

The background of the title section is a blue-tinted photograph showing the silhouettes of several workers on a high-voltage power line tower. The workers are positioned at different heights, and the complex lattice structure of the tower is visible against a lighter sky.

# ***Environmental and Social Management Plan Monitoring Report 2022***

**PT PLN (Persero)  
Bali Distribution Main Unit**



## CONTENTS

<b>CONTENTS</b>	<b>i</b>
<b>FIGURES</b>	<b>iii</b>
<b>TABLES</b>	<b>iv</b>
<b>GLOSSARY</b>	<b>v</b>
<b>PREFACE</b>	<b>vi</b>
<b>APPROVAL SHEET</b>	<b>vii</b>
<b>CHAPTER I INTRODUCTION</b>	
1.1 Purpose of the Monitoring Report 2022	1
1.2 Brief Project Description	1
1.3 Compliance with National Regulation	4
1.4 Environmental and Social Management Plan (ESMP)	6
<b>CHAPTER II RESULTS</b>	
2.1 Environmental and Social Screening Checklist	10
2.2 Monitoring the Pre-Construction Period	10
2.3 Monitoring the Construction Period	11
2.4 Monitoring the Operation Period	12
2.5 Warehouse Monitoring Results	13
2.6 Health and Safety Monitoring	15
2.7 Mechanism for Handling Customer Complaints	17
2.8 Training, Stakeholders Engagement, Grievance Redress Mechanism Implementation	19
2.9 Summary of Key Findings	20
<b>CHAPTER III CONCLUSION AND RECOMMENDATION</b>	<b>21</b>
<b>APPENDICES</b>	<b>22</b>
Appendix 1: UID Bali Detailed Business Location	
Appendix 2: List of Environmental Approvals and Permits	
Appendix 3: List of Indonesia's Environmental and Social Regulations	
Appendix 4: List of Standard Operational Procedure in Distribution Lines Construction	
Appendix 5: Screening Form of PT PLN (Persero) UID Bali for Sub-Projects in 2022	
Appendix 6: Environmental Reporting Receipts	
Appendix 7: Work Environment Measurement Report	
Appendix 8: Hazardous Waste Management	
Appendix 9: Hazardous Waste Temporary Storage	
Appendix 10: PCBs Test Report with Deksil Method	
Appendix 11: Public Consultation Written Agreements	
Appendix 12: OHS Act in Contract Documents	
Appendix 13: OHS Document Implementation	
Appendix 14: Emergency Preparedness and Response Plan	

Appendix 15: Right of Way and Safety Distance

Appendix 16: OHS Audit

Appendix 17: Environmental Management System Procedure

Appendix 18: Corporate Social Responsibility

Appendix 19: ESMP Matrix

Appendix 20: Warehouse Standardization

## FIGURES

Figure 1. Bali Electricity Location Map	2
Figure 2. RoW and Safe Distance on Distribution Power Lines	11
Figure 3. Tree Trimming Around Power Lines	11
Figure 4. Police Line as a Work Sign	12
Figure 5. Transformer Warehouse Existing Condition	13
Figure 6. Hazardous Waste Temporary Storage	14
Figure 7. Transformer Offline Oil Sampling for PCBs Test	15
Figure 8. Transformer Containing PCBs Storage Area	15
Figure 9. Lighting, Noise and Air Monitoring Report 2022	16
Figure 10. Work Accident Report 2022	16
Figure 11. Electrical Installation Accident Report 2022	17
Figure 12. Public Accident Report 2022	17
Figure 13. The Mechanism for Handling Customer Complaints	18
Figure 14. CSR Programs at PLN UID Bali	19

## **TABLES**

Table 1. The PLN UID Bali's Project Capacity of Power Distribution Strengthening in 2022	10
Table 2. INSPEKTA Monitoring Report	16
Table 3. Example of a Customer Complaint Report in 2022	19

## GLOSSARY

1.	<b>AIIB</b>	:	Asian Infrastructure Investment Bank
2.	<b>DPLH</b>	:	<i>Dokumen Pengelolaan Lingkungan Hidup</i> (Environmental Management Document)
3.	<b>kV</b>	:	Kilovolt
4.	<b>PLN</b>	:	<i>Perusahaan Listrik Negara</i> (Indonesia's National Electricity Company) Indonesian Enterprise
5.	<b>UKL</b>	:	<i>Upaya Pengelolaan Lingkungan Hidup</i> (Environmental Management Efforts)
6.	<b>UPL</b>	:	<i>Upaya Pemantauan Lingkungan Hidup</i> (Environmental Monitoring Efforts)
7.	<b>SPPL</b>	:	<i>Surat Pernyataan Pengelolaan Lingkungan</i> (Statement of Readiness to Manage and Monitor the Environment)
8.	<b>UID</b>	:	<i>Unit Induk Distribusi</i> (a unit business of PLN focuses on electric power distribution)
9.	<b>UP2D</b>	:	<i>Unit Pelaksana Pengatur Distribusi</i> (a subunit below UID, responsible to manage the reliability of the 20 kV distribution system to supply electrical energy continuously without causing failure to consumer)
10.	<b>UP3</b>	:	<i>Unit Pelaksana Pelayanan Pelanggan</i> (a subunit below UID, responsible to manage customer services, including electric distribution network management, electricity sales, and service quality improvement)
11.	<b>ULP</b>	:	<i>Unit Layanan Pelanggan</i> (a subunit below UP3 aka a sub-subunit below UID, responsible to support customer services which include supply turn-on and disconnection, billing and payment collection, and other customer services during electricity distribution in smaller areas)

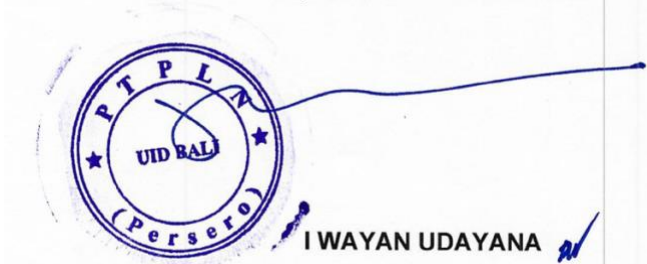
## PREFACE

In the implementation of AIIB – PLN Strengthening Distribution Network in East Java and Bali Project, there are several documents required to comply in accordance with the AIIB environmental and social protection standards and Indonesian regulation. In preparation, the Bank and PLN have approved the Environmental and Social Management Plan Framework (ESMPF) document, which is general in nature and serves as an umbrella for the development of the more detailed safeguards document of Environmental and Social Management Plan (ESMP).

PT PLN (Persero) Distribution Main Unit – UID Bali has a high commitment in the effort to conserve the environment. Therefore, planning, implementing and reporting the implementation and monitoring of the ESMP activities must be carried out periodically as prepared in this document, the ESMP Monitoring Report 2022 UID Bali. The full report is written in English with a summary in Indonesian.

We would like to thank all of those who have assisted in the preparation of this ESMP Monitoring Report 2022 document.

Denpasar, 4<sup>th</sup> December 2023



The image shows a blue circular official stamp of PT PLN (Persero) UID BALI. The stamp contains the text "PT PLN" at the top, "UID BALI" in the center, and "(Persero)" at the bottom, flanked by two stars. A blue ink signature is written across the stamp. Below the stamp, the name "I WAYAN UDAYANA" is printed in blue, followed by a blue checkmark.

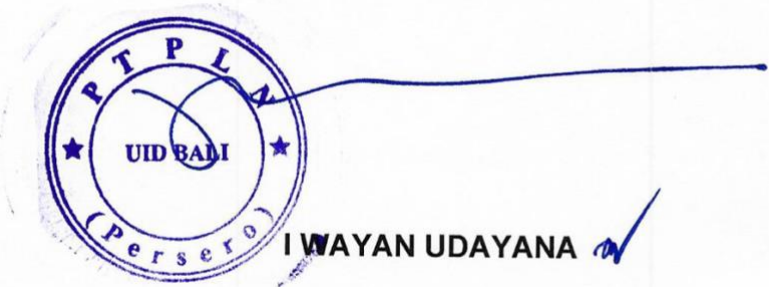
## APPROVAL SHEET

### Environmental and Social Management Plan (ESMP) Monitoring Report 2022 PT PLN (Persero) Bali Distribution Main Unit

AIIB – PLN Project  
Strengthening Distribution Networks in East Java and Bali

Denpasar, 4<sup>th</sup> December 2023

**GENERAL MANAGER**



The stamp is circular with a double border. The outer ring contains the text 'PT PLN' at the top and '(Persero)' at the bottom, separated by two stars. The inner circle contains the text 'UID BALI'. A blue ink signature is written across the stamp. A long horizontal line extends from the right side of the stamp.

**I WAYAN UDAYANA**



## Ringkasan Laporan Monitoring ESMP 2022 UID Bali

### Bab 1. Pendahuluan

#### 1.1. Tujuan Laporan Monitoring ESMP 2022

Laporan ini dibuat untuk menampilkan kegiatan mitigasi dan monitoring untuk aspek perlindungan lingkungan dan sosial Proyek AIIB – PLN Penguatan Jaringan Distribusi di Jawa Timur dan Bali di 2022.

#### 1.2. Penjelasan Singkat tentang Proyek

PLN UID Bali sejak 1975 bertanggung jawab untuk pengelolaan sistem distribusi tenaga listrik di Provinsi Bali. Jaringan distribusi listrik yang digunakan bertingkat menengah berkapasitas 20kV. Dalam proyek ini divisi yang terlibat adalah: 1) Perencanaan dan Keuangan; 2) Distribusi dan Pemasaran; 3) K3L; dan 4) Komunikasi.

Kegiatan-kegiatan dalam Proyek AIIB – PLN Penguatan Jaringan Distribusi di Jawa Timur dan Bali adalah:

1. Program Peningkatan Keandalan Jaringan Listrik seperti perbaikan dan peningkatan JTM dan JTR, mencakup tahap pra konstruksi, konstruksi dan operasional;
2. Program Pemasaran untuk menangani kebutuhan listrik masyarakat yang meningkat;
3. Program Efisiensi untuk meningkatkan kualitas pelayanan dan mengurangi hilangnya tenaga listrik.

Proyek ini ditetapkan sebagai Kategori B berdasarkan Kebijakan Lingkungan dan Sosial – ESP AIIB, dengan penerapan Standar Lingkungan dan Sosial (ESS) 1 – Penilaian dan Manajemen Lingkungan dan Sosial. ESS 2 – Pemukiman Kembali Non-sukarela termasuk pembebasan lahan dan ESS 3 – Masyarakat Adat tidak berlaku karena sub proyek yang dibiayai tidak memerlukan pembebasan lahan atau kegiatan yang berdampak buruk bagi masyarakat adat. Karena proyek dan sub proyek dinyatakan sebagai Kategori B dan jalur distribusi diklasifikasikan sebagai Kategori B dan hanya memerlukan UKL-UPL atau SPPL, sub proyek menggunakan AMDAL tidak masuk pembiayaan.

#### 1.3. Rencana Pengelolaan Lingkungan dan Sosial – ESMP

Dalam Proyek ini ESMP disusun sebagai panduan melakukan perlindungan lingkungan dan sosial sesuai dengan standar AIIB. Tujuan pembuatan ESMP adalah untuk memastikan pelaksanaan, monitoring dan peningkatan langkah-langkah mitigasi yang teridentifikasi untuk mengurangi dampak negatif dan meningkatkan dampak positif di setiap kegiatan dalam setiap tahapan proyek – pra konstruksi, konstruksi dan operasional, serta membahas dampak lingkungan dan sosial yang tidak diharapkan atau tidak terduga yang mungkin timbul selama tahap konstruksi dan operasional.

### Bab 2. Pelaksanaan Kegiatan

Pada tahun 2022 PLN UID Bali melakukan berbagai sub-proyek untuk peningkatan dan efisiensi jaringan listrik tegangan menengah dan rendah, konstruksi feeder untuk gardu baru, penggantian material dan transformer, instalasi LBS, recloser, DS, JTM, JTR, APP dan meteran 1 phase dan 3 phase, dengan menerapkan K3L dalam pelaksanaannya.

Pelaksanaan K3L dan aspek sosial di PLN UID Bali ada di bawah Manager K3L – Keamanan, Bapak I Nyoman Jendra. Pelaksanaan, monitoring dan pelaporan harian dilakukan oleh dua asisten, Asisten Manager K3L – Keamanan, I Made Dwipayana, dibantu oleh dua staf, I Kadek Evi Surbakti dan Risma Fauziah Rahmadani; sementara Asisten Manager Lingkungan, I Gede Alit Sutawan dibantu oleh seorang staf, Ni Luh Kade Dwi Jayanti.

#### 2.1. Daftar Penapisan Lingkungan dan Sosial

Penapisan lingkungan dan sosial dilakukan di awal pelaksanaan untuk semua komponen proyek dan sub proyek yang akan dilaksanakan untuk mencegah dampak lingkungan dan sosial negatif yang signifikan dalam pelaksanaan proyek, dengan panduan kebijakan perlindungan lingkungan dan sosial AIIB. PLN UID Bali melakukan penapisan terkait habitat yang dilindungi, jarak aman, wilayah keanekaragaman

hayati, masyarakat adat, peninggalan bersejarah, dan penggunaan tanah pribadi. Secara umum di 2022 tidak ada penambahan area baru dibandingkan dengan Laporan 2021.

## 2.2. Monitoring – Tahap Pra Konstruksi

Pembangunan jaringan listrik tegangan menengah dan rendah dapat menyebabkan dampak pada aspek ekologis, fisik dan sosial dalam tahap pra konstruksi, karenanya sebelum memulai kegiatan, UP3 akan melakukan penapisan aspek lingkungan, lokasi perumahan masyarakat adat, peninggalan bersejarah, dan penggunaan tanah pribadi. Rencana pemotongan dahan dan cabang pohon di area jalur kabel – ROW untuk memastikan jarak aman dibuat pada tahap ini, dengan adanya peta rute ROW dan perjanjian tertulis dengan pemilik pohon mengenai ijin memotong pohon.

## 2.3. Monitoring – Tahap Konstruksi

Dalam Tahap Konstruksi secara umum kegiatan dilakukan oleh kontraktor sebagai pihak ketiga, dengan pengawasan K3L UID Bali. Pihak ketiga wajib mengikuti semua peraturan pemerintah dan PLN terkait keselamatan kerja seperti sertifikat CSMS, HIRARC, ijin kerja dan Standar Prosedur Pelaksanaan untuk setiap jenis pekerjaan konstruksi yang dilakukan oleh pihak ketiga.

## 2.4. Monitoring – Tahap Operasional

Pada Tahap Operasional, dampak yang harus dimonitor misalnya adalah kemungkinan kontaminasi tanah dan badan air karena minyak trafo listrik bekas yang dikategorikan sebagai tumpahan minyak limbah berbahaya, penempatan trafo yang mengandung PCB di gudang, dan penyimpanan ATTB di Gudang penyimpanan. Pada 2022 di PLN UID Bali masih terdapat Gudang Trafo Bekas yang belum tertutup seluruhnya. Anggaran untuk pembangunan Gudang Limbah B3 Sementara di 2023 sudah disetujui dan akan dikerjakan sesuai standar perundangan yang ada.

## 2.5. Monitoring – Gudang

Di PLN UID Bali terdapat dua tipe gudang yaitu Gudang Bahan Material dan Gudang Limbah B3, yang dimiliki oleh setiap unit. Dalam Gudang Bahan Material terdapat penyimpanan kabel, MCB, trafo dan perlengkapan lainnya yang dipantau menggunakan AGO – Aplikasi Gudang Online.

Gudang Limbah B3 digunakan untuk penyimpanan bahan dan limbah beracun dan berbahaya seperti minyak pelumas, baterai baru dan lama, dan kain bekas. Pengelolaan B3 dilakukan oleh pihak ketiga yang mempunyai ijin dari Kementerian LHK. Sebelum dibawa oleh pengelola, B3 ditempatkan di Gudang Tempat Penampungan Sementara – TPS, dan di PLN UID Bali fasilitas ini sudah dilengkapi oil trap untuk mencegah kebocoran minyak keluar dari Gudang. Terdapat tiga Gudang TPS Limbah B3 di PLN UID Bali yang memiliki atap, lantai semen, sistem pembuangan limbah cair, pertolongan pertama, pemadam api sesuai perundangan. Pemeliharaan gudang secara berkala dilakukan untuk menjaga kualitas bangunan sesuai standar.

Pengecekan Total Petroleum Hydrocarbon – TPH untuk mengetahui kandungan minyak dalam air sudah diusulkan untuk dilakukan di 2023. PLN UID Bali sudah memiliki prosedur penanganan ceceran minyak, penempatan dan pengelolaan B3 dan bahan kimia yang terintegrasi dalam Integrated Management System (IMS), dengan pemantauan gudang secara berkala untuk menjaga kualitas bangunan sesuai standar.

Salah satu limbah B3 yang harus dimonitor adalah minyak trafo mengandung PCB yang sudah dilarang penggunaannya oleh pemerintah dan dalam proyek ini. Trafo dengan PCB ditemukan pada material sebelum 1997 dengan kapasitas lebih dari 100kVA. PLN UID Bali membuat inventarisasi dan melakukan tes trafo yang diduga mengandung PCB. Pada 2022 dilakukan tes dexsil untuk 144 trafo, 11 ditemukan mengandung minyak dengan PCB. Trafo tanpa PCB disimpan di gudang PLN, yang dengan PCB diserahkan pada pihak ketiga untuk penanganan selanjutnya.

## 2.6. Monitoring – K3L

Dalam pelaksanaan kegiatan PLN UID Bali terdapat resiko tinggi terjadinya kecelakaan saat melakukan pekerjaan. PLN Pusat membuat aplikasi Inspekta sebagai alat pantau K3L saat bekerja seperti kondisi dan tindakan yang tidak aman. Aplikasi ini dimiliki oleh setiap karyawan PLN untuk melaporkan kondisi dan tindakan yang tidak aman berkaitan dengan K3L, dimonitor oleh PLN Pusat untuk penyelesaian. Untuk meningkatkan kualitas pekerjaan K3L tindakan dan standar yang dilakukan oleh PLN UID Bali adalah membuat dan melakukan Standar Prosedur Operasional – SOP untuk setiap kegiatan, inspeksi manajemen, monitoring pekerjaan di lapangan yang difokan ke dalam whatsapp grup dan melalui website Inspekta. Monitoring K3L terkait pencahayaan, kebisingan dan kualitas udara dilakukan setiap enam bulan oleh pihak ketiga, mengacu pada dokumen lingkungan yang dikeluarkan oleh DLHK.

## 2.7. Mekanisme Penanganan Keluhan Pelanggan

PLN mempunyai Penanganan Keluhan Pelanggan melalui call center 123 dan aplikasi PLN Mobile, yang dapat dilacak tahapan proses yang sedang dilakukan. Pada umumnya keluhan terkait dengan padamnya jaringan listrik dan tidak ada keluhan perlindungan lingkungan dan sosial yang muncul di tahun 2022 di PLN UID Bali.

## 2.8. Pelaksanaan Pelatihan, Keterlibatan Pemangku Kepentingan dan Mekanisme Penanganan Keluhan

Pelatihan OHS bagi karyawan PLN UID Bali dilakukan oleh Pusat Pendidikan dan Pelatihan – Pusdiklat PLN dan lembaga bersertifikasi, dengan cakupan beragam, seperti pelatihan bersertifikat untuk Ahli Keselamatan Kesehatan Kerja Umum – AK3U, Ahli Keselamatan Kesehatan Kerja – AK3, Pemadam Kebakaran, Pelatihan Limbah Bahan Beracun dan Berbahaya – PLB3 dan Penanggung Jawab Pengendalian Pencemaran Udara – PPPU. Kegiatan di Bulan Nasional K3 Januari – Februari diisi dengan kegiatan yang bersifat strategis seperti upacara Bulan K3, pencahangan komitmen tanpa kecelakaan oleh manajemen, pegawai dan vendor; bersifat promotif seperti pemasangan bendera dan spanduk K3, berbagai lomba: sudut K3, ketangkasan satuan pengaman, cerdas cermat K3, safety briefing dan induction; serta bersifat implementasi seperti simulasi tanggap darurat.

Pelatihan dan kegiatan bersama dan bagi masyarakat umum dilakukan melalui program Tanggung Jawab Sosial Perusahaan – CSR, misalnya mendukung kegiatan pertanian bawang merah, pendampingan untuk mesin pemroses coklat, dukungan mesin listrik untuk petani garam dan peternakan ayam.

## 2.9. Aspek Kunci untuk Peningkatan Pelayanan

Temuan yang perlu diperbaiki di 2022 adalah: 1) terdapat Gudang Trafo yang belum memiliki pelindung; dan 2) ada sebelas (11) sampel minyak trafo yang mengandung PCB.

## Bab 3. Kesimpulan dan Rekomendasi

**Kesimpulan:** secara umum di lapangan proyek dilakukan dengan efektif menggunakan kelengkapan K3L dan sosial yang memadai; rencana dan pemantauan K3L dan sosial dengan UKL – UPL sesuai standar AIIB.

**Rekomendasi:** melanjutkan dan meningkatkan pelaksanaan K3L dengan menghindari kecelakaan di tempat kerja sesuai standar AIIB dan PLN; melanjutkan pemantauan sesuai ESMP dan UKL – UPL; melanjutkan komunikasi bermakna dan sistem penyampaian keluhan PLN; melakukan pengelolaan bahan, limbah dan gudang B3 sesuai standar; mengurangi pemutusan arus listrik dan keluhan pelanggan.

## **CHAPTER I INTRODUCTION**

### **1.1. Purpose of the Monitoring Report 2022**

One of PLN Distribution Main Unit – UID Bali’s objectives is to mitigate or avoid adverse environmental and social impacts in AIIB – PLN Strengthening Distribution Networks in East Java – Bali Project. The purpose of this Annual Environmental and Social Monitoring Report is to present the environmental and social mitigation and monitoring activities in Bali Province undertaken by PLN UID Bali covering the project in 2022. This report includes updates on project progress and evaluation of environmental and social program implementation.

### **1.2. Brief Project Description**

PT PLN (Persero) UID Bali has carried out electricity distribution activities covering all regencies and cities in Bali province since 1975. The electric power distribution to customers in a location and area has used a 20 kV medium voltage network as the main network with aim to avoid distribution losses with the quality of the voltage requirements that should be met by PT PLN (Persero) as the holder of the Main Business Authority as regulated in the Electricity Law Number 30 of 2009.

Divisions involved in the project are:

1. Planning and finance are in charge of ensuring that activity planning is in accordance with the requirements of PT PLN (Persero) Distribution Main Unit Bali Environmental and Social Management Plan (ESMP) documents;
2. Distribution and Commerce is in charge of ensuring that the implementation of activities has met the document requirements;
3. The K3L (HSSE) Bureau is in charge of ensuring the HSSE implementation monitoring for each work activity, as a Focal Person in the implementing unit with the main task of conducting socialization related to environmental aspects and obligations;
4. The Communication Division is tasked to conduct public consultation including socialization to stakeholders regarding the activities to be carried out by the company.



Figure 1.

Bali Electricity Location Map

The Medium Voltage Standard as the operating voltage used is 20 kV. The Medium Voltage Network should meet the construction standards set by PLN. The electricity safety standards included the minimum safe distance between the phase and the environment and between the phase and the ground.

The conductor and cable dimension size, in addition to meeting the requirements for power distribution, also meeting the requirements for conductor insulation resistance for safety at a voltage of 20 kV. In an effort to maintain reliability and increase of electricity distribution, several programs were carried out, as described below.

#### a) Improving Electricity Lines Reliability Program

Activities included in this program are conducted in order to minimize the risk of electricity interruptions that can be caused by many factors, such as trees, kites, thunder or lightning. This program also includes activities to minimize the duration of power out if it is inevitable. Activities described above are:

- Medium Voltage Lines (JTM) or Low Voltage Lines (JTR) Rehabilitation and Reconductoring
- Medium Voltage Lines (JTM) or Low Voltage Lines (JTR) Reconfiguration
- Distribution Substation Re-installment
- Key Point Installation and Maintenance
- Jointing Cable Installation
- GSW Installation
- Unsafe Action and Unsafe Condition – to Follow Up

There are typical stages to carry out those programs, which are:

a. Pre-Construction or Planning Stage

Pre-construction or planning stage included activities to determine the capacity and location of network reliability strengthening projects. In this stage, simulation of the calculation of the optimal amount and configuration of the electric power network was also carried out using software such as the Electrical Transient Analysis Program (ETAP). Subsequently, a field survey would be carried out to meet the construction standards, right of way, safe distance, electricity safety, and environmental and social protection aspects.

In this stage, the activities included:

- Outreach to communities affected by network reliability strengthening projects including socialization, education, and land use agreements to strengthen network reliability activities;
- Selection of work partners by adjusting the level of work risk and compliance with environmental aspects.

b. Construction Stage

The construction phase began with pre-mobilization, followed by mobilization and implementation of onsite work, with the following notes:

- Work partners to meet the qualifications for pre-mobilization activities by carrying out activities to prepare tools, materials, and socialization to residents around the work location;
- Personnel, equipment and material mobilization in accordance with Work SOP;
- Implementation of work under strict supervision to obtain the appropriate work quality, with zero work accidents and zero environmental and social impacts;
- Equipment testing and commissioning and minor repairs to obtain an Operational Eligibility Certificate (SLO).

c. Operational Stage

The operational phase was carried out after obtaining SLO. To ensure the electrical energy distribution reliability, routine monitoring and maintenance were carried out in accordance with applicable regulations. For handling maintenance, it could be carried out either by planned or without outages by competent personnel for Work in (High) Voltage Condition (PDKB).

**b) Marketing Program**

Activities included in this program are conducted in order to provide electricity to new and existing customers, due to the increase of electricity demand. Those activities are:

- JTM Construction
- JTM and JTR Expansion
- Installation of Distribution Substation and Electricity Metering and Breaker Equipment (APP).

**c) Efficiency Program**

Activities included in this program are conducted in order to minimize PLN's electricity losses, whether technical losses, caused by inefficient lines or not functioning metering equipment, or non-technical losses, caused by customer's fraud or human error in reading kWh meter. Those activities are:

- Replacement of 1-phase/3-phase kWh meter
- Electricity Metering and Breaker Equipment (APP) Construction Repair
- Modern Procurement for Automatic Meter Reading (AMR).

**1.3. Compliance with National Regulation**

In running the business, PLN UID Bali ensures compliance with all relevant regulatory requirements. PT PLN (Persero) is established with the Deed of Incorporation of Limited No. 169 dated 30 July 1994 and its amendment No. 9 dated 20 January 2015. The business activities, particularly in power distribution at PLN UID Bali, are performed based on the following permits:

- a. Minister of ESDM Decree No. 634-12/20/600.3/2011 concerning PT PLN (Persero)'s Electricity Supply Business License (IUPTL) – for the electricity in Java and Bali areas, the electricity supply business permit as stated in Appendix 1;
- b. Minister of ESDM Decree No. 188.K/HK.02/MEM.L/2021 concerning PT PLN (Persero)'s Electricity Supply Business Plan (RUPTL) 2021-2030 – for the distribution development plan in Java, Madura, and Bali areas as stated in Appendix 2.

In Indonesia, the Act No. 32 Year 2009 with amendments to the Act No. 11 Year 2020 is the main environmental law covering important environmental issues, including environmental standards, type of environmental documents, environmental permits, and environmental audits.

Indonesia's Government has a concern about environmental sustainability which became an integral part of risk-based licensing. According to Government Regulation No. 22 Year 2021 regarding Environmental Protection and Management, every business that has significant and insignificant impacts on the environment must have an Environment Approval, namely:

- Statement of Readiness to Manage and Monitor the Environment (SPPL) for low-risk businesses;
- Environmental Management Efforts (UKL) and Environmental Monitoring Efforts (UPL) for medium-risk businesses; and
- Environmental and Impact Assessment (AMDAL) for a high-risk business.

**1.3.1 UKL UPL Documents for Warehouse and Project Activities**

In doing electric power distribution activities, PLN UID Bali has the Environment Permit No. 660.3/5895/IV-A/DISPMPT concerning Environmental Permits for 20 kV Medium Voltage Network (JTM)

Activities and Distribution Substations in Bali Province, PT PLN (Persero) Bali Distribution Main Unit. PLN UID Bali's sub-units like UP2D and UP3s, sub-sub units named ULPs, and other support activities such as hazardous waste temporary storage already have environmental documents. List of environmental approvals and permits in PLN UID Bali is tabulated in Appendix 2. Following this approval, PLN UID Bali is required to submit a report about the environmental and social commitments specified within the environmental documents to the Environmental Agency of each respective regencies every six months.

### 1.3.2 Hazardous Waste Storage Permit

The type of hazardous waste that generated from power distribution activities are used lubricating oil and battery or used battery. These wastes are stored at hazardous waste temporary storages in several areas in Bali Province, with operating permit for each hazardous waste temporary disposal site (TPS) seen in Appendix 2 and condition of the hazardous waste temporary storages in the PLN UID Bali area in Appendix 9.

### 1.4. Environmental and Social Management Plan (ESMP)

ESMP table of PLN UID Bali has encompassed the entire project stages and the mitigation systems, starting from planning or pre-construction to operational phase.

#### 1.4.1 Pre-Construction Phase

In Pre Construction phase, there are several activities carried out, including:

##### a. Location survey

A site survey is carried out to ensure that construction activities such as the construction of a 20 kV distribution network (SUTM, SKTM, SKTR), the construction of distribution substations and other construction activities have complied with technical, safety, environmental and social aspects. This survey uses the direct observation method to all activity locations that are estimated to be affected by the said development activities. Survey activities are carried out by officers who are competent in the field of engineering and understand environmental and social aspects. The survey of the location of the network placement also involved the community, religious leaders, traditional leaders and the local government. The results of the survey can be used as a reference or consideration in the preparation of the contract for the implementation of the work.

##### b. Mobilization

At the stage of mobilizing the work of building a 20 kV distribution network of SUTM, SKTM, SKTR, construction of distribution substations and other construction activities is sought so as not to interfere with routine community activities that can cause public unrest such as noise, traffic jams, scattered dust, the emergence of waste, both hazardous and non-hazardous. When mobilizing equipment, it is mandatory to



use tools that are in accordance with standards, carried out in a safe way by taking into account safety aspects. The mobilization of the workforce can involve local residents according to their skills and expertise.

c. **Community Outreach**

The activity with community like public consultation including socialization was carried out with the aim of providing education to the public regarding construction of a 20kV distribution network of SUTM, SKTM, SKTR, construction of distribution substations and other construction activities. Routine socialization is carried out to the community by direct meeting, through media such as leaflets, posters and banners with traditional leaders, banjar, or electronic media like Facebook and Instagram. The objective is to provide information to the community about electricity, reduce community resistance to PLN projects and empower resources.

#### **1.4.2 Construction Phase**

Electricity network construction activities aim to maintain reliable electricity supply to customers and improve PLN's services to customers, especially for new installations and power changes.

To reduce the environmental and social impacts of 20kV electricity grid construction activities in the province of Bali, the following efforts have been made:

- Conduct socialization or approach to land owners regarding the placement of company assets like poles, distribution substations, key points. The placement of poles, substations must be in accordance with the planning drawings and obtain permission from the land owner;
- The placement of PLN's assets does not interfere with sacred places or areas like temples, Sanggah, and Bale Banjar as well as residents' houses or local communities and customs;
- Mobilization of activities during construction does not disturb the order and routine activities of the community around the project;
- Coordinate with local community leaders, the security authority and related agencies if there is a large capacity mobilization of equipment;
- Install safety signs at work sites such as banners, traffic signs, emergency lights etc;
- Construction work is carried out by officers who have competence in the fields of electricity, civil and working at heights to prevent work accidents.

#### **1.4.3 Operation Phase**

In maintaining the continuity of electricity distribution to customers and maintaining the satisfaction of electricity customers in Bali, PLN periodically carries out electricity network maintenance activities, both off-line and on-line maintenance. Activities in order to improve the reliability of the electricity network are as follows:

a. **Tree cutting activities around Right of Way – RoW**

Tree cutting activities are carried out by PLN partners in accordance with the Self-Level Agreement – SLA contained in the work agreement (SPK). Important things to do in tree cutting activities are:

- Make a tree cutting plan (tree map) around the RoW;
- Coordinate with related parties like land and building owners, local government, security authority;
- Prepare work equipment according to standards;
- Performed by competent personnel for electrical and working at height;
- Installing safety signs in the crossing area.

b. Material maintenance and replacement activities

Maintenance and replacement of material for Medium Voltage Networks and Low Voltage Networks, Substations, Distribution Substations, Key Points with attention to the following matters:

- Routine and corrective maintenance work, carried out according to schedule of maintenance management;
- Informing the maintenance schedule to residents affected by power outages;
- Install safety signs in the maintenance area so that no residents approach the danger zone;
- Secure traffic around the maintenance work area to avoid congestion;
- Work according to the SOP that has been set;
- Performed by officers who are competent in their fields and use PPE according to standards;
- Collect the remaining used materials to be returned to the PLN material warehouse;
- Pay attention to project waste with electric waste, such as remaining cable skin, copper pieces, to avoid pollution to the environment.

c. Hazardous (B3) waste management

B3 waste management aims to ensure that there is no B3 waste such as used transformer oil that can pollute the environment due to PLN projects. B3 waste management efforts are carried out by:

- Providing TPS for B3 waste that already has a permit from the relevant agency with list of TPS PLN UID Bali which already has a permit attached;
- Cooperating with companies have LB3 transportation and management permits with Letter of Cooperation Agreement with Companies that have LB3 management permits attached;
- Reporting the waste balance periodically to the relevant agencies;
- Conducted by competent officers and have LB3 management certification;
- Implement 5S program periodically.

d. Management of House Keeping of Used Materials – ATTB

Management of ATTB (Fixed but Not Operating Assets) aims to ensure the equipment or materials are in accordance with the 5S rules of Seiri – Concise, Seiton – Neat, Seiso – Clean, Seiketsu – Treat, and Shitsuke – Diligent. The efforts that can be made to manage ATTB include:

- To record assets like tools and materials that are no longer used to be transferred to the PLN warehouse
- Sorting ATTB materials into usable materials, damaged or unfit materials

- Placing ATTB materials according to 5S rules in order to obtain warehouse aesthetics
- Elimination of ATTB assets in accordance with applicable regulations

Environmental management in the operational phase is carried out by measuring the conditions of the work environment and environmental management based on ESMP matrix in environmental document to ensure that environmental pollution does not occur. Social management activities are carried out by involving stakeholders like local communities, for example public consultation and socialization activities for safe electricity use and community development. The ESMP matrix is tabulated in Appendix 19.

## CHAPTER II RESULTS

Numerous projects of PLN UID Bali have been conducted in 2022 to enhance the JTM reliability and achieve the efficiency were new feeder construction, old materials displacement, old transformers replacement, key-point replacement and installation of LBS, recloser, DS, JTM, JTR, Substation construction, APP installation, and substitution of 1 phase and 3 phase meter boxes.

The institutional arrangement and staffing for Environmental and Social management and supervision in PLN UID Bali in general and applied in the project is as regulated in Perdir PLN No: 0263.P/DIR/2022 of Amended of Perdir PT PLN (Persero) No. 0069.P1D1R12022 concerning Organisation and Working Procedure of PT PLN (Persero) UID Bali. Referred to the policy, in 2022 the overall supervision and operational is under the Safety, Security, Occupational Health and Environment Manager, I Nyoman Jendra. Under the position, there are two Assistant Managers, one for Safety, Security, and Occupational Health Unit, under I Made Dwipayana, supported by one officer, I Kadek Evi Surbakti and one junior officer, Risma Fauziyah Rahmadani. For Environmental Unit, the assistant manager is I Gede Alit Sutawan assisted by one officer, Ni Luh Kadek Dwi Jayanti.

### 2.1. Environmental and Social Screening Checklist

At the beginning of subprojects, an environmental and social screening checklist is used to review potential environmental and social safeguard impacts and determine whether the subprojects will trigger relevant safeguard policies of AIB. In the location selection process for the subprojects, PLN UID Bali carried out the environmental and social screening including protected area, safe distance, main biodiversity area, indigenous peoples, cultural heritage, and the use of private land. The summary of the environmental and social screening checklist for each subproject is tabulated in Appendix 5. In general, there are no new additional area in 2022 compared to the ESMP Monitoring Report 2021. The PLN UID Bali project capacity of power distribution strengthening in 2022 is tabulated in Table 1 below.

Table 1. PLN UID Bali’s Project Capacity of Power Distribution Strengthening in 2022

No	Unit	Activity	Location (City/District)	Details
1	UP3 Bali Selatan	Network Reliability Improvement	- Denpasar City	JTM: 101.33 kms
			- Badung Dist.	JTR: 64.1 kms
			- Tabanan Dist.	Substation: 9.235 KVA
2	UP3 Bali Timur	Network Reliability Improvement	- Bangli Dist.	JTM: 16.83 kms
			- Gianyar Dist.	JTR: 36.3 kms
			- Klungkung Dist.	Substation: 11.550 KVA
			- Karangasem Dist.	
3	UP3 Bali Utara	Network Reliability Improvement	- Jembrana Dist.	JTM: 8.87 kms
			- Buleleng Dist.	JTR: 53.19 kms
			- Tabanan Dist.	Substation: 21.850 KVA

## 2.2. Monitoring the Pre-Construction Period

Constructing medium or low voltage network of JTM and JTR might affect in ecological, physical, and social aspects at pre-construction stage. In PLN UID Bali, many of JTM and JTR construction have been conducted for mostly residents and industries. Before projects have been carried out, the UP3, a sub unit of PLN UID analyse the potential effects to environment, land, residents, indigenous people and cultural heritage through screening form, seen in Appendix 5. The trees cutting and trimming under Right of Way (ROW) activities must be performed to ensure the networks reliability with the permission of landowners in agreement documents. A clear ROW route and written agreement shown in Appendix 15 and Appendix 11, respectively. The Figure 2 and 3 below show the application of safety distance and trimming along the RoW in this project.



**Figure 2.** RoW and Safe Distance on Distribution Power Lines



**Figure 3.** Tree Trimming Around Power Lines

### 2.3. Monitoring the Construction Period

During construction activities, the third parties, who will be responsible on doing the construction, must meet all the requirements of PLN standard and government regulation like CSMS certified contractor, HIRARC, working permit, and standard operational procedures implementation, filled in contract document between PLN UID Bali and vendors. For instance, installation and demolition of JTM, substation cubicle, JTR, SR APP 3 phase at UP3 Bali Selatan. According to contract document 0007.SP/DAN.00.01/D05020000/2022, the vendor has complied the requirements and assured the projects have been worked properly as accommodated in Appendix 12 and 13. Figure 4 below shows the usage of police line as a work sign.



**Figure 4.** Police Line as a Work Sign

### 2.4. Monitoring the Operation Period

Workers and society are the most affected parties during the operational stage. On the other side,

waste is an affecting resource appears in this phase. An old transformers replacement, for instance, during transportation of an old transformer to a warehouse and it should be assured no oil spills from the transformer, and the warehouse must be covered to protect from the rain. In 2022 several transformer warehouses in the PLN UID Bali still have not protected with proper cover, in which it might cause another issue, with existing transformer warehouse seen in Figure 5 below. Although the transformer is a waste, it is still the asset of PLN that must be maintained properly. In 2023, PLN UID Bali has proposed a budget to build transformer waste warehouse designed according to the applicable regulations.



**Figure 5.** Transformer Warehouse Existing Condition

## 2.5. Warehouse Monitoring Results

Materials warehouse is distinguished with waste warehouse, in particular hazardous waste. Each unit of PLN UID Bali has own materials warehouse. The materials such as miniature circuit breaker (MCB), cables, and other equipment are organized into groups based on the type, certain physical or mechanical properties. These are monitored by using excel or online warehouse application (Aplikasi Gudang Online – AGO).

The hazardous waste temporary disposal site is used for hazardous waste generated from power distribution activities such as used lubricating oil, battery or used battery, and used rags. Hazardous waste management is carried out with a third party who has a hazardous waste management permit from the Minister of Environment and Forestry. The hazardous waste temporary storage at PLN UID Bali is equipped with an oil trap which functions to prevent any oil from dripping out of the boundary. PLN UID Bali had proposed testing Total Petroleum Hydrocarbon – TPH on the water to determine the oil content in the water. Figure 6 below shows the UID Bali hazardous waste temporary storage.

Before the hazardous waste is given to the third party to be managed, it is stored at hazardous waste temporary storages in several areas in Bali Province, with the operating permit for each hazardous waste temporary disposal site (TPS – Tempat Penampungan Sementara) seen in Appendix 2. In 2022,

PLN UID Bali has developed environmental procedures for handling spilled oil, storage and treatment hazardous and chemical materials integrated with Integrated Management System (IMS) of PLN UID Bali as seen in Appendix 17. The condition of the hazardous waste temporary storages in the PLN UID Bali can be seen in Appendix 9.



**Figure 6.** Hazardous Waste Temporary Storage

As noted, a type of hazardous waste generated is used transformer oil. Based on the Ministry of Environment and Forestry Regulation No. P.29/MENLHK/SETJEM/PLB.3/12/ 2020, PCBs are prohibited from being used and it is still found in transformer oil. PLN UID Bali is managing PCBs by taking an inventory of offline and online transformers, visual testing based on the year of manufacture and transformer capacity, and conducting tests on transformers that may indicate contained PCBs. The criteria for transformers that have potential to contain PCBs are transformers with years of manufacture before 1997 and the capacity more than 100 kVA.

The PCBs testing have been done in stages. In 2022, a PCBs test using the dexsil method has been carried out for 144 offline transformer oil samples and 11 may contain PCBs because the test result shows the PCBs content is more than 50 ppm. Transformers that may contain PCBs would have a further test carried out using the gas chromatography method, while transformers that do not contain PCBs are submitted to the third party as described previously. The results of PCBs testing by the dexsil method can be seen in Appendix 10, with the PCBs test activity and storage as in Figure 7 and 8 respectively.

Over all PLN UID Bali material warehouses have complied with the standards implemented by PLN with details shown in Appendix 20.





**Figure 7.** Transformer Offline Oil Sampling for PCBs Test



**Figure 8.** Transformer Containing PCBs Storage Area

PLN UID Bali has three hazardous waste temporary disposal sites. The company has made efforts to provide appropriate storage areas based on Indonesian Government Regulation Number 22 of 2021. Based on Central PLN data, each disposal location has been equipped with a roof, concrete floor, storage for damaged transformers, transformer oil emptying facilities, drainage system, warehouse yard connected with traps. fat or oil, oil traps, eyewash, first aid, fire extinguishers, sorting hazardous waste based on each category, housekeeping and transformation labeling. However, some storage areas may require slight repairs in the following year due to the age of the warehouse and natural conditions as well as the results of water monitoring from grease traps before the water is discharged into the environment will be tested in the following year.

## 2.6. Health and Safety Monitoring

The majority of activities at PLN UID Bali have high risk level that may cause accident to workforce such as serious injuries, disability and death or fatality make the health and safety aspects must be considered as first priority in all work stages. Preventing accidents, PLN Headquarter has rolled out an application called INSPEKTA to monitor several findings of health and safety aspects nonconformity, such as unsafe actions and unsafe conditions. Each employee is given one account for reporting perilous incidents surrounding the work environment. The PLN Headquarter monitors the reports for taking the solution. Table 2 below shows the INSPEKTA Monitoring Report in UID Bali. Throughout 2022 in PLN UID Bali the number

of unsafe conditions were 98.4%, or 4.574 of 4.648 cases, 1,2% unsafe actions and 0,4% near miss incidents. Of the 4,574 unsafe conditions, one work accident occurred with minor injuries resulting from a falling tree that hit JTM due to strong winds during work implementation.

**Table 2. INSPEKTA Monitoring Report**

Statistik Unit dari Kategori

#	Unit	Unsafe Act	Unsafe Condition	Nearmiss
1	Unit Induk Distribusi Bali	3	57	2
2	UP2D Bali	1	423	0
3	UP3 Bali Selatan	24	1.393	1
4	UP3 Bali Timur	28	2.126	14
5	UP3 Bali Utara	1	575	0
<b>Total</b>		<b>57</b>	<b>4.574</b>	<b>17</b>

Considering the large number of reporting on unsafe conditions, actions and measures taken by UID Bali to improve safety management have been done by having and implementation of Standard Operational Procedure – SOP for each activity, like SOPs for Low and Medium Voltage Networks and Substations Maintenance; assurance for Job Safety Analysis document approval before job implementation, and regular socialization to minimise any unsafe action.

In PLN UID Bali the quality of lighting, noise and air are monitored, measured and reported every semester by experts – third parties, as in Figure 9 below.

The figure shows three copies of inspection reports (LAPORAN HASIL UJI) for noise, lighting, and air quality at the PT. PLN (PERSERO) UNIT INDUK DISTRIBUSI BALI. Each report includes a table of measurements, a list of findings, and official signatures and stamps.

**Report 1: Noise Measurement**

No	Parameter	Satuan	Metode Analisa	Hasil Pengukuran	Batas Mutu
1	Suara Diakustik (SD)	ug/hari	SN 7119-7 2017	50	100 (*)
2	Konten Molekula (CO)	pphm	Pembacaan langsung	20	1000 (**)
3	Nitrogen Dioksida (NO <sub>2</sub> )	ug/hari	SN 7119-2 2017	0,6	200 (**)
4	Oksigen (O <sub>2</sub> )	ug/hari	SN 7119-8 2017	0,1	100 (**)
5	Hydrogen Sulfida (H <sub>2</sub> S)	ppm	SN 8605 2018	0,002	0,02 (*)
6	Amonia (NH <sub>3</sub> )	ppm	SN 7119-1 2006	0,06	2 (*)
7	TSP (Debu Total)	ug/hari	Gravimetri	60	230 (*)
8	Debu PM <sub>10</sub>	ug/hari	Pembacaan langsung	1,10	50 (**)
9	Debu PM <sub>2,5</sub>	ug/hari	Pembacaan langsung	0,97	35 (**)

**Report 2: Lighting Measurement**

No	Lokasi Sampel	Sudut	Metode pengukuran	Hasil Pengukuran		Batas Mutu
				Range	Rata-rata	
1	Ruang BCM	Lux	SN 7062 2019	65,0 - 164,0	121,56	300
2	Ruang SPU	Lux	SN 7062 2019	38,0 - 108,0	76,52	300
3	Ruang Kuangan	Lux	SN 7062 2019	55,0 - 162,0	124,06	300
4	Ruang Pemukiman dan KSL	Lux	SN 7062 2019	78,0 - 206,0	139,46	300

**Report 3: Air Quality Measurement**

No	Titik Pengukuran	Sudut	Metode pengukuran	Hasil Pengukuran	Batas Mutu (*)
1	Halaman Depan	dB(A)	SN 7231 2009	72,8	85
2	Halaman belakang	dB(A)	SN 7231 2009	61,8	85

**Figure 9.** Lighting, Noise and Air Monitoring Report 2022

The recapitulation of work accidents in 2022 is explained in the Figure 10 below.

PT PLN (Persero)  
Unit Induk Distribusi Bali

Lampiran I Keputusan Direksi PT PLN (Persero)  
Nomor : 0250.P/DIR/2016  
Formulir 6 : Laporan dari Unit Induk kepada Kantor Pusat

**REKAPITULASI KECELAKAAN KERJA  
TAHUN 2022**

NO	UNIT KERJA	TANGGAL	WAKTU	LOKASI	AKIBAT				KORBAN	PENYEBAB	KETERANGAN
					LUKA RINGAN	LUKA BERAT	MENINGGAL	KERUGIAN MATERIAL			
1	ULP Karangasem	24 Februari 2022	11:39 WITA	Ds. Ulakan, Kec. Manggis, Kab. Karangasem	1	-	-	-	Edo Tri Tama	Unsafe Condition - Pohon tumbang akibat angin kencang menimpa SUTM dan mengakibatkan Make Switch tertutup/close 1 phasa sehingga pekerja terkena imbas tegangan 20kV	Laporan Kecelakaan telah dikirim melalui surat nomor 0561 /KLH.01.01 / C05000000/2022 tanggal 26 Februari 2022

Mengetahui,  
General Manager

Denpasar, Maret 2022  
Dilaporkan oleh,  
Pejabat Pengendali K3, Keamanan, dan Lingkungan

I WAYAN UDAYANA

I NYOMAN JENDRA

**Figure 10.** Work Accident Report 2022


In 2022, there were no accident related to electrical installation or public in the PLN UID Bali work area, as seen in Figure 11 and 12 below.


PT PLN (Persero)  
Unit Induk Distribusi Bali

Lampiran I Keputusan Direksi PT PLN (Persero)  
Nomor : 0251.P/DIR/2016  
Formulir 6 :Laporan dari Unit Induk kepada Kantor Pusat

**REKAPITULASI KECELAKAAN INSTALASI  
TAHUN 2022**

NO	UNIT KERJA	TANGGAL	WAKTU	LOKASI	AKIBAT				KORBAN	PENYEBAB	KETERANGAN
					LUKA RINGAN	LUKA BERAT	MENINGGAL	KERUGIAN MATERIAL			
<b>NIHIL</b>											

Mengetahui,  
General Manager  
  
I WAYAN UDAYANA

Denpasar, Maret 2022  
Dilaporkan oleh,  
Pejabat Pengendali K3, Keamanan, dan Lingkungan  
  
I NYOMAN JENDRA


**Figure 11. 2022 Electrical Installation Accident Report**


PT PLN (Persero)  
Unit Induk Distribusi Bali

Lampiran I Keputusan Direksi PT PLN (Persero)  
Nomor : 0252.P/DIR/2016  
Formulir 6 :Laporan dari Unit Induk kepada Kantor Pusat

**REKAPITULASI KECELAKAAN MASYARAKAT UMUM  
TAHUN 2022**

NO	UNIT KERJA	TANGGAL	WAKTU	LOKASI	AKIBAT				KORBAN	PENYEBAB	KETERANGAN
					LUKA RINGAN	LUKA BERAT	MENINGGAL	KERUGIAN MATERIAL			
<b>NIHIL</b>											

Mengetahui,  
General Manager  
  
I WAYAN UDAYANA

Denpasar, Maret 2022  
Dilaporkan oleh,  
Pejabat Pengendali K3, Keamanan, dan Lingkungan  
  
I NYOMAN JENDRA

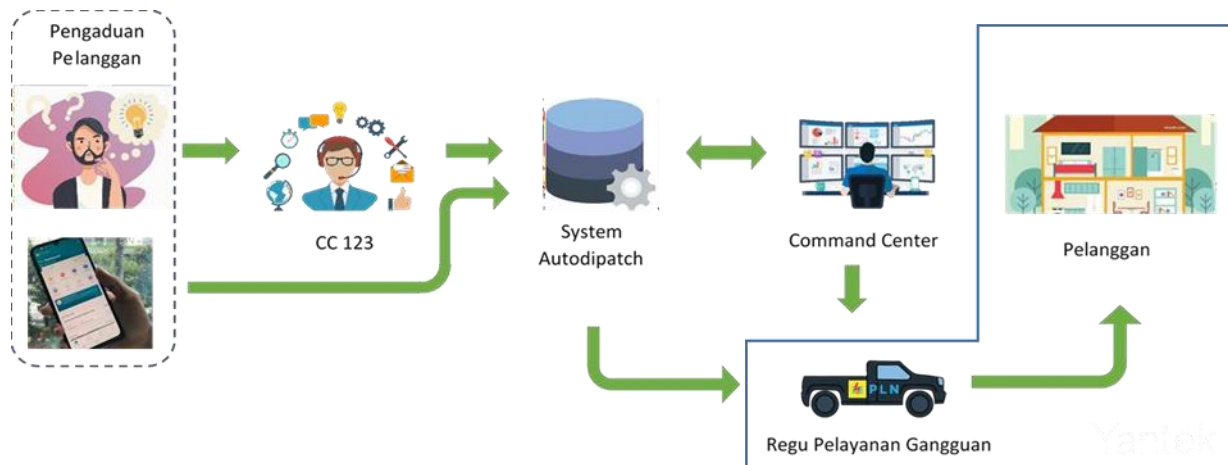
**Figure 12. Public Accident Report 2022**

## 2.7. Mechanism for Handling Customer Complaints

PT PLN (Persero) always improves service to customers, including complaints about electricity services. Currently PLN customers and public in general can submit complaints via call center 123 and through the PLN Mobile application. PLN provides a fast and real time complaint service to provide the best experience

for customers.

Through the PLN Mobile application, customers can track the process of handling disruptions in real time. The mechanism for handling Customer complaints is as illustrated in the Figure 13 below.



NO	URAIAN	STANDAR WAKTU (MENIT)	PELANGGAN	CC 123	SYSTEM AUTO DISPATCH	COMMAND CENTER	REGU PELAYANAN TEKNIK	PELANGGAN/ LOKASI
<b>A. kondisi Normal (tidak ada Alih Regu atau Posko)</b>								
1	Pelanggan melakukan pengaduan melalui : a. Telfon dan media lainnya ke CC123 atau	1	1a	1a				
	b. Aplikasi PLN Mobile	1	1b					
2	System Autodispatch mengirim WO ke Regu Pelayanan Teknik, Operator Command Center memantau WO dari Aplikasi APKT System Autodispatch	1			2	2		
3	Regu Pelayanan Teknik menerima WO dari sistem autodispatch melalui APKT Mobile	1					3	
4	Regu Pelayanan Teknik menuju Lokasi Pelanggan	45 *					4	
5	Petugas Yantek melakukan penanganan pengaduan di lokasi alamat pelapor sesuai SOP Pekerjaan dan Standar PS4 (Penampilan Sikap Senyum Salam dan Sapa)							5
6	1. Petugas Yantek menginput ke Aplikasi APKT Mobile bahwa WO sudah di terima dan ditindaklanjuti. 2. Petugas Yantek menyelesaikan waktu tanggap dan waktu perbaikan sesuai durasi dilapangan. 3. petugas Yantek memilih kode gangguan sesuai pekerjaan yang telah di selesaikan. a. Fasilitas b. Sub Fasilitas c. Equipment d. Event Damage e. Tindakan f. Standar Waktu g. Penyebab h. Grup Penyebab i. Cuaca j. Material meliputi jumlah, jenis, type, merk (scan QR Code)	180 *					6	
7	Pekerjaan selesai						7	

**Figure 13.** The Mechanism for Handling Customer Complaints

In handling complaints, service officers will receive reports from the command center or from auto dispatch as a follow-up to customer reports via command center 123 or the PLN Mobile application.

The service officer will immediately contact the customer and go to the customer's location. The following Table 3 is an example of a customer complaint report in 2022, with the duration time of handling complaint.

**Table 3.** Example of the Customer Complaint Report in 2022

NO	POSKO	NO LAPORAN	NAMA PELAPOR	ALAMAT PELAPOR	LAPORAN	TGL/JAM LAPOR	TGL/JAM PETUGAS DATANG	TGL/JAM PEKERJAAN SELESAI
1	POSKO ULP DENPASAR	G1222120300068	IBU ARINI	JL. GUNUNG SAPUTAN NO 32 RT -/- BR PEKANDELAN DS PADANG NGAMBIAN KEC DENPASAR BARAT KOTA DENPASAR DI DEKAT GANIDA A PARTEMENT	TIDAK BISA ENTRY TOKEN	03/12/2022 07:29	03/12/2022 07:49	03/12/2022 07:59
2	POSKO ULP KARANGASEM	G12221203000569	BP I NENGAH KARI	JL RAYA PURI BAGUS NO.0 RT-0 / RW-0 BR CANDIDA SA DESA BUGBUG KEC KARANG ASEM KAB KARANG ASEM DEKAT TOKO MITRA SARANA	PADAM	03/12/2022 17:47	03/12/2022 18:22	03/12/2022 18:36
3	POSKO ULP KARANGASEM	G12221203000579	BP DWI SUMARTA	JL I KETUT JELANTIK NO - RT - RW - BR DINAS KANGKANG DS KERTA MANDALA KEC ABANG KAB KARANG ASEM BALI ACUAN TEPATNYA REST AREA KANGKANG	TEGANGAN DROP	03/12/2022 17:56	03/12/2022 18:23	03/12/2022 18:37

## 2.8. Training, Stakeholders Engagement and Grievance Redress Mechanism (GRM) Implementation

Training and capacity building for PLN employees are organized by PLN Education and Training Center – Pusdiklat, or other certified institutions. Some regular training and certification in Occupational Health and Safety – OHS aspects in UID Bali are First Aid, General Occupational Safety and Health – AK3U, Fire Fighter, Toxic and Hazardous Waste – PLB3, Air Pollution Control – P3U, and Lead Auditor, with participants from HSE Unit and general, defined by the Human Resources Development Unit following schedule from the HSE Unit.

PLN UID Bali has yearly activities during National OHS Month in January – February by having declaration of a zero-accident commitment by management, employees and vendors; promotional activities like installing flags and banners, safety corner competitions, security guard agility competitions, OHS intelligence, safety briefing competitions and induction, and emergency response simulations.

Training for and activities with community have been applied under the Corporate Social Responsibility (CSR) program. PLN UID Bali has sponsored many CSR programs like e-agriculture onion farming in Trunyan, assistance on cocoa processing machines, electric pumps for salt farmers, and smart chicken farming, as seen in Figure 14 below.



**Figure 14.** CSR Programs at PLN UID Bali

PLN UID Bali has carried out education to the public through regular monthly electricity safety outreach. Electricity safety outreach is carried out in every sub-district within the PLN UID Bali work area. In this socialization, PLN UID Bali has provided understanding to the public regarding the importance of continuity in the distribution of electricity to support the activities of the wider community. Continuity of electricity distribution can be influenced by network conditions that do not comply with a safe distance from trees or buildings around the electricity network (ROW). So far there have been no complaints from the public regarding environmental and social aspects. PLN UID Bali has facilitated individuals to explain problems via call center 123 and PLN Mobile, and get information about programmes in PLN by social media like Instagram, twitter and face book, and local radios.

## 2.9. Summary of Key Findings

During 2022, the issues in PLN UID Bali were:

- Transformer warehouses have not been protected by cover in several warehouses
- Eleven transformer oil samples have been contaminated by PCBs according to the dexil laboratory test result

## **CHAPTER III CONCLUSION AND RECOMMENDATION**

This ESMP Monitoring Report of 2022 of the AIIB – PLN Strengthening Distribution Networks in East Java and Bali Project has been developed for submission to AIIB. This ESMP Monitoring Report presents the status of environmental monitoring and mitigation measures undertaken by PLN UID Bali. The conclusion drawn from this ESMP Monitoring Report are as described below.

- The project has been effectively implemented on sites with appropriate resources and capability to execute the plan in general;
- The periodic environmental monitoring and management during the operation phase, as required by the UKL-UPL, has been conducted frequently and showed no major deficiencies to the applicable regulation and AIIB safeguards standards;
- The project is considered to comply with most of the commitments stated in the UKL-UPL and HSE requirements with findings regarding the condition of transformers warehouses in several units of PLN UID Bali.

The recommendation in terms of improving the environmental, social, health, and safety performance within the reporting period is as follows:

- To continue the high level of HSE performance during the next phase of the project and committed to a safe workplace and the prevention of work-related injuries;
- To continue the frequency of monitoring as required in the UKP-UPL;
- To continue meaningful communication and consultation with the community and application of the PLN's established Grievance Redress Mechanism;
- To maintain the hazardous waste management and assure the hazardous waste temporary storage complied with the technical standards;
- To minimize network interferences and customer's complaints.



## APPENDICES

### Appendix 1. UID Bali Detailed Business Location

a. PT PLN (Persero) UID Bali at Provincial level, Jl. Letda Tantular No. 1 Renon Denpasar, Coordinate: -8.66890835282275, 115.22236313864876

b. PT PLN (Persero) South Bali Customer Service Implementation Unit (UP3), Jl. Sutoyo No. 1 Denpasar, Coordinate: -8.662975997274057, 115.21718778136479 in charge of 5 Customer Service Units (ULPs), namely:

- PT PLN (Persero) Denpasar Customer Service Unit at Jl. Sutoyo No.1 Denpasar, Coordinate: -8.662975997274057, 115.21718778136479 with working areas covering West Denpasar Subdistrict, South Denpasar Subdistrict, and Denpasar City;
- PT PLN (Persero) Denpasar Customer Service Unit at Jl. Sutoyo No. 1 Denpasar, Coordinate: -8.662975997274057, 115.21718778136479 with working areas covering East Denpasar Subdistrict and Sanur tourism area Denpasar City;
- PT PLN (Persero) Kuta Customer Service Unit at Jl. Sunset Road Denpasar, Coordinate: -8.715288709535134, 115.18612591205337 with working areas covering Kuta and South Kuta, and Nusa Dua tourism area Badung Regency;
- PT PLN (Persero) Mengwi Customer Service Unit at Jl. Raya Abianbase Kapal Mangupura Badung, Coordinate: -8.582998094249401, 115.18084781019982 with working areas covering: North Kuta, Abiansema, Mengwi and Petang, Badung Regency;
- PT PLN (Persero) Tabanan Customer Service Unit at Jl. Gajah Mada No. 1 Tabanan, Coordinate: -8.539529003323475, 115.127633190573 with working areas covering Baturiti, Kediri, Tabanan, Marga, Penebel, Pupuan, Selemadeg, West Selemadeg, East Selemadeg, and Kerambitan.

c. PT PLN (Persero) East Bali Customer Service Implementation Unit (UP3) at Jl. Batu Tabih No. 53 Semarapura, Coordinate: -8.543227910084275, 115.39338005464771 in charge of 4 Customer Service Units (ULPs), namely:

- PT PLN (Persero) Gianyar Customer Service Unit at Jl. Kebo Iwa No. 2 Gianyar, Coordinate: -8.542243502737268, 115.32244953153018 with working areas covering: Blahbatuh, Gianyar, Payangan, Sukawati, Tampaksiring, Tegalalang, and Ubud, Gianyar Regency;
- PT PLN (Persero) Bangli Customer Service Unit at Jl. Brigadir Jenderal Ngurah Rai, No. 89, Bangli, Coordinate: -8.454139769049217, 115.3549877964377 with working areas covering: Bangli, Kintamani, Susut, and Tembuku;
- PT PLN (Persero) Klungkung Customer Service Unit at Jl. Ngurah Rai No. 40, Central Semarapura, Klungkung Subdistrict, Klungkung Regency, Bali 80752 Coordinate: -8.530806050711842, 115.39834744088712 with working areas covering: Banjarangkan, Dawan, Klungkung, and Nusa Penida;

- PT PLN (Persero) Karangasem Customer Service Unit at Jl. Nenas No. 4 Karangasem, coordinate -8.436736207682705, 115.60372371529525 with working areas covering: Abang, Bebandem, Karangasem, Kubu, Manggis, Rendang, Selat, and Sidemen.

d. PT PLN (Persero) North Bali Customer Service Implementation Unit at Jl. Udayana, Banjar Tegal, Buleleng Subdistrict, Buleleng Regency, Bali 81116, Singaraja, Coordinate: -8.118149559185468, 15.08535791550887 in charge of 5 Customer Service Units (ULPs), namely:

- PT PLN (Persero) Tejakula Customer Service Unit at Jl. Raya Singaraja – Amlapura, Tejakula, Sukadana, Kubu, Karangasem Regency, Bali 80811, Coordinate: -8.101440666873719, 115.35697467405446 in Buleleng Regency with working areas covering: Tejakula and Kubu (addition);

- PT PLN (Persero) Singaraja Customer Service Unit at Jl. Ngurah Rai No. 68, Coordinate: - 8.113548696069648, 115.09193355163754 Buleleng Regency, with working areas covering: Banjar, Buleleng, Sawan, and Sukasada;

- PT PLN (Persero) Seririt Customer Service Unit at Jl. Sudirman No. 91-119, Seririt, Seririt Subdistrict, Buleleng Regency, Bali 81153, Coordinate: -8.19258430725858, 114.94107779670303 with working areas covering Pupuan and Seririt;

- PT PLN (Persero) Negara Customer Service Unit at Jl. Gatot Subroto No. 33, Pendem, Negara Subdistrict, Jembrana Regency, Bali 82221, Coordinate: -8.360019687384124, 114.62504885142576 with working areas covering: Jembrana, Mendoyo, and Pekutatan;

- PT PLN (Persero) Gilimanuk Customer Service Unit in Gilimanuk, Melaya Subdistrict, Jembrana Regency, Bali, Coordinate: -8.173337957309164, 114.43889215437481 with working areas covering Gilimanuk Subdistrict, Jembrana Regency and Gerogak Subdistrict, Buleleng Regency.

e. PT PLN (Persero) Bali Distribution Regulating Implementation Unit with the working areas throughout Bali related to the operation of the 20kV medium voltage network.

## **Appendix 2. List of Environmental Approvals and Permits**

- a. PT PLN (Persero) North Bali Customer Service Implementation Unit
- SPPL of Office Building of PT (PLN (Persero) North Bali Customer Service Implementation Unit at Jl. Udayana No. 27 Singaraja, dated 12 October 2017
  - SPPL of Office Building of PT (PLN (Persero) Tejakula Customer Service Unit, at Jl. Raya Singaraja-Karangasem Singaraja, dated 12 October 2017
  - SPPL of Office Building of PT (PLN (Persero) Seririt Customer Service Unit, at Jl. Sudirman No. 96 Seririt Singaraja, dated 8 June 2017
  - SPPL of Office Building of PT (PLN (Persero) Gilimanuk Customer Service Unit at Gilimanuk Village, Jembrana Regency, dated 21 November 2017
  - DPPL Recommendation Letter from Environmental Office of Buleleng Regency No. 660.1/551/KLH/2009 dated 29 November 2009, on Activity of Office Building of PT (PLN (Persero) Singaraja Customer Service Unit
  - Recommendation Letter from Environmental Office of Jembrana Regency No. 660.1/267.1/LHKP dated 7 September 2003, on Activity of Office Building of PT (PLN (Persero) Negara Customer Service Unit
  - Environmental Permit from Bali Governor No. 660.03/226/IV-A/DISPMP dated 5 January 2018, on Activity of 20 KV Medium Voltage Electricity Network in West Bali National Park (TNBB)
  - Environmental Permit from Environmental Office of Buleleng Regency No. 660.1/3589/IL/DLH/2018 dated 21 December 2018, on Activity of Pamaron Material Warehouse of PT PLN (Persero) North Bali at Jl. Singaraja Gilimanuk
  - SPPL of Office Building of PT (PLN (Persero) U North Bali Customer Service Implementation Unit at Jl. Udayana No. 27 Singaraja, dated 12 October 2017
- b. PT PLN (Persero) East Bali Customer Service Implementation Unit
- Recommendation from Environmental Agency of Klungkung Regency No. 660.1/164/DPLH 2017 dated 6 November 2017, on Activity of Office Building of PT PLN (Persero) East Bali Customer Service Unit
  - SPPL of Office Building of PT (PLN (Persero) Gianyar Customer Service Unit at Jl. Kebo Iwa No. 2 Gianyar, dated 12 October 2017
  - SPPL of Office Building of PT (PLN (Persero) Bangli Customer Service Unit at Jl. Ngurah Rai No. 89B Bangli, dated 04 October 2017
  - SPPL of Office Building of PT (PLN (Persero) Klungkung Customer Service Unit at Jl. Ngurah Rai No. 40 Semarapura, dated 5 December 2017
  - SPPL of Office Building of PT (PLN (Persero) Karangasem Customer Service Unit at Jl. Nenas No. 04 Karangasem, dated 11 December 2017
- c. PT PLN (Persero) South Bali Customer Service Implementation Unit

- Environmental Permit No. 164/72/1296/DB/DPMPTSP/2018 from One Stop Integrated Investment Service Denpasar City, dated 26 March 2018 on Activity of Office Building of PT PLN (Persero) South Bali Area, Denpasar Rayon and Prima Area at Jl. Sudirman No. 2 Denpasar
- Decree of Regent of Tabanan No. 64 of 2010 dated 15 February 2010, on Stipulation of DPPL of Activity of Office of PT PLN (Persero) Tabanan Customer Service Unit at Jl. Gajahmada No. 1 Tabanan
- Environmental Permit from OSS Institution with NIB: 8120003820135 dated 06 April 2020 by Regent of Badung, on Activity of Office Building of PT PLN (Persero) Kuta Customer Service Unit at Jl. Sunset Road Kuta Badung

d. PT PLN (Persero) Bali Distribution Management Implementation Unit

- Environmental Permit from One Stop Integrated Investment Service Denpasar City No: 164/235/6134/DB/DPMPTSP/2017 dated 28 November 2017, on Activity of Office of PT PLN (Persero) Bali Distribution Management Implementation Unit
- Environmental Permit from Regent of Badung No. 660.4/793/IL/LH/20015 dated 23 December 2015, on Activity of Material Warehouse of PT PLN (Persero) Bali Distribution Management Implementation Unit

e. PT PLN (Persero) Bali Distribution Main Unit

- Environmental Permit from One Stop Integrated Investment Service Denpasar City No. 164/51/1760/DT/BPPTSP & PM/2016 dated 11 March 2016, on Activity of PT PLN (Persero) Bali Distribution Main Unit at Jl. Letda Tantular No. 1 Renon Denpasar
- Environmental Permit from One Stop Integrated Investment Service Denpasar City No. 164/191/5262/DT/DPMPTSP/2017 dated 10 October 2017, on Tohpati Material Warehouse of PT PLN (Persero) Bali Distribution, South Bali UP3 and East Bali UP3
- Decree of the Regent of Tabanan No. 180/1417/03/HK&HAM/2019 dated 17 June 2019, on Environmental Business and/or Activity Permit of Bedugul House Building Construction of PT PLN (Persero) UID Bali
- Env Permit from One Stop Integrated Investment Service Denpasar City No. 660.3/5895/IV-ADISPMPT dated 16 December 2019, on Activities of 20 kV Medium Voltage Network
- Env Management and Monitoring Efforts No. SK.9508/MENLHK-PKTL/PDLUK/PLA.4/ 11/2022 concerning Approval of the Statement of Capability for Env Management for Development and Operational Activities of the Fast Charging, Ultra-Fast Charging, and Home Charging Public Electric Vehicle Charging Station Network System in Bali Province.

### **Appendix 3. List of Indonesia's Environmental and Social Regulations**

#### **A. Environmental Regulations**

##### **Acts**

1. Undang-Undang No. 5 Tahun 1960 tentang Peraturan Dasar Pokok-Pokok Agraria;
2. Undang-Undang No. 5 Tahun 1990 tentang Konservasi Sumber Daya Alam Hayati dan Ekosistemnya;
3. Undang-Undang No. 7 Tahun 1994 tentang Ratifikasi Perjanjian Pembentukan Organisasi Perdagangan Dunia;
4. Undang-Undang No. 5 Tahun 1994 tentang Ratifikasi Konvensi PBB tentang Keanekaragaman Hayati (UN-CBD);
5. Undang-Undang No. 39 Tahun 1999 tentang Hak Asasi Manusia;
6. Undang-Undang No. 41 Tahun 1999 tentang Kehutanan, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;
7. Undang-Undang No. 13 Tahun 2003 tentang Ketenagakerjaan, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;
8. Undang-Undang No. 17 Tahun 2004 tentang Ratifikasi Protokol Kyoto untuk Konvensi Kerangka Kerja PBB tentang Perubahan Iklim;
9. Undang-Undang No. 24 Tahun 2007 tentang Penanggulangan Bencana;
10. Undang-Undang No. 26 Tahun 2007 tentang Penataan Ruang, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Karya;
11. Undang-Undang No. 30 Tahun 2007 tentang Energi;
12. Undang-Undang No. 14 Tahun 2008 tentang Keterbukaan Informasi Publik;
13. Undang-Undang No. 19 Tahun 2009 tentang Ratifikasi Konvensi Stockholm tentang bahan Pencemar Organik yang Persisten;
14. Undang-Undang No. 30 Tahun 2009 tentang Ketengalistrikan, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;
15. Undang-Undang No. 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;
16. Undang-Undang No. 36 Tahun 2009 tentang Kesehatan, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;
  
17. No.31 Tahun 2004 tentang Perikanan, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;
18. Undang-Undang No. 11 Tahun 2010 tentang Cagar Budaya;
19. Undang-Undang No. 17 Tahun 2013 tentang Organisasi Kemasyarakatan;
20. Undang-Undang No. 18 Tahun 2013 tentang Pencegahan dan Pemberantasan Perusakan

Hutan, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;

21. Undang-Undang No. 1 Tahun 2014 tentang Pengelolaan Wilayah Pesisir dan Pulau-Pulau Kecil, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;

22. Undang-Undang No. 21 Tahun 2014 tentang Panas Bumi, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;

23. Undang-Undang No. 22 Tahun 2019 tentang Sistem Budi Daya Pertanian Berkelanjutan, dengan perubahan Undang-Undang No. 11/2020 tentang Cipta kerja.

### **Government Regulations**

1. Peraturan Pemerintah No. 21 Tahun 2008 tentang Manajemen Bencana

2. Peraturan Pemerintah No. 70 Tahun 2009 tentang Konservasi

3. Peraturan Pemerintah No. 50 Tahun 2012 tentang Penerapan Sistem Manajemen Keselamatan dan Kesehatan Kerja;

4. Peraturan Pemerintah No. 34 Tahun 2018 tentang Sistem Standardisasi dan Penilaian Kesesuaian Nasional;

5. Peraturan Pemerintah No. 22 Tahun 2021 Tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup;

6. Peraturan Pemerintah No. 5 Tahun 2021 tentang Penyelenggaraan Perizinan Berusaha Berbasis Risiko;

### **Presidential Decrees, Instructions, and Regulation**

1. Instruksi Presiden No. 9 Tahun 2000 tentang Pengarusutamaan Gender dalam Proses Pembangunan

2. Keputusan Presiden No. 32 Tahun 1990 tentang Pengelolaan Kawasan Lindung

3. Keputusan Presiden No. 23 Tahun 1992 tentang Ratifikasi Konvensi Wina untuk Perlindungan Lapisan Ozon dan Protokol Montreal tentang Zat yang Menguras Lapisan Ozon sebagaimana Disesuaikan dan Dlubah oleh Pertemuan Kedua Para Pihak London, 27-29 Juni 1990

4. Keputusan Presiden No. 46 Tahun 2005 Perubahan atas Protokol Montreal tentang Zat yang Menguras Lapisan Ozon

5. Instruksi Presiden No. 10 Tahun 2011 tentang Penundaan Pemberian Izin Baru dan Penyempurnaan Tata Kelola Hutan Alam Primer dan Lahan Gambut

6. Peraturan Presiden No. 92 Tahun 2020 tentang Kementerian Lingkungan Hidup dan Kehutanan;

7. Peraturan Presiden No. 98 Tahun 2021 tentang Penyelenggaraan Nilai Ekonomi Karbon untuk Pencapaian Target Kontribusi yang Ditetapkan Secara Nasional dan Pengendalian Emisi Gas Rumah Kaca dalam Pembangunan Nasional

### **Ministry Decrees and Regulations**

1. Keputusan Kepala Badan Pengelolaan Dampak Lingkungan No. 299 Tahun 1996 tentang Arah Teknis Penilaian Sosial dalam AMDAL;
2. Keputusan Kepala Badan Pengelolaan Dampak Lingkungan No. 124 Tahun 1997 tentang Penilaian Kesehatan Masyarakat dalam AMDAL;
3. Keputusan Menteri Lingkungan Hidup (MLH) No. 45 Tahun 2005 tentang Pedoman Penyusunan Laporan Realisasi Rencana Pengelolaan Lingkungan (RKL) dan Rencana Pemantauan Lingkungan (RPL);
4. Peraturan Menteri Pertanian No. 1 Tahun 2007 tentang Bahan Aktif yang Dilarang dan Pestisida Terbatas;
5. Peraturan Menteri Kehutanan No 30 Tahun 2009 tentang Prosedur Implementasi untuk Mengurangi Emisi dari Deforestasi dan Degradasi Hutan (REDD);
6. Keputusan MLH No. 31 Tahun 2009 tentang Arah dan Kontrol Penerapan Manajemen Lingkungan, Ekolabel, Produksi Bersih, dan Penggunaan Teknologi Lingkungan di Daerah;
7. Keputusan MLH No. 31 Tahun 2009 tentang Arah dan Kontrol Penerapan Manajemen Lingkungan, Ekolabel, Produksi Bersih, dan Penggunaan Teknologi Lingkungan di Daerah;
8. Keputusan MLH No. 9 Tahun 2010 tentang Pedoman Keluhan Masyarakat dan Penanganan Keluhan yang Disebabkan oleh Polusi dan/atau Degradasi;
9. Peraturan Menteri Kehutanan No. 6 Tahun 2010 tentang Norma, Standar, Prosedur dan Kriteria untuk Pengelolaan Hutan di Unit Pengelolaan Hutan Lindung;
10. Keputusan MLH No. 5 Tahun 2012 tentang Jenis Rencana Bisnis dan/atau Kegiatan yang tunduk pada Analisis Dampak Lingkungan;
11. Permen Lingkungan Hidup No. 17 Tahun 2012 tentang Pedoman Keterlibatan Masyarakat dalam Proses Penilaian Dampak dan Izin Lingkungan;
12. Keputusan MLH No. 17 Tahun 2012 tentang Partisipasi Publik dalam AMDAL dan Izin Lingkungan;
13. Keputusan MLH No. 15 Tahun 2013 tentang Pengukuran, Pemberitahuan, dan Verifikasi Tindakan Mitigasi untuk Perubahan Iklim;
14. Peraturan Menteri Pertanian No. 64 Tahun 2013 tentang Sistem Pertanian Organik;
15. Peraturan Menteri Pertanian No. 107 Tahun 2014 tentang Pengawasan Pestisida;
16. Keputusan Menteri Lingkungan Hidup dan Kehutanan (MLHK) No. 6347/MenLHK-PKTL/IPSDH/PLA.1/11/2016 tentang Penetapan Peta Indikatif Penundaan Pemberian Izin Baru Pemanfaatan Hutan, Penggunaan Kawasan Hutan, dan Perubahan Peruntukan Kawasan Hutan dan Areal Penggunaan Lain (Revisi XI);
17. Peraturan Menteri Perindustrian No. 40/M-IND/PER/7/2016 tentang Pedoman Teknis untuk Pengembangan Kawasan Industri;

18. Peraturan MLHK No 72 Tahun 2017 tentang Pedoman Pelaksanaan Pengukuran, Pelaporan dan Verifikasi Aksi dan Sumber Daya Pengendalian Perubahan Iklim;
19. Peraturan Kementerian Lingkungan Hidup dan Kehutanan (KLHK) No. P.31/MENLHK/SETJEN/SET/1/5/2017 tentang Pedoman Pengarusutamaan Gender di Lingkungan dan Kehutanan dan Peraturan Menteri Kehutanan No. P.65/Menhut-II/2011 tentang Pedoman Perencanaan dan Penganggaran Responsif Gender di Sektor Kehutanan;
20. Keputusan MLHK No.P.22/MENLHK/SETJEN/SET.1/3/2017 tentang Prosedur Pengaduan tentang Polusi dan/atau Kerusakan Lingkungan dan/atau Penghancuran Hutan;
21. Peraturan Menteri Perhubungan No. 11 Tahun 2017 tentang Perubahan Ketiga atas Peraturan Menteri Perhubungan Nomor PM 75 Tahun 2015 tentang Penyelenggaraan Analisis Dampak Lalu Lintas;
22. Keputusan MLHK No. 26/2018 tentang Pedoman Penyusunan dan Peninjauan dan Pemeriksaan Dokumen Lingkungan dalam Penerapan Pengajuan Tunggal secara langsung;
23. Keputusan MLHK No. P.23/MENLHK/SETJEN/KUM.1/7/2018 tentang Kriteria untuk Bisnis dan/atau Kegiatan yang Memerlukan Perubahan Izin;
24. Keputusan MLHK No. P.24/MENLHK/SETJEN/KUM.1/7/2018 tentang Pembebasan Kewajiban untuk Mempersiapkan AMDAL untuk Bisnis dan/atau Kegiatan yang Berlokasi di Kabupaten/Kota Menyiapkan Detail Rencana Tata Ruang;
25. Keputusan MLHK No.P.25/MENLHK/SETJEN/KUM.1/7/2018 tentang Pedoman Penentuan Bisnis dan/atau Kegiatan yang Memerlukan Tindakan Pengelolaan dan Pemantauan Lingkungan dan Surat Pernyataan tentang Pengelolaan dan Pemantauan Lingkungan;
26. Keputusan MLHK No. 38 Tahun 2019 tentang Jenis Rencana Bisnis dan/atau Kegiatan yang tunduk pada Analisis Dampak Lingkungan;
27. Peraturan Menteri Pekerjaan Umum dan Perumahan Rakyat No. 21/PRT/M/2019 tentang Pedoman Sistem Manajemen Keselamatan Konstruksi;
28. Peraturan Menteri Pertanian No. 38 Tahun 2020 tentang Penyelenggaraan Sertifikasi Perkebunan Kelapa Sawit Berkelanjutan Indonesia;
29. Peraturan Menteri Energi dan Sumber Daya Mineral No. 11 Tahun 2021 tentang Pelaksanaan Usaha Ketenagalistrikan.

### **Local Government Regulations**

1. Bali Province Regional Regulation Number 1 of 2017 concerning Environmental Protection and Management;
2. Regulations of the Governor of Bali Number 8 of 2007 Relating to Environmental Quality Standards and New Environmental Damage Criteria;
3. Source Based Waste Management Regulations of the Governor Of Bali Number 47 of 2019.



### **PLN Regulations**

1. PLN Board of Directors Decree No. 134.K/DIR/2007 concerning Environmental, Health, and Safety Policy;
2. PT PLN (Persero) Decree No. 200.K/DIR/2009 concerning Revision of Decision No. 059.K/DIR/2009 concerning PT PLN (Persero) Performance Level Evaluation System;
3. PT PLN (Persero) Decree No. 114.K/DIR/2010 concerning Transformer Power;
4. Decision of the PLN Board of Directors (PLN Decision) No. 473/2010 Construction Standards for Low Power Electric Networks (for distribution lines);
5. PLN Board of Directors Decree No. 606/2010 Construction Standards for Medium Voltage Electricity;
6. PLN Board of Directors Decree No. 605/2010 Construction Standards for Distribution Substations and Transmitting Substations;
7. Board of Directors Regulation No. 501/2012 concerning Public Information Openness (KIP);
8. PLN Board of Directors Decree No. 0520-2.K/DIR/2014 concerning Collection of Maintenance Guidelines for Main Station Equipment; Directors Regulation of PT PLN (Persero) No. 0250.K/DIR/2016 concerning Occupational Safety Guidelines at PT PLN (Persero);
9. Directors Regulation of PT PLN (Persero) No. 0251.K/DIR/2016 concerning Electrical Installation Safety Guidelines at PT PLN (Persero);
10. Directors Regulation of PT PLN (Persero) No. 0252.K/DIR/2016 concerning Public Safety Guidelines at PT PLN (Persero);
11. Directors Decree of PT PLN (Persero) No. 0325.K/DIR/2021 concerning Contractor Safety Management System;
12. Decision of the PLN Board of Directors (PLN Decision) regarding FABA and Gypsum Waste Management;
13. PLN Board of Directors Decree No. 0028.P/DIR/2015 concerning Organizational Structure, Responsibilities, and Main Duties in the Human Resources Management Directorate of PT PLN (Persero);
14. PLN Board of Directors Decree No. 0250.P/DIR/2016 concerning Work Safety Guidelines at PT PLN (Persero);
15. PLN Board of Directors Decree No. 0252.P/DIR/2016 concerning Public Safety Guidelines in PT PLN (Persero);
16. PLN Director Regulation No. 0179.P/DIR/2016 concerning Organizational Structure.

### **B. Social**

#### **Regulations Acts**

1. Undang-Undang No. 5 Tahun 1960 tentang Peraturan Dasar tentang Pokok-Pokok Agraria;
2. Undang-Undang No. 7 Tahun 1984 tentang Ratifikasi Konvensi tentang Penghapusan Segala Bentuk Diskriminasi terhadap Perempuan (CEDAW);

3. UU No. 39 Tahun 1999 tentang Hak Asasi Manusia;
4. UU No. 11 Tahun 2005 tentang Ratifikasi Kovenan Internasional tentang Hak Ekonomi, Sosial dan Budaya (ICESCR);
5. Undang-Undang No. 11 Tahun 2009 tentang Kesejahteraan Sosial, dengan perubahan Undang-Undang No.14 Tahun 2019 tentang Pekerja Sosial;
6. Undang-Undang No. 30 Tahun 2009 tentang Ketenagalistrikan, dengan perubahan Undang-Undang No. 11 Tahun 2020 tentang Cipta Kerja;
7. Undang-Undang No. 13 Tahun 2011 tentang Penanganan Fakir Miskin;
8. Undang-Undang No. 2 Tahun 2012 tentang Pengadaan Tanah untuk Pembangunan bagi Kepentingan Umum;
9. Undang-Undang No. 7 Tahun 2012 tentang Penanganan Konflik Sosial.

### **Government Regulations**

1. Peraturan Pemerintah (PP) No. 23 Tahun 2014 tentang Perubahan Atas Peraturan Pemerintah Nomor 14 Tahun 2012 tentang Kegiatan Usaha Penyediaan Tenaga Listrik;
2. PP No. 2 Tahun 2015 tentang Implementasi Undang-Undang No. 7 Tahun 2012 tentang Penanganan Konflik Sosial;
3. PP No. 45 Tahun 2017 tentang Partisipasi Masyarakat dalam Pengelolaan Pemerintahan Lokal;
4. PP No. 62 Tahun 2018 tentang Mitigasi Dampak Sosial pada Masyarakat dalam Pengadaan Tanah untuk Pembangunan Nasional;
5. PP No. 18 Tahun 2021 tentang Hak Pengelolaan, Hak Atas Tanah, Satuan Rumah Susun dan Pendaftaran Tanah;
6. PP No. 19 Tahun 2021 tentang Penyelenggaraan Pengadaan Tanah bagi Pembangunan untuk Kepentingan Umum.

### **Presidential Instructions and Regulation**

1. Instruksi Presiden No. 9 Tahun 2000 tentang Pengarusutamaan Gender dalam Pembangunan Nasional;
2. Instruksi Presiden No. 10/2011 tentang Penangguhan Pemberian Izin Baru dan Peningkatan Tata Kelola Hutan Alam dan Lahan Gambut;
3. Instruksi Presiden No. 1/2016 tentang Akselerasi Implementasi Strategi Nasional
4. Peraturan Presiden (Perpres) No. 4/2016 tentang Percepatan Pembangunan Infrastruktur Ketenagalistrikan;
5. Perpres No. 88/2017 tentang Penyelesaian Penguasaan Tanah di Kawasan Hutan;
6. Perpres No. 56/2018 tentang Perubahan Kedua dari Peraturan Presiden No.3/2016

yang mencantumkan Proyek Strategis Nasional.

### **Ministry Regulations**

1. Peraturan Kepala Badan Pertahanan Nasional No. 5 Tahun 2012 tentang Pedoman Teknis Pengadaan Tanah, dengan perubahan Permen Agraria/Kepala BPN No. 6 Tahun 2015 tentang Perubahan Atas Peraturan Kepala Badan Pertahanan Nasional Nomor 5 Tahun 2012 tentang Petunjuk Teknis Pelaksanaan Pengadaan Tanah;
2. Peraturan Menteri Dalam Negeri No. 1 Tahun 2016 tentang Pengelolaan Aset Desa;
3. Peraturan Menteri Energi dan Sumber Daya Mineral No. 33 Tahun 2016 Solusi Teknis untuk Tanah, Bangunan, dan/atau Pohon yang Dimiliki oleh Masyarakat di dalam Kawasan Hutan untuk Percepatan Pembangunan Infrastruktur Listrik;
4. Peraturan Menteri Keuangan No. 56 Tahun 2017 tentang Perubahan atas Peraturan Menteri Keuangan No. 101/PMK01/2014 tentang Penilaian Publik, dengan perubahan Peraturan Menteri Keuangan No. 228/PMK.01/2019 tentang perubahan Kedua Atas Peraturan Menteri Keuangan Nomor 101/PMK.01/2014 Tentang Penilaian Publik;
5. Peraturan Menteri Energi dan Sumber Daya Mineral (ESDM) No. 27 Tahun 2018 tentang Kompensasi untuk Tanah, Bangunan, dan/atau Pabrik di Bawah Ruang Bebas Saluran Transmisi Listrik
6. Peraturan Menteri Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi 16 Tahun 2019 tentang Musyawarah Desa;
7. Peraturan Menteri ESDM No. 2 Tahun 2019 tentang Perubahan Atas Peraturan Menteri ESDM No 18 Tahun 2015 tentang Ruang Bebas dan Jarak Bebas Minimum Pada Saluran Udara Tegangan Tinggi, Saluran Udara Tegangan Ekstra Tinggi, dan Saluran Udara Tegangan Tinggi Arus Searah Untuk Penyaluran Tenaga Listrik;
8. Peraturan Menteri Agraria/Kepala BPN No. 18 Tahun 2019 tentang Tata Cara Penatausahaan Tanah Ulayat Kesatuan Masyarakat Hukum Adat;
9. Peraturan Menteri Agraria/Kepala BPN No. 17 Tahun 2019 tentang Izin Lokasi, dengan perubahan Peraturan Menteri Agraria/Kepala BPN No. 13 Tahun 2020 tentang Perubahan atas Peraturan Menteri Agraria dan Tata Ruang/Kepala Badan Pertahanan Nasional Nomor 17 Tahun 2019 tentang Izin Lokasi;
10. Peraturan MLHK No. 17 Tahun 2020 tentang Hutan Adat dan Hutan Hak;
11. Peraturan Menteri Badan Usaha Milik Negara No. PER-05/MBU/04/2021 tentang Program Tanggung Jawab Sosial dan Lingkungan Badan Usaha Milik Negara.

### **PLN Regulations**

1. Keputusan Direksi (Kepdir) PLN No. 605 Tahun 2010 tentang Standar Konstruksi

untuk Gardu Distribusi Daya dan Gardu Switching;

2. Kepdir PLN No. 4606 Tahun 2010 tentang Standar Konstruksi untuk Jaringan Tenaga Tegangan Menengah;
3. Kepdir PLN No. 473 Tahun 2010 tentang Standar Konstruksi untuk Jaringan Listrik Tegangan Rendah;
4. Kepdir PLN No. 366 Tahun 2007 tentang Tanggung Jawab Sosial Perusahaan;
5. Kepdir PLN No. 344 Tahun 2016 tentang Prosedur Pengadaan Tanah di PLN;
6. Keput Kepdir PLN No. 289 Tahun 2013 tentang Pengadaan Tanah untuk Tujuan Penyediaan Listrik, Biaya Operasional Pengadaan Tanah, dan Biaya Kompensasi Operasional.

#### **Appendix 4. List of Standard Operational Procedure in Distribution Lines Construction**

##### **National Regulations and Standards**

1. Indonesian National Standard (SNI) No. 04-0225-2000 concerning Electrical Installations for Buildings

##### **PLN Standards**

1. Directors Decree of PT PLN (Persero) No. 473.K/DIR/2010 concerning Construction Standards of Low-Voltage Electric Power Networks
2. Directors Decree of PT PLN (Persero) No. 474.K/DIR/2010 concerning Construction Standards of Electric Power Networks;
3. Directors Decree of PT PLN (Persero) No. 475.K/DIR/2010 concerning Engineering Design Criteria of Electric Power Distribution Construction;
4. Directors Decree of PT PLN (Persero) No. 605.K/DIR/2010 concerning Construction Standards of Distribution Substation and Power Switching Substation;
5. Directors Decree of PT PLN (Persero) No. 606.K/DIR/2010 concerning Construction Standards of Medium Voltage Power;
6. Procedure No. PT-HSSE-27 concerning Environmental and Social Safeguard Procedures for Distribution Network Works Performed by Third Parties at PT PLN (Persero).

##### **PLN UID Bali Internal Procedures**

1. Procedure of PLN UID Bali No. DISBALI-IPM-B.06 Control of Shrink Measurement and Evaluation
2. Procedure of PLN UID Bali No. DISBALI-IPM-B.01 Planning of Operational Patterns and Distribution System Maintenance

3. Procedure of PLN UID Bali No. DISBALI-IPM-B.02 Logistics Control
4. Procedure of PLN UID Bali No. DISBALI-IPM-B.07 Distribution Asset Management

- **Appendix 5. Screening Form of PT PLN (Persero) Bali Distribution Main Unit for Sub-Projects in 2022**

The evidence can be found in the following link and folder “5. Appendix 5”: [https://bit.ly/Appendix\\_5](https://bit.ly/Appendix_5)

- **Appendix 6. Environmental Reporting Receipts**

The evidence can be found in the following link and folder “6. Appendix 6”: <https://tinyurl.com/Appendix6>

- **Appendix 7. Work Environment Measurement Report**

The evidence can be found in the following link and folder “7. Appendix 7”: <https://tinyurl.com/Appdx7>

- **Appendix 8. Hazardous Waste Management**

The evidence can be found in the following link and folder “8. Appendix 8”: <https://tinyurl.com/Appendix8>

- **Appendix 9. Hazardous Waste Temporary Storage**

The evidence can be found in the following link and folder “9. Appendix 9”: <https://tinyurl.com/Appdix9>

- **Appendix 10. PCBs Test Report with Dexsil Method**

The evidence can be found in the following link and folder “10. Appendix 10”: <https://tinyurl.com/Appdix10>

- **Appendix 11. Public Consultation Written Agreements**

The evidence can be found in the following link and folder “11. Appendix 11”: [https://bit.ly/Appendix\\_11](https://bit.ly/Appendix_11)

- **Appendix 12. OHS Act in Contract Documents**

The evidence can be found in the following link and folder “12. Appendix 12”: [https://bit.ly/Appendix\\_12](https://bit.ly/Appendix_12)

- **Appendix 13. OHS Document Implementation**

The evidence can be found in the following link and folder “13. Appendix 13”: [https://bit.ly/Appendix\\_13](https://bit.ly/Appendix_13)

- **Appendix 14. Emergency Preparedness and Response Plan**

The evidence can be found in the following link and folder “14. Appendix 14” [https://bit.ly/Appendix\\_14](https://bit.ly/Appendix_14)

- **Appendix 15. Right of Way and Safety Distance**

The evidence can be found in the following link and folder “15. Appendix 15”: [https://bit.ly/Appendix\\_15](https://bit.ly/Appendix_15)

- **Appendix 16. OHS Audit**

The evidence can be found in the following link and folder “16. Appendix 16”: [https://bit.ly/Appendix\\_16](https://bit.ly/Appendix_16)

- **Appendix 17. Environmental Management System Procedure**

The evidence can be found in the following link and folder “17. Appendix 17”: [https://bit.ly/Appendix\\_17](https://bit.ly/Appendix_17)

- **Appendix 18. Corporate Social Responsibility**

The evidence can be found in the following link and folder “18. Appendix 18”: [https://bit.ly/Appendix\\_18](https://bit.ly/Appendix_18)

- **Appendix 19. ESMP Matrix**

The evidence can be found in the following link and folder “19. Appendix 19”: [https://bit.ly/Appendix\\_19](https://bit.ly/Appendix_19)

- **Appendix 20. Warehouse Standardization**

The evidence can be found in the following link and folder “20. Appendix 20”: [https://bit.ly/Appendix\\_20](https://bit.ly/Appendix_20)