2 x 100 MW KALTENG – 1
COAL-FIRED STEAM POWER PLANT (CFSPP)

Scope of Works
Modification of Weigh Bridge A, B, and C into Automatic Operation

C		Add some items			
B		General revision			
A		Issued for Approval			
Rev.	Date	Description	Prepared By	Checked By	Approved By

A. Location

Inside the IPP Kalteng-1 Power Plant area, Tumbang Kajuei Village, Rungan District, Gunung Mas Regency, Central Kalimantan. The detailed location is as per the drawing below.

B. Definition

1. Project or Work Operation : Modification of Weigh Bridge A, B, and C into Automatic
2. Owner : PT. SKS Listrik Kalimantan ("SLK")
3. Contractor : 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 or Power Plant : IPP Kalteng-1 Coal Fired Power Plant

C. Scope of Work

Background

PT SKS Listrik Kalimantan (SLK) operates a coal-fired power plant (PLTU Kalteng-1) which utilizes weighbridges to measure the weight of incoming and outgoing materials such as coal, diesel, FABA, garbage, and other transported materials.

Currently, the weighbridges (A, B, and C) are operated manually, requiring operator presence on-site to read truck weight, manage data entry, and control weighbridge operations.

To improve efficiency, accuracy, and reduce human error, SLK intends to upgrade the weighbridge system into a fully automated system that can operate without manual operator intervention. The automation will integrate RFID-based truck identification, automatic sensors, electronic indicators, and system integration with existing load cells and PC-based weighing systems.

PT SKS Listrik Kalimantan (SLK) request to Contractor/vendor to provide the system that can connect the existing weighbridges with the automation weighing system to record the operational data and connect to server.

D. Scope of Work by Contractor

1. Modification of Weigh Bridge A, B, and C into Automatic Operation

The Contractor shall perform all engineering, supply, installation, configuration, testing, and commissioning required to transform the weighbridges into a fully automated system without delete the existing system. The Contractor will provide the automation system and connecto existing weighbridges. The scope includes but is not limited to:

1.1 Supply and Installation of RFID-based Ultrasonic Card Reader

- Provide and install RFID/ultrasonic card reader at each weighbridge.
- Ensure compatibility with truck-mounted RFID tags.
- Reader must detect vehicle ID and load type automatically.
- Data must be integrated directly to the weighbridge PC system.

1.2 Supply and Installation of Automation Sensors & Indicators

Including (but not limited to):

- Ultrasonic distance sensors
- Infrared barrier sensors
- Traffic lights / signal indicators (RED–YELLOW–GREEN)
- Display boards (optional if required by Owner)
- Wiring and accessories

1.3 System Integration

- Integrate new automation system with existing weighbridge system.
- Ensure seamless communication between RFID system, weighing indicators, gate control (if any), and central monitoring.
- Integrate data to existing server/IPC used for previous manual operation.

1.4 Testing & Commissioning

- Functional testing for each sensor, indicator, and RFID reader.
- System integration test (end-to-end).
- Final commissioning witnessed by Owner.

1.5 Documentation

Contractor shall provide:

- Manual book (operation & troubleshooting)
- Wiring diagram (single line diagram, GA layout, schematic)
- Network diagram (if applicable)
- Commissioning test reports
- Software , Database, Source Code and all included Structure data must be handed over to the Team Owner/Relevant PIC
- Obligation to submit & update source code data Structure (Coding), ownership and access rights.

1.6 Training

Provide training for:

- Owner's area team (operator)
- Maintenance and trouble shooting of New system (Weight Bridge)

2. Quality Control and Reporting Scope

Contractor shall provide:

- Inspection and Test Plan (ITP)
- Quality documentation and reports
- Daily/weekly progress report
- Final inspection report
- Warranty of service for **1 year** (parts and workmanship)

3. Temporary Facilities

Provided by Vendor / Contractor

- Mobilization & demobilization of tools/equipment
- Mobilization & demobilization of manpower
- Local transportation for manpower, materials, equipment
- Contractor's safety PPE
- Special tools used for installation

Provided by Owner (SLK)

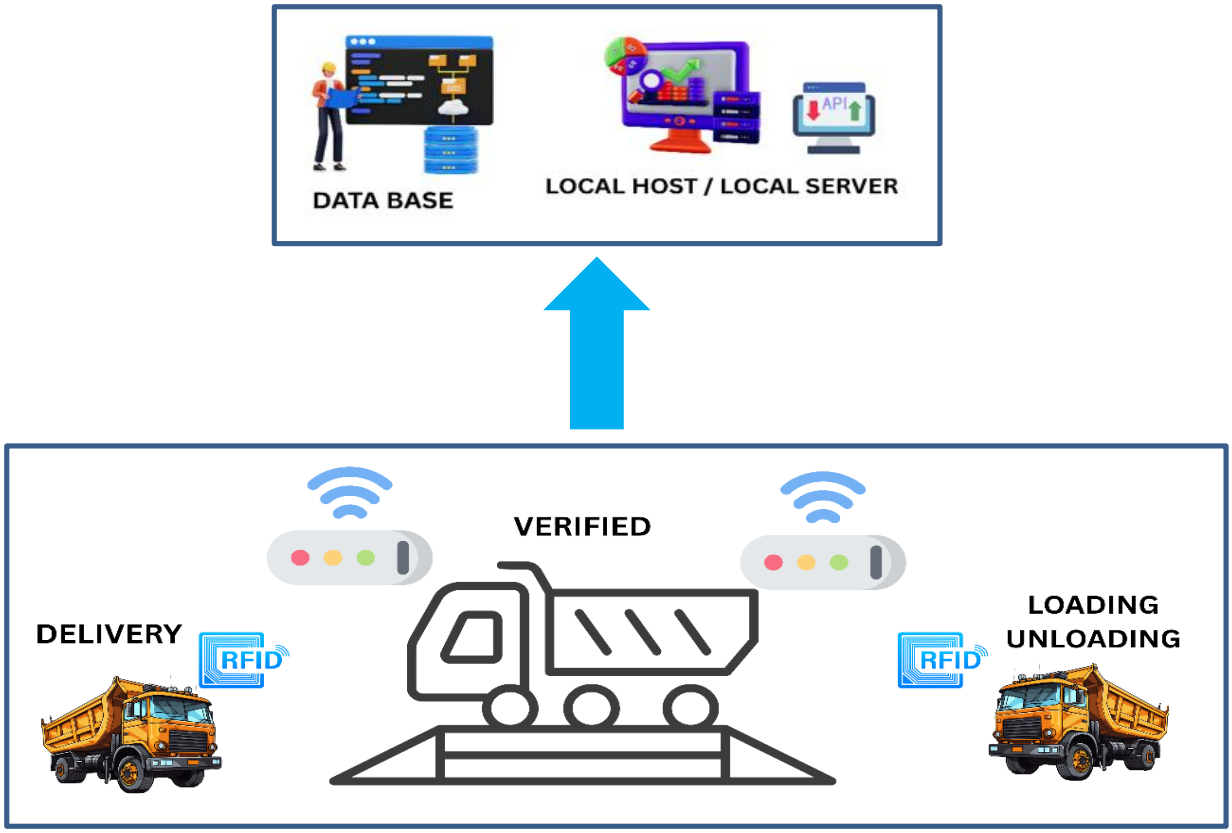
- Dormitory / accommodation
- Site office & rest shelter
- Secure work area

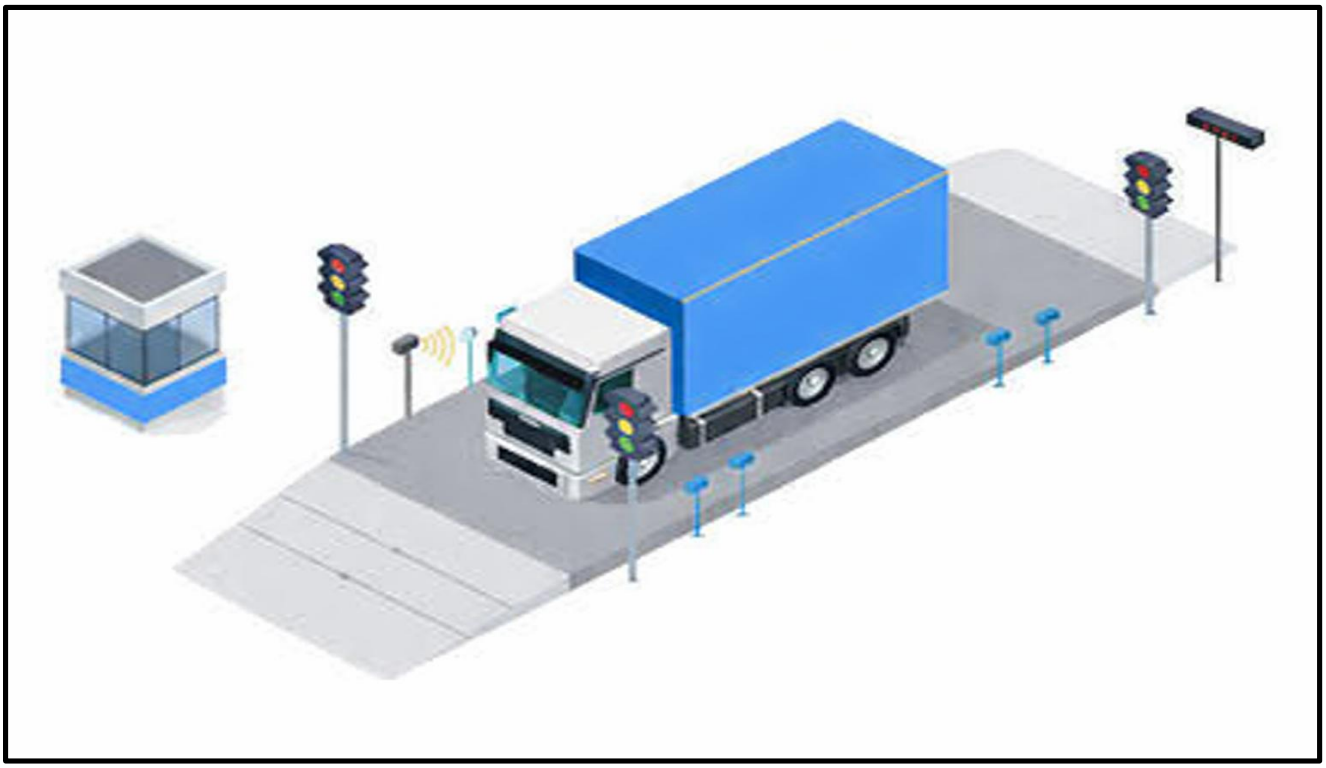
4. Consumables & Tools (Contractor Responsibility)

Contractor must prepare:

- Consumables & additional sensors for automation
- General tools and Special tools for installation & testing
- Power extension cables & temporary lighting

E. Drawing Schematic





Flow Inbound (Masuk)

1. Truck approaches the weighbridge
2. **RFID will auto-readable**
3. Validation system:
    - ID of Truck (Coal Truck/Garbage Truck/FABA Truck)
    - Vendor
    - Schedule / DO / Load type
    - Initial load of Truck
4. Green Lamp → Open the Gate
5. Truck stop on Weighbridge
6. Stabilizing the sensor → **Load will read automatically**
7. Camera take a photo (timestamp)
8. Data will be saved → **Gross Weight / Net Weight**

Flow Outbound (Keluar)

1. Truck approaches the weighbridge
2. RFID Re auto-readable
3. System will measure **Net Weight / Gross Weight**
4. Validation tolerance
5. Green Lamp → Open the Gate
6. Weighing slip will automatically recorded and printed

Correspondent

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