

**INTEGRATED SAFEGUARDS DATASHEET
APPRAISAL STAGE**

I. Basic Information

Date prepared/updated: 09/11/2009

Report No.: AC4205

1. Basic Project Data

Country: Botswana	Project ID: P112516	
Project Name: Botswana - Morupule B Generation and Transmission Project		
Task Team Leader: Varadarajan Atur		
Estimated Appraisal Date: August 24, 2009	Estimated Board Date: October 29, 2009	
Managing Unit: AFTEG	Lending Instrument: Specific Investment Loan	
Sector: Power (80%);Mining and other extractive (20%)		
Theme: Infrastructure services for private sector development (100%)		
IBRD Amount (US\$m.):	162.00	
IDA Amount (US\$m.):	0.00	
GEF Amount (US\$m.):	0.00	
PCF Amount (US\$m.):	0.00	
Other financing amounts by source:		
Borrower		1,317.00
IBRD Guarantee		243.00
<u>African Development Bank</u>		<u>203.00</u>
		1,763.00
Environmental Category: A - Full Assessment		
Simplified Processing	Simple <input type="checkbox"/>	Repeater <input type="checkbox"/>
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

2. Project Objectives

The objectives of the project are to support Botswana in: (i) developing reliable and affordable supply of electricity for energy security; (ii) promoting alternative energy resources for low-carbon growth; and (iii) building its institutional capacity in the energy sector. All these objectives are key to Botswana's development strategy aimed at further reducing poverty and spreading the dividends of progress more equitably among all sections of society.

The first objective will be achieved by adding 600 megawatts (MW) new capacity through four units of 150 MW each, adjacent to the existing Morupule A Power Station, and associated transmission lines and substations. Greater availability of affordable electricity to households and industry will benefit the economy as a whole. New electricity connections bring new economic opportunities. The economic growth made possible by increased and secure access to electricity will enhance social welfare, help create jobs, and allow some of the country's rural populations to benefit from electricity for the first time.

The second objective will be achieved by preparing a low-carbon growth strategy to help the Government and private sector to fast track exploration of alternative energy sources (e.g., coal-bed methane (CBM), concentrating solar power (CSP)) and new technologies (e.g., carbon capture and storage (CCS)) through feasibility studies and securing appropriate financing. In the short-term, this will enhance the Government's knowledge, capacity, and preparedness for new technologies; in the medium-term, this will enhance the prospects for private sector investment in new technologies and energy alternatives; in the long-term, this will benefit the local population by creating new "green collar" jobs and increasing Botswana's contribution to regional climate change mitigation.

The third objective will be achieved by improving the sector frameworks - policy, legal, and regulatory - for the electricity, coal, and CBM, and enhancing capacity of the relevant institutions, including setting up of a new independent electricity regulator.

3. Project Description

The proposed project has three components and two associated infrastructure elements.

Component 1 - Morupule Generation Expansion: This component includes three distinct and integral infrastructure subcomponents as follows:

Component 1(A) - The Morupule B Power Station (estimated cost US\$1,211.3 million, including taxes and duties of US\$ 138 million) involves construction of a 600 MW (4 x 150 MW) coal-fired power station, adjacent to the existing Morupule A Power Station in the township of Palapye, in the eastern part of the country. The scope includes, inter alia: (i) coal conveyor, coal yard, coal crushers, and coal preparation equipment, (ii) limestone preparation and feed systems, (iii) ash disposal and handling system, (iv) circulating fluidized bed (CFB) boilers with associated particulate removal equipment, (v) steam turbines and generators, (vi) fans and air cooled condensers, (vii) switchyard, and (viii) balance of plant.

Component 1(B) - A transmission system (estimated cost US\$275.2 million, including taxes and duties of US\$ 36 million) involves construction, through supply and installation, of: (i) Morupule-Phukoje 400-kilovolt (kV) transmission line (102 kilometer (km)) and associated and associated communications equipment (OPGW), (ii) 400-kV line bay at Phukoje, (iii) 315-MVA transformer intertie bay between Morupule A and Morupule B, (iv) 220-kV line deviation (5 km) near existing Morupule A station, (v) three 315-MVA 400/220-kV transformers (two at Isang substation and one at Morupule B station), (vi) automatic generation control (AGC) equipment, software, and associated training, (vii) Isang (formerly called Mosaditsheni) 400/220-kV substation and 220-kV tie-in two lines, (viii) Morupule-Isang 400-kV transmission line (215 km), and (ix) reactive power compensation equipment.

Component 1(C) - A water supply system (estimated cost US\$53.0 million, including taxes and duties of US\$6.1 million) involves construction, through supply and installation, of: (i) gathering system, pumps, and reservoir at the new section of the Paje

well field and a pipeline from there to the Morupule B Power Station (80 km) for backup supply; (ii) power supply line for the new Paje well field; and (iii) an extension pipeline from the MCL reservoir to the Morupule B Power Station (5 km) for the main water supply.

Component 2 - Alternative Energy Development: This component (estimated cost US\$6.8 million, including taxes) includes preparation of alternative energy projects supporting low-carbon growth strategy as follows: (i) low-carbon study for growth and long-term mitigation strategy for Botswana; (ii) bankable feasibility study for a commercial scale CSP, including implementation approach and funding mobilization assistance; (iii) CBM and coal development strategy; and (iv) detailed feasibility study for pilot implementation of a CCS project.

Component 3 - Institution and Capacity Building: This component (estimated cost US\$13.9 million, including taxes) covers project implementation assistance, institution and capacity building for Botswana Power Corporation (BPC) and the Ministry of Minerals, Energy, and Water Resources (MMEWR) as follows:

(a) For BPC (power plant and transmission): (i) transmission system harmonic study; (ii) transmission control area establishment; (iii) transmission system operations training; (iv) air quality monitoring and management; (v) training and workshops for Project Management Unit (PMU) staff; and (vi) project management and supervision.

(b) For MMEWR (sector development): (i) interim tariff policy study; (ii) tariff policy and regulatory agency for the power sector, including capacity building; (iii) design and implementation of a communications program; and (iv) training for safeguards monitoring.

Associated infrastructure. Beyond the scope of the project are two elements of associated infrastructure: (1) MCL is undertaking an expansion of their underground coal mine, which also supplies coal to the Morupule A Power Station, for the dual purposes of supplying coal to (i) the proposed Morupule B Power Station and (ii) the export market; and (2) MCL has constructed a twenty-two kilometer underground water pipeline from the North-South Carrier (NSC) for the dual purposes of supplying water to (i) the Morupule Colliery and (ii) the proposed Morupule B Power Station. Both of these undertakings also serve other customers, not just BPC or the project. Given their importance to the project, however, Environmental and Social Impact Assessments (EIAs) for both have been included in the project documentation.

4. Project Location and salient physical characteristics relevant to the safeguard analysis

The project is located at Morupule, near the township of Palapye, in the semi-arid eastern part of Botswana, adjacent to the site of the existing Morupule A Power Station. The surrounding area is sparsely inhabited.

5. Environmental and Social Safeguards Specialists

Mr Paul Jonathan Martin (AFTEN)

Ms Paula F. Lytle (ECSS4)

6. Safeguard Policies Triggered	Yes	No
Environmental Assessment (OP/BP 4.01)	X	
Natural Habitats (OP/BP 4.04)		X
Forests (OP/BP 4.36)		X
Pest Management (OP 4.09)	X	
Physical Cultural Resources (OP/BP 4.11)		X
Indigenous Peoples (OP/BP 4.10)		X
Involuntary Resettlement (OP/BP 4.12)	X	
Safety of Dams (OP/BP 4.37)	X	
Projects on International Waterways (OP/BP 7.50)	X	
Projects in Disputed Areas (OP/BP 7.60)		X

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts: Emissions of Pollutants. Specifications for the proposed Morupule B Power Station include achievement of applicable World Bank emissions standards (Thermal Power: Guidelines for New Plants, Pollution Prevention and Abatement Handbook, 1998). While Botswana has not established emissions standards for power stations, the Air Pollution (Prevention) Act of 1971 requires the application of best practicable means to control emissions. World Bank emissions standards are more stringent than the maximum permissible limits specified by the Botswana authorities for Morupule A's current boiler operations.

The Environmental and Social Impact Assessment (EIA) for the proposed Morupule B Power Station found that current emissions from the Morupule A Power Station may be causing occasional local exceedances of Botswanan and World Bank air quality standards for ambient sulfur dioxide and particulate matter concentrations, suggesting that it may not be possible for Morupule B to meet ambient air quality standards without reductions in emissions from Morupule A.

The dam safety report identified existing elevated levels of sulfate in the groundwater adjacent to the Morupule A ash disposal site.

Availability of Water. Although both the Morupule A and the proposed Morupule B power stations are designed for air-cooling technology, significant amounts of water will still be required for a variety of aspects of their operation, in particular as make-up water for blow-down losses. The estimated water requirement for the combined operation of Morupule A and Morupule B is 2.2 million cubic meters per year. Currently, about seven

hundred thousand cubic meters per year are being supplied for the Morupule A Power Station from an older section of the Paje well field.

A new section of the Paje well field will be developed as the backup source of water for Morupule B operations. The EIA of the proposed new well field indicates that meeting the full water requirement from this source would draw down the aquifer by thirty percent in twenty years, potentially affecting a number of cattle post boreholes. BPC has identified an underground structure separating the new section of the Paje aquifer into distinct northern and southern compartments. If the northern compartment of the aquifer is used, the seeps at the foot of the adjacent escarpment which feed the Motloutse River may be affected. BPC will develop the southern compartment of the well field as a backup source of water for Morupule B operations. Any future development of the northern compartment for Morupule B operations will be subject to further studies and agreement with the World Bank.

Safety of Dams. BPC commissioned an independent assessment by a qualified specialist of the safety of the existing ash impoundment dam. The report also makes recommendations on the design of the new ash dam. This assessment was completed in March 2009, and indicated that while the existing ash dam appears stable at present, improvements in the structure and operation of the dam are recommended to address any possible concerns. In addition, the design of the new dam should be subject to independent review. OP 4.37 Safety of Dams is triggered.

Use of Pesticides. BPC does not intend to use pesticides or herbicides to control pests or vegetation under transmission lines; however, BPC has sought guidance from the Plant Protection Division of the Ministry of Agriculture on appropriate herbicides to use for control of vegetation at substations, and received the recommendation to use preparations of tebuthiuron, an active ingredient categorized by the World Health Organization as Class III, slightly hazardous. OP 4.09 Pest Management is triggered.

Involuntary Resettlement and Social Impacts. Social impact assessments have been carried out for the proposed power station and transmission lines. Within the designated site of the proposed Morupule B power station, there is one family which will have to be resettled. With respect to the transmission lines, the EIA and a May 2009 Resettlement Action Plan Baseline Investigation indicates that there is potential negative impact on land use, disruption of access to grazing or agricultural fields, and possible resettlement of individual households depending on the final routing. The Bank visited sites along the proposed routing and recommended modifications to further minimize the impact. OP 4.12 Involuntary Resettlement is triggered.

It is also expected that the influx of workers during the construction period would have significant social impact, separate from any safeguard issues. Although HIV/AIDS prevention programs are in place, these will need to be scaled up and carefully targeted.

The project team carried out social screening to identify whether indigenous peoples are present in, or have attachment to, the project area. Based on the findings of the social screening, OP 4.10 Indigenous Peoples is not triggered.

International Waterways. The primary source of water for the proposed Morupule B Power Station is the North-South Carrier (NSC). The Water Utility Corporation captures surface water from the northeastern part of Botswana and transfers it via the NSC to various users including in the capital city of Gaborone. MCL has an allocation of about 2.5 million cubic meters per year from the existing capacity of the NSC and has built a twenty-two kilometer underground water pipeline linking the Morupule site to the NSC. BPC has purchased a 50 percent interest in the pipeline in exchange for the rights to about three-fourths of the water. The coal mine and power station will use the existing capacity of the ongoing NSC scheme, and will not entail works and activities that would exceed the original scheme, change its nature, or so alter or expand its scope and extent as to make it appear a new or different scheme. The Government of Botswana has notified riparians regarding the capture and transfer of the designed capacity of water to the NSC, as required by the SADC Revised Protocol on Shared Watercourses. Botswana has conformed with the requirements of OP 7.50 for notification to riparian states regarding the transfer of water via the NSC in accordance with the provisions of the SADC Revised Protocol on Shared Watercourses of 2000.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

It is possible that within a decade or so there may be more than 17,000 MW of coal-fired generation capacity within approximately one hundred and fifty kilometers of the Botswana/South Africa border. Separate environmental assessments for investments in coal-fired power on both sides of the Botswana/South Africa border will not adequately address possible cumulative, long-range, and transboundary effects, in particular impacts on air quality, water availability and quality, and socio-economics.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

No-project alternative. Given the regional shortage of power, the no-project alternative implies that BPC will be unable to meet projected national demand for power. The benefits of this alternative are that most of the negative impacts associated with the proposed development option will be prevented; these benefits are out-weighed, however, by the economic costs of continued and worsening national power shortages.

Site alternatives. The main factors influencing the location of the Morupule B Power Station are a reliable and low-cost coal resource of suitable quality and water supply. Other important factors that influence location include availability of land, environmental suitability, proximity to the market and availability of infrastructure such as roads, railways and telecommunications. Establishment of the power station at any other location in Botswana would require significant additional infrastructure to be constructed such as roads, rail and the establishment of a new coal mine. Notwithstanding the financial cost associated with this additional infrastructure, the impact to the environment

would be significantly greater than the proposed expansion of an existing footprint. BPC has also altered the initial proposed transmission line routing (which would have followed existing power lines) to minimize social impact in the outskirts of Mahalapye.

Technology alternatives. The electricity demand pattern in Botswana requires that a base-load generation technology be considered, as a peaking electricity generation technology will only limit the extent to which imported power will be needed at certain times of the day. Although this will assist in reducing reliance on imported power, it will not enable BPC to replace the current seventy percent reliance on imported power with local generation capability, which is a key strategic objective of this project, given the renegotiation of the contract with Eskom which will terminate any sales of electricity to Botswana by 2013. Recent developments in energy storage technologies are bringing renewable energy technologies such as solar thermal generation and wind energy closer to providing base-load requirements, however these new technologies cannot yet be considered to be commercially proven. Given the urgent need to establish base-load capacity in Botswana to replace imported power, and the prohibitive cost of an oil-fired plant, the only financially feasible option is a coal-fired plant.

Design alternatives. Design options considered for Morupule B Power Station focused on either the CFB boiler design or the pulverized coal (PC) boiler design. The CFB design is an advanced coal utilization technology which has the following benefits over conventional thermal power plants:

- Wide range of fuel adaptability which allows for the use of low grade coal, biomass, and waste tyres;
- Decreased emissions of nitrogen oxides and sulfur oxides;
- High combustion efficiency; and
- Space saving and improved maintenance ability.

Selecting between PC and CFB boiler designs is a complex decision and environmental performance is only one criterion which should influence this decision. CFB boiler design is able to achieve a similar environmental performance with respect to gaseous emissions to PC technology with emissions control, at a lower operating cost.

The large unit sizes (500 MW and above) necessary for super-critical boiler technology were deemed inappropriate for a small system like in Botswana.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described. The following assessments of safeguard policy issues have been undertaken or are underway:

Environmental:

EIA for Morupule B Power Station - Completed

EIA for BPC transmission lines - Completed

EIA for Isang Substation - Draft under DEA review

EIA for the new section of the Paje well field - Completed
EMP for Paje well field water pipeline and power connection - Underway

Social:

RPF for project - Completed
Abbreviated RAP for family at Morupule B site - Completed
RAP for Morupule-Phokoje 400-kV transmission line - Underway
RAP for Morupule-Isang 400-kV transmission line Draft - under DEA review

Associated infrastructure:

EIA for MCL mine expansion - Completed
EIA for NSC-1-MCL water pipeline - Completed

Emissions. The power station will include continuous ambient air quality and in-stack emissions monitoring for compliance with applicable standards (Botswanan and Bank standards for both emissions and ambient air quality). The Department of Waste Management and Pollution Control (DWMPC) holds the primary responsibility for enforcing the compliance of the project with national environmental regulatory requirements, and with the approved Environmental and Social Management Plans (EMPs). In order to strengthen the capacity of DWMPC to fulfill their mandate, the TA component of the project includes resources to provide DWMPC with training and equipment for air quality monitoring, and expert advice for the development of national emissions standards for power plants.

Prior to making a decision regarding investment in emissions control at Morupule A, BPC intends to undertake a two-year air quality monitoring campaign to better define the issues to be addressed and possible solutions. This is necessary because the EIA provided only a "predicted baseline" for air quality, due to the limitations of available directly monitored data. Based on the results of the two-year air quality monitoring campaign, BPC will implement measures as necessary to ensure that the joint operation of Morupule A and B does not lead to exceedances of World Bank or Botswanan air quality standards.

To avoid further groundwater contamination from the old ash dump, in the future, ash (slurry and dry) from the Morupule A Power Station will be rerouted to the new ash dump at the Morupule B Power Station, which will have a sealed base.

Water. Although the power station will be connected to the new section of the Paje well field, by stipulating that the NSC-1 is the primary water supply, BPC will be minimizing the impact on the slowly recharging underground aquifer at Paje. Furthermore, BPC has identified an underground structure separating the new section of the Paje aquifer into distinct northern and southern compartments. To avoid affecting the seeps at the foot of the adjacent escarpment, only the southern compartment of the new section of the Paje well field will be connected. Further studies and modeling will be conducted before taking any decision to connect the northern compartment of the aquifer, before which no-objection from the World Bank would be requested.

Pest Management. The environmental assessment of the Isang Substation, which is currently underway, will include a pest management plan providing guidance on the safe storage, handling, application, and disposal of pesticides and herbicides to be used by BPC at this and other substations, as well as recommendations on the training needed to implement this guidance. When implemented, this will meet the requirements of OP 4.09 Pest Management.

Safety of Dams. The assessment of the existing ash dam provided a set of recommendations that will be implemented by BPC, including:

- Structural measures to improve the integrity of the outer wall of the ash dam;
- Provision to pump off water pools for return to the power station;
- Construction of bunds around the south-east of the ash dump to catch any contaminated runoff, eroded material or slippage;
- Construction of diversion ditches to the north-west to divert runoff and prevent erosion;
- Alteration of the deposition system;
- Improvements in the groundwater monitoring system; and
- A detailed geotechnical investigation of the existing ash dam.

The design of the new ash dam to be built will be subject to independent review. BPC plans to use the new ash dam for collecting ash from both the existing Morupule A power plant and the proposed new Morupule B power plant. Based on the independent assessment of the existing and planned ash dams, and on the advice of the World Bank's Lead Dam Specialist, it was determined that neither a Panel of Experts nor an Emergency Preparedness Plan are required.

Involuntary Resettlement. BPC has prepared and is implementing a Resettlement Policy Framework (RPF) that complies with the requirements of OP 4.12 Involuntary Resettlement. BPC has also commissioned a Resettlement Action Plan baseline study to update the information in the EIA and provide better social data for resettlement planning. It has prepared a draft abbreviated Resettlement Action Plan for one section of the Transmission line and under the RPF, has agreed that RAPs will be prepared prior to any construction activities.

In accordance with the RPF, BPC has implemented an abbreviated Resettlement Action Plan for the one family residing on the project site, and will fence the project site before commencement of construction activities on site.

When the surveys are completed for the final routing of the transmission lines, additional Resettlement Action Plans may be required, in compliance with the RPF. If required, each such plan must be implemented, any resettlement must be completed, and any compensation must be paid prior to commencement of construction activities on that subcomponent.

The water supply component is not expected to require a Resettlement Action Plan. A detailed EMP is under preparation for this component.

International Waterways. Botswana has conformed with the requirements of OP 7.50 Projects on International Waterways for notification to riparian states regarding the transfer of water via the NSC in accordance with the provisions of the SADC Revised Protocol on Shared Watercourses of 2000.

Institutional Capacity. BPC will be responsible for the overall implementation, administration, and enforcement of the EMPs for the project. For the proposed Morupule B Power Station, BPC will appoint an Engineering Consultant, who in turn will:

- Ensure that the EMP specifications are included in all tender documents issued for building works and activities on site, and will monitor and enforce adherence to these requirements by contractors;
- Appoint an Environmental Liaison Officer to monitor implementation of and compliance with the EMP for the duration of the works; and
- Issue fines or stop-work orders for contravention of the EMP and give instructions regarding corrective action.

In addition, BPC will appoint an Environmental Manager who will undertake regular audits of the construction sites for EMP compliance by contractors and BPC. During the operational phase, the Environmental Manager will be responsible for ensuring BPC's continuing compliance with the EMPs. BPC will also appoint a community outreach official to support continual dialogue with communities and ensure that social aspects are implemented as per policy.

Management of Cumulative Impacts. Recognizing that separate environmental assessments for future investments in coal-fired power on both sides of the Botswana/South African border will not adequately address possible cumulative, long-range and transboundary effects, the World Bank has initiated discussions with the authorities in both countries to jointly undertake a Regional Environmental and Social Assessment (RESA). The terms of reference for the first phase of the RESA have been agreed with BPC, the Department of Environmental Affairs, DWMPC, as well as with the Department of Environmental Affairs and Tourism in South Africa. The World Bank will use trust fund resources to carry out the first phase as well as the full RESA, with full participation of the relevant authorities in Botswana and South Africa. The first phase report, including draft ToR for the full RESA, will be disclosed by June 30, 2010.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people. Public consultations were conducted for the project as part of the various environmental and social assessments. The stakeholder engagement process for the EIA of the power plant commenced in August 2007 with the publication of an advertisement in English and Setswana announcing the project. An invitation to attend the scheduled public meeting

regarding the project was included in the advertisements, and at these meetings a background information document was presented in both Setswana and English.

A public meeting was held at Palapye main Khotla on September 4, 2007, and was conducted in Setswana as all the participants could speak and understand the language. The meeting was attended by thirty-one people including the consultations team and representatives from BPC. A meeting with key local and central government officers was also convened in Palapye in September 2007, and the stakeholder engagement team undertook consultations with focus groups comprised of local farmers in the following lands areas within ten kilometers of the proposed power station site:

- Morupule;
- Mantshadidi;
- Mmalenakana;
- Dikabeana; and
- Molapowadipitse.

The principal comments received during these consultations are indicated below:

- i) Public, farmers and livestock owners meetings - (a) preference should be given to local people for non-skilled and semi-skilled labor requirements and the hiring should be done in a transparent manner, such as through use of the Khotla, (b) concern was expressed regarding the increased probability of illegal occupiers of land who will come in as job seekers;
- ii) Business community - the contractor should source some of the materials and services locally; and
- iii) Local government - construction phase may exert pressure on existing social amenities such as schools and clinics available in the town. Additional consultations have been made in the context of the Resettlement Action Plan Baseline Investigation in March- April 2009.

In compliance with the Bank's policy on disclosure of information, BPC has made the approved versions of all safeguard documents available both on the BPC website and at the public libraries in Palapye and Serowe.

All EIAs required for appraisal are completed, as follows:

- EIA for Morupule B Power Station;
- EIA for BPC transmission lines;
- EIA for the new section of the Paje well field;
- RPF for project;
- Abbreviated RAP for family at Morupule B site;
- EIA for MCL mine expansion;
- EIA for NSC-1-MCL water pipeline.

B. Disclosure Requirements Date

Environmental Assessment/Audit/Management Plan/Other:

Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	06/15/2008
Date of "in-country" disclosure	12/01/2008
Date of submission to InfoShop	02/04/2009
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	05/07/2009

Resettlement Action Plan/Framework/Policy Process:

Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	05/19/2009
Date of "in-country" disclosure	05/22/2009
Date of submission to InfoShop	05/22/2009

Indigenous Peoples Plan/Planning Framework:

Was the document disclosed prior to appraisal?	
Date of receipt by the Bank	
Date of "in-country" disclosure	
Date of submission to InfoShop	

Pest Management Plan:

Was the document disclosed prior to appraisal?	N/A	
Date of receipt by the Bank		N/A
Date of "in-country" disclosure		N/A
Date of submission to InfoShop		N/A

*** If the project triggers the Pest Management and/or Physical Cultural Resources, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.**

If in-country disclosure of any of the above documents is not expected, please explain why:

Pest Management issues only arise in relation to vegetation control at the Isang Substation. A Pest Management Plan will be incorporated in the EMP for the Substation, which will be submitted for no-objection by the Bank.

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?	Yes
If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?	Yes
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes

OP 4.09 - Pest Management

Does the EA adequately address the pest management issues?	Yes
Is a separate PMP required?	No

If yes, has the PMP been reviewed and approved by a safeguards specialist or SM? Are PMP requirements included in project design? If yes, does the project team include a Pest Management Specialist? N/A

OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared? Yes

If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan? Yes

OP/BP 4.37 - Safety of Dams

Have dam safety plans been prepared? Yes

Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank? N/A

Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training? N/A

OP 7.50 - Projects on International Waterways

Have the other riparians been notified of the project? Yes

If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent? N/A

Has the RVP approved such an exception? N/A

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank's Infoshop? Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs? Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies? Yes

Have costs related to safeguard policy measures been included in the project cost? Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies? Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents? Yes

D. Approvals

<i>Signed and submitted by:</i>	<i>Name</i>	<i>Date</i>
Task Team Leader:	Mr Varadarajan Atur	09/09/2009
Environmental Specialist:	Mr Paul Jonathan Martin	09/09/2009
Social Development Specialist Additional Environmental and/or Social Development Specialist(s):	Ms Paula F. Lytle	09/09/2009
<i>Approved by:</i>		
Regional Safeguards Coordinator: Comments:	Mr Warren Waters	09/11/2009
Sector Manager: Comments:	Mr Subramaniam V. Iyer	09/11/2009