

Program Safeguard Systems Assessment

November 2015

Perusahaan Listrik Negara
Electricity Grid Strengthening—Sumatra Program
(Guaranteed by the Republic of Indonesia)

ABBREVIATIONS

ADB	– Asian Development Bank
AMDAL	– Analisis Mengenai Dampak Lingkungan (environmental impact assessment)
APKT	– Aplikasi Penyelesaian Keluhan Terpadu (integrated complaint solving application)
EIA	– environmental impact assessment
kV	– kilovolt
m	– meter
m ²	– square-meter
MOER	– Ministry of Environment Regulations
P3BS	– Pusat Penyalur dan Pengatur Beban Sumatera (Sumatra Load Dispatch Center)
PCB	– polychlorinated biphenyls
PLN	– Perusahaan Listrik Negara (State Electricity Corporation)
PLN Decree	– Decree of the Board of Directors of PLN
PSSA	– program safeguard system assessment
ROW	– right-of-way
SMK3	– Sistem Manajemen Kesehatan dan Keselamatan Kerja (occupational health and safety management system)
SPPL	– Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan Hidup (letter of commitment for the environmental management plan and environmental monitoring plan)
UIP	– Unit Induk Pembangunan (development unit)
UKL/UPL	– Upaya Pengelolaan Lingkungan Hidup / Upaya Pemantauan Lingkungan Hidup (environmental management efforts and environment monitoring efforts)

PROGRAM SAFEGUARD SYSTEMS ASSESSMENT

1. The Electricity Grid Strengthening—Sumatra Program is proposed to finance a portion of the broader Sumatra grid strengthening program using the results-based lending modality of the Asian Development Bank (ADB). The executing and implementing agency will be the State Electricity Corporation (PLN), a 100% state-owned enterprise. PLN's broader program expenditure for strengthening and developing Sumatra's power transmission and distribution systems is estimated at \$10,834.5 million during 2015–2019, of which capital expenditure investments costs are \$7,362 million. PLN, with the support of the government, has requested a loan of \$575 million from ADB's ordinary capital resources (A loan) and \$25 million from the ASEAN Infrastructure Fund (B loan) to finance a portion of the broader program. ADB will provide \$600 million (5.5%) and the World Bank \$500 million (4.6%) in support of the same program.

2. The program safeguard system assessment (PSSA) aims to (i) examine the safeguard systems of the Government of Indonesia and PLN, and related implementation practices and capacity; and (ii) suggest safeguard program actions where gaps and weaknesses are found. ADB undertook the PSSA in partnership with PLN. The assessment builds on existing knowledge of ADB, PLN, and concerned government agencies, as well as on specific analysis carried out during program preparation. The PSSA is based on document reviews, meetings, and extensive discussions with PLN, field investigations, and interviews with relevant stakeholders. Based on the assessment, the program may trigger environment and involuntary resettlement safeguard principles of ADB's Safeguard Policy Statement (2009), but not safeguard principles for indigenous peoples.

3. The program's impact will be enhanced quality of life in Indonesian society with the sustainable use of electricity as a key driver of increased economic activity. The expected outcome is the achievement of an adequate and reliable power supply for Sumatra. This will be achieved through the following outputs during 2015–2019:

- (i) Output 1. Existing transmission system strengthened and expanded:
 - (a) existing 150 kilovolt (kV) transmission lines reconducted,
 - (b) 150 kV and 275 kV substations extended,
 - (c) 150 kV and 275 kV reactors and capacitors installed, and
 - (d) outgoing 20 kV switchgears at existing 150 kV substations expanded.
- (ii) Output 2. Existing distribution system strengthened and expanded:
 - (a) medium-voltage (20 kV) and low-voltage distribution network expanded and reinforced,
 - (b) distribution transformers installed,
 - (c) service connections and feeders installed, and
 - (d) customer meter boxes and circuit breakers installed.
- (iii) Output 3. Performance management and implementation improved:
 - (a) PLN staff training and certification programs accelerated, and
 - (b) obstacles in contract implementation processes analyzed and resolved.

A. Program Environmental and Social Impacts and Risks

4. PLN has a preliminary list of output 1 activities, which could be revised or expanded. While the general areas of output 2 are known, the specific sites will be determined during program implementation. Output 3 is related to improved performance management and implementation, and does not involve physical activities.

5. **Environment.** Activities that would be classified category A in ADB's Safeguard Policy Statement¹ will not qualify for results-based lending support.² Activities located in or directly adjacent to key biodiversity areas,³ in addition to national protected areas that include areas of wildlife sanctuaries or reserves, refuge for animals, and cultural heritage, will be excluded from the scope of the program.⁴ The program is categorized B for environment as the impacts are not deemed significant.

6. Construction-related impacts of reconductoring⁵ transmission lines are site-specific because (i) the activities will take place mainly at the height of the conductors using the existing transmission lines to string in the new ones, and (ii) existing access roads to transmission line towers are used on a routine basis for inspecting and maintaining the transmission line facilities. Disturbance of wildlife, if any, will be minor and temporary, since the existing habitat will not be permanently altered.

7. The program activities related to extending substations (including installation of reactors and capacitors, and expansion of switchgears) will take place in existing substation premises already owned and managed by PLN. Substation premises are surrounded by boundary fences and have access tracks spacious enough for heavy trucks. Construction-related impacts will be localized within or in the close vicinity of the PLN premises.

8. Expansion and reinforcement of the distribution network (including installation of distribution transformers, service connections and feeders, and customer meter boxes and circuit breakers) will generally take place in urban and community areas already subject to human disturbance. Environmentally sensitive locations are not likely to be impacted.

9. Potential construction-related impacts of activities include disturbance of vegetation, soil erosion, sedimentation, soil and/or water pollution by oil spills, noise, dust, vibrations, and generation of waste (including hazardous wastes). Transportation of equipment and materials may generate some noise, dust, and air pollution. Potential impacts during operations include trimming of trees within the right-of-way (ROW) of transmission and distribution lines (paras.11 and 13), soil and/or water contamination by oil spills from transformers at substations, and noise from transformers. The risk of bird collisions with transmission lines is considered to be low because activities in key biodiversity areas are excluded from the program (para.5). Potential risks to occupational and community health and safety include electromagnetic fields. All the impacts and risks are site-specific, and can be mitigated and/or managed by PLN's current practices.

10. **Involuntary resettlement.** The program is categorized B for involuntary resettlement as the impacts are not deemed significant.

¹ An activity would be classified category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. ADB. 2009. *Safeguard Policy Statement*. Manila. (para.50).

² Results-based lending for programs will exclude activities that would be classified category A in the Safeguard Policy Statement. ADB. 2013. *Piloting Results-Based Lending for Programs*. Manila. (para.66).

³ Key biodiversity areas are sites of international importance for the conservation of biodiversity through protected areas and other governance mechanisms. They are identified nationally using simple standard criteria, based on their importance in maintaining species populations, and informed by the International Union for Conservation of Nature.

⁴ No transmission lines and substations on PLN's preliminary list (para.4) is located in or directly adjacent to national protected areas although some of existing transmission line or substation assets in Sumatra are already located in or near environmentally sensitive locations.

⁵ Reconductoring is the term used by PLN to define the replacement of existing conductors with new ones.

11. Reconductoring of transmission lines is not likely to trigger involuntary resettlement because the activities will take place mainly within the existing 20-meter (m) wide ROW and will use existing access roads to transmission line towers (para.6). Nonland assets that are more than 3 m high in the ROW were removed when the existing transmission lines were installed. Trees growing taller than 3 m in the ROW are cleared regularly as part of transmission line maintenance. The landowners of the ROW are allowed to continue to use the land. However, the program activities could cause temporary damage of non-land assets (primarily trees and crops): (i) under the conductors mainly accidental in nature during reconductoring activities; and (ii) along access roads to transmission line towers for transportation of heavy equipment, such as puller-tensioners and conductor reel stands that will be used at the stringing site.

12. The program activities related to extending the substations (including installing reactors and capacitors, and expanding switchgears) will take place in existing substation premises already owned and managed by PLN, and will not trigger any involuntary resettlement. Activities that require land acquisition, if any, will be excluded from the program.

13. Expansion of the distribution network (including installation of distribution transformers) will require (i) use of no more than 0.2 square meters (m²) of land for installing concrete poles;⁶ and (ii) possible removal of non-land assets (primarily trees) located within 2.5 m of the conductors (within the 7 m wide ROW in the case of trees) during their stringing. Distribution transformers are classified into two categories based on mounting location: (i) pad-mounted transformers installed on concrete pads and locked in steel cases (no more than 9 m² required); and (ii) pole-mounted transformer installed high above on a utility pole. All distribution transformers will be installed on (i) the premises of customers who require power at the primary distribution level, which are generally large commercial centers or industrial complexes; (ii) public land⁷ or otherwise; and (iii) utility poles.

14. Installation of service connections and feeders, customer meter boxes, and circuit breakers do not trigger any involuntary resettlement because all service connections and feeders, customer meter boxes, and circuit breakers will take place in the premises of billed customers who have initiated the request to be connected and are willing to pay for the services.

15. **Indigenous peoples.** The program is categorized C for indigenous peoples as no program activity is expected to impact indigenous peoples. Although Sumatra is inhabited by a variety of ethnic groups, the program will not be in areas with Indigenous Peoples presence. The program will exclude activities that directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples, or affect the territories or natural or cultural resources that indigenous peoples own, use, occupy, or claim as ancestral domain or an asset. All existing substation assets in Sumatra are not located in an area (land or territory) occupied, owned, or used by indigenous peoples, and/or claimed as ancestral domain.

B. Safeguard Policy Principles Triggered

16. The ADB Safeguard Policy Statement has 11 environmental principles, which will all be

⁶ Diameter of the poles is 40 centimeters for medium-voltage distribution lines and 20 centimeters for low-voltage distribution lines.

⁷ The number of customers fed by a single pad-mounted distribution transformer varies depending on the number of customers in an area, thus the location of transformers can be selected quite flexibly by adjusting their capacity and coverage area.

triggered by the program. Of its 12 involuntary resettlement principles, 7 will be triggered, 5 will not: principle 3 on improvement or restoration of affected persons' livelihoods, principle 4 on assistance for physically relocated affected persons, principle 5 on vulnerable groups' living standards, and principles 8 and 9 on resettlement plan and its disclosure. The program's expected impact is minimal (paras.10–14). Deterioration of affected persons' livelihoods and physical relocation are not foreseen. Voluntary donations and negotiated settlements will be applied for the expected impacts.

C. Diagnostic Assessment

1. Assessment Methodology and Resources

17. The assessment incorporated a review of government laws and regulations pertaining to safeguards, PLN guidelines and guidance related to activities under the program scope and safeguards, and other PLN documents such as environmental impact assessment (EIA) reports and monitoring reports related to the program scope. The evaluation of government safeguard systems included reference to ADB's technical assistance for country safeguard systems in Indonesia.⁸

18. Meetings and extensive discussions were conducted with key PLN staff at headquarters and in regional offices who are working on safeguards in Sumatra. Field investigations were conducted for existing transmission lines, substations, and distribution lines, and at central warehouses for materials and wastes in Medan, Binjai, and Deli Serdang regency (North Sumatra Province) in April 2015 and Pekanbaru (Riau Province) in May 2015. Interviews were completed with provincial and district environment agencies (Badan Lingkungan Hidup Daerah) in Pekanbaru to validate the environmental assessment and monitoring and reporting procedures related to the program scope. Interviews with community stakeholders in Pekanbaru were held to gather information on their perspectives about PLN's safeguard implementation practices.

19. Main meetings included (i) a meeting on 24 April 2015 in Medan with representatives of PLN headquarters and regional units to share views on the findings during the field visit in North Sumatra province; (ii) a meeting on 7 May 2015 in Pekanbaru with representatives of PLN headquarters and regional offices and units to obtain their views, suggestions, and recommendations on the preliminary assessment findings and proposed actions to address gaps; (iii) a preliminary consultation meeting on 22 May 2015 in Jakarta with representatives of PLN headquarters to obtain their opinions on the first draft PSSA; and (iv) a wider consultation meeting on 19 June 2015 in Jakarta convening PLN headquarters and regional offices and units in Sumatra to obtain their views, suggestions, and recommendations on the draft PSSA.

2. Environment

20. The result of the diagnostic assessment of the government's current system (policy and legal frameworks), PLN practices, and the gap between them and the ADB Safeguard Policy Statement regarding environment is summarized in the Safeguards Diagnostic Assessment.⁹

⁸ ADB. 2010. *Technical Assistance for Strengthening and Use of Country Safeguard Systems*. Manila (TA 7566-REG); ADB. 2013. *Technical Assistance for Aligning Asian Development Bank and Country Systems for Improved Project Performance*. Manila (TA 8548-INO).

⁹ Additional Information to the PSSA (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

21. **Policy and legal frameworks.** Indonesia's EIA (AMDAL) is an assessment of the significant impacts of business or activities on the environment, which is necessary for decision-making regarding implementation of the business of activities. The AMDAL system, established in 1982, has been amended several times, most recently by a *Government Regulation No. 27/2012 Regarding Environmental Permit*, which is the derivative of *Law No. 32/2009 Regarding Environmental Protection and Management*.

22. The government's environment laws and regulations, specifically, *the Ministry of Environment Regulations (MOERs) No. 05/2012 Regarding Type of Activities Requiring AMDAL, No.16/2012 Regarding Guidelines for Preparation of Environmental Documents, No. 17/2012 Regarding Guidelines for Public Participation in AMDAL Process and Environmental Permit* prescribe the requirements for AMDAL, environmental management efforts and environmental monitoring efforts (UKL/UPL),¹⁰ or letter of commitment for the environmental management plan and environmental monitoring plan (SPPL),¹¹ environmental permit process, guidelines for preparing environmental documents, requirements of community involvement, public consultation and grievance redress mechanism, and implementation and monitoring of appropriate mitigation measures to address adverse environmental impacts.

23. In addition, *Government Regulation No. 101/2014 Regarding Management of Toxic and Hazardous Waste Substances* regulates the management and disposal procedures for toxic and hazardous waste substances. *Law No. 14/2008 Regarding Public Information* guarantees the provision of correct information to the public as a form of public service. *Law No. 13/2003 Regarding Manpower*, and *Government Regulation No. 50/2012 Regarding Practice of Health and Safety Management System* ensure the right of every worker to protection, health, and safety to achieve optimal work productivity; and require implementation of a health and safety system. *Presidential Decree No. 32/1990 Regarding Management of Protected Area* regulates the procedures and mechanisms for the preservation of protected areas and *Law No. 11/2010 Regarding Physical Cultural Resources* for cultural heritage.

24. **PLN practices.** Based on the assessment of current PLN practices, PLN, as a corporate entity, will adopt and comply with the MOERs for the conduct of environmental assessment in securing environmental clearance for substations and transmission lines, as well as with other laws and regulations related to solid waste, hazardous waste, pollution control, forest management, environmental monitoring and reporting, information disclosure, and community involvement. Where the environmental impacts of distribution lines are not covered by the national government's legal framework, environmental mitigation measures are specified in *the decree of the PLN Board of Directors (PLN decree) No. 473/2010 Regarding Construction Standard for Low Voltage Power Network*¹² and *PLN Decree No. 606/2010 Regarding Construction Standard for Medium Voltage Power Network*.¹³ PLN implements good practices on managing environmental impacts such as meaningful consultation,¹⁴ provision of waste

¹⁰ This pertains to the management and monitoring efforts of businesses and /activities that have no significant impacts on the environment, which are necessary for the process of the decision- making regarding the implementation of the businesses and /activities.

¹¹ This is a statement regarding the undertaking to monitor and manage the environmental impact of businesses and activities that are exempted from the AMDAL or UKL/UPL.

¹² PLN. 2010. *Lampiran Keputusan Direksi PT PLN (Persero)/Nomor:473.K/DIR/2010 Buku 3–Standar Konstruksi Jaringan Tegangan Rendah Tenaga Listrik*.

¹³ PLN. 2010. *Lampiran Keputusan Direksi PT PLN (Persero)/Nomor:606.K/DIR/2010 Buku 5–Standar Konstruksi Jaringan Tegangan Menengah Tenaga Listrik*.

¹⁴ Meaningful consultation is a process that (i) begins early in project preparation and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is

storage and segregation, and use of environmentally accepted equipment such as nonpolychlorinated biphenyls (PCB) transformers. To address the potential risks for workers' health and safety, PLN established an occupational health and safety management system (SMK3) for transmission lines, substations, and distribution lines; it has been successfully implemented.

25. PLN operations units conduct regular monitoring during construction and/or rehabilitation and operation of each transmission line and substation. Measurements of electromagnetic fields are conducted twice a year. An external monitor conducts an annual validation of the internal monitoring results. At least every 2 years, ambient air quality, surface water quality, and noise at and around transmission lines and substations are measured (the frequency depends on the EIA result) to comply with the MOERs and the occupational health and safety management system. The quantity of hazardous waste generation is also monitored. Environmental monitoring reports are submitted to provincial and district environment agencies semiannually. In addition, each PLN regional office and unit conducts public consultations twice a year on health and safety and other environmental and social safeguard issues related to its activities, and reports the results to PLN headquarters through quarterly performance reports on occupational health and safety and quarterly environmental performance reports, each of which includes the result of occupational health and safety management system implementation monitoring, and environmental and social monitoring.

26. PLN has a very effective complaints management system through (i) call center 123, which can be accessed by anyone anywhere in Indonesia through the website, email, telephone, and social media; (ii) online by using integrated complaint solving application (APKT); and (iii) frontline, i.e., customer services. PLN regional offices and units immediately act on community complaints including those related to construction impacts, environment, community health and safety, and resettlement issues, by deploying PLN technical service responders.

27. **Gaps identified.** The government's environmental screening under *MOER No. 05/2012*, mainly uses a prescriptive list with thresholds of proposed activity, whereas ADB screens based on the significance of impacts. In addition, limited data and information is available to serve as a reference for the sustainable use and control of biodiversity, although an AMDAL is required for businesses and activities to be located in or directly adjacent to protected areas, which include critical or natural habitats. Thus the program will adopt screening criteria to exclude activities located in or directly adjacent to protected areas.

28. The government's legal framework exempts distribution line activities from an environmental assessment, provided that they are not located in or directly adjacent to protected areas. However, considering that the scale of the impact is site-specific and that environmental mitigation measures are implemented following the PLN decrees, the current practices will be sufficient to manage the environmental impacts. According to PLN regional offices and units, no outstanding issues or complaints regarding adverse environmental impacts caused by distribution lines have ever been reported.

understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. ADB. 2009. *Safeguard Policy Statement*. Manila (para.54).

29. Field visits of substations noted that some substations did not have any oil containment system around operating transformers, which increases the potential for oil spills and contamination of nearby surfaces. Provision of having such an oil retention facility was also missing from some AMDALs prepared for the existing substations. The program requires a system to ensure the provision of an appropriate oil retention facility.

30. A field visit to a central warehouse of a distribution system observed notable spillage of oil from some transformers. The implementation of environmental mitigation measures to manage industrial wastes including hazardous wastes has flaws. The management of industrial waste can be improved in terms of avoiding and managing oil spillage and utilizing only a government-recognized third party when disposing of hazardous wastes. An appropriate permit for disposal of hazardous wastes is also necessary.

31. Assessments undertaken are of the view that the environment safeguard system currently in place through the government's environmental laws and regulations as well as PLN's internal guidelines (PLN decrees) are sufficient to comply with the ADB Safeguard Policy Statement principles that are triggered. However, PLN can improve current practices of waste management and ensure consistent compliance with the government's environmental requirements.

3. Involuntary Resettlement

32. **Policy and legal frameworks.** The key legal instruments currently in force in Indonesia related to involuntary resettlement are *Law No. 02/2012 Regarding Land Acquisition for the Development of Public Interest* and its implementing regulations. The law and regulations cover land acquisition required for "development of public interest", which is assigned to state-owned enterprises by the government. Land acquisition for the purpose of providing electric power that is not based on a government assignment will be regulated by *PLN Decree No. 0289/2013 Regarding Land Acquisition for the Purpose of Providing Electricity, Operational Costs of Land Acquisition, and Operational Cost of Compensation*.¹⁵ *PLN Decree No. 0289/2013* covers (i) direct land acquisition to be used for tower siting, major electricity substation, network, transmission, distribution, power plant, and office, by giving indemnity; and/or (ii) indirect land acquisition for creating free space by giving compensation for the land crossed by the electricity network and transmission and by giving indemnity for the plants and buildings. As for compensation to owners of land, building, trees and other objects under the transmission line of above 35 kV which will be formed as free space, *the Ministry of Energy and Mineral Resources Decree No. 38/2013 Regarding Compensation of Assets in the ROW of Transmission Line* establishes procedures, mechanisms, and formulas for compensation.

33. No system (policy and legal frameworks) covers the resettlement impact caused by the program. *Law No. 02/2012* will not be triggered because the activities under the program are not considered as being assigned by the government. *PLN Decree No. 0289/2013* does not mention use of land (not "direct land acquisition") for distribution lines (concrete poles) and indirect land acquisition for creating "free space" under distribution lines (i.e., removal of non-land assets for stringing of conductors). *PLN Decrees No. 0289/2013* and *No. 38/2013* do not cover the temporary impact caused by construction or rehabilitation works (i.e., damage on non-

¹⁵ PLN. 2013. *Keputusan Direksi PT PLN (Persero)/Nomor:0289.K/DIR/2013 Tentang Pengadaan Tanah Untuk Kepentingan Penyediaan Tenaga Listrik Biaya Operasional Pengadaan Tanah Dan Biaya Operasional Kompensasi Di Lingkungan*.

land assets caused during reconductoring of transmission lines).

34. **PLN practices.** For reconductoring of transmission lines, PLN conducts meaningful consultation with potential affected persons in conjunction with the contractors prior to civil works. Possible damage is unknown during consultation, because it is mainly accidental in nature during civil works (para.11). Potential damage of non-land assets and compensation for the damage are well explained to the potential affected persons prior to the commencement of civil works to avoid problems after the occurrence of damage. For any damage to non-land assets (primarily trees and crops), the affected persons are provided with compensation by contractors based on negotiated settlement referring to the local market rate of the assets. The cost of compensation is borne by the contractors as part of overheads, contingency, and profit.

35. For the installation of distribution lines, PLN starts meaningful consultation from the planning stage. The agenda of the consultations includes the project plan, cable stringing that may require removal of non-land assets (mainly trees), and agreement with landowners for the use of land if poles need to be located on private land.

36. PLN, in conjunction with contractors, facilitates the planning of the alignment and the design of the distribution line in close coordination with (potential) affected persons, beneficiaries, and relevant government agencies such as the Ministry of Public Works and Housing (which has authority regarding national roads) and local governments (which have authority regarding regional roads), because the distribution lines are installed along public roads mostly on or close to the border between public land and private land. The alignments of distribution lines, including the location of utility poles, can be changed if needed. The distance between the poles varies from 60 m to 80 m for medium-voltage networks and 30 m to 40 m for low-voltage networks. Even within the same alignment, the conductors are able to avoid disturbance of non-land assets (mainly trees) by setting the height of poles and conductors higher or by replacing the bare cable with an insulated cable that can go along or through obstacles including trees. This flexibility allows PLN to optimize the alignments of distribution lines including the locations of utility poles taking into full consideration the opinions and requests of stakeholders. PLN's practice is to minimize the siting of concrete poles on private land and to avoid disturbance of non-land assets to the maximum extent possible or else to obtain concurrence of the affected persons well in advance, during the planning stage for the use of private land for utility poles and removal of non-land assets. In the case of Sumatra, on average, less than 5% of medium-voltage utility poles and no more than 50% of low-voltage utility poles are located on private land. If a pole with a distribution transformer needs to be located on private land, written permission for the use of the land is obtained from the landowners following *PLN Decree No. 0605/2010 Regarding Construction Standard for Power Distribution Substation*.¹⁶

37. If a distribution line is installed upon the request of a community, the head of a village submits a statement letter on behalf of the community group (including affected persons) signed by the community representatives with a written commitment to bear any costs, damages, or any other impacts incurred due to the project without any compensation whatsoever. Thus no compensation is provided to the affected persons. For other cases, if utility poles need to be located on private land except for those with distribution transformers (para.36), then only a verbal agreement from the landowner is obtained. If non-land assets need to be removed, the

¹⁶ PLN. 2010. *Lampiran Keputusan Direksi PT PLN (Persero)/Nomor:605.K/DIR/2010 Buku 4–Standar Konstruksi Gardu Distribusi Dan Gardu Hubung Tenaga Listrik*.

affected persons will be provided with a “cutting cost” for the affected trees (in lieu of compensation) or compensation for other non-land assets, if any, only if requested by the affected persons. The “cutting cost” or compensation, if any, is handled by contractors based on negotiated settlement referring to the local market rates of the assets. Contractors bear the cost of compensation as part of the mobilization cost needed for the clearance of the project site. The budget for such compensation is covered by their overheads, contingency, and profit.

38. The grievances related to these resettlement impacts are received and resolved through the comprehensive complaints management system (para.26).

39. **Gaps identified.** The result of the diagnostic assessment of PLN practices and gap with ADB’s Safeguard Policy Statement regarding involuntary resettlement are summarized in Additional Information for the PSSA (footnote 9).

40. While no system (policy and legal frameworks) covers the resettlement impact triggered by the program (para.33), PLN practices adopted for the program’s impact do not imply expropriation based on eminent domain and thus do not trigger ADB’s Safeguard Policy Statement.¹⁷ The distribution line facilities do not need to be at specific locations. Meaningful consultation is conducted from the planning stage, allowing the affected persons to be fully involved in the decision making for the distribution line alignment and design. The affected persons are fully knowledgeable about the project and its implications and consequences, and freely agree to participate. They have the option to agree or disagree with the impact, without adverse consequences being imposed on them either formally or informally by the state.

41. Identified gaps between PLN’s practices and the ADB principles revolve around principles 6 and 12. Negotiated settlements for “cutting cost” or compensation for non-land assets are handled exclusively by contractors, only upon a request from the affected persons in the case of distribution lines, and not monitored by PLN or any third party. While meaningful consultation with the affected persons is carried out, the information of “adequate” and “fair” price of affected assets may not be provided to the affected persons during the negotiation, although the rates are negotiated based on local market rates, which are well known by all stakeholders. The negotiation and settlement processes are not documented, while written consensus and permission is obtained for impacts caused by distribution line facilities requested by communities and utility poles with transformers.

42. Based on the field visits in urban and rural areas and interviews with some affected persons, and considering the nature and scale of the impacts caused by the program, the current practices are assessed to be sufficient to manage the risks and are unlikely to affect the income and livelihood status of the affected persons. However, PLN needs to monitor the resettlement outcomes and their impacts on the living standards of displaced persons, and take necessary actions if the impacts are found to affect the income and livelihood status of the affected persons.¹⁸

¹⁷ Resettlement is considered involuntary when displaced individuals or communities do not have the right to refuse land acquisition that results in displacement. This occurs when (i) lands are acquired through expropriation based on eminent domain; and (ii) lands are acquired through negotiated settlements, if the expropriation process would have resulted in the failure of negotiation. ADB. 2009. *Safeguard Policy Statement*. Manila. Appendix 2, para.5.

¹⁸ Involuntary resettlement principle 6 states “Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated

4. Institutional Arrangements

43. PLN has seven regional offices (*wilayahs*) in Sumatra, which cover Aceh; North Sumatra; West Sumatra; South Sumatra, Jambi, and Bengkulu; Riau and Riau islands; Bangka Belitung; and Lampung. They are responsible for the construction, operation, and maintenance of distribution lines. PLN's regional units in Sumatra are development units (UIPs), which are responsible for the development of substations and transmission lines and Sumatra load dispatch center (P3BS), which is responsible for the operation and maintenance of substations and transmission lines. Sumatra has two development units: (i) in Medan, covering North Sumatra (Medan), Aceh, Riau, and West Sumatra provinces; and (ii) in Palembang, covering South Sumatra, Jambi, and Lampung provinces.

44. PLN is a decentralized operation, and therefore has dedicated safeguard staff at headquarters and in regional offices and units. Headquarters staff is responsible for policy matters while regional staff is responsible for the delivery. At PLN headquarters, the Environmental Planning and Management Unit in the Systems Planning Division under the Director of Corporate Planning, comprises four full-time staff, who handle environmental and social safeguards issues all over the country. Each PLN regional office has a safeguard unit with two or three staff depending on the number and scale of projects allocated. It oversees the compliance of safeguard-related laws and regulations and PLN guidance. Each PLN development unit also has a safeguard team, comprising about 10 staff members. It handles environment and land acquisition issues. In some cases, to accelerate the implementation of safeguard measures, PLN establishes a project implementation unit for specific projects. At PLN load dispatch center, the safeguard issues are handled by staff in the main section, because load dispatch center is responsible only for operation and maintenance, and is rarely tasked with any environmental or land acquisition issues.

45. Since 1967, PLN has implemented many power subsector projects including transmission lines, substations, and distribution lines, some of which have been funded by multilateral agencies. PLN has accumulated adequate knowledge and experience in handling environmental and social safeguard issues. To enhance their capacity, PLN staff attend trainings (including training on environmental and resettlement safeguards) provided by the Education and Training Unit of PLN Corporate University. All staff are entitled to select and attend trainings twice a year. In addition, several PLN staff have been enhancing their understanding of social and environmental safeguards by participating in external training conducted by ADB.¹⁹ Some PLN staff also participate actively in discussions on the equivalence assessment of country safeguard systems for resettlement and environmental safeguards conducted under ADB technical assistance (footnote 8).

46. **Weakness in implementation effectiveness of the safeguard system.** On the basis of this assessment, PLN's capacity is deemed adequate. However, during field visits, weak

settlements will maintain the same or better income and livelihood status." ADB. 2009. *Safeguard Policy Statement*. Manila. p.17.

¹⁹ The external training includes (i) training on involuntary resettlement in 2010 through ADB. 2007. *Technical Assistance for Training Involuntary Resettlement and Capacity Development* (TA 6425-REG). Manila; (ii) training on social safeguards for land acquisition for the development of public interest conducted in 2014 through the subproject: Capacity Development for Social Safeguard Preparation and Implementation in Water Resource Management and Energy in Indonesia under TA 7566-REG (footnote 8); (iii) discussion and workshop for strengthening the AMDAL system through the subproject: Strengthening Capacity of Indonesia's Environment Impact Assessment (AMDAL) System under TA 7566-REG (footnote 8).

application of waste management was found to be an outcome of low staff awareness about the related regulatory framework and guidelines (para.30). Robust in-house refresher training is to be conducted annually for PLN staff from headquarters and regional offices and units in Sumatra to increase the awareness of safeguard requirements and ensure their proper implementation. Focal persons for environmental and social safeguards of the program will be assigned at headquarters and each office and unit to ensure compliance with the safeguard program actions.

D. Safeguard Program Actions

47. Given the assessment, and considering the scope and scale of the impacts and the risks, seven program actions are proposed to address the identified gaps and weaknesses (Table 1). The detailed safeguard program actions with their indicators and targets, responsibility, time frame, and budget resources are presented in Additional Information to the PSSA (footnote 9). PLN has adequate capacity and has agreed to implement these actions. ADB will monitor implementation during program implementation.

Table 1: Safeguards Program Actions

Actions	Responsible Agencies^a	Time Frame
1. PLN headquarters issues guidance on screening criteria for selecting locations and components to ensure that the program will exclude (i) activities that would be classified environment category A in the ADB Safeguard Policy Statement; (ii) activities related to extension of substations, installation of reactors and capacitors, and expansion of switchgears that require land acquisition; and (iii) activities that directly or indirectly affect the dignity; human rights; livelihood systems; or culture of indigenous peoples; or affect the territories or natural or cultural resources that indigenous peoples own, use, occupy, or claim as an ancestral domain or asset. PLN <i>wilayahs</i> , UIPs, and P3BS submit to PLN headquarters a list of activities excluded from the program following the guidance issued through this program action annually.	DIV K3L DIV PR SUM DIV KR SUM PLN <i>wilayahs</i> UIPs P3BS	Prior to the first disbursement and 2016 onwards
2. Equip transformers with oil retention facilities at substations extended under the program.	UIPs	2016 onwards
3. Improve the management of industrial waste.	PLN <i>wilayahs</i>	Within a year of program commencement
4. Monitor the resettlement outcomes and their impacts on the living standards of displaced persons through reviewing complaints received and conducting consultations with the community, and take necessary actions if the impacts are found to affect the income and livelihood status of the affected persons. ^b Implementation of this program action will be reported to relevant divisions semiannually.	DIV K3L DIV PR SUM PLN <i>wilayahs</i> P3BS	2016 onwards
5. Appoint focal persons to implement environmental and social safeguard activities.	DIV K3L PLN <i>wilayahs</i> DIV PR SUM UIPs P3BS	4 th quarter 2015
6. Build capacity of relevant field personnel at related divisions,	DIV K3L	Every 4 th

Actions	Responsible Agencies ^a	Time Frame
<i>wilayahs</i> , UIPs, P3BS, and contractors on environmental and social safeguards focusing on the safeguard program actions.	PLN <i>wilayahs</i> DIV PR SUM UIPs P3BS	quarter starting from 2015 onwards
7. Monitor and ensure the implementation of program actions 2 and 3, and report the results quarterly to DIV K3L through the environmental performance report.	DIV K3L PLN <i>wilayahs</i> UIPs	2016 onwards

DIV K3L = Health, Safety, and Environment Division, DIV KR SUM = Sumatra Construction Division, DIV PR SUM = Sumatra Development Division, PLN = Perusahaan Listrik Negara (State Electricity Corporation), P3BS = Pusat Penyalur dan Pengatur Beban Sumatera (Sumatra Load Dispatch Center), UIP = Unit Induk Pembangunan (Development Unit), wilayah = regional office.

^a The agencies listed are subject to revision in light of PLN's reorganization on 7 August 2015.

^b Resettlement means removal or damage of non-land assets and use of private land for installation of concrete poles.

Source: Asian Development Bank.