

The background of the cover features a blue-tinted photograph of high-voltage power lines and the silhouettes of workers in safety gear. The image is partially obscured by a large white diagonal shape on the right side.

Environmental and Social Management Plan Monitoring Report 2022

**PT PLN (Persero)
East Java Distribution Main Unit**



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GLOSSARY

AIIB	Asian Infrastructure Investment Bank
DPLH	<i>Dokumen Pengelolaan Lingkungan Hidup</i> (Environmental Management Document)
kV	Kilovolt
PLN	<i>Perusahaan Listrik Negara</i> (Indonesia's National Electricity Company)
Persero	Indonesian Enterprise
SPPL	<i>Surat Pernyataan Pengelolaan Lingkungan</i> (Statement of Readiness to Manage and Monitor the Environment)
UID	<i>Unit Induk Distribusi</i> (a unit business of PLN focuses on electric power distribution)
ULP	<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)
UKL	<i>Upaya Pengelolaan Lingkungan Hidup</i> (Environmental Management Efforts)
UPL	<i>Upaya Pemantauan Lingkungan Hidup</i> (Environmental Monitoring Efforts)
UP2D	<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)
UP2K	<i>Unit Pelaksana Proyek Ketenagalistrikan</i> (a subunit below UID, responsible to manage electrical distribution system projects to serve isolated rural areas)
UP3	<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)

PREFACE

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

PT PLN (Persero) Distribution Main Unit – UID Jatim 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 Jatim. 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 PT PLN (Persero) UID Jatim ESMP 2022 Monitoring Report document.

Surabaya, 4 December 2023



AGUS KUSWARDYO

APPROVAL SHEET

II

Environmental and Social Management Plan (ESMP)

Monitoring Report – 2022

PT PLN (Persero) East Java Main Unit – Distribution

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

Surabaya, 4 December 2023

GENERAL MANAGER



AGUS KUSWARDYO

Ringkasan Laporan Monitoring ESMP 2022 UID Jatim

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 AIB – PLN Penguatan Jaringan Distribusi di Jawa Timur dan Bali 2022.

1.2. Penjelasan Singkat tentang Proyek

PLN UID Jatim sejak 1972 bertanggung jawab untuk pengelolaan sistem distribusi tenaga listrik di Provinsi Jawa Timur yang mencakup wilayah perkotaan, perdesaan dan kepulauan. Secara organisasional PLN UID Jatim memiliki 16 UP3, 1 UP2D, 1 UP2K, and 112 ULP yang melayani lebih dari 12 juta pelanggan individual, perusahaan, pabrik dan pemerintahan. Kapasitas PLN UID Jawa Timur sampai Desember 2022 adalah 9.552 MW, dengan *peak load* 5.939 MW dan *reserve* 3.032 MW.

Kegiatan-kegiatan yang didanai oleh Proyek AIB – PLN Penguatan Jaringan Distribusi di Jawa Timur dan Bali adalah:

1. Pengiriman ke lokasi dan penyimpanan sementara di lokasi material, termasuk trafo, saluran listrik distribusi, tiang pancang;
2. Pemasangan dan peningkatan jaringan distribusi, termasuk pembersihan ruang bebas hambatan – jalur kabel – ROW; pekerjaan sipil seperti penggalian pondasi untuk tiang, penggalian dan atau pengeboran; pendirian tiang; rangkaian kabel listrik; pemasangan dan penggantian trafo;
3. Penyimpanan, penanganan dan pembuangan trafo;
4. Sambungan ke jaringan dan ke rumah tangga, termasuk pemasangan kotak meteran pelanggan dan pemutus sirkuit); dan
5. Pemeliharaan jalur distribusi seperti pemotongan dahan pohon.

Proyek ini ditetapkan sebagai Kategori B berdasarkan Kebijakan Lingkungan dan Sosial – ESP AIB, 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 yang membutuhkan 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 AIB. 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 Jatim 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 Jatim ada di bawah General Manager UID, Bapak Agus Kuswardoyo. Pelaksanaan, monitoring dan pelaporan harian di UID oleh Manager K3L – Keamanan, Bapak Parlan, dan di UP2 dan UP3 supervisi oleh Manager Unit, pelaksanaan harian oleh Team Leader K3L K3L – Keamanan.

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 AIB. PLN UID Jatim melakukan penapisan terkait habitat yang dilindungi, jarak aman, wilayah keanekaragaman hayati, masyarakat adat, peninggalan bersejarah, dan penggunaan tanah pribadi.

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 Jatim. 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.

2.5. Monitoring – Gudang

Di PLN UID Jatim 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. Dalam pelaksanaan, saat dilakukan audit Integrated Management System (IMS) seringkali ditemukan perbedaan antara jumlah sesungguhnya di gudang dan data di aplikasi.

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. Di 2022 PLN UID Jatim sudah mempunyai prosedur penanganan ceceran minyak, penempatan dan pengelolaan B3 dan bahan kimia yang terintegrasi dalam Integrated Management System (IMS). Terdapat 18 Gudang TPS Limbah B3 di PLN UID Jatim 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.

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 Jatim membuat inventarisasi dan melakukan tes trafo yang diduga mengandung PCB. Pada 2022 dilakukan tes dextil untuk 91 trafo dan 26 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 Jatim 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 Jatim adalah membuat dan melakukan Standar Prosedur Operasional – SOP untuk setiap kegiatan, inspeksi manajemen, monitoring pekerjaan di lapangan yang diinfokan ke dalam whatsapp grup dan melalui website Inspekta. Monitoring K3L dilakukan berkala, setiap bulan, tiga bulan atau enam bulan mengacu pada dokumen lingkungan unit yang dikeluarkan oleh DLHK.

2.7. Pelaksanaan Pelatihan, Keterlibatan Pemangku Kepentingan dan Mekanisme Penanganan Keluhan

Pelatihan OHS bagi karyawan PLN UID Jatim misalnya 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 biasanya difokuskan pada masyarakat umum, misalnya dengan melakukan sosialisasi tentang listrik aman, kegiatan donor darah dan pemeriksaan kesehatan dan simulasi tanggap darurat.

Pelatihan dan kegiatan bersama dan bagi masyarakat umum dilakukan melalui program Tanggung Jawab Sosial Perusahaan – CSR, dengan mendukung kegiatan pertanian, pariwisata, persampahan dan kerajinan rakyat.

Keluhan pelanggan PLN UID Jatim di 2022 biasanya terkait putusnya aliran listrik, yang diatasi dengan pembuatan dan penerapan SOP Feeder dan kesulitan mengakses pembelian listrik pra-bayar, yang diatasi dengan perbaikan sistem penjualan token listrik. Tidak ada keluhan berkaitan dengan aspek perlindungan lingkungan dan sosial.

2.8. Aspek Kunci untuk Peningkatan Pelayanan

Temuan yang perlu diperbaiki di 2022 adalah: 1) perbedaan antara material yang ada di gudang dengan data aplikasi AGO; 2) ada 26 sampel minyak trafo yang mengandung PCB; 3) terjadi 1455 interfensi feeder; dan 4) kesulitan mengakses pembelian listrik pra-bayar.

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 UID Jatim's objectives is to mitigate or avoid adverse environmental and social impacts in AIB – 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 East Java Province undertaken by PLN UID Jatim covering the project in 2022. This report includes updates on project progress and evaluation of environmental and social program implementation. The report is written by an environmental officer and supervised by Manager of Health and Safety division and General Manager of PLN UID Jawa Timur.

1.2. Brief Project Description

PLN UID Jatim is a unit business below PT PLN (Persero) which is a state-owned company that is responsible for managing electricity in Indonesia, according to Government Regulation No. 18 Year 1972 that PLN is in charge of providing electric power to the public. PLN UID Jatim has been responsible for managing the electric power distribution system in East Java Province since 1961, with a working area of 47.963 km² and a population of 40,67 million people (BPS, 2020). PLN UID Jatim is providing electrical services for people in urban, rural areas, and remote islands, such as Kangean, Sapeken, and Sapudi Islands, to mention some.

In the operation of adequate and reliable electric power distribution in East Java Province, PLN UID Jatim organizationally consists of 16 UP3s, 1 UP2D, 1 UP2K, and 112 ULPs. The condition of PLN UID Jawa Timur electrical system until December 2022 shows that the power is capable of 9.552 MW, and the peak load was 5.939 MW and reserves was 3.032 MW. Currently, PLN UID Jatim has served more than 12 million customers, consisting of household, government, industry, and business customers. Strengthening the distribution networks continues to be carried out in order to serve the electricity needs of the entire community and economic development in East Java Province. The detailed location of UID, UP2D, UP2K, UP3, and ULP can be found in Appendix 1.



Figure 1. The Working Area of PLN UID Jatim

East Java and Bali Power Distribution Strengthening Project comprises the expansion of medium-voltage (MV) and low-voltage (LV) distribution network, including erection of new poles, cable stringing, trenching and cable burial in urban environment, and installation of distribution transformers, customer connection and meter replacement, MV switch of LBS and Rec, and MV

distribution cubicle and substation. The subprojects comprise the following activities taking place in defined study areas and for which AIIB funds are sought:

- a. Delivery to site and temporary storage at site of material, including transformers, distribution power lines, piles, etc.
- b. Installation or upgrading of the distribution network, including clearing of the right of way; civil works like foundation digging for poles, and in some instances trenching and or boring; erection of poles; stringing of power lines; installation and replacement of transformers;
- c. Storage, handling, and disposal of end-of-life transformers;
- d. Connection to the network and to households (including installation of customer meter boxes and circuit breakers); and
- e. Maintenance of distribution lines like vegetation clearance.

Table 1 below is describing the components of the project.

Table 1. The Component of East Java and Bali Power Distribution Strengthening Project

No.	Type of Distribution Network	Activities
1	Overhead line	Improvement and expansion of distribution network above ground level which requires (i) land use to install electrical poles no more than 0,2 m ² ; (ii) the possibility of removal non-ground access (especially trees) within 2,5 m of the conductor during the installation process, and existing road's line (ROW) with a width depending on line voltage and type of facility planned or located in the area belongs to the road.
2	Underground line	Being considerate if overhead line is not applicable (for example: in urban/commercial areas) Using horizontal directional drilling (HDD) for a road crossing to minimize the impact, and minimum drilling along the side of road from HDD exit point to a pole. The possibility of underground lines installation is low.
3	Distribution transformer	Installed on pole structure Distribution transformers are arranged into two categories: pad-mount and pole mount. Pad-mount transformers will be installed on public land, or in locations where customers need power at the primary distribution level, usually in a commercial centre or an industrial area.

1.3. Compliance with National Regulation

In running the business, PLN UID Jatim 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 Jatim, 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.

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 Jatim has the Environment Permit No. 17.0/3/02/V/2020 regarding Environmental Management Document (DPLH) of 20 kV Electricity Network for East Java Distribution Area. In addition, PLN UID Jatim's sub-units like UP2D and UP3s, sub-sub units named ULPs, and other support activities such as hazardous waste temporary storage also already have environmental documents. List of environmental approvals and permits in PLN UID Jatim is tabulated in Appendix 2. Following this approval, PLN UID Jatim 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, battery and used battery, and used rags. These wastes are stored at hazardous waste temporary storages in several areas in East Java 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 Jatim area in Appendix 9.

1.4. Environmental and Social Management Plan (ESMP)

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

a. Preconstruction Phase

The preconstruction phase is the time to determine the location and capacity of the project and make plans to mitigate risks during construction work. Preconstruction activities include the calculation and simulation to optimize the configuration of the electric power distribution network, a field survey to meet the construction standards and environmental requirements, public consultation and communication with stakeholders and the general public on the scope, and possible impacts and proposed mitigation measures.

b. Construction Phase

Construction activities that carried out in this project, including new connections for both medium and low voltage power line, distribution substation, cubicle, kWh meter; and constructed improvements due to fallen trees, tornadoes, and others. The implementation of construction activities is in accordance with the standard operational procedures that have

been set, including the Indonesian National Standard, PLN Standard, and PLN UID Jatim's Internal Working Procedure. At the end of the construction phase, a commissioning test is to be performed to ensure that they are safe and meet the design requirements.

The projected impacts and risks during the construction phase are expected to be limited in scope but may include:

- Disturbance to traffic: The proposed interventions may involve temporary road closures and vehicle or pedestrian traffic deviations that could result in traffic congestion and perhaps risks of accidents.
- Temporary difficulties of access: during construction and installation of equipment, access may be limited to the adjacent buildings, and some disturbance to the neighbouring residents and users.
- Noise generation: The use of construction equipment could potentially impact workers and neighbourhood residents.
- Construction safety: Construction site activities, particularly work at height and/or live-line working, must be effectively managed to prevent injury to workers and disruption of the project.

c. Operational Phase

The purpose of this construction activity is to support the distribution of electricity so it can be accepted by customers without interruption. Thus, in the operational phase, routine monitoring and maintenance were carried out in accordance with applicable regulations and standards. The maintenance work can be performed either planned or unplanned by competent personnel. PLN UID Jatim has a team that is compatible to maintain the electrical equipment in live-line working or hotline maintenance of PDKB – Live-line Working Team. Maintenance activities are also carried out by implementing occupational health and safety (OHS).

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 the environmental document to ensure that environmental pollution does not occur. The 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 4.

Chapter II

Results

Numerous projects of PLN UID Jatim have been conducted in 2022 to enhance the JTM reliability and achieve the efficiency were new feeder construction for new GI operations, 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 Jatim in general and applied in the project is under the UID General Manager, Agus Kuswardoyo, with daily monitoring and implementation under the Safety, Security, Occupational Health and Environment Manager, Parlan. For the Implementation Units of UP2 and UP3 the supervision is under the UP Managers, and daily implementation under the Safety, Security, Occupational Health and Environment Team Leaders.

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 AIIB. In the location selection process for the subprojects, PLN UID Jatim 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. The PLN UID Jatim's project capacity of power distribution strengthening in 2022 is tabulated in Table 2 below.

Table 2. The PLN UID Jatim's Project Capacity of Power Distribution Strengthening in 2022

No	Unit	Activity	Location (City/District)	Details
1	UP3 Surabaya Selatan	Network Reliability Improvement	- Surabaya City, - Gresik Dist., - Sidoarjo Dist.	JTM: 103,58 kms JTR: 137,28 kms Substation: 675 set
2	UP3 Surabaya Utara	Network Reliability Improvement	- Surabaya City	JTM: 63,42 kms JTR: 67,15 kms Substation: 251 set
3	UP3 Malang	Network Reliability Improvement	- Malang Dist., - Batu City, - Malang City	JTM: 206,10 kms JTR: 394,68 kms Substation: 539 set
4	UP3 Pasuruan	Network Reliability Improvement	- Pasuruan City, - Probolinggo City, - Pasuruan Dist., - Probolinggo Dist.	JTM: 322,74 kms JTR: 341,31 kms Substation: 440 set
5	UP3 Kediri	Network Reliability Improvement	- Blitar City, - Kediri City, - Blitar Dist., - Kediri Dist., - Tulungagung Dist.	JTM: 317,50 kms JTR: 690,66 kms Substation: 672 set
6	UP3 Mojokerto	Network Reliability Improvement	- Mojokerto City, - Jombang Dist., - Mojokerto Dist., - Nganjuk Dist.,	JTM: 274,53 kms JTR: 255,85 kms Substation: 586 set

Table 2. The PLN UID Jatim's Project Capacity of Power Distribution Strengthening in 2022

No	Unit	Activity	Location (City/District)	Details
7	UP3 Madiun	Network Reliability Improvement	- Madiun City, - Madiun Dist., - Magetan Dist., - Ngawi Dist.	JTM: 206,29 kms JTR: 470,29 kms Substation: 450 set
8	UP3 Jember	Network Reliability Improvement	- Jember Dist., - Lumajang Dist.	JTM: 350,60 kms JTR: 461,07 kms Substation: 614 set
9	UP3 Bojonegoro	Network Reliability Improvement	- Bojonegoro Dist., - Lamongan Dist., - Tuban Dist.	JTM: 254,99 kms JTR: 365,04 kms Substation: 546 set
10	UP3 Banyuwangi	Network Reliability Improvement	- Banyuwangi Dist.	JTM: 36,55 kms JTR: 185,85 kms Substation: 319 set
11	UP3 Pamekasan	Network Reliability Improvement	- Bangkalan Dist., - Pamekasan Dist., - Sampang Dist., - Sumenep Dist.	JTM: 261,37 kms JTR: 376,81 kms Substation: 632 set
12	UP3 Situbondo	Network Reliability Improvement	- Bondowoso Dist., - Situbondo Dist. -	JTM: 153,63 set JTR: 308,99 set Substation: 244 set
13	UP3 Gresik	Network Reliability Improvement	- Surabaya City - Gresik Dist., - Lamongan Dist.	JTM: 71,83 kms JTR: 91,04 kms Substation: 467 set
14	UP3 Sidoarjo	Network Reliability Improvement	- Gresik Dist., - Mojokerto Dist., - Sidoarjo Dist.	JTM: 22,85 kms JTR: 302,76 kms Substation: 236 set
15	UP3 Surabaya Barat	Network Reliability Improvement	- Surabaya City, - Gresik Dist., - Sidoarjo Dist.	JTM: 24,33 kms JTR: 142,43 kms Substation: 350 set
16	UP3 Ponorogo	Network Reliability Improvement	- Pacitan - Ponorogo - Trenggalek	JTM: 188,17 kms JTR: 417,79 kms Substation: 419 set

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 Jatim, many of JTM and JTR construction have been conducted for mostly residents and industries. Before start any projects, the UP3, a sub unit of PLN, 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) 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 below shows the safety distance and RoW in this project.



Figure 2. RoW dan Safe Distance on Distribution Power Lines

2.3. Monitoring the Construction Period

During construction activities, the third parties responsible on doing the construction, must meet all the requirements of PLN standard and government regulation such as CSMS certified contractor, HIRARC, working permit, and standard operational procedures implementation, filled in contract document between PLN UID Jatim and vendors. For instance, installation and demolition of JTM, substation cubicle, JTR, SR APP 3 phase at UP3 Bojonegoro. According to contract document No: 0123.PJ/HKM.02.01/C04020000/2022, the vendor has complied the requirements and assured the projects have been worked properly, as accommodated in Appendix 12 and 13. Figure 3 below shows the usage of police line as a work sign.



Figure 3. 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 as protection from rain. According to Government Regulation No. 22 of 2021, warehouse must be covered to protect from the rain and provided an oil trap to prevent environmental pollution regarding to oil spills or leakage. Figure 4 below shows an example of the warehouse condition in UID Jatim.



Figure 4. UID Jatim Transformer Warehouse Condition

2.5. Warehouse Monitoring Results

Materials warehouse is distinguished with waste warehouse, in particular hazardous waste. Each unit of PLN UID Jatim has own materials warehouse. The materials such as meter 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 or AGO – Aplikasi Gudang Online. In practice some discrepancy was found between the physics material total in the warehouse and data in the application when Integrated Management System (IMS) audit performed.

The hazardous waste temporary disposal site is used for hazardous waste generated from power distribution activities such as used lubricating oil, battery, used battery, and used rags. Hazardous waste management is carried out with a third party owned a hazardous waste management permit from the Minister of Environment and Forestry. Before the hazardous waste given to the third party to be managed, it is stored at hazardous waste temporary storages in several areas in East Java Province, with the operating permit for each hazardous waste temporary disposal site (Tempat Penampungan Sementara – TPS) seen in Appendix 9. In 2022, PLN UID Jatim has developed environmental procedures for handling spilled oil, storage and treatment hazardous and chemical materials that integrated with Integrated Management System (IMS) of PLN UID Jatim as seen in Appendix 17. The condition of the hazardous waste temporary storages in the PLN UID Jatim area can be seen in Appendix 9, and Figure 5 below shows the condition in UP3 Madiun.



Figure 5. Hazardous Waste Temporary Storage at UP3 Madiun

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 Jatim has managed the 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 was done in stages. In 2022, a PCBs test using the dexsil method has been carried out for 91 offline transformer oil samples and 26 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 by 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 using the dexsil method can be seen in Appendix 10 and the PCBs test activity as in Figure 6.



Figure 6. Transformer Offline Oil Sampling for PCBs Test

PLN UID Jatim has 18 hazardous waste temporary disposal sites. The company has endeavoured to provide proper storages based on Indonesian Government Regulation No. 22 of 2021. According to the data of PLN Headquarter, each disposal sites has been supplemented with roof covering, concrete floor, drainage systems connected to fat, oil trap, eyewash, first aid, fire extinguisher, the hazardous waste separation based on each category, housekeeping and transformation labelling. The condition of some facilities can be seen in Figure 7. Several storages might require minor refinement in the following year due to the age of warehouses and natural condition, like wind storming and sun exposure that causing rust stain roof.



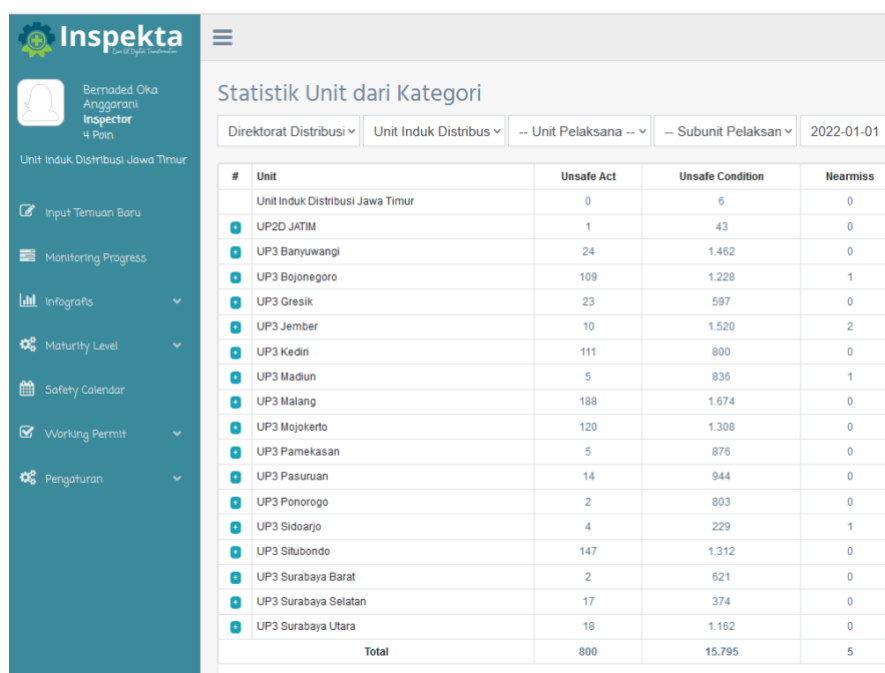
Figure 7. Hazardous Waste Temporary Storage

2.6. Health and Safety Monitoring

The majority of activities at PLN UID Jatim 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 every work stage. Preventing the 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 developing the solution.

In PLN UID Jatim the environmental monitoring is carried out every month, three, or six months based on the requirement stated in the environmental documents of each service unit. The documents have been approved by provincial or districts' environmental offices as in Appendix 7.

Throughout 2022 the number of unsafe conditions were nearly to 95%, 15795 of 16600 cases at PLN UID Jatim, 4.8% unsafe actions and 0.02% near miss incidents as in Figure 8 below. Considering the large number of reporting on unsafe conditions, actions and measures taken by UID Jatim 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; inspection by management; and field monitoring with report using social media and Inspekta website.



#	Unit	Unsafe Act	Unsafe Condition	Nearmiss
	Unit Induk Distribusi Jawa Timur	0	6	0
1	UP2D JATIM	1	43	0
2	UP3 Banyuwangi	24	1.462	0
3	UP3 Bojonegoro	109	1.228	1
4	UP3 Gresik	23	597	0
5	UP3 Jember	10	1.520	2
6	UP3 Kediri	111	800	0
7	UP3 Madiun	5	836	1
8	UP3 Malang	188	1.674	0
9	UP3 Mojokerto	120	1.308	0
10	UP3 Pamekasan	5	876	0
11	UP3 Pasuruan	14	944	0
12	UP3 Ponorogo	2	803	0
13	UP3 Sidoarjo	4	229	1
14	UP3 Situbondo	147	1.312	0
15	UP3 Surabaya Barat	2	621	0
16	UP3 Surabaya Selatan	17	374	0
17	UP3 Surabaya Utara	18	1.162	0
	Total	800	15.795	5

Figure 8. INSPEKTA Monitoring Report

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

In PLN UID Jatim regular training and certification in Occupational Health and Safety – OHS aspects are General Occupational Safety and Health – AK3U, Electrical Occupational Safety and Health – AK3L, Fire Fighter, and Toxic and Hazardous Waste – PLB3, with participants from HSE Unit and general, defined by the Human Resources Development Unit following schedule from the HSE.

PLN UID Jatim activities during National OHS Month in January – February usually is focused to the community by having socialisation on general health, medical check-up and blood transfusion, and emergency response simulations.

Training for the surrounding community in UID Jatim is applied by the Corporate Social Responsibility (CSR) program. PLN UID Jatim has sponsored many CSR program like Farmers – Tani Betet Tour, Tani Listrik Terpadu Educated Tour, Ikat Tenun Village, Sendi Village, Waste Bank, and Petik Naga Listrik, as seen in Figure 8.



Figure 8. CSR Programs at PLN UID Jatim

The electricity construction may have a negative effect to human health due to the electromagnetic radiation. In case of cable uncovered insulations, people live near the pole might get an electric shock. Some customers in PLN UID Jatim had met problems with topping up the prepaid electricity tokens for kWh meter and some issued the power outage. During 2022 it has been recorded 1,455 times feeder interferences, as in the Figure 9 below. To overcome the issues, PLN UID Jatim has developed and implemented standard operational procedure (SOP) for addressing interferences to handle the problem directly, as in Appendix 4. In 2022, there were no grievance related to social and environmental aspect in PLN UID Jatim.

GGN PENYULANG (kali)		
NO	A R E A	REALISASI
		2022
1	SURABAYA SELATAN	171
2	SURABAYA UTARA	100
3	MALANG	87
4	PASURUAN	191
5	KEDIRI	121
6	MOJOKERTO	111
7	MADIUN	47
8	JEMBER	69
9	BOJONEGORO	100
10	BANYUWANGI	47
11	PAMEKASAN	72
12	SITUBONDO	47
13	GRESIK	53
14	SIDOARJO	122
15	SURABAYA BARAT	53
16	PONOROGO	64
J U M L A H		1,455

Figure 9. The Interferences Number in 2022

PLN UID Jatim with AIIB team had met a resident having her house nearby a pole that not met the safe distance regulation due to the land limitation. To note that the area and specifically the house has not and will not be in the coverage of AIIB Jatim Bali Distribution Project. Figure 10 below shows the discussion with the house owner.



Figure 10. Interview – AIIB Team and House Owner

PLN UID Jatim has facilitated individuals to channel 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, as shown in Figure 11 below.



Figure 11. PLN Mobile Application and Instagram

2.8. Summary of Key Findings

During 2022 the issues in PLN UID Jatim were:

- The discrepancy between the total real material in the warehouse and data in the application
- From the dexcil laboratory test result 26 transformer oil samples contaminated PCBs
- Feeder interferences occurred 1.455 times
- Difficulty in topping up electricity for prepaid kWh machine

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 Jatim. The conclusion drawn from this ESMP Monitoring Report were:

- The project is generally being effectively implemented on sites with appropriate resources and capability to accomplish the plan;
- The periodic environmental monitoring and management during the operation phase, as required by the UKL-UPL, has been conducted frequently and with no major deficiencies to the applicable regulation and AIIB safeguard 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 Jatim.

The recommendation for 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.

Appendix 1: UID Jatim's Detailed Business Location

Table 3. UID Jatim's Detailed Business Location

No.	Unit Business	Address
1	UID Jawa Timur	Jl. Embong Trengguli No. 19-21, Kota Surabaya Coordinate: -7.265454263357005, 112.74332761476165.
2	UP2D Jawa Timur	Jl. Embong Wungu No. 4, Kota Surabaya Coordinate: -7.26534840972209, 112.74320004245534
2.1	Central Distribution Control Center (DCC Tengah)	Jl. Embong Wungu No. 4, Kota Surabaya Coordinate: -7.26534840972209, 112.74320004245534
2.2	West Distribution Control Center (DCC Barat)	Sambijajar, Kec. Kertosono, Kabupaten Nganjuk Coordinate: -7.614819900635506, 112.0980971305032.
2.3	East Distribution Control Center (DCC Timur)	Plerenan, Sumberkedawung, Leces, Probolinggo Coordinate: -7.848135894642564, 113.22891162925504
3	UP2K Jawa Timur	Jl. Embong Trengguli No. 19-21, Kota Surabaya Coordinate: -7.265454263357005, 112.74332761476165.
4	UP3 Banyuwangi	Jl. Nusantara No. 1, Kec. Banyuwangi, Kab. Banyuwangi Coordinate: -8.209737555785193, 114.37792552837466
4.1	ULP Banyuwangi Kota	Jl. Nusantara No. 1, Kec. Banyuwangi, Kab. Banyuwangi Coordinate: -8.209737555785193, 114.37792552837466
4.2	ULP Rogojampi	Jl. Nusantara No. 1, Kec. Banyuwangi, Kab. Banyuwangi Coordinate: -8.209737555785193, 114.37792552837466
4.3	ULP Genteng	Jl. Diponegoro No. 345, Kec. Gambiran, Kab. Banyuwangi Coordinate: -8.371472824225346, 114.1461648517396
4.4	ULP Muncar	Jl. Brawijaya No. 60, Kec. Muncar, Kab. Banyuwangi, Coordinate: -8.435433993786555, 114.32356888516476
4.5	ULP Jajag	Jl. Ahmad Yani No. 47, Kec. Gambiran, Kab. Banyuwangi, Coordinate: -8.442458210599677, 114.18045157182357
5	UP3 Bojonegoro	Jl. Teuku Umar No. 3, Kec. Bojonegoro, Kab. Bojonegoro Coordinate: -7.152787529513715, 111.89108325409164
5.1	ULP Babat	Jl. Raya Pantura No. 151, Kec. Babat, Kab. Lamongan Coordinate: -7.1001196050351405, 112.19220438349588
5.2	ULP Bojonegoro	Jl. KH. Hasyim Ashari No. 3, Kec. Bojonegoro, Kab. Bojonegoro Coordinate: -7.150819736457851, 111.87902104112098
5.3	ULP Brondong	Jl. Raya Paciran, Km. 35, Kec. Paciran, Kab. Lamongan Coordinate: -6.868077634887189, 112.332823332428
5.4	ULP Jatirogo	Jl. Panglima Sudirman, Desa Sadang, Kec. Jatirogo, Kab. Tuban Coordinate: -6.883050864885932, 111.65975543222176
5.5	ULP Lamongan	Jl. Veteran, Kec. Lamongan, Kabupaten Lamongan Coordinate: -7.103517296921866, 112.4237178453836
5.6	ULP Padangan	Jl. Bojonegoro-Ngawi, Kec. Padangan, Kab. Bojonegoro Coordinate: -7.166103463800881, 111.61065024093234
5.7	ULP Sumber Rejo	Jl. Imam Bonjol No. 3, Kec. Bojonegoro, Kab. Bojonegoro Coordinate: -7.17062743726624, 112.02663197235925
5.8	ULP Tuban	Jl. AKBP Suroko No. 38, Kebonsari, Kec. Tuban, Kab. Tuban Coordinate: -6.902854288535241, 112.06199932947025
6	UP3 Gresik	Jl. DR. Wahidin Sudiro Husodo No. 134, Kec. Gresik, Kab. Gresik Coordinate: -7.162665067494151, 112.63250181458187
6.1	ULP Bawean	Jl. Pendidikan, Kec. Sangkapura, Kab. Gresik

Table 3. UID Jatim's Detailed Business Location

No.	Unit Business	Address
		Coordinate: -5.84856624754764, 112.66068972757812
6.2	ULP Benjeng	Jl. Raya Munggugianti No. 414, Kec. Benjeng, Kab. Gresik Coordinate: -7.263472579117247, 112.49512920343646
6.3	ULP Giri	Jl. Raden Santri No. 29, Kec. Gresik, Kab. Gresik Coordinate: -7.154313198786633, 112.6563626944322
6.4	ULP Sedayu	Jl. Raya Pahlawan No. 26, Kec. Sidayu, Kab. Gresik Coordinate: -6.998295366697616, 112.56458210077783
7	UP3 Jember	Jl. Gajah Mada No. 198, Kec. Kaliwates, Kab. Jember Coordinate: -8.177207742793087, 113.67795546431344
7.1	ULP Ambulu	Jl. Manggar, Kec. Tegalsari, Kab. Jember Coordinate: -8.344344482511081, 113.59727725647673
7.2	ULP Jember Kota	Jl. PB Sudirman No. 114, Kec. Patrang, Kab. Jember Coordinate: -8.142771503204608, 113.71229068979159
7.3	ULP Kalisat	Jl. DR. Wahidin No. 20, Kec. Kalisat, Kab. Jember Coordinate: -8.141329213414986, 113.81742034392617
7.4	ULP Kencong	Jl. R.A. Kartini No. 219, Kec. Kencong, Kab. Jember Coordinate: -8.291885803695745, 113.39251894575689
7.5	ULP Klakah	Jl. Raya Klakah, Kec. Klakah, Kab. Lumajang Coordinate: -7.999309423767122, 113.24939285658911
7.6	ULP Lumajang	Jl. Jendral Ahmad Yani No. 177, Kec. Lumajang, Kab. Lumajang Coordinate: -8.100833551008531, 113.23191384362772
7.7	ULP Rambipuji	Jl. Dharmawangsa No. 42, Kec. Rambipuji, Kab. Jember, Coordinate: -8.207377193324266, 113.60885269962532
7.8	ULP Tanggul	Jl. Raya Lumajang-Jember, Kec. Tanggul, Kab. Jember Coordinate: -8.156517701456611, 113.44070657415432
7.9	ULP Tempeh	Jl. Raya Tempeh, Kec. Lumajang, Kab. Lumajang Coordinate: -8.210746284237374, 113.17061359412766
8	UP3 Kediri	Jl. Basuki Rahmat No. 1, Kec. Kota Kediri, Kota Kediri Coordinate: -7.813349361633385, 112.01428410981475
8.1	ULP Blitar	Jl. Ahmad Yani No. 21, Kec. Kepanjenkidul, Kota Blitar Coordinate: -8.09830095225866, 112.17152498152501
8.2	ULP Campurdarat	Jl. Kanigoro No. 7, Kec. Campur Darat, Kab. Tulungagung Coordinate: -8.16205526178975, 111.85835924954077
8.3	ULP Grogol	Jl. Raya Gringging, Kec. Grogol, Kab. Kediri Coordinate: -7.745965862609262, 111.96759495672836
8.4	ULP Kediri Kota	Jl. Basuki Rahmat No. 1, Kec. Kota Kediri, Kota Kediri Coordinate: -7.813349361633385, 112.01428410981475
8.5	ULP Ngadiluwih	Jl. Perintis Kemerdekaan No. 98, Kec. Ngadiluwih, Kab. Kediri Coordinate: -7.877881958721953, 111.99927051952601
8.6	ULP Ngunut	Jl. Raya Pulosari, Kec. Ngunut, Kab. Tulungagung Coordinate: -8.094780954570098, 111.99609268484717
8.7	ULP Pare	Jl. Pb. Sudirman No. 25, Kec. Pare, Kab. Kediri Coordinate: -7.766605119403202, 112.19161482759446
8.8	ULP Srengat	Dandong, Kec. Srengat, Kab. Blitar Coordinate: -8.064783323745175, 112.07595950322442
8.9	ULP Sutojayan	Jl. Raya Utara Lodoyo, Kec. Sutojayan, Kab. Blitar Coordinate: -8.160677685063103, 112.21745167745904
8.10	ULP Tulungagung	Jl. Kapten Kasihin No. 55, Kec. Tulungagung, Kab. Tulungagung

Table 3. UID Jatim's Detailed Business Location

No.	Unit Business	Address
		Coordinate: -8.045498958925327, 111.90019677264871
8.11	ULP Wlingi	Jl. Panglima Sudirman No. 2, Kec. Wlingi, Kab. Blitar Coordinate: -8.084299099298404, 112.31246578527994
9	UP3 Madiun	Jl. MT Haryono No. 30, Kec. Taman, Kota Madiun Coordinate: -7.634100661917686, 111.53292954451179
9.1	ULP Caruban	Jl. Raya Caruban, Kec. Wonoasri, Kab. Madiun Coordinate: -7.549113371948408, 111.63826625659378
9.2	ULP Dolopo	Jl. Raya Dolopo, Kec. Dolopo, Kab. Madiun Coordinate: -7.747105415341901, 111.52845006394058
9.3	ULP Madiun Kota	Jl. MT Haryono No. 30, Kec. Taman, Kota Madiun Coordinate: -7.634100661917686, 111.53292954451179
9.4	ULP Magetan	Dusun Magetan, Kec. Magetan, Kab. Magetan Coordinate: -7.6552068498082795, 111.32861257417176
9.5	ULP Mantingan	Jl. Raya Mantingan No. 44, Kec. Mantingan, Kab. Ngawi Coordinate: -7.3647666630455975, 111.15475017220473
9.6	ULP Maospati	Jl. Raya Maospati Solo No. 51, Kec. Maospati, Kab. Magetan Coordinate: -7.606512910522695, 111.45209381466968
9.7	ULP Ngawi	Jl. Jaksa Agung Suprpto No. 37, Kec. Ngawi, Kab. Ngawi Coordinate: -7.400581676389934, 111.44675988375208
10	UP3 Malang	Jl. Jenderal Basuki Rahmat No.100, Kec. Klojen, Kota Malang Coordinate: -7.97442703617857, 112.63023906108599
10.1	ULP Batu	Jl. Trunojoyo, Songgokerto, Kec. Batu, Kota Batu Coordinate: -7.865585158352954, 112.50941695659945
10.2	ULP Blimbing	Jl. Raya Mangliawan No. 3 RT.04 RW.III, Kel. Mangliawan, Kec. Pakis, Kab. Malang Coordinate: -7.950651702598757, 112.66810051456167
10.3	ULP Bululawang	Jl. Raya Bululawang No. 13, Kec. Bululawang, Kab. Malang Coordinate: -8.068763779167679, 112.64145566715918
10.4	ULP Dampit	Jl. Gunung Jati No.11, Kec. Dampit, Kab. Malang Coordinate: -8.21365159343354, 112.75585128530828
10.5	ULP Dinoyo	Jl. MT. Haryono, Kec. Lowokwaru, Kota Malang Coordinate: -7.945936511450879, 112.61493362583593
10.6	ULP Gondanglegi	Jl. Pangeran Diponegoro No. 16, Gondanglegi, Kab. Malang Coordinate: -8.09877197287004, 112.63715842979494
10.7	ULP Kebon Agung	Jl. Satsui Tubun No. 28, Kec. Sukun, Kota Malang Coordinate: -8.02006251422973, 112.62995934613713
10.8	ULP Kepanjen	Jl. Panji No. 1, Kec. Kepanjen, Kab. Malang Coordinate: -8.133630353162488, 112.5750386579352
10.9	ULP Malang Kota	Jl. Jenderal Basuki Rahmat No.100, Kec. Klojen, Kota Malang Coordinate: -7.974536357943166, 112.63006150485302
10.11	ULP Lawang	Jl. Pungkur Argo No. 12, Kec. Lawang, Kab. Malang Coordinate: -7.835663586523679, 112.69534985649997
10.12	ULP Singosari	Jl. Kertanegara, Kec. Singosari, Kab. Malang Coordinate: -7.889262592687962, 112.66748286295038
10.13	ULP Sumberpucung	Jl. Raya Karangates-Kepanjen, Kec. Sumberpucung, Kab. Malang Coordinate: -8.159836557246502, 112.45626140679877
10.14	ULP Tumpang	Jl. Raya Tulus Ayu No.15, Kec. Tumpang, Kab. Malang

Table 3. UID Jatim's Detailed Business Location

No.	Unit Business	Address
		Coordinate: -8.018908812528908, 112.76379056263207
11	UP3 Mojokerto	Jl. R.A Basuni No. 69, Kec. Sooko, Kab. Mojokerto Coordinate: -7.494232557836998, 112.42540026807116
11.1	ULP Jombang	Jl. KH. Wachid Hasyim No. 73, Kec. Jombang, Kab. Jombang Coordinate: -7.54464243104677, 112.23731199435669
11.2	ULP Kertosono	Jl. P.B. Sudirman 18, Kec. Kertosono, Kab. Nganjuk, Coordinate: -7.600452572164896, 112.10122420013502
11.3	ULP Mojoagung	Jl. Raya Veteran No. 347 Miagan, Kec. Mojoagung, Kab. Jombang Coordinate: -7.56799553938388, 112.3575532123227
11.4	ULP Mojokerto	Jl. Jend. A. Yani No.6, Kec. Magersari, Kab. Mojokerto Coordinate: -7.463760306857156, 112.4350395798463
11.5	ULP Mojosari	Jl. Pemuda No. 78, Kota Mojosari, Kab. Mojokerto Coordinate: -7.508646520426993, 112.56021825121272
11.6	ULP Nganjuk	Jl. Dr. Sutomo No.54, Kec. Nganjuk, Kab. Nganjuk Coordinate: -7.604327473890022, 111.8976572945858
11.7	ULP Ngoro	Jl. Suropati No.5, Kec. Ngoro, Kab. Jombang Coordinate: -7.687914703103292, 112.27196608564918
11.8	ULP Pacet	Jl. Komando Hayam Wuruk No. 25, Kec. Pacet, Kab. Mojokerto Coordinate: -7.657151715712359, 112.53654580414177
11.9	ULP Ploso	Jl. Raya Ploso-Babat No.3, Kec. Ploso, Kab. Jombang Coordinate: -7.4407364725480925, 112.22595155730531
11.10	ULP Warujayeng	Jl. Basuki Rahmad No. 17A, Kec. Warujayeng, Kab. Nganjuk Coordinate: -7.625556351257883, 112.02216281232326
12	UP3 Pamekasan	Jl. Jokotole No. 127A, Kec. Pademawu, Kab. Pamekasan Coordinate: -7.160881910760965, 113.49226388124816
12.1	ULP Ambunten	Jl. KH. Hasyim Asyari, Kec. Ambunten, Kab. Sumenep Coordinate: -6.886261260548867, 113.74041215464696
12.2	ULP Bangkalan	Jl. Letnan Mestu No.4, Kec. Bangkalan, Kab. Bangkalan Coordinate: -7.026136881367906, 112.75044598348352
12.3	ULP Blega	Jl. Raya Blega No. 30, Kec. Blega, Kab. Bangkalan Coordinate: -7.120859619325816, 113.06835788348417
12.4	ULP Kamal	Jl. Trunojoyo No. 27, Kec. Kamal, Kab. Bangkalan Coordinate: -7.149267470893375, 112.71477468374427
12.5	ULP Kep. Kangean	Jl. Sriwijaya, Kec. Arjasa, Kab. Sumenep Coordinate: -6.858621350732034, 115.28849982357747
12.6	ULP Ketapang	Jl. Raya Ketapang-Banyuates, Kec. Ketapang, Kab. Sampang Coordinate: -6.895254765391785, 113.2813934546471
12.7	ULP Pamekasan	Jl. Kesehatan, Kec. Pamekasan, Kab. Pamekasan Coordinate: -7.157370154531353, 113.48541478348427
12.8	ULP Sampang	Jl. Trunojoyo No.63, Kec. Sampang, Kab. Sampang Coordinate: -7.200470821917897, 113.25090094115596
12.9	ULP Sumenep	Jl. Urip Sumoharjo, Kec. Kotasumenep, Kab. Sumenep Coordinate: -7.013264023747347, 113.86941699697641
12.10	ULP Waru	Jl. Raya Blaban No. 2, Kec. Barumarmar, Kab. Pamekasan Coordinate: -6.900613888212766, 113.48532696063498
13	UP3 Pasuruan	Jl. Panglima Sudirman No. 69, Kec. Purworejo, Kota Pasuruan, Coordinate: -7.6525547,112.8979683

Table 3. UID Jatim's Detailed Business Location

No.	Unit Business	Address
13.1	ULP Bangil	Jl. Mangga No. 68, Kec. Bangil, Kab. Pasuruan Coordinate: - 7.602592094571757, 112.77662021404068
13.2	ULP Gondang Wetan	Jl. Raya Kejayan No. 144, Kec. Kejayan, Kab. Pasuruan Coordinate: -7.6960633, 112.8776460
13.3	ULP Grati	Jl. Raya Kedung Bako, Km.8, Kec. Rejoso, Kab. Pasuruan Coordinate: -7.6274, 112.945267
13.4	ULP Kraksaan	Jl. Rengganis No. 99, Kec. Kraksaan, Kab. Probolinggo, Coordinate: -7.759774, 113.4147996
13.5	ULP Pandaan	Jl. Raya Kasri No. 48 Kec. Pandaan, Kab. Pasuruan Coordinate: -7.6500302, 112.68816708
13.6	ULP Pasuruan	Jl. Diponegoro, No. 1, Kec. Panggungrejo, Kota Pasuruan, Coordinate: -7.6428585, 112.9084763
13.7	ULP Prigen	Jl. Taman Wisata No. 543, Kec. Tretes, Kab. Prigen Coordinate: -7.696333, 112.631114
13.8	ULP Probolinggo	at Jl. Dr Sutomo No. 60 Kec. Mayangan, Kota Probolinggo Coordinate: -7.7498015, 113.2085234
13.9	ULP Sukorejo	Jl Raya Buluagung No. 56, Kec. Purwosari, Kab. Pasuruan Coordinate: -7.7391611, 112.7270698
14	UP3 Ponorogo	Jl. Arif Rachman Hakim No. 8, Kec. Ponorogo, Kab. Ponorogo Coordinate: -7.844953, 111.476346
14.1	ULP Balong	Jl. Jend. Sudirman No.12, Kec. Balong, Kab. Ponorogo Coordinate: -7.951655, 111.438792
14.2	ULP Pacitan	Jl. Jend. A. Yani No.94, Kec. Pacitan, Kab. Pacitan Coordinate: -8.195307268696597, 111.09659711351047
14.3	ULP Trenggalek	Jl. Dr Sutomo No. 34, Kec. Ponorogo, Kab. Ponorogo Coordinate: -7.868520, 111.472420
14.4	ULP Trenggalek	Jl. Kis Mangunsarkoro No.7, Kec. Trenggalek, Kab. Trenggalek Coordinate: 8.049987, 111.717096
15	UP3 Sidoarjo	Jl. Ahmad Yani No.47-49, Kec. Sidoarjo, Kab. Sidoarjo Coordinate: -7.4494654260421305, 112.71825041618933
15.1	ULP Krian	Jl. Ki Hajar Diwantoro No. 11, Kec. Krian, Kab. Sidoarjo Coordinate: -7.4112275150134685, 112.57778286653408
15.2	ULP Porong	Jl. Raya Pangkemi No. 18, Kec. Tulangan, Kab. Sidoarjo Coordinate: -7.493563078315474, 112.67112643179192
15.3	ULP Sidoarjo Kota	Jl. Ahmad Yani No.47-49, Kec. Sidoarjo, Kab. Sidoarjo Coordinate: 7.4494654260421305, 112.71825041618933
16	UP3 Situbondo	Jl. Cempaka No. 35, Kec. Panarukan, Kab. Situbondo Coordinate: -7.7118379307024005, 113.99725708809487
16.1	ULP Asembagus	Jl. Raya Banyuputih, Kec. Asembagus, Kab. Situbondo Coordinate: -7.7501093, 114.2268099
16.2	ULP Besuki	Jl. Gunung Ijen, Kec. Besuki, Kab. Situbondo Coordinate: -7.7379564, 113.6907781
16.3	ULP Bondowoso	Jl. Kolonel Sugiono, Kec. Bondowoso, Kab. Bondowoso Coordinate: -7.9176386, 113.8294858
16.4	ULP Panarukan	Krajan Timur, Kec. Panarukan, Kab. Situbondo Coordinate: -7.7118379307024005, 113.99725708809487
16.5	ULP Wonosari	Jl. Raya Situbondo, Tapen, Kab. Bondowoso Coordinate: -7.8759219, 113.9118142

Table 3. UID Jatim's Detailed Business Location

No.	Unit Business	Address
17	UP3 Surabaya Barat	Jl. Taman Bar. No.48, Taman, Kab. Sidoarjo Coordinate: -7.353419040539072, 112.69495930002113
17.1	ULP Menganti	Jl. Raya Bringkang, Pakupari, Kec. Menganti, Kab. Gresik Coordinate: -7.301472425139031, 112.56473352710175
17.2	ULP Karangpilang	Jl. Raya Mastrip 114, Kec. Karang Pilang, Kota Surabaya Coordinate: -7.33461753541963, 112.70449370451142
17.3	ULP Taman	Jl. Raya Geluran, Kec. Taman, Kabupaten Sidoarjo, Coordinate: -7.301467857739009, 112.56473582946957
18.	UP3 Surabaya Selatan	Jl. Ngagel Timur No. 14, Kec. Gubeng, Kota Surabaya Coordinate: -7.288610156975076, 112.7498796145707
18.1	ULP Darmo Permai	Jl. Raya Darmo Permai Utara No. 5, Kec. Dukuhpakis, Kota Surabaya Coordinate: -7.3014689995884074, 112.5647369806547
18.2	ULP Dukuh Kupang	Jl. Raya Dukuh Kupang No. 157, Kec. Sawahan, Kota Surabaya Coordinate: -7.301476992537063, 112.5647392830248.
18.3	ULP Gedangan	Jl. Sawo Tratat No.Km.15, Kec. Gedangan, Kab. Sidoarjo Coordinate: -7.301473566988522, 112.56473467828523
18.4	ULP Ngagel	Jl. Ngagel Timur No. 14, Kec. Gubeng, Kota Surabaya Coordinate: -7.287741533971661, 112.74975791531983
18.5	ULP Rungkut	Jl. Rungkut Industri VIII No. 27, Kec. Tenggilis Mejoyo, Kota Surabaya Coordinate: -7.335709309477891, 112.75043580097099
19	UP3 Surabaya Utara	Jl. Gemblongan No. 64, Kec. Bubutan, Kota Surabaya, Coordinate: -7.253080772597481, 112.73701372775925
19.1	ULP Embong Wungu	Jl. Dr. Soetomo No.42, Kec. Tegalsari, Kota Surabaya Coordinate: -7.281183613423015, 112.73995877107843
19.2	ULP Indrapura	Jl. Indrapura No. 48, Kec. Krembangan, Kota Surabaya Coordinate: -7.233849, 112.7310867
19.3	ULP Kenjeran	Jl. Kedinding Lor No.25, Kec. Kenjeran, Kota Surabaya Coordinate: -7.2658058, 112.7080988
19.4	ULP Perak	Jl. Tanjung Sadari No. 82, Kec. Krembangan, Kota Surabaya Coordinate: -7.2251115, 112.7249496
19.5	ULP Ploso	Jl. Ploso Tim. III No.1, Ploso, Kec. Tambaksari, Kota Surabaya Coordinate: -7.2567659, 112.7698973
19.6	ULP Tandes	Jl. Margomulyo No. 44, Kec. Asemrowo, Kota Surabaya Coordinate: -7.2365432, 112.6824163

Appendix 2: ESMP Matrix

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
New Feeders Construction for New GI Operations (Improved JTM Reliability)								
A	Pre-Construction/Planning							
1	Ecological, physical, social (land use)	Medium Voltage Power Network development plan (SKTM), which consists of: 1. The route and plan the length of SKTM; 2. Trees cutting that cannot be avoided; 3. Trees under the <i>Right of Way</i> (ROW) that must be trimmed	There are no significant potential negative impacts	In designing the route: 1. avoid cutting trees on both public and private land; 2. make preliminary agreements with potentially affected parties including private land owners whose land has to be used; 3. socialization about the ROW 4. In order to prevent erosion and poor foundations: 1) investigate the location of piles along the SKTM route; 2) ensure	The entire path of the project	F: One time W: Initial Planning	1. Routings to avoid private land, forestry; 2. Evidence of agreement with land and trees owners; 3. Socialization notes on ROW safety based on safe distances according to the PLN board of directors' regulations; 4. There are no reports of landslides at the pole location	Implementati on Unit
		Some of the JTM routes and poles are on agricultural land, forest areas, part of houses / private land, so that the minimum ROW						Potential negative impacts: increased disturbance from tree branches, buildings on the ROW

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
		distance of 3 meters cannot be fulfilled		that the demolition is done properly to avoid landslides				
		PLN installation Disassembly at SKTM	The possibility of erosion and landslides in the area					
		SKTM development plans in cultural heritage areas or areas where there are potential discoveries of new historical sites	The SKTM development plan has the potential to disturb and damage cultural heritage objects	1. Obtain a permit or recommendation from the cultural heritage management authority 2. PLN and the Contractor implement cultural heritage handling procedures for the distribution network		F: One time W: Initial Planning	1. Permission / recommendation from the official authority 2. Consultations note with community leaders and relevant authorities	Implementati on Unit
2	Social	Preparation of ROW lines and pole locations	Dissatisfaction relates to land use for the	Avoid the use of private land, and indigenous group areas by PLN	ROW path	F: one time W: The Beginning	1. The existence of a clear PLN ROW route and as far as possible	Implementati on Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
			ROW, location of poles and substations	Consultation and socialization to land owners and community leaders by PLN (and the Contractor)	ROW lines, poles and substations	of The Planning	avoid the use of private land and indigenous group areas 2. Consultation's documentation with affected communities explaining the ROW restrictions	
				PLN makes land use agreements with land owners		F: As needed until all agreements with land owners are collected W: Planning	Documentation of land use agreements (according to point A. 1)	
B	Construction							

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
1	OHS - Worker and Community Health and Safety	Excavation for cables, holes for poles, erecting piles, laying ground cables, installing TM construction and supporting accessories	Negative impacts on safety, health and social of construction workers on workers and society	1. CSMS certified contractor 2. Identification of hazards from work (IBPR) / (job safety analysis) 3. Work permit for hazardous work 4. Compliance with SMK3 Government Regulation No. 50 of 2012 4. Implement SOP in accordance with the work 5. signs Installation in accordance with the guidelines 6. Officers and supervisors are equipped with standard Personal Protective Equipment (PPE) 7. Stop Working Authority Inspection 8. LOTO procedure	At each project site, along the ROW	F: Once W: the beginning of construction	1. No work accident 2. Danger signboard and safety of dug holes due to the construction 2. Records of public concern inspections by contractors 3. There is no reprimand or termination of work from the officer Stop working authority	The contractor supervised by the implementation Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				9. The contractor maintains the required ethics during the construction phase				
2	Social and Traffic	Materials and equipment transportation using a vehicle that is not feasible or exceeds the capacity of the vehicle / road or the speed exceeds the allowable limit Materials placement, equipment up on the road when the installation work in progress will disrupt traffic	The possibility of traffic disturbances such as: congestion, road damage, as a result of spilled construction material during transportation, the spread of soil, gravel and project materials on the body of the road. Construction waste spread on the road	1. Placing traffic control officers at the project site; 2. Install information signs that work is in progress 3. Prevent scattered construction materials on the road 4. Provide a special location for placing the materials (not on the road) 5. Comply with traffic regulations and instructions for orderly use of roads NO. 004 / T / BNKT / 1990			1. Information on outage plans to customers 2. Work in progress information signboard 3. There is a special location for placing the materials 4. No traffic disruption 5. Construction material does not contaminate the body of the road	
C	Operational							

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
1	OHS - Worker and Community Health and Safety	The electric voltage generated from the operating power grid	Negative impacts on safety, health and social impact on surrounding communities and workers	1. Perform a periodic inspection 2. Installing a danger sign on the PLN assets that have a voltage 3. Socialization to the public regarding safe distances	At each project site, along the ROW	F: Through-out operations W: Through-out Operations	1. There are no accidents reports on the general public and the workers 2. Inspection notes 3. Documentation of socialization to the general public regarding safe distances	Implementati on Unit
Old Material Replacement (JTM Reliability Improvements)								
A	Pre-Construction/Planning							
1	-	Inspection of existing network	There is no potential negative impact	-	-	-	-	-

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
B	Consruction							
1	OHS - Worker and Community Health and Safety	Replacement of TM construction and accessories	Disturbance to customers due to power outages and potential work accidents	1. Provide information on outage plans to customers through social media or letters to related parties; 2. Carry out load mauver scenarios before and after the work 3. CSMS certified contractor 4. Occupational hazard identification (IBPPR) /JSA 5. Work permit for hazardous work 6. Compliance with SMK3 Government Regulation No. 50 of 2012 7. Implement SOP in accordance with the work 8. signs Installation in accordance with the guidelines 9. Officers and supervisors are equipped with	The entire existing distributio n network	F: Once W: the beginning of construction	1. Information on outage plans to customers 2. Project implementation signs 3. There are no reports of work accidents 4. There is no reprimand or termination of work from the officer Stop working authority	UID

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				standard Personal Protective Equipment (PPE) 10. Stop Working Authority Inspection 11. LOTO procedure				
2	Electronic waste	Replacement of damaged equipment (Returning the old materials)	1. The damaged (old) material is left at the work site so that it has the potential to pollute the environment 2. The damaged (old) material is taken by the workers so that the potential for contamination cannot be controlled 3. The damaged (old) material storage is not neatly arranged so that it has the potential to pollute the environment	1. Carry out orderly administrative actions and control the amount of material being unloaded and returned by arranging the ATTB warehouse in accordance with the Warehouse SOP 2. Implementing the Hazardous Waste Management SOP, 3. Preventive Procedures Cross-contamination PCB, 4. Procedure for Managing Used Materials and Non-B3 Waste	The entire existing distribution network	F: Once W: when the construction is finished	1. Notes on the implementation of replacement of tools and materials (in and out of the warehouse) 2. The recording damaged equipment / materials (ATTB) results in the ATTB warehouse management system 3. There are no reports of environmental pollution	Implementation Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				5. Procedure for Handling Spilled Oil / Transformer Oil				
C	Operational							
1	Electronic waste	Handling, storage and disposal of used materials	Used material stacking in the warehouse	1. Arrangement in the warehouse according to the type of material 2. Used material auction 3. Implementing the Hazardous Waste Management SOP 4. Preventive Procedures PCB Cross Contamination 5. Procedure for Managing Used Materials and Non-B3 Waste 6. Procedure for Handling Spilled Oil / Transformer Oil	Warehouse/Storage	F: During operation W: During operational phase	1. Arrangement of materials in accordance with the 5S principle 2. There are no reports of environmental pollution	Implementation Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
Old Transformers Replacement (JTM Reliability Improvements)								
A	Pre-Construction/Planning							
1	-	Inspection of existing transformer condition	There is no potential negative impact	-	-	-	-	-
B	Construction							
1	OHS - Worker and Community Health and Safety	Replacement of old transformers and its accessories	There are work accidents during the work process	1. CSMS certified contractor 2. Occupational hazard identification (IBPPR) /JSA 3. Work permit for hazardous work 4. Compliance with SMK3 Government Regulation No. 50 of 2012 5. signs Installation in accordance with the guidelines 6. Officers and supervisors	In accordance with the transformer replacement plan	F: Once W: as per the replacement plan	1. Danger sign 2. There are no reports of work accidents 3. There is no reprimand or termination of work from the officer Stop working authority	Implementing Unit (for announcements of power outages for customers) The contractor, under the supervision of the Implementing Unit, puts up a work

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				are equipped with standard Personal Protective Equipment (PPE) 7. Stop Working Authority Inspection 8. Works in accordance with Construction Standards for installation, dismantling and transportation of electrical equipment 9 Procedure for Handling Spilled Oil / Transformer Oil (in case of leakage) 10. LOTO procedure				implementati on sign and a danger sign
2	Social and Traffic		1. Power failures on the customer as a result of outages during the replacement of transformers and	1. Provide power outage information to customers; 2. Put up a sign that work is in progress to road users			1. Documentation of outage plan information to customers 2. Documentation of work is in progress sign installation	

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
			accessories 2. Traffic congestion				3. No traffic disruption	
3	Waste	Returning the old transformer to the warehouse	1. Transformer oil seepage upon replacement and returning the transformer 2. The missing transformer components are taken by workers, causing oil to leak	1. Prepare pallets and containers to anticipate seepage / leakage of oil from the transformer; 2. Orderly administrative and supervision of the number of transformers and components returned 3. Works in accordance with Construction Standards for installation, dismantling and transportation of electrical equipment 4. Implementing the Hazardous Waste Management SOP	The entire existing distribution network	F: Once W: when the construction is finished	1. There is no oil seepage from the transformer during replacement and returning activities to the warehouse 2. There are no reports of environmental pollution 3. Material return documentation	Implementation Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				5. Preventive Procedures cross-contamination PCB, 6. Procedure for Managing Used Materials and Non-B3 Waste, 7. Procedure for Handling Spilled Oil / Transformer Oil				
C	Operational							
1	OHS - Worker and Community Health and Safety	The electric voltage caused by leakage currents and voltages from the operating power grid	Negative impacts on safety, health and social impact on surrounding communities and workers	Periodic grid inspections to ensure compliance with ROW requirements	At each project site, along the ROW	F: Periodical-ly W: Through-out Operations	1. Inspection report 2. There are no accidents reports on the general public and the workers	Implementati on Unit
2	Waste	Handling and storage of used transformers	1. Soil and water contaminated with transformer oil; 2. Stacking of used transformers in storage sheds	1. Arrangement in warehouse at special warehouse facilities; 2. Storage of used transformers in accordance with SOP	Warehou- se Storage	F: During operation	1. No oil spills from the transformer in the warehouse 2. The used transformer that is stored is empty and	UID and / or Implementing Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				3. Setting up a process for assets removal 4. Implementing the Hazardous Waste Management SOP, 5. Preventive Procedures Cross-contamination PCB, 6. Procedure for Managing Used Materials and Non-B3 Waste, 7. Procedure for Handling Spilled Oil / Transformer Oil		W: During operational phase	covered with a cover to protect it from rain 3. Asset disposal process document	
Keypoint Replacement and Installation: LBS, Recloser, DS (JTM Reliability Enhancement)								
A	Pre-Construction/Planning							
1	-	Inspection of existing keypoint and its network	There is no potential negative impact	-	-	-	-	-
B	Construction							

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
1	OHS - Worker and Community Health and Safety	Keypoint Installation and Replacement	There are work accidents during the work process	1. Danger sign Installation 2. Officers and supervisors are equipped with PPE according to the standard 3. The contractor has a CSMS certificate (Contractor Safety Management System) 4. Hazard identification of the work (IBPPR) or JSA (job safety analysis) 5. Implement SOP in accordance with the work 6. working permit, 7. workers competencies 8. Compliance with SMK3 Government Regulation No. 50 of 2012 9. Conduct periodic inspections by Stop	According to the keypoint replacement plan	F: Once W: as per the replacement plan	1. Danger sign 2. There are no reports of work accidents 3. There is no reprimand or termination of work from the officer Stop working authority	Implementing Unit (for announcements of customer power outages); The contractor, under the supervision of the Implementing Unit, puts up a sign of work implementation and a danger sign

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				Working Authority officers 10. LOTO procedure				
2	Social and Traffic		1. Electricity users are interrupted due to a blackout during the work on replacing the keypoint and its accessories; 2. The existence of traffic congestion due to project activities	1. Providing information to customers 2. Work is in progress sign installation 3. assigning traffic control officer			1. Information on outage plans to customers 2. Work in progress information signboard 3. Documentation of no traffic disruptions	
3	Waste	Returning the keypoint material and its accessories	1. Damaged (old) keypoint material and / or its accessories are left at the job site so that it becomes waste; 2. The damaged (old) material is taken by the workers so that the potential for contamination cannot be controlled	1. Orderly administrative and control of the quantity of materials to be unloaded and returned 2. Arrangement of ATTB warehouse in accordance with the Procedure for Managing Used Materials and Non-B3 Waste	The entire existing distribution network	F: Once W: the construction is complete	1. Arrangement of materials in accordance with the 5S principle 2. Material return documents	Implementation Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
			3. The damaged (old) material storage is not neatly arranged so that it has the potential to pollute the environment					
C	Operational							
1	Social	Periodic maintenance of the keypoint and installing a lock on the cover panel	There are no significant potential negative impacts	Notify surrounding customers if there will be a power outage	All keypoints in the existing distribution network	F: During operation W: During operational phase	There are no reports of keypoint interference	Implementation Unit
2	Waste	Handling, storage and disposal of keypoint material and its accessories	Keypoint material stacking in the warehouse	Arrangement of ATTB warehouse in accordance with the Procedure for Managing Used Materials and Non-B3 Waste	Warehouse/ Storage	F: During operation W: During operational phase	The material arrangement is in accordance with the 5S rules	Implementation Unit
Construction of JTM / JTR / Substation (Marketing)								
A	Pre-Construction/Planning							

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
1	Ecological, physical, social (land use)	Calculation: 1. Trees that have to be cut down; 2. Number of poles mounting point plan TM / TR and substations; 3. Cable requirements according to JTM / JTR lines and substations	There are no significant potential negative impacts	1. Preliminary agreements with potentially affected parties; 2. Socialization of the 3 meter ROW distance for land owners; 3. Carry out construction according to construction standards	The entire path of the project	F: One time W: Initial Planning	1. Records of agreements / permits with land and tree owners 2. Socialization notes on ROW safety based on safe distances according to the PLN board of directors' regulations	Implementati on Unit
		There are poles that are placed on agricultural land, forest areas, part of a house / private land	The safe distance from the ROW is not achieved because the network ROW is not fulfilled at least 3 meters which will have a negative impact on land owners			F: one time W: Early Planning (route determination)	1. A route that considers environmental and social aspects 2. Optimal use of public land to avoid private land 3. There is no damage to the pile due to landslides or erosion	Implementati on Unit
		Damage to the pile foundation building (collapsed or tilted) due to landslide or erosion	Damage to poles resulting in a power outage which causes disruption to electricity users					

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
		Activity is on sites of cultural heritage	The SKTM development plan has the potential to disturb and damage cultural heritage objects	1. Obtain a permit or recommendation from the cultural heritage management authority 2. PLN and the Contractor implement cultural heritage handling procedures for the distribution network		F: One time W: Initial Planning	1. Permission / recommendation from the official authority 2. Consultation note with community leaders	Implementati on Unit
2	Social	Preparation of ROW lines and pole locations	Dissatisfaction relates to land use for the ROW, location of poles and substations	Avoid the use of private land, and indigenous group areas by PLN	ROW path	F: one-time W: The Beginning of The Planning	1. The use of privately owned land and indigenous group areas by PLN is insignificant 2. Recording the consultation and socialization with affected communities explaining the importance of poles, substations and restrictions on the ROW	Implementati on Unit
				Consultation and socialization of the importance of ROW, substations and poles to land owners and community leaders by PLN (and the Contractor)	ROW lines, poles and substations			

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				The land use agreement from the land owner is collected by PLN		F: As needed until all agreements with land owners are collected W: Planning phase	Documentation of land use agreements (according to point A. 1)	
B	Construction							
1	OHS - Worker and Community Health and Safety	Excavation for cables, holes for poles, erecting poles, ground cables installation, installing TM / TR / substation's construction and supporting accessories	The negative impact on the safety, health and the social construction workers to the community	1. Danger sign Installation 2. Officers and supervisors are equipped with PPE according to the standard Applying ethics required during the construction phase 3. The contractor has a CSMS certificate	At each project site, along the ROW	F: Once W: the beginning of construction	1. Danger sign Installation 2. Officers use PPE properly and completely in accordance with the requirements 3. There are no reports of work accidents 4. There is no reprimand or termination of work	The contractor supervised by the implementation Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
				(Contractor Safety Management System) 4. Hazard identification of the work (IBPPR) or JSA (job safety analysis) 5. Implement SOP in accordance with the work 6. working permit, 7. workers competencies 8. Compliance with SMK3 Government Regulation No. 50 of 2012 9. Conduct periodic inspections by Stop Working Authority officers 10. LOTO procedure			from the officer Stop working authority.	
2	Social and Traffic	Material Placement during installation work	Traffic jams and accidents due to project materials, scattering of soil, gravel and project materials outside the project site, and a	1. Placing traffic control officers at the project site; 2. Install information signs that work is in progress; 3. Prevent scattered construction materials on the road			1. Information on outage plans to customers 2. Work in progress information signboard 3. There is a special	

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring				
					Location	Frequency and Time	Performance Indicators	Management Institutions	
			power outage due to construction activities	4. Provide a special location for placing the materials (not on the road) 5. Comply with traffic regulations and instructions for orderly use of roads NO. 004 / T / BNKT / 1990			location for placing the materials 4. No traffic disruption 5. Construction material does not contaminate the body of the road		
3	Damage to the plant and construction Waste	installation of the construction of TM/TR/Substation	The existence of waste from the installation / construction activities of TM / TR / substations such as Haspel	Cleaning up waste / garbage after work completion					There is no residual waste from the work site Repairing the damage plants according to the agreement
				1. Agreement with the owner for the plant/tree replacement ; 2. Cleaning up waste / garbage after work completion of					
C	Operational								
1	OHS- Worker and Community	Electrical voltage generated from the operating power grid and substations	Negative impacts on safety, health and social impact on surrounding	1. Perform periodic inspections	At each project site, along the ROW	F: During Operations W: During Operations	1. There are no accidents reports on the general public and the workers;	Implementati on Unit	

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
	Health and Safety		communities and workers	2. Installing a danger sign on the PLN assets that have a voltage 3. Socialization related to safety distance			2. Documentation socialization/ public consultation with the community related to the safe distance	
APP Installation (Marketing)								
A	Pre-Construction/Planning							
1	-	Survey the location of the APP installation plan	There is no potential negative impact	-	-	-	-	-
B	Construction							
1	OHS - Worker and Community Health and Safety	APP installation	There was a work accident while the work was in progress	1. Officers and supervisors have attended work safety training; 2. Officers and supervisors are equipped with PPE according to the standard 3. Implement SOP according to work	Fit to the APP installation location	F: Once W: the beginning of construction	There are no reports of work accidents	Implementation Unit
C	Operational							

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
1	OHS - Worker and Community Health and Safety	Electricity generated on APP	Negative impacts on safety, health and social impact on surrounding communities and workers	1. APP Installation in accordance with the construction standards and an alarm installation if needed 2. Providing information on danger signs on APP	Fit to the APP installation location	F: Through-out operations W: Through-out Operations	1. Customer IML already has SLO 2. There are no accidents reports on the general public and the workers	Implementati on Unit
Replacement of 1 Phase/3 Phase meter boxes (Efficiency)								
A	Pre-Construction/Planning							
1	Social	Data collection of damaged/old/ stuck/ blurry meter boxes	There was a refusal to replace the meter boxes from the customer	Socialization and education regarding the meter boxes replacement	Fit to meter boxes replaceme nt	F: Once W: the beginning of construction	Socialization notes at the time of socialization	Implementati on Unit
B	Construction							

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
1	OHS - Worker and Community Health and Safety	Installation of meter boxes replacement	There was a work accident while the work was in progress	1. Officers and supervisors have attended work safety training; 2. Officers and supervisors are equipped with PPE according to the standard	Fit with consumer meter boxes installation	F: Once W: the beginning of construction	There are no reports of work accidents	Implementation Unit
2	Waste		1. Old meter boxes are scattered outside the warehouse so that the potential for pollution cannot be controlled. 2. Arrangement of ATTB warehouse in accordance with the Procedure for Managing Used Materials and Non-B3 Waste	1. Orderly administrative and control of the quantity of materials to be unloaded and returned 2. Arrangement of ATTB warehouse in accordance with the Procedure for Managing Used Materials and Non-B3 Waste	Fit with consumer meter boxes installation	F: Once W: at the end of one construction phase	1. Material return documents	Implementation Unit
C	Operational							
1	Waste	Handling, storage and disposal of used meter boxes materials	Used meter boxes material stacking in the warehouses	Arrangement of ATTB warehouse in accordance with the Procedure for Managing Used Materials and Non-B3 Waste	Warehouse/Storage	F: During operation W: During operational phase	The material arrangement is in accordance with the 5S rules	Implementation Unit

ESMP Matrix

No	Impact Category	Impact Activities/Resources	The Negative Impact Potential	Management Efforts (ME)	Monitoring			
					Location	Frequency and Time	Performance Indicators	Management Institutions
2	Social		Theft of meter boxes	Good administrative in data collection on the stored meter boxes	Warehouse/Storage	F: During operation W: During the storage phase	There are no findings / reports of theft of the meter boxes	Implementation Unit

Appendix 3: List of Environmental Approvals and Permits

No.	Unit Business	Environmental Approvals and Permits
1	UID Jatim	a. DPPL Office Building of PT PLN (Persero) UID Jatim No. 6660/539/436.7.2/2009, issued by Environment Agency of Surabaya City dated 10 September 2009 b. DPLH Recommendation for 20 kV Electricity Network for East Java Distribution Area No. 660/11562/111.2/2020, issued by Environment Agency of East Java Province dated 18 May 2020 c. Environment Permit of DPLH 20 Kv Electricity Network for East Java Distribution Area No. 17.05/3/02/V/2020, issued by Investment and Integrated One-Stop Services Agency of East Java Province dated 20 May 2020
2	UP3 Banyuwangi	a. DPPL Office Building of PT PLN (Persero) UP3 Banyuwangi No. 660/2967/429.207/2009, issued by Regional Secretariat of Banyuwangi Regency dated 8 September 2009 b. SPPL Office Building of PT PLN (Persero) ULP Genteng No. 660.2/157/SPPL/VIII/2017, issued by Environment Agency of Banyuwangi Regency dated 03 August 2017 c. SPPL Office Building of PT PLN (Persero) ULP Jajag No. 660.2/159/SPPL/VIII/2017, issued by Environment Agency of Banyuwangi Regency dated 03 August 2017 d. SPPL Office Building of PT PLN (Persero) ULP Muncar No. 660.2/160/SPPL/VIII/2017, issued by Environment Agency of Banyuwangi Regency dated 03 August 2017 e. SPPL Office Building of PT PLN (Persero) ULP Rogojampi No. 660.2/158/SPPL/VIII/2017, issued by Environment Agency of Banyuwangi Regency dated 03 August 2017 f. SPPL Office Building of PT PLN (Persero) ULP Banyuwangi Kota No. 660.2/158/SPPL/VIII/2017, issued by Environment Agency of Banyuwangi Regency dated 03 August 2017 g. Hazardous Waste Temporary Storage Permit No. 660/124/429.104/2018, issued by Environment Agency of Banyuwangi Regency dated 17 January 2018
3	UP3 Bojonegoro	a. DPPL Office Building of PT PLN (Persero) UP3 Bojonegoro No. 660/677/207.412/2009, issued by Environment Agency of Bojonegoro Regency dated 24 August 2009 b. DPLH Office Building of PT PLN (Persero) ULP Lamongan No. 660/202/413.117/2018, issued by Environment Agency of Lamongan Regency 22 January 2018 c. SPPL Office Building of PT PLN (Persero) ULP Babat No. 660/555.SPPL/413.117/2020, issued by Environment Agency of Lamongan Regency dated 30 September 2020

No.	Unit Business	Environmental Approvals and Permits
		d. SPPL Office Building of PT PLN (Persero) ULP Brondong No. 660/556.SPPL/413.117/2020, issued by Environment Agency of Lamongan Regency dated 30 September 2020 e. SPPL Office Building of PT PLN (Persero) ULP Jatirogo No. 660/349.SPPL/413.112/2020, issued by Environment Agency of Tuban Regency dated 22 December 2020 f. SPPL Office Building of PT PLN (Persero) ULP Tuban No. 660/350.SPPL/413.112/2020, issued by Environment Agency of Tuban Regency dated 22 December 2020 g. Hazardous Waste Temporary Storage Permit No. 188/1789/Kep/413.111/2018, issued by Investment and Integrated One-Stop Services Agency of Lamongan Regency dated 14 May 2018
4	UP3 Gresik	a. DPPL Office Building of PT PLN (Persero) UP3 Gresik No. 660/557A/437.75/2009, issued by Environment Agency of Gresik Regency dated 01 October 2009 b. DPLH Recommendation for Bawean Diesel Power Plant No. 660/183/DPLH/437.75/2017, issued by Environment Agency of Gresik Regency dated 26 October 2017 c. SPPL Office Building of PT PLN (Persero) ULP Benjeng No. 660/337/SPPL/437.75/2017, issued by Environment Agency of Gresik Regency dated 8 December 2017 d. SPPL Office Building of PT PLN (Persero) ULP Giri No. 660/336/SPPL/437.75/2017, issued by Environment Agency of Gresik Regency dated 8 December 2017 e. SPPL Office Building of PT PLN (Persero) ULP Sidayu No. 660/169/SPPL/437.75/2018, issued by Environment Agency of Gresik Regency dated 29 October 2018
5	UP3 Jember	a. DPPL Office Building of PT PLN (Persero) UP3 Jember No. 660.1/291/512/2009, issued by Environment Agency of Jember Regency dated 16 September 2009 b. SPPL Office Building of PT PLN (Persero) ULP Ambulu, issued by Environment Agency of Jember Regency dated 11 December 2018 c. SPPL Office Building of PT PLN (Persero) ULP Jember Kota, issued by Environment Agency of Jember Regency dated 11 December 2018 d. SPPL Office Building of PT PLN (Persero) ULP Kalisat, issued by Environment Agency of Jember Regency dated 11 December 2018 e. SPPL Office Building of PT PLN (Persero) ULP Kencong, issued by Environment Agency of Jember Regency dated 11 December 2018

No.	Unit Business	Environmental Approvals and Permits
		f. SPPL Office Building of PT PLN (Persero) ULP Klakah No. 366/SPPL/XII/2018, issued by Environment Agency of Lumajang Regency dated 18 December 2018 g. SPPL Office Building of PT PLN (Persero) ULP Lumajang No. 367/SPPL/XII/2018, issued by Environment Agency of Lumajang Regency dated 18 December 2018 h. SPPL Office Building of PT PLN (Persero) ULP Rambipuji, issued by Environment Agency of Jember Regency dated 11 December 2018 i. SPPL Office Building of PT PLN (Persero) ULP Tanggul, issued by Environment Agency of Jember Regency dated 11 December 2018 j. SPPL Office Building of PT PLN (Persero) ULP Tempeh No. 364/SPPL/XII/2018, issued by Environment Agency of Lumajang Regency dated 18 December 2018 k. Hazardous Waste Temporary Storage Permit No. 660.1/1409/35.09.319/2017, issued by Environment Agency of Jember Regency dated 19 December 2017
6	UP3 Kediri	a. DPPL Office Building of PT PLN (Persero) UP3 Kediri No. 660/193/419.37/2009, issued by Environment Agency of Kediri City dated 23 October 2009 b. SPPL Office Building of PT PLN (Persero) ULP Kediri Kota No. 660/057/AMD/419.111/2018, issued by Environment Agency of Kediri City dated July 8, 2018 c. SPPL Office Building of PT PLN (Persero) ULP Tulungagung No. 660.1/151/SPPL/118/2018, issued by Environment Agency of Tulungagung Regency dated 16 July 2018 d. SPPL Office Building of PT PLN (Persero) ULP Ngunut No. 660.1/150/SPPL/118/2018, issued by Environment Agency of Tulungagung Regency dated 16 July 2018 e. SPPL Office Building of PT PLN (Persero) ULP Srengat No. 660/143/409.113.2/2018, issued by Environment Agency of Blitar Regency dated 08 August 2018 f. SPPL Office Building of PT PLN (Persero) ULP Pare No. 660.1/276/418.35/2018, issued by Environment Agency of Kediri Regency dated 28 June 2018 g. SPPL Office Building of PT PLN (Persero) ULP Wlingi No. 660/131/409.113.2/2018, issued by Environment Agency of Blitar Regency dated 19 July 2018 h. SPPL Office Building of PT PLN (Persero) ULP Sutojayan No. 660/140/409.113.2/2018, issued by Environment Agency of Blitar Regency dated 07 August 2018 i. SPPL Office Building of PT PLN (Persero) ULP Ngadiluwih No. 660.1/275/418.35/2018, issued by Environment Agency of Kediri Regency dated 28 June 2018

No.	Unit Business	Environmental Approvals and Permits
		j. SPPL Office Building of PT PLN (Persero) ULP Grogol No. 660.1/274/418.35/2018, issued by Environment Agency of Kediri Regency dated 28 June 2018 k. SPPL Office Building of PT PLN (Persero) ULP Blitar No. 660.1/13/410.2081/SPPL/VII/2018, issued by Environment Agency of Blitar Regency dated 19 July 2018 l. SPPL Office Building of PT PLN (Persero) ULP Campurdarat No. 660.1/149/SPPL/118/2018, issued by Environment Agency of Campurdarat Regency dated 16 July 2018 m. Environment Permit for Bangsongan guard office No. 503.11.05/1987/418.27/2018, issued by Investment and Integrated One-Stop Services Agency of Kediri Regency dated 09 July 2018 n. Hazardous Waste Temporary Storage Permit No. 503.11.01/1814/418.27/2018, issued by Investment and Integrated One-Stop Services Agency of Kediri Regency dated 28 June 2018
7	UP3 Madiun	a. DPPL Office Building of PT PLN (Persero) UP3 Madiun No. 660/532/401.304/2009, issued by Environment Agency of Madiun City dated 9 October 2009 b. SPPL Office Building of PT PLN (Persero) ULP Magetan No. 493, issued by Environment Agency of Magetan Regency dated 25 April 2019 c. SPPL Office Building of PT PLN (Persero) ULP Ngawi No. 660/547/404.111/2018, dated 06 July 2018 d. SPPL Office Building of PT PLN (Persero) ULP Maospati No. 942, issued by Environment Agency of Magetan Regency dated 26 June 2018 e. DPLH Office Building of PT PLN (Persero) ULP Caruban No. 660.1/3594/402.117/2018, dated 28 December 2018 f. SPPL Office Building of PT PLN (Persero) ULP Dolopo No. 436/SPPL/2018, issued by Environment Agency of Madiun Regency dated 22 November 2018 g. SPPL Office Building of PT PLN (Persero) ULP Mantingan No. 660/3556/404.111/2019, dated 16 April 2019 h. Hazardous Waste Temporary Storage Permit No. 503.44/003/401.106/2018, issued by Investment and Integrated One-Stop Services Agency of Madiun City dated 04 September 2018
8	UP3 Malang	a. DPLH Office Building of PT PLN (Persero) UP3 Malang Customer Service Unit No. 660/287/35.73.406/2009, issued by Environment Agency of Malang City dated 15 September 2009

No.	Unit Business	Environmental Approvals and Permits
		b. SPKPPLH Office Building of PT PLN (Persero) ULP Lawang No. 660.4/5092/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 c. SPPL Office Building of PT PLN (Persero) ULP Bululawang No. 660.4/5089/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 d. SPPL Office Building of PT PLN (Persero) ULP Batu No. 660/611/DL/422.110/2019, dated 30 July 2019 e. SPPL Office Building of PT PLN (Persero) ULP Singosari No. 660.4/5088/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 f. SPPL Office Building of PT PLN (Persero) ULP Kepanjen 660.4/5091/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 g. SPPL Office Building PT (PLN (Persero) ULP Kebonagung No. 107/SPPL/35.73/307/2019, dated 03 May 2019 h. SPPL Office Building of PT PLN (Persero) ULP Tumpang No. 660.4/5085/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 i. SPPL Office Building of PT PLN (Persero) ULP Gondanglegi No. 660.4/5093/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 j. SPPL Office Building of PT PLN (Persero) ULP Dampit No. 660.4/5094/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 k. SPPL Office Building of PT PLN (Persero) ULP Ngantang No. 660.4/5090/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 l. SPPL Office Building of PT PLN (Persero) ULP Sumberpucung No. 660.4/508735.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 m. SPPL Office Building of PT PLN (Persero) ULP Dinoyo No. 109/SPPL/35.73/307/2018, issued by Environment Agency of Malang City dated 20 December 2018 n. SPPL Office Building of PT PLN (Persero) ULP Blimbing No. 660.4/5086/35.07.117/2018, issued by Environment Agency of Malang Regency dated 12 November 2018 o. SPKPPLH Hazardous Waste Temporary Storage No. 660.4/4476/SKPPLH/35.07.117/2017, issued by Environment Agency of Malang Regency dated 12 November 2018
9	UP3 Mojokerto	a. UKL-UPL Office Building of PT PLN (Persero) UP3 Mojokerto No. 660/437/416-203.A/2009, issued by Investment and Integrated One-Stop Services Agency of Mojokerto Regency dated 12 February 2019

No.	Unit Business	Environmental Approvals and Permits
		b. SPPL Office Building PT (PLN (Persero) ULP Mojoagung No. 78/SPPL-B/2017, issued by Environment Agency of Jombang Regency dated 29 May 2017 c. SPPL Office Building of PT PLN (Persero) ULP Mojokerto Kota No. 660/1832/417.312/2018, dated 17 May 2018 d. SPPL Office Building of PT PLN (Persero) ULP Jombang No. 203/SPPL-B/2018, issued by Environment Agency of Jombang Regency dated 16 November 2018 e. SPPL Office Building of PT PLN (Persero) ULP Ngoro No. 97/SPPL-B/2018, dated 7 May 2018 f. SPPL Office Building of PT PLN (Persero) ULP Mojokerto No. 48/SPPL/2018, dated 24 September 2018 g. SPPL Office Building of PT PLN (Persero) ULP Ploso No. 96/SPPL/2018, dated May 7, 2018 h. SPPL Office Building of PT PLN (Persero) ULP Pacet No. 47/SPPL/2018, dated 24 September 2018 i. SPPL Office Building of PT PLN (Persero) ULP Kertosono No. 660/2199/411.315/2018, dated 14 August 2018 j. SPPL Office Building of PT PLN (Persero) ULP Warujayeng No. 660/2197/411.315/2018, dated 14 August 2018 k. SPPL Office Building of PT PLN (Persero) ULP Nganjuk No. 660/2198/411.315/2018, dated 14 August 2018
10	UP3 Pamekasan	a. SPPL Office Building of PT PLN (Persero) UP3 Pamekasan No. 660/322/441.407/2009, issued by Regional Secretariat of Pamekasan Regency dated 24 September 2009 b. SPPL Office Building of PT PLN (Persero) ULP Pamekasan No. 660.1/229/432.310/Dok.Lingk/2018, issued by Environment Agency of Pamekasan Regency dated 30 October 2018 c. SPPL Office Building of PT PLN (Persero) ULP Sumenep No. 660.1/165/432.310.Dok.Lingk/2019, issued by Environment Agency of Sumenep Regency dated 25 March 2019 d. SPPL Office Building of PT PLN (Persero) ULP Sampang No. 660/775/434.219/2019, issued by Environment Agency of Sampang Regency dated 27 March 2019 e. SPPL Office Building of PT PLN (Persero) ULP Bangkalan No. 041-2018, issued by Environment Agency of Bangkalan Regency dated 14 November 2018 f. SPPL Office Building of PT PLN (Persero) ULP Kamal No. 194 - 2019, dated 21 November 2019 g. SPPL Office Building of PT PLN (Persero) ULP Ketapang No. 660/217/434.219/2019, dated 27 March 2019 h. SPPL Office Building of PT PLN (Persero) ULP Blega No. 082/2019, dated 3 July 2019

No.	Unit Business	Environmental Approvals and Permits
		i. SPPL Office Building of PT PLN (Persero) ULP Prenduan No. 660/137/REKOM.013/435.119.2/2019, dated 13 March 2019 j. SPPL Office Building of PT PLN (Persero) ULP Ambunten No. 660/146/REKOM.013/435.119.2/2019, dated 13 March 2019 k. SPPL Office Building of PT PLN (Persero) ULP Waru No. 660.1/165/432.310.Dok.Lingk/2019, dated 25 March 2019 l. UKL-UPL Recommendation for Gili Genting Diesel Power Plant No. 660/663/DPLH.030/435.119.2/2017, issued by Environment Agency of Sumenep Regency dated 20 December 2017 m. UKL-UPL Recommendation for Gili Iyang Diesel Power Plant No. 660/60/UKL-UPL.027/435.119.2/2017, issued by Environment Agency of Sumenep Regency dated 20 December 2017 n. UKL-UPL Recommendation for Kangean Diesel Power Plant No. 660/661/DPLH.028/435.119.2/2017, issued by Environment Agency of Sumenep Regency dated 20 December 2017 o. UKL-UPL Recommendation for Mandangin Diesel Power Plant No. 660/39/434.219/2018, issued by Environment Agency of Sumenep Regency dated 15 January 2018 p. UKL-UPL Recommendation for Raas Diesel Power Plant No. 660/174/UKL-UPL.022/435.119.2/2017, issued by Environment Agency of Sumenep Regency dated 03 March 2020 q. UKL-UPL Recommendation for Sapeken Diesel Power Plant No. 660/662/DPLH.029/435.119.2/2017, issued by Environment Agency of Sumenep Regency dated 20 December 2017 r. DPLH Recommendation for Sapudi Diesel Power Plant No. 660/664/DPLH.031/435.119.2/2017, issued by Environment Agency of Sumenep Regency dated 20 December 2017 s. Hazardous Waste Temporary Storage Permit No. 503/518/DPMPTSP/435.120.4/2018, issued by Investment and Integrated One-Stop Services Agency of Sumenep Regency dated 27 June 2018
11	UP3 Pasuruan	a. DPPL Office Building of PT PLN (Persero) UP3 Pasuruan No. 660/192/423.208/2009, issued by Environment Agency of Pasuruan City dated 31 August 2009 b. SPPL Office Building of PT PLN (Persero) ULP Pasuruan Kota No. SPPL/301/423.110/2018, issued by Environment Agency of Pasuruan City dated 03 December 2018

No.	Unit Business	Environmental Approvals and Permits
		c. SPPL Office Building of PT PLN (Persero) ULP Gondangwetan No. 132/SPPL/2018, issued by Environment Agency of Pasuruan Regency dated 13 November 2018 d. SPPL Office Building of PT PLN (Persero) ULP Bangil No. 131/SPPL/2018, issued by Environment Agency of Pasuruan Regency dated 13 November 2018 e. SPPL Office Building of PT PLN (Persero) ULP Pandaan No. 136/SPPL/2018, issued by Environment Agency of Pasuruan Regency dated 13 November 2018 f. SPPL Office Building of PT PLN (Persero) ULP Prigen No. 134/SPPL/2018, issued by Environment Agency of Pasuruan Regency dated 13 November 2018 g. SPPL Office Building of PT PLN (Persero) ULP Probolinggo No. 660/2480/425.116/2018, issued by Environment Agency of Probolinggo City dated 11 October 2018 h. SPPL Office Building of PT PLN (Persero) ULP Sukorejo No. 135/SPPL/2018, issued by Environment Agency of Pasuruan Regency dated 13 November 2018 i. UKL-UPL Recommendation for Gili Ketapang Diesel Power Plant No. 503/002/426.116/2018, issued by Investment and Integrated One-Stop Services Agency of Probolinggo Regency dated 08 May 2018 j. Hazardous Waste Temporary Storage Permit No. 503/003/LB3/423.107/2018, issued by Investment and Integrated One-Stop Services Agency of Pasuruan City dated 23 August 2018
12	UP3 Ponorogo	a. DPPL Office Building of PT PLN (Persero) UP3 Ponorogo No. 660/396/405.26/2009, issued by Environment Agency of Ponorogo Regency dated 02 September 2009 b. SPPL Office Building of PT PLN (Persero) ULP Ponorogo No. 660/234/405.25/2018, issued by Environment Agency of Ponorogo Regency dated 8 October 2018 c. SPPL Office Building of PT PLN (Persero) ULP Balong No. 660/231/405.25/2018, issued by Environment Agency of Ponorogo Regency dated 8 October 2018 d. SPPL Office Building of PT PLN (Persero) ULP Pacitan No. 660.1/174/408.25/2018, issued by Environment Agency of Pacitan Regency dated 27 November 2018 e. SPPL Office Building of PT PLN (Persero) ULP Trenggalek Customer Service Unit No. 660.1/174/408.25/2018, issued by Environment Agency of Trenggalek Regency dated 28 November 2018
13	UP3 Sidoarjo	a. DPPL Office Building of PT PLN (Persero) UP3 Sidoarjo No. 660/1704/404.6.3/2009, issued by Environment Agency of Sidoarjo Regency dated 25 September 2009

No.	Unit Business	Environmental Approvals and Permits
		b. SPPL Office Building of PT PLN (Persero) ULP Sidoarjo Kota No. 660/35/438.5.15/2018, issued by Investment and Integrated One-Stop Services Agency of Sidoarjo Regency dated 13 December 2018 c. SPPL Office Building of PT PLN (Persero) ULP Porong No. 660/36/438.5.15/2018, issued by Investment and Integrated One-Stop Services Agency of Sidoarjo Regency dated 13 December 2018 d. SPPL Office Building of PT PLN (Persero) ULP Krian No. 660/3#/438.5.15/2018, issued by Investment and Integrated One-Stop Services Agency of Sidoarjo Regency dated 13 December 2018
14	UP3 Situbondo	a. DPPL Office Building of PT PLN (Persero) UP3 Situbondo No. 660.1/229/431.401.2/2009, issued by Environment Agency of Situbondo Regency dated 24 September 2009 b. SPPL Office Building of PT PLN (Persero) ULP Panarukan No. 1279/MUM.00.01/2017, dated 31 July 2017 c. SPPL Office Building of PT PLN (Persero) ULP Wonosari No. 660.1/1212SPPL/430.9.6/2018, issued by Environment Agency of Bondowoso Regency dated 14 November 2018 d. SPPL Office Building of PT PLN (Persero) ULP Asembagus No. 1277/MUM.00.01/2017, issued by Environment Agency of Situbondo Regency dated 31 July 2017 e. SPPL Office Building of PT PLN (Persero) ULP Besuki No. 1278/MUM.00.01/2017, issued by Environment Agency of Situbondo Regency dated 31 July 2017 f. SPPL Office Building of PT PLN (Persero) ULP Bondowoso No. 660.1/541.2/SPPL/430.9.6/2018, issued by Environment Agency of Bondowoso Regency dated 6 June 2018 g. Hazardous Waste Temporary Storage Permit No. 188.4/I/ILI/431.218/2018, issued by Investment and Integrated One-Stop Services Agency of Situbondo Regency dated 07 February 2018
15	UP3 Surabaya Barat	a. DPPL Office Building of PT PLN (Persero) UP3 Surabaya Barat No. 660/4062/404.6.3/2015, issued by Environment Agency of Sidoarjo Regency dated 22 December 2015 b. SPPL Office Building of PT PLN (Persero) ULP Menganti No. 660/43/SPPL/437.75/2017, dated 6 March 2019
16	UP3 Surabaya Selatan	a. DPPL Office Building of PT PLN (Persero) UP3 Surabaya Selatan No. 660/515/436.7.2/2009, issued by Environment Agency of Surabaya City dated 8 September 2009

No.	Unit Business	Environmental Approvals and Permits
		b. SPPL Office Building of PT PLN (Persero) ULP Darmo Permai No. 660.1/344/436.7.12/2019, issued by Environment Agency of Surabaya City dated 06 March 2019 c. SPPL Office Building of PT PLN (Persero) ULP Dukuh Kupang No. 660.1/343/436.7.12/2019, issued by Environment Agency of Surabaya City dated 06 March 2019 d. SPPL Office Building of PT PLN (Persero) ULP Ngagel No. 660/515/436.7.2/2009, issued by Environment Agency of Surabaya City dated 08 September 2019 e. SPPL Office Building of PT PLN (Persero) ULP Rungkut No. 660.1/317/436.7.12/2019, issued by Environment Agency of Surabaya City dated 27 February 2019
17	UP3 Surabaya Utara	a. DPPL Office Building of PT PLN (Persero) UP3 Surabaya Utara No. 660/516/436.7.2/2009, issued by Environment Agency of Surabaya City dated 8 September 2009 b. SPPL Office Building of PT PLN (Persero) ULP Indrapura No. 660.1/1874/436.7.12/2019, issued by Environment Agency of Surabaya City dated 21 November 2019 c. SPPL Office Building of PT PLN (Persero) ULP Ploso No. 660.1/1333/436.7.12/2018, issued by Environment Agency of Surabaya City dated 17 October 2018 d. SPPL Office Building of PT PLN (Persero) ULP Tandes No. 660.1/1334/436.7.12/2018, issued by Environment Agency of Surabaya City dated 17 October 2018 e. SPPL Office Building of PT PLN (Persero) ULP Perak No. 660.1/1334/436.7.12/2018, issued by Environment Agency of Surabaya City dated 17 October 2018 f. SPPL Office Building of PT PLN (Persero) ULP Kenjeran No. 660.1/1720/436.7.12/2016, issued by Environment Agency of Surabaya City dated 19 October 2016

Appendix 4: 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. Undang-Undang No. 45 Tahun 2009 tentang Perubahan Undang-Undang 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 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 Menteri Lingkungan Hidup No. 31 Tahun 2009 tentang Arah dan Kontrol Penerapan Manajemen Lingkungan, Ekolabel, Produksi Bersih, dan Penggunaan Teknologi Lingkungan di Daerah;
7. Keputusan Menteri Lingkungan Hidup No. 31 Tahun 2009 tentang Arah dan Kontrol Penerapan Manajemen Lingkungan, Ekolabel, Produksi Bersih, dan Penggunaan Teknologi Lingkungan di Daerah;

8. Keputusan Menteri Lingkungan Hidup 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 Menteri Lingkungan Hidup 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 Menteri Lingkungan Hidup No. 17 Tahun 2012 tentang Partisipasi Publik dalam AMDAL dan Izin Lingkungan;
13. Keputusan Menteri Lingkungan Hidup 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 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 Menteri Lingkungan Hidup dan Kehutanan 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 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 Menteri Lingkungan Hidup dan Kehutanan 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 Menteri Lingkungan Hidup dan Kehutanan No. 26/2018 tentang Pedoman Penyusunan dan Peninjauan dan Pemeriksaan Dokumen Lingkungan dalam Penerapan Pengajuan Tunggal secara langsung;
23. Keputusan Menteri Lingkungan Hidup dan Kehutanan No. P.23/MENLHK/SETJEN/KUM.1/7/2018 tentang Kriteria untuk Bisnis dan/atau Kegiatan yang Memerlukan Perubahan Izin;
24. Keputusan Menteri Lingkungan Hidup dan Kehutanan 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 Menteri Lingkungan Hidup dan Kehutanan 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 Menteri Lingkungan Hidup dan Kehutanan 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. Peraturan Gubernur Jawa Timur No. 30 Tahun 2011 tentang Jenis Usaha dan/atau Kegiatan yang Wajib Dilengkapi Upaya Pengelolaan Lingkungan Hidup (UKL) dan Upaya Pemantauan Lingkungan Hidup (UPL);
2. Peraturan Daerah Jawa Timur No. 5 Tahun 2012 tentang Rencana Tata Ruang Wilayah 2011-2031.

PLN Regulations

1. Keputusan Direksi PLN No. 134.K/DIR/2007 tentang Kebijakan Lingkungan, Kesehatan dan Keselamatan Kerja;
2. Keputusan PT PLN (Persero) No. 200.K/DIR/2009 tentang Revisi Keputusan No. 059.K/DIR/2009 tentang Sistem Evaluasi Tingkat Kinerja PT PLN (Persero);
3. Keputusan PT PLN (Persero) No. 114.K/DIR/2010 tentang Tenaga Trafo;
4. Keputusan Direksi PLN (Keputusan PLN) No. 473/2010 Standar Konstruksi untuk Jaringan Listrik Tenaga Rendah (untuk jalur distribusi);
5. Keputusan Direksi PLN No. 606/2010 Standar Konstruksi untuk Tegangan Listrik Menengah;
6. Keputusan Direksi PLN No. 605/2010 Standar Konstruksi untuk Gardu Distribusi dan Gardu Pemancar;
7. Peraturan Dewan Direksi No. 501/2012 tentang Keterbukaan Informasi Publik (KIP);
8. Keputusan Direksi PLN No. 0520-2.K/DIR/2014 tentang Pengumpulan Pedoman Perawatan untuk Peralatan Stasiun Utama;
9. Directors Regulation of PT PLN (Persero) No. 0250.K/DIR/2016 concerning Occupational Safety Guidelines at PT PLN (Persero);
10. Directors Regulation of PT PLN (Persero) No. 0251.K/DIR/2016 concerning Electrical Installation Safety Guidelines at PT PLN (Persero);
11. Directors Regulation of PT PLN (Persero) No. 0252.K/DIR/2016 concerning Public Safety Guidelines at PT PLN (Persero);
12. Directors Decree of PT PLN (Persero) No. 0325.K/DIR/2021 concerning Contractor Safety Management System;
13. Keputusan Direksi PLN (Keputusan PLN) tentang Pengelolaan Sampah FABA dan gypsum;
14. Keputusan Direksi PLN No. 0028.P/DIR/2015 tentang Struktur Organisasi, Tanggung jawab dan Tugas Utama di Direktorat Manajemen Sumber Daya Manusia PT PLN (Persero);
15. Keputusan Direksi PLN No. 0250.P/DIR/2016 tentang Pedoman Keselamatan Kerja di PT PLN (Persero);
16. Keputusan Direksi PLN No. 0252.P/DIR/2016 tentang Pedoman Keselamatan Publik dalam PT PLN (Persero);
17. Peraturan Direktur PLN No. 0179.P/DIR/2016 tentang Struktur Organisasi;

18. Peraturan Direktur PLN No. 0225.P/DIR/2016 tanggal 24 Mei 2016 dan Keputusan PT PLN (Persero) No. 049/SDM.01.03/DIVORG/2016 tentang Organisasi UIP dan Unit Pelaksana.

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. 2/2012 tentang Pengadaan Tanah untuk Pembangunan demi Kepentingan Umum;
9. Undang-Undang No. 7 Tahun 2012 tentang Penanganan Konflik Sosial.

Government Regulations

1. Peraturan Pemerintah No. 23 Tahun 2014 tentang Perubahan Atas Peraturan Pemerintah Nomor 14 Tahun 2012 tentang Kegiatan Usaha Penyediaan Tenaga Listrik;
2. Peraturan Pemerintah No. 2 Tahun 2015 tentang Implementasi Undang-Undang No. 7 Tahun 2012 tentang Penanganan Konflik Sosial;
3. Peraturan Pemerintah No. 45 Tahun 2017 tentang Partisipasi Masyarakat dalam Pengelolaan Pemerintahan Lokal;
4. Peraturan Pemerintah No. 62 Tahun 2018 tentang Mitigasi Dampak Sosial pada Masyarakat dalam Pengadaan Tanah untuk Pembangunan Nasional;
5. Peraturan Pemerintah No. 18 Tahun 2021 tentang Hak Pengelolaan, Hak Atas Tanah, Satuan Rumah Susun dan Pendaftaran Tanah;
6. Peraturan Pemerintah 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 No. 4/2016 tentang Percepatan Pembangunan Infrastruktur Ketenagalistrikan;
5. Peraturan Presiden No. 88/2017 tentang Penyelesaian Penguasaan Tanah di Kawasan Hutan;
6. Peraturan Presiden 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 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 Energi dan Sumber Daya Mineral No. 2 Tahun 2019 tentang Peraturan Menteri Energi dan Sumber Daya Mineral tentang Perubahan Atas Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 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 Menteri Lingkungan Hidup dan Kehutanan 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 PLN No. 605 Tahun 2010 tentang Standar Konstruksi untuk Gardu Distribusi Daya dan Gardu Switching;
2. Keputusan Direksi PLN NO. 4606 Tahun 2010 tentang Standar Konstruksi untuk Jaringan Tenaga Tegangan Menengah;
3. Keputusan Direksi PLN No. 473 Tahun 2010 tentang Standar Konstruksi untuk Jaringan Listrik Tegangan Rendah;
4. Keputusan Direksi PLN No. 366 Tahun 2007 tentang Tanggung Jawab Sosial Perusahaan;
5. Keputusan Direksi PLN No. 344 Tahun 2016 tentang Prosedur Pengadaan Tanah di PLN;
6. Keputusan Direksi PLN No. 289 Tahun 2013 tentang Pengadaan Tanah untuk Tujuan Penyediaan Listrik, Biaya Operasional Pengadaan Tanah, dan Biaya Kompensasi Operasional.

Appendix 5: List of Standard Operational Procedure in Distribution Lines Construction

National Regulations and Standards

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

PLN Standards

- a. Directors Decree of PT PLN (Persero) No. 473.K/DIR/2010 concerning Construction Standards of Low-Voltage Electric Power Networks
- b. Directors Decree of PT PLN (Persero) No. 474.K/DIR/2010 concerning Construction Standards of Electric Power Networks;
- c. Directors Decree of PT PLN (Persero) No. 475.K/DIR/2010 concerning Engineering Design Criteria of Electric Power Distribution Construction;
- d. Directors Decree of PT PLN (Persero) No. 605.K/DIR/2010 concerning Construction Standards of Distribution Substation and Power Switching Substation;
- e. Directors Decree of PT PLN (Persero) No. 606.K/DIR/2010 concerning Construction Standards of Medium Voltage Power;
- f. 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 Jatim's Internal Procedures

- a. Procedure of PLN UID Jatim No. PK.DIS.01. Evaluation of Medium Voltage Network Faults
- b. Procedure of PLN UID Jatim No. PK.JAR.01 Inspeksi Gardu Pasangan Dalam
- c. Procedure of PLN UID Jatim No. PK.JAR.02 Inspeksi Gardu Pasangan Luar
- d. Procedure of PLN UID Jatim No. PK.JAR.03 Medium Voltage Network Inspections
- e. Procedure of PLN UID Jatim No. PK.JAR.04 Low Voltage Network Inspections
- f. Procedure of PLN UID Jatim No. PK.JAR.05 Pole Mounted Substation Inspection
- g. Procedure of PLN UID Jatim No. PK.JAR.06 Medium Voltage Network Management
- h. Procedure of PLN UID Jatim No. PK.JAR.07 Low Voltage Network Management
- i. Procedure of PLN UID Jatim No. PK.JAR.08 Pole Mounted Substation Fault Management
- j. Procedure of PLN UID Jatim No. PK.JAR.09 Diesel Power Plant Maintenance
- k. Procedure of PLN UID Jatim No. PK.JAR.10 Diesel Power Plant Operation
- l. Procedure of PLN UID Jatim No. PK.JAR.11 Low Voltage Network Maintenance
- m. Procedure of PLN UID Jatim No. PK.JAR.12 Medium Voltage Network Maintenance
- n. Procedure of PLN UID Jatim No. PK.JAR.13 Concrete Substation Maintenance
- o. Procedure of PLN UID Jatim No. PK.KON.01 Supervision Construction for Distribution Network
- p. Procedure of PLN UID Jatim No. PK.KON.02 Prestressed Concrete Pole Construction
- q. Procedure of PLN UID Jatim No. PK.HAR.01 Cubicle 20 kV Maintenance
- r. Procedure of PLN UID Jatim No. PK.HAR.05 Digital kWh Meter Maintenance

Appendix 6: Screening Form of PT PLN (Persero) East Java Distribution Main Unit for Sub-Projects in 2022

The evidence can be found in the folder "Appx. 6":

Appendix 7: Environmental Reporting Receipts

The evidence can be found in the folder "Appx. 7"

Appendix 8: Work Environment Measurement Report

The evidence can be found in the folder "Appx. 8":

Appendix 9: Hazardous Waste Management

The evidence can be found in the folder "Appx. 9":

Appendix 10: Hazardous Waste Temporary Storage

The evidence can be found in the folder "Appx. 10":

Appendix 11: PCBs Test Report with Dextil Method

The evidence can be found in the folder "Appx. 11"

Appendix 12: Public Consultation Written Agreements

The evidence can be found in the folder "Appx. 12"

Appendix 13: OHS Act in Contract Documents

The evidence can be found in the folder "Appx. 13"

Appendix 14: OHS Document Implementation

The evidence can be found in the folder "Appx. 14"

Appendix 15: Emergency Preparedness and Response Plan

The evidence can be found in the folder "Appx. 15"

Appendix 16: Right of Way and Safety Distance

The evidence can be found in the folder "Appx. 16"

Appendix 17: OHS Audit

The evidence can be found in the folder "Appx. 17"

Appendix 18: Environmental Management System Procedure

The evidence can be found in the folder "Appx. 18"

Appendix 19: Corporate Social Responsibility

The evidence can be found in the folder "Appx. 19"