

Human Rights Risk Assessment

Thaton Power Station

NOMOGAIA, 2014



Human Rights Risk Assessment conducted by NomoGaia, evaluating The Electric Power Project (P143998), the World Bank-funded refurbishment of the Thaton Power Station, in Mon State, Myanmar.



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1. INTRODUCTION

The World Bank is funding the replacement of a 40-year-old, gas-fired power station in Myanmar – the Thaton power plant, in Mon State. The \$140 million project involves construction of a turnkey operation including two gas-fired turbines and a steam turbine, which will double the electrical output of the power plant without increasing emissions. As project documents note, “Thaton’s plant is more dangerous than other plants, and is in need of urgent improvement to meet international safety regulations” (Annex 2, Detailed Project Description). There is a clear need to modernize Myanmar’s electricity infrastructure, and, done right, Thaton is a useful place to start.

2. PROJECT OBJECTIVES

Negotiations with the Government of Myanmar within the World Bank’s Country Partnership Framework have resulted in the prioritization of electricity generation over grid expansion. There is unquestionably a generation capacity need. However, the project’s scope should not be narrowed to the extent that it undermines human welfare or project security. Rather, in its implementation it should uphold the World Bank’s priorities of reducing inequality, supporting the peace process, and engaging marginalized groups. Intended beneficiaries for the project include “poor people,” and the project is designated as “rural development.” Ensuring that rural beneficiaries benefit is central to the World Bank’s Myanmar strategy.

The project is expected to contribute to the second pillar of the World Bank’s Myanmar strategy by “building confidence in the ongoing reform process” (Interim Strategy Note 2012). Although indicators are not provided to document the ways in which the project bolsters reform, the Project Appraisal Document calls for “quick and tangible impact” for communities in association with the project. Specific, achievable indicators associated with the project are recommended in this document.

Presently, the important World Bank objectives outlined above are subsumed under a Project Development Objective that limits itself to the output of electricity.

3. PROJECT RISKS

Project documentation identifies three main risks that could destabilize the project.¹ These are:

1. Fuel supply risks if the government opts not to allocate the needed gas to the facility,
2. Fuel price volatility, which could compromise the financial stability of MEPE and
3. Limited government capacity and attention to plant needs, which could affect personnel skills training, maintenance needs and other operational essentials.

However, infrastructure projects also present human rights risks, which can have material impact on feasibility. From this perspective, a fourth risk is apparent:

4. Deterioration of the fragile ceasefire established two years ago between ethnic armed organizations (particularly the Karen National Union (KNU) and the New Mon State Party (NMSP) and the Government of Myanmar.

4. HUMAN RIGHTS RISKS

Some human rights risks are material to project sustainability and feasibility. The termination of a ceasefire agreement would impact both project feasibility and human rights. Other human rights risks are not material to the project but are in violation of World Bank principles for responsible development. Damage to health and the environment does not affect project viability but may undermine the World Bank’s lending position on future projects, by sending the message that World Bank due diligence is not sufficient to protect populations from harm. Both types of human rights risks are present at Thaton if not mitigated.

¹ World Bank, Strategic Context, Paragraph 71

4.1. Fragility of Ceasefire – Exacerbated Inequality

The potential for renewed conflict has gone unaddressed in project documents, resulting in analytical gaps that, without mitigation, increase project risk and human rights risk. Thaton power station came under heavy attack at least four times during the war between the KNU and the Tatmadaw between 1975 and 1991. The power plant and associated tire factory were erected on Karen farmlands, causing forced relocation and creating a state of perpetual of insecurity for the local population, which is still palpable today. The ceasefire between the KNU and the Government of Myanmar hinges on a government commitment to “support the basic needs of the people and ensure that development projects have the full participation and support of local villagers” (Point 4, Ceasefire Statement). Although the World Bank considers the Karen people indigenous, no indigenous peoples assessments or planning frameworks were produced. It was argued that because Karen people living near the power plant comprise the “majority of beneficiaries,” they needed no separate assessment. However, the Karen people in the vicinity represent a highly underserved population in terms of electrical connectivity. Their houses, schools and healthcare workers operate without electricity. Given their extreme poverty (17% are food poor, as defined by UNDP in the Integrated Household Living Conditions Survey 2009-2010 to represent households that cannot purchase sufficient food to meet their caloric needs), they do not have access to transportation to seek job opportunities in urban Thaton, where increased power generation could positively impact job creation. Rather than beneficiaries, they may be uniquely negatively impacted, experiencing environmental impacts of the power station without benefitting from employment, electricity or the use of electrified facilities.

In addition to the disparate impact project development is likely to have on the impoverished communities near the power station, Thaton refurbishment social teams have also failed to meaningfully engage with Karen stakeholders. Engagement was attempted in the Burmese language, but the majority of the local population speaks only the Karen language fluently. Most Karen villagers remain uninformed about the project. The lack of input from the most marginalized residents near the project site is a twofold problem. In concrete terms, social impact assessors failed to gather local perspectives. Symbolically, the decision not to engage with Karen people in the Karen language signals a disregard for Karen perspectives.

The Karen are highly sensitive to actions by the Government of Myanmar perceived to alienate them from public participation; a 60-year war was waged in the name of self-determination, and a peacetime failure to involve Karen people in infrastructure decision-making undermines government commitments to be more inclusive. Interviews conducted in 2013 and 2014 throughout Mon and Karen regions found that local people felt threatened by international organizations “who are being closely directed by the government” (Asia Foundation, 2014). The Myanmar Peace Support Initiative has found widespread concern that increased government involvement in ethnic minority lands “could promote the government’s perceived economic and political agendas” (MPSI, 2014). To date, Thaton engagement has done nothing to invalidate these fears. Social impact assessors documented “broad community support for the project,” but only from the Burmese-speaking residents, who are disproportionately well off. In Burmese-language consultations, non-Karen residents professed to speak for Karen people and act as their representatives. This type of paternalism is perceived as condescending and disempowering by Karen communities.²

Although the value of consultations was limited by language restrictions, at least one key area of disjoint between project designs and community interests was revealed. Consultation documented “broad community support,” but only on the condition that local people would receive access to electricity. The Thaton project will not provide improved electricity to local communities. The World Bank proposes to consider Thaton community electrification through the National Electrification Plan (NEP), however the NEP investigations, conducted jointly by the World Bank, Asian Development Bank (ADB) and Japan International Coordination Agency (JICA), have not included Mon or Karen States. The ADB’s current Power Distribution

² Kim Jolliffe, Interview; Asia Foundation, 2014

Improvement Plan is only designed to improve access in townships within Yangon, Mandalay, Saigaing and Magway regions.³ Current power projects increase disparities in poverty indicators between ethnic minorities and Burmans.

4.2. Health and Environment Risks

Thaton has operated for 40 years. Staff have used hydrochloric acid to lower the pH of process water, caustic soda to raise it and phosphoric acid to soften the water. They have run the plant on crude oil when gas lines stopped flowing. Oil was carted to site in drums that have not been disposed of for years or decades. Tanks and drums used to transport these materials sit in storage rooms, empty fields and roadsides, untreated. Adjacent to the power plant, two large transformers ramp up voltage for transmission. Thaton dates to an era when PCBs were commonly used as dielectric fluids in transformers.

The project ESIA included no soil or water testing. As a result, soil levels of total petroleum hydrocarbons (TPH), petroleum product compounds (BTEX) and PCBs are unknown. Local residents drink from bucket wells, located downslope from the power plant. Their paddies are in valleys downstream from the power plant. It is unclear whether drinking water or irrigation water is currently safe for villagers, which makes it impossible to monitor negative impacts associated with construction or positive impacts associated with site redevelopment. If TPH levels are high in the soil directly beneath the plant site, there is reason for concern about worker safety. Soil vapors seep up from TPH-affected soils. In a closed space such as the new Thaton power plant, that could affect worker health.

5. MANAGING RISKS: WORLD BANK RESTRUCTURING

The World Bank has recently shifted to a new model for managing projects, involving technical and cross-cutting experts. It is not currently clear how the new organization will operate in practice, however certain global practice groups should have a clear role in decision making for the Thaton Project. Inclusion of the Energy Global Practice group is natural. Additionally, Global Practice groups pertaining to Urban, rural & social development; Fragility, conflict & violence (a cross-cutting group) and Environment & natural resources should be incorporated into project implementation processes. Input from these technical experts should guide the selection of bids and the finalization of terms with the successful project bidder to ensure that various World Bank and Myanmar aims are met.

5.1. Fragility, Conflict & Violence, interacting with Rural Development

5.1.1. Indigenous People's Assessment

Although Safeguard OP/BP 4.10 on Indigenous Peoples was triggered in Project Appraisal, no indigenous peoples assessment was conducted. The stakeholder engagement conducted at site was conducted in Burmese language and, as a result, focused predominantly on the concerns of the relatively advantaged ethnic Burmans who have compounds in local villages. The need for an indigenous people's assessment derives from the fact that local languages, lifestyles, cultures, livelihoods and access to services are significantly different for the Karen community members than from the Burmans. In the course of a 60-year conflict, the central government employed tactics to alienate and isolate ethnic armed organizations by impoverishing villagers that might otherwise provide them support. Referred to as Four Cuts, this approach significantly curtailed ethnic minorities' access to crops, food, education, medicine, communications and basic security.⁴ It has wrought lasting deprivation for ethnic minority villagers, isolating them from development and creating cycles of disempowerment.⁵ Completion of an indigenous people's assessment (conducted by a team that includes ethnic Karen and Pa'O) that evaluates existing cycles of disempowerment

³ ADP Power Distribution Improvement Project- Program Administration Manual

⁴ BPHWT. Diagnosis: Critical – Health and Human Rights in Eastern Burma. October 2010; TBC displacement reports

⁵ Engvall and Linn, Development, Natural Resources & Conflict in Myanmar, <http://www.eastasiaforum.org/2013/06/13/development-natural-resources-and-conflict-in-myanmar/>

and causes of disparity should reveal recommendations for mitigation that support local culture while improving standards of living for the least empowered.

5.1.2. Inclusive engagement process and grievance mechanism

Project documents require the development of a community grievance mechanism at Thaton. This is an important component of Technical Assistance but also a complicated one. Karen villagers are extremely reluctant to express grievances, partly because they have historically been victimized by armed groups – both rebel and government – that had a presence in the area, and partly because their hierarchical social system discourages complaints. In Karen patron-client relationships, political leaders are expected to care for the needs of community members, and community members are expected to treat leaders with deference. As such, Karen villagers require direct encouragement from their leaders to speak out. Furthermore, because villagers have grown accustomed to fielding conflicting demands from a variety of authorities on both sides of the conflict, authorities should jointly visit villages together, demonstrating that their aims and interests align and that collaboration is sincerely pursued. To elicit grievances, Karen political leadership, in collaboration with Myanmar government leadership, and perhaps also accompanied by Mon leadership, as Thaton is located in Mon State, should visit villages to present the concept of a grievance mechanism and to request that villagers help develop and then use it.

An inclusive grievance mechanism should be designed with the particular complexities of local culture in mind. Specifically, such a procedure should:

1. Create a direct channel for complaint from affected people to the project proponent (World Bank and contractor)
2. Be accessible through all local languages and respectful of all cultures,
3. Incorporate ethnic minority political leadership (per terms of the current ceasefire agreements) and
4. Be validated by the community, in partnership with relevant community-based organizations (Karen Human Rights Group, Karen Environmental Working Group, other) to ensure it suits their needs and is understood by all.

5.1.3. Incorporation of community grievances into project design and management

The community, in Burmese language consultations, has already issued a first grievance that, to date, has not been addressed. Despite living in the direct vicinity of the power plant and alongside numerous power lines, the local community does not have effective access to electricity. The community has offered 100% support for the project **on the condition that they receive improved access to electricity**. The lines to which a very small percentage of households are connected are inadequate and unsafe. Voltage drops and surges destroy electrical equipment, and voltage losses through inefficient wires result in extremely low quality of power to households.

The most straightforward way to ensure legitimacy of a grievance mechanism is to demonstrate its responsiveness. Villagers have already complained that their access to electricity is too limited, and the project should respond to this. Improvement to local power access is a low-cost, high-reward approach. According to the US Energy Information Administration, rural residents require 50-75 kWh per person per year to meet basic energy needs. As a fraction of power generation at Thaton after refurbishment, the entire community could be electrified for roughly 0.02% of Thaton's capacity (assuming the plant operates at 70% efficiency).

Karen groups, particularly the more militant ones, have begun to question the good-faith efforts of development and aid organizations collaborating with the Government of Myanmar.⁶ The direct and tangible

⁶ <http://www.irrawaddy.org/feature/magazine-feature/talking-peace-thinking-war.html>; <http://www.irrawaddy.org/contributor/deeds-peace.html>; Rightsholders and stakeholders in Thaton and near the

benefits from increased local electrification would validate the terms of the ceasefire and strengthen the peace process.

5.1.4. Evaluation of the viability of providing subsidized connections to certain households

Not all households will be able to afford connections. Field research in Thaton aligns with the World Bank's poverty and social impact assessment (PSIA) research in finding that some households are too poor and marginalized to afford electrification. Some interviewed rightsholders see no value in electrification. Others see its value but do not have resources to reallocate to monthly tariffs. The National Electrification Plan under development by the World Bank, the Asian Development Bank and other international and national partners proposes a subsidy scheme. Thaton would be an ideal place to pilot that scheme, as the cost of transmission infrastructure would be very low, the population is rural and underserved, and the increase in power generation makes local allocations negligible in terms of national generation needs.

5.2. Health, Environment & Natural Resources

The Implementation Support Plan commits environmental specialists to provide twice-yearly support to MOEP and MEPE. Thaton is a brownfield site, where crude oil storage was unsafe and hydrochloric acid spills remain visible to the eye. Redevelopment of brownfield sites can have documented positive impacts on water quality, air quality and soil pollution reduction. Key considerations are the contaminants present, the pathways for contaminants to migrate, including where crops are irrigated and where people source drinking water, and the receptors, which could include animals consumed by local people as well as people themselves. To ensure that environmental risks from the deteriorating existing plant are monitored and minimized, and to track potential benefits from the new plant, a number of benchmarking indicators are proposed. They are in line with World Bank guidance on redeveloping brownfield sites.⁷

5.2.1. Drinking Water, Food Sources

While burning natural gas to generate electricity generally has few direct impacts on soil and water quality, peculiarities of the Thaton plant present concerns about pollution. For decades, when the government allocated insufficient natural gas to Thaton, crude oil (or heating oil) was used to fire the plant. Oil was transported to site in drums, which are currently stored stacked in warehouses, where residues in them leak. Water treatment for process water (received from the tire factory) involves use of hydrochloric acid, caustic soda and trisodium phosphate. None of these chemicals are safely stored. Caustic soda sacks have torn open and spilled onto warehouse flooring. Hydrochloric acid drums are stacked outside the warehouse, lining the roads, and scattered around site. Finally, transformers adjacent to the power plant have been in operation for 40 years. At the time Thaton was built, PCBs were commonly used dielectric fluids.

Well water from local communities, paddy water and project area soils should be tested for total petroleum hydrocarbons (TPHs), the BTEX suite of chemicals, which are associated with petroleum brownfield sites, and PCBs. Water should also be tested for pH and phosphate, given the inadequate storage of water treatment chemicals and the known negative impacts of phosphate in water sources (strongly caustic).

It is impossible to evaluate the health risks associated with leakages of chemicals and hydrocarbons without monitoring soil and water data. No Thaton project documents, including the ESIA, included soil, water or air quality sampling.

5.2.2. Workplace Safety

power station also expressed skepticism about ongoing discussions with the Government of Myanmar, frequently mentioning that Karen groups were rearming in the hills.

⁷ <http://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/brownfields.pdf?resourceurlname=brownfields.pdf>

Both the construction of the new facility and the continuing presence of the old facility have implications for worker health and safety. If the new plant is built atop a TPH plume, workers could be exposed to hazardous vapors seeping up from the soil. Depending on the outcome of soil and water sampling, soil vapor sampling may also be necessary. At a minimum, the existing hazardous waste materials (empty drums, torn chemical bags, asbestos tiles) should be removed from site and disposed of properly.

6. BENCHMARKING OUTCOMES

Annex 5 of the appraisal document (Implementation Support Plan) commits environmental and social specialists to provide twice-yearly support to MOEP and MEPE in developing, implementing, evaluating and updating its capacity building program under the Component 2 of MEPP. This provides an opportunity to monitor outcomes pertinent to rural development, social equity and strengthening of peace agreements. Paragraph 79 of Appendix 3 (Implementation Arrangements) states that “specific measures will be implemented to ensure that indigenous peoples receive social and economic benefits that are culturally appropriate.” We propose the following indicators, measured within the local community:

Rural Development Benchmarks

Indicator Name	Unit of Measure		Baseline	Current	End Target
Installation of distribution capacitors	Unit	Value	zero		
		Date			
		Comments			
Increased local household connections	Percent	Value	3.8%		50%
		Date			
		Comments			
Increased local service sector connections (schools, clinics)	Percent	Value			
		Date			
		Comments			
Increased local business connections	Percent	Value			
		Date			
		Comments			

Environmental and Health Benchmarks

Indicator Name	Unit of Measure		Baseline	Current	End Target
Soil lab analysis: Total petroleum hydrocarbons (annual)	Sample	Value			500 mg/kg
		Date			
		Comments			
Water lab analysis: BTEX: Benzene (plant area, neighboring paddy land, local wells)	Sample	Value			5ppb
		Date			
		Comments			
Water lab analysis: BTEX, Toluene (plant area, neighboring paddy land, local wells)	Sample	Value			1000ppb
		Date			
		Comments			
Water lab analysis: BTEX: Ethylbenzene (plant area, neighboring paddy land, local wells)	Sample	Value			700ppb
		Date			
		Comments			
Water lab analysis: BTEX: Zylenes (plant area, neighboring paddy land, local wells)	Sample	Value			10,000ppb
		Date			
		Comments			
Water lab analysis: PCBs (plant area, neighboring paddy land, local wells)	Sample	Value			
		Date			
		Comments			
Air lab analysis: asbestos	Sample	Value			

		Date			
		Comments			
Air lab analysis: TPH (planned new plant area, enclosed)	Sample	Value			>500ppm
		Date			
		Comments			

Fragility Benchmarks

Indicator Name	Unit of Measure		Baseline	Current	End Target
Establishment of Grievance Mechanism Drafting Committee: coalition genuinely representing local residents	Member list	Value			
		Date			
		Comments			
Establishment of grievance mechanism featuring: (1) appropriate languages; (2) anonymity; (3) non-literate accessibility	Sample	Value			
		Date			
		Comments			
Approval of grievance mechanism by local residents (Karen, Pa’O, Burman and all other villagers)	Sample	Value			
		Date			
		Comments			
Grievances fielded and addressed per year	Number	Value	0		10
		Date			
		Comments			
Repeat grievances reflecting inadequate remediation	Sample	Value			0
		Date			
		Comments			

7. SUMMARY OF RECOMMENDATIONS

- Conduct an IP assessment that engages local Karen, Pa’O and other people on their perceptions of the project and their interest in receiving electricity
- Develop an inclusive grievance mechanism for all local political, ethnic authorities and residents
- Provide rural electrification to communities (improved wires and distribution capacitors will be needed for existing connections) surrounding the Thaton power station, as a pilot for NEP plans, and as a demonstration that community concerns are heard, respected and addressed
- Conduct water and soil sampling for hydrocarbons and other contaminants that could affect drinking and irrigation water for surrounding communities
- Modify environmental management plans and Thaton refurbishment construction plans according to findings from water and soil sampling

8. METHODS

In country research for this report was conducted over 4 days in Yangon and three days in Thaton, with the aim of providing rapid findings to inform next steps for the World Bank. Interviews were conducted with 6 local Karen villagers, 2 Pa’O community members, 3 Bamar power plant workers, 3 teachers, a midwife, a doctor, 3 Thaton district CSO representatives, 2 NLD political leaders and a variety of foreign experts. Two group interviews were conducted in the villages, which were conducted in Burmese language.

9. ACKNOWLEDGEMENTS

NomoGaia owes thanks to a wealth of experts who contributed to the fullness of this assessment. Within Myanmar’s brave and vital civil society, Shell Aung Aung, Nan Yin Yin Soe, Augustine Hti San and Mi Kun Chan Non provided invaluable support. Among the remarkable scholars and foreign experts who have dedicated years of their lives to the welfare of Myanmar’s people, Ashley South, Kim Joliffe, Vicky Bowman and Donna Guest provided particularly valuable insights, while several other experts too numerous to name were incredibly generous with their time and knowledge. The willingness of World Bank personnel, both in

Myanmar and beyond, to engage with questions of human rights risk at Thaton merits special recognition, as these individuals have gone beyond their official duties to ensure that development benefits all of Myanmar's citizens. Finally, the rightsholders who consented to be interviewed for this assessment have earned our deepest gratitude. They are not named, as many of them are reluctant to have their identities shared publicly, but their commitment to ensuring the equitable improvement of conditions and the stability of the current peace process leaves us in awe.