage on drain cyclone A & B to slag ash cooler
4.5	Check, repair / replace expansion joint & valve

4.6	Replace expansion join drain Cyclone to Slag Ash Cooler
4.1	Chain Scrapper bottom ash
4.1.1	Inspection/lubricant Chain Scrapper
4.1.1	Replace oil gearbox Chain Scrapper
4.1.2	Repair if any bucket loose / broken / crack Chain Scrapper
4.2	Bucket Elevator Slag Cooler
4.2.1	Inspection/lubricant chain Bucket Elevator Slag Cooler
4.2.2	Replace oil gearbox Bucket Elevator Slag Cooler
4.2.3	Repair if any bucket loose / broken / crack Bucket Elevator Slag Cooler
4.3	Slag Ash Cooler A, B, C, and D
4.3.1	Check & cleaning slag cooler inlet line
4.3.2	Regreasing roller slag ash cooler & repair if any touching with cooling pipe
4.3.3	Check/repair gland sealing line
4.3.4	Check and repair inlet valve mov
4.3.5	Repair pin of support ring ash cooler
4.3.6	Replace inlet slag cooler expansion joint
5	ESP
5.1	Inspection corrugated, compensator & Pipeline & repair if there any damage
5.2	Inspection, cleaning & regreasing rootblower Under ESP
5.3	Dismantle insulation to inspect ESP Hopper
5.4	Inspection Dome Valve System, Repair / replace material if any damage
5.5	Inspection anticlogg nozzle system. Replace material if any damage
5.6	Inspection inside structure
6	Fly ash system
6.1	Inspection Double Feeder Coarse FA
6.1.1	Inspect & adjust chain sprocket
6.1.2	Inspect and cleaning nozzle and blade mixer, replace if any damage
6.1.3	Inspection Dry Unloading and Telescopic spout. Repair if any damage
6.1.4	Inspect for Replace/Cleaning Bag Filter
6.1.5	Regreasing inlet dome valve double mixer
6.2	Inspection Double Feeder Fine FA
6.2.1	Inspect & adjust chain sprocket
6.2.2	Inspect and cleaning nozzle and blade mixer, replace if any damage
6.2.3	Inspection Dry Unloading and Telescopic spout. Repair if any damage
6.2.4	Inspection for Replace/Cleaning Bag Filter
6.2.5	Regreasing inlet dome valve double mixer
6.2.6	Inspection dome valve system for transfer esp to coarse and fine ash silo
6.2.7	Inspection of rootblower fly ash silo
6.2.8	Inspect and recoating roof top fly ash silo
7	Pipe line Inspection
7.1	Check all Hanger and Support (adjust if necessary)
7.2	Inspection underground lining inside CWP pipe
7.3	The shaft seal steam supply pipe has no drainage, will install new tapping pipe DN25 to line drainage.
7.4	Carry out technical transformation by connecting the pipes of these three drainage water seals to the trench or to a suitable position before the drainage water seal of the shaft seal cooler, The design error of the drainage water seal in the shaft seal steam return system poses a risk of vacuum leakage.
7.5	Inspect hot reheat pipe, repair if any finding (P91 Material) (33 Dia.Inch)
7.6	Intermitten Bowdown vessel and Pipeline
7.7	Check, inspection, replacement tube furnace boiler thickness <7mm DN60 (80 Dia.Inch and 350m membran)
7.8	Check, inspection, welding plate furnace and all area
7.9	Check boiler drain thickness as per requested
7.10	Leakage at (flange) drain before MCV Line cold reheat to auxsteam header (2100032603)
7.11	Steam leak in line drain CRH to aux header turbine (2100032832 & 2100033521)
7.12	Leakage normal drain MCV LPH #5 (2100032901)
7.13	Replace Valve Venting Inlet & Outlet Line Feedwater HPH #2
7.14	Inspection line extraction including remove & install cladding
7.15	Replace pipe normal drain HPH2
8	Coal chute & SA lower pipe
8.1	Inspection Welding Coal Chute A if damage (inside & outside)
8.2	Inspection Welding Coal Chute B if damage (inside & outside)
8.3	Inspection Welding Coal Chute C if damage (inside & outside)
8.4	Inspection Welding Coal Chute D if damage (inside & outside)
8.5	Inspection Welding Coal Chute E if damage (inside & outside)
8.6	Inspection Welding Coal Chute F if damage (inside & outside)
8.7	Inspection SA lower pipe A-F
8.8	Repair if any damage
8.9	Add. Emergency Drain Pipeline at Each Outlet Coal Feeder
9	Coal feeder A-F
9.1	Inspect head and tail pulley condition
9.2	Inspect belt condition and replace if necessary
9.3	Replace rubber scrapper conveyor if required

9.4	Centering and adjust belt tension of conveyor
9.5	Inspect chain and sprocket conveyor (lubricated)
9.6	Sampling oil condition (viscosity, moisture)
9.7	Inspect gearbox main drive motor, change / top up oil
9.8	Inspect gearbox clean out conveyor, change / top up oil
9.9	Part replacement gasket/packing
9.10	Bolt tightening / torque
9.11	Inspection and ensure dredge machine can be operated
9.12	Welding tapping point coal feeder A-F
10	Manhole inspection
10.1	Open and Packing Manhole Boiler Check
10.1.1	Open & Replace packing Furnace man hole
10.1.2	Open & Replace packing COD man hole
10.1.3	Open & Replace packing gas duct man (inlet HRA & ignition duct) hole
10.1.4	Open & Replace packing Seal pot man hole
10.1.5	Open & Replace packing HRA man hole
10.1.6	Open & Replace packing Economizer man hole
10.1.7	Open & Replace packing Air duct from fan man hole
10.1.8	Open & Replace packing Air preheater man hole
10.1.9	Open & Replace packing ESP man hole
10.1.10	Open & Replace packing Windbox manhole
10.2	Close Manhole Boiler
10.2.1	Close Furnace man hole (After cleaning)
10.2.2	Close COD man hole (after cleaning)
10.2.3	Close Outlet gas duct inlet HRA & ignition duct) man hole (after cleaning)
10.2.4	Close Seal pot man hole (after cleaning)
10.2.5	Close HRA man hole (after cleaning)
10.2.6	Close Economizer man hole (after cleaning)
10.2.7	Close Air duct from fan man hole (after cleaning)
10.2.8	Close Air preheater man hole (after cleaning)
10.2.9	Close ESP man hole (after cleaning)
10.2.10	Replace Gasket Manhole Boiler if any damage
10.2.11	Repair / replace manhole locking bolt & L-bar if any damage
11	Steam drum
11.1	Open Manhole steam drum
11.2	Remove, clean and repair the demister pad / cyclone water separation device
11.3	Check the corrosion and scaling inside the drum, and clean the corrosion and scaling inside the drum
11.4	Inspection of internal welds and metal flaw detection
11.5	Drum center line level measurement, measurement of drum tilt and bending
11.6	Check and repair drum support, hanger, adjust the expansion indicator (if necessary)
11.7	Inspection internals, cleaning, and repair if necessary
11.8	Close Manhole steam drum (after cleaning) + cold tightening
11.9	Hot tightening manhole steam drum
12	Refractory Inspection
12.1	Refractory inspection (Furnace, Cyclone & COD, seal pot, ignition chamber, windbox, gas duct, manhole)
12.2	Repair after inspection (Furnace, Cyclone & COD, seal pot, ignition chamber, windbox, gas duct, manhole). If required
12.3	Install refractory at platen reheater
12.4	Install additional refractory at panel superheater-1 & 6
13	Sand feeding
13.1	Inspect sandfeeding system (gearbox and bucket elevator), repair if any damage
13.2	Inspect bag filter, replace if any damage
14	Compressor air dryer (Subject possible to stop)
14.1	Oil Free Screw Air Compressor
14.1.1	Top up / Replace Oil
14.1.2	Cleaning / Replace air filter for compressor
14.1.3	Cleaning body compressor & air dryer
14.1.4	Inspect desiccant, diffuser, muffler, cleaning filter (fine & superfine) on air dryer system
14.2	Oil Injected Screw Air Compressor
14.2.1	Top up / Replace Oil
14.2.2	Cleaning / Replace air filter for compressor
14.2.3	Cleaning body compressor & air dryer
14.2.4	Cleaning filter (fine & superfine) on air dryer system
15	Sootblower System
15.1	Relubricating gearbox, regreasing chain, bearing, replace if necessary
15.2	Inspect Lance tube sootblower condition, replace if necessary
15.3	After NDT Inspection Replace if found that was Eroded.
16	Commisioining boiler
16.1	Commisioning Boiler Fan System until acceptance parameter accomplish
16.2	Commisioning Boiler Fly Ash System until no clogged and no leak
16.3	Commisioning Boiler Bottom Ash System until no clogged and no leak
16.4	Commisioning Boiler Coal Feeding System until no clogged and no leak
16.5	Commisioning Boiler Fuel System

A.2	**Mechanical Turbine**
17	Vacuum pump
17.1	Flushing HE cooler vacum pump A & B
17.2	Re-greasing bearing DE & NDE vacuum pump A & B
17.3	Replace gland packing Vacuum pump A & B
17.4	Cleaning water filter Vacuum pump A & B
17.5	Cleaning area pump vacuum pump B & B
17.6	Check alignment
18	Vacuum system
~~18,1~~	~~Check & replace broken copper pipe~~
18,2	Inspect the closeness of vacuum system
18,3	Modification backwash line
19	DEH (hydraulic power unit for main valve turbine)
19,1	Check oil viscosity and particle content
19,2	Top up / **Replace** Hydraulic oil
19,3	Cleaning and replace oil filter DEH
19,4	Check and cleaning oil cooler DEH
19,5	Oil Purification by portable purifier
19,6	Inspect Pump Coupling Condition, Replace if Damaged
19,7	Check Oil Filter Line Supply oil for Governoring Valve , Replace if Necessery
19,8	Adjust DEH safety valve (outlet after block valve)
19,9	Install tapping point for NAS online sampling oil DEH
20	HP & LP Bypass (hydraulic power unit for HP & LP bypass)
20,1	Check oil viscosity and particle content
20,2	Check and cleaning cooling system bypass pump
20,3	Purifier oil by Mobile Purifier
20,4	Top up Hydraulic oil
20,5	Install scafolding
20,6	Replace O-ring seal
20,7	Check pump coupling condition, Replace Rubber Coupling Bypass Pump and Recirculating Pump , Replace if Necessery
20,8	Cleaning or replace oil filter HP & LP Bypass
20,9	Cleaning area HP & LP Bypass
20,10	Flushing, purging, and cleaning bypass hydraulic oil line and cleaning block valve
21	Open Circulating Water Strainer/Electric water filter A & B
21.1	Open man hole water filter OCW strainer A
21.2	Cleaning inside water filter OCW strainer A
21.3	Check and manual rotate blade
21.4	Close man hole water filter OCW Strainer A
21.5	Check Gearbox OCW Strainer A, Replace Oil and Oil Seal If Necesarry
22	Condensate pump A & B
22.1	Check oil viscosity and particel content
22.2	Replace new oil CEP A & B
22.3	Check oil level glass and pipe oil connection CEP A & B
22.4	Check alignment CEP A & B
22.5	Cleaning work area CEP A & B (including inside pump pit)
22.6	Cleaning Inlet Strainer
23	CCCW Pump A & B
23.1	Open upper half casing
23.2	Check Replace Gland Packing Sealing Water
23.3	Check alignment
23.4	Replace rubber bolt coupling
23.5	Cleaning Inlet Strainer
23.6	Re-greasing pump
23.7	Check inside check valve
23.8	Cleaning area
24	Boiler feed pump
24,1	Boiler Feed Pump A, B, and C
24.1.1	Check oil viscosity and particle content
24.1.2	Top up or replace oil
24.1.3	Check magnetic filter
24.1.4	Check condition HE oil cooler
24.1.5	Check coupling condition
24.1.6	Check alignment
24.1.7	Cleaning fins HE by spray water
24.1.8	Cleaning inlet strainer pump
24.1.9	Cleaning area pump
24.1.10	Purification lub oil BFP
24.1.11	BFP-1A drain body leak (Notif 1100038770)
24.1.12	BFP 1A Motor DE - Oil Leak (Notif 1100038771)
24.1.13	BFP 1B Motor DE - Oil Leak (Notif 1100038774)
24.1.14	BFP 1C Motor DE - Oil Leak (Notif 1100038776)
24.1.15	Improvement of tapping for online purification system of BFP lube oil pump 1A, 1B and 1C
24,2	Fluid Coupling BFP A, B, and C

24.2.1	Check and Cleaning fluid coupling BFWP/gear box
24.2.2	Cleaning oil filter inlet pump (working pump, Lubrication pump & circulation Pump) fluid coupling
24.2.3	Check & cleaning working air cooler and lube oil cooler fluid coupling
24.2.4	Check coupling condition
24.2.5	Check alignment
24.2.6	Inspect mechanical condition of scoop tube
25	Condenser
25,1	Condenser side A & B, Front side and Rear Side
25.1.1	Open condenser manhole
25.1.2	Open man hole hotwell/water box condenser
25.1.3	Inspection inside condensor & hotwell
25.1.4	Close manhole condensor
25.1.5	Close man hole Hotwell/water box condenser
25.1.6	Check lining Condenser - Coating CL+AC if necessary
25.1.7	Irigation test
25,2	Rubber ball loading facility
25.2.1	Open man hole Outlet condensor side A & B (man hole ball screen)
25.2.2	Check Rubber ball pump conndition
25.2.3	Check coupling condition
25.2.4	Check and adjust ball screen side A & B, repair if necessarry
25.2.5	Close man hole Outlet condensor side A&B (man hole ball screen)
26	Oil Cooler for MOT
26,1	Oil Cooler A and B Main Oil Tank
26.1.1	Cleaning fins HE by spray water (heat exchanger) Oil cooler A and B
26.1.2	Check Visual condition HE (heat exchanger) A and B
27	Smoke exhaust fan
27,1	Smoke Exhaust Fan A & B
27.1.1	Check and cleaning smoke exhaust fan A & B
27.1.2	Inspection impeller of smoke Exhaust Fan A & B
28	Main oil purifier system
28,1	Main Oil Purifier
28,2	Cleaning and replace oil filter
28,3	Check pump transfer oil purifier
28,4	Check vacuum pump oil purifier, Replace Fan
28,5	Cleaning area of Oil Purifier
29	Generator air cooler
29,1	Disassembly the water box, clean the inner wall of cooling tubes of air cooler with nylon brush
29,2	wash the wound copper chips on coolingtube with warm water to remove the dust and dirty
29,3	inspect rubber gasket, replace the damaged or hardnet gasket
29,4	after cleaning dry coolers by compressed air to avoid corrosion
30	Jacking oil pump
30,1	Check all connector JOP A & B
30,2	Cleaning and replace oil filter JOP-A and B (inlet & outlet)
30,3	Trial running JOP A & B
30,4	Check lifting turbine rotor
30,5	Cleaning Area Jacking Oil Pump
30,6	Inspection and cleaning of Jacking Oil Pump and block valve
30,7	Purging line
31	Cooling tower system #1 - #5
31,1	Check oil viscosity and particel content
31,2	Visual inspection check geabox
31,3	Replace oil gearbox Cooling tower
31,4	Check alignment cooling tower
31,5	Inspect spacer coupling, shaft coupling, blade, and bolts condition of cooling tower fan, replace if neccessary
31,6	Check condition nozzle spray cooling tower and replace if necessary
31,7	Check condition eliminator and replace if necessary
31,8	Tighten all bolt structure CT and replace defect structure if necessary
31,9	Rectify leakage cooling tower wall
31.10	Replace Horizontal Oil Seal of Gearbox Cooling Tower
31,11	Improvement of cooling tower basin gate
32	CWP #1 & #2 System
32.1	Check alignment CWP 1 & 2
32.2	Motor uncouple, replace shaft sleeve and its Gland Packing
32.4	Check, Inspection and rectify leakage chamber oil motor CWP 1 & CWP 2
32.5	Check and replace mech-seal cooling pump if required, Cleaning Pump Housing (Inside) before Assembly
32.6	Check, Cleaning, and Lubricate Hoist Crane CWP (Outdoor)
32.7	Check / sampling oil condition of Hydraulic BT. VALVE outlet CWP. Replace / purified if necessary
33	Turbine Oil System
33,1	Inspect the installation clearance of main oil pump bearing and blade wheel
33,2	Clean up oil cooler, and see whether or not the copper pipe is broken
33,3	Clean up strainer, and clear oil tank & oil filter
33,4	Inspect fume exhaust fan and fume exhaust system
33,5	Check & clear oil pipeline

33,6	Check oil viscosity and particel content
33,7	Drain, Inspection, Flushing Main oil tank by portable oil purifier if necessary, and Recirculating MOT
33,8	Oil ejector inspection & cleaning (inc.check roughness nozzle)
33,9	AC and DC pump inspection
33.10	Install additional isolate valve at overflow MOT
34	Extraction system
34,1	Inspect each extraction check valve and its control system
34,2	Inspect HP exhaust back valve, which shall remain close shut
34,3	Drainage system: Check drainage pipelines, which should be clear
34,4	Find out whether or not anchor bolts are loose; see whether or not there is a contact vacancy between base frame and blocking iron;
34,5	Check each part of sliding pin system to see whether or not they comply with design requirements
34,6	Check the supervisory system elements, such as axial displacement, expansion difference & vibration, and calibrate & adjust them a new
34,7	Extraction valve #4 to deaerator indicate not fully open
35	Deaerator Inspection Work
35,1	Open manhole deaerator
35,2	Check Tube & Nozzle Condition (Visual Check), Reweld if any Finding
35,3	Close manhole deaerator
35,4	Install sliding stopper support of pipe from HPH
35,5	Inspection Air Extraction HPH to Dearator, Replace/Pacting if any Finding
35,6	Inspection line condesate to deaerator, replace part if necessary
A.5	**Painting Activity**
A.5.1	Painting and touch up for equipment and pipe are needed
A.6	**Fabrication and Installation Additional Cover**
A.6.1	Transmitter
A.6.2	Hoist crane
A.7	**Replacement Insulation for High Pressure Drain & Vent Pipe**
A.7.1	Drain pipe of Main Steam pipe; OD 76; Drawing J0501
A.7.2	Drain pipe of Main Steam pipe; OD 60; Drawing J0501
A.7.3	Drain pipe of Main Steam pipe; OD 28; Drawing J0501
A.7.4	Drain pipe of the Hot-Reheat Steam pipe; OD 76; Drawing J0502
A.7.5	Vent pipe of the Hot-Reheat Steam pipe; OD 25; Drawing J0502
A.7.6	Drain pipe of Cold-Reheat Steam pipe; OD 57; Drawing J0503
A.7.7	Drain pipe of Cold-Reheat Steam pipe; OD 38; Drawing J0503
A.7.8	Drain pipe of Cold-Reheat Steam pipe; OD 33,4; Drawing J0503
A.7.9	Vent pipe of Cold-Reheat Steam pipe; OD 25; Drawing J0503
A.7.10	Boiler drains and blow down system pipe; OD 32; Drawing J0503
A.8	**Take oil for sampling**
A.8.1	Take sampling oil for PA Fan
A.8.2	Take sampling oil for SA Fan
A.8.3	Take sampling oil for ID Fan
A.8.4	Take sampling oil for HPF Fan
A.8.5	Take sampling oil for Coal Feeder (gearbox, scrapper)
A.8.6	Take sampling oil for Slag Cooler (gearbox)
A.8.7	Take sampling oil for Bottom Ash Scrapper Conveyor
A.8.8	Take sampling oil for Bottom Ash Double Mixer
A.8.9	Take sampling oil for Bottom Ash Bucket Elevator
A.8.10	Take sampling oil for Fly Ash Silo Double Mixer (Coarse)
A.8.11	Take sampling oil for Fly Ash Silo Double Mixer (Fine)
A.8.12	Take sampling oil for Sand Feeding (gearbox)
A.8.13	Take sampling oil for Oil Free Compressor
A.8.14	Take sampling oil for Oil Injected Compressor
A.8.15	Take sampling oil for Main Oil Tank
A.8.16	Take sampling oil for Cooling Tower Fan
A.8.17	Take sampling oil for Condensate Pump
A.8.18	Take sampling oil for DEH
A.8.19	Take sampling oil for Boiler Feed Water Pump
A.8.20	Take sampling oil for Bypass Station
A.8.21	Take sampling oil for Conveyor (gearbox)

PT SKS LISTRIK KALIMANTAN

Appendix-4 – Schedule of Work

Package Name:
Mechanical inspection and Repair Work Unit-1 2025

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

31 Jan 2025
Revision : 0

Management System
ISO 9001:2015
ISO 14001:2015
www.tuv.com
ID 91 100 2135359
ID 824 104 22002

0	31 Jan 2025	First Issued	AAS	MSZ	Subhan Hasisi	Ikhlas Mappatunru
Rev.	Date	Description	Prepared by	Checked by	Reviewed by	Approved by

Paraf

Created By

Reviewer

PT SKS LISTRIK KALIMANTAN

APPENDIX-4
Schedule of Work
Mechanical Inspectionand Repair Outage Unit-1 2025

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	DAY 18	DAY 19	DAY 20
1	Preparation	-																									
2	Mobilization man power and tools	-																									
3	Safety Induction	1 day																									
4	Unit desynchronize with grid	0																									
5	Starting inspection and repair works*)	25 days																									
6	Pre-commissioning and commissioning	4 days																									
7	Unit readiness for start up and synchronization**)	1 day																									
8	Unit start up and synchronization	3 days																									
9	Unit readiness for normal operation	1 day																									

Note: Unit #1 OFF for 20 Days, 02 May - 21 May 2025

*) The duration schedule can be changed based on the Contractor manpower strategy, however the works shall be completed no later by day 17th from the Unit desynchronize from the grid. The Contractor shall prepare a detailed schedule and submit it for Owner review.

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