

**Botswana**  
**Morupule B Generation and Transmission Project**  
**October 2011**  
**Safeguards Review Mission**  
**AIDE-MÉMOIRE**

1. A World Bank mission visited Botswana October 17-28, 2011, to supervise the Morupule B Generation and Transmission Project (**Morupule B**) for the International Bank for Reconstruction and Development (**Bank**). The mission was composed of Messrs/Mmes Varadan Atur (Mission Leader), Paula Lytle (Sr. Social Development Specialist), Scott Sinclair (Lead Financial Officer and Co-TTL) and Serwalo Tumelo (Local Consultant). Though previously planned, the Industrial and Commercial Bank of China (**ICBC**) and Sinosure could not join the mission<sup>1</sup>.

2. The principal objective of the mission was to supervise Morupule B Power Plant construction site safety and selected safeguards aspects of the project, but the mission also covered certain other project components. The mission expresses its appreciation for the cooperation of the Ministry of Finance and Development Planning (**MFDP**), the Ministry of Minerals, Energy, and Water Resources (**MMEWR**), Botswana Power Corporation (**BPC**) and China National Electric Equipment Corporation (**CNEEC**).

3. This Aide-Mémoire summarizes the principal findings and recommendations of the mission (including updates as of mid-November<sup>2</sup>), which are subject to confirmation by Bank Management.

**A. Power Plant Construction Site Safety Aspects**

4. The project suffered a fatal accident at site involving a Chinese worker who fell from height while working on the roof construction. This accident happened on August 22, 2011. The mission expressed condolences to CNEEC Project Manager and BPC and MMEWR on the project team's behalf as well as on behalf of Bank Management. A previous accident of similar nature at site involved another Chinese worker who died on February 26, 2011 due to fall from height.

5. The mission reviewed with BPC Management, including the Project Manager of Morupule B, the independent fatal accident investigation report which was prepared by a panel and led by the Corporate Risk Manager of BPC. The mission separately also reviewed the main findings and recommendations of the report with the EPC Contractor CNEEC at the site. The mission's findings, assessments and recommendations are as below:

- a) By the time of the mission, BPC and CNEEC had implemented most of the safety improvements recommended during the Bank's May-2011 mission and only the hiring of

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<sup>1</sup> This was due to delays in securing transit visas. The ICBC is the principal financier of the power station component of the project and Sinosure is the co-Guarantor of the ICBC loan along with the IBRD.

<sup>2</sup> To incorporate findings and outcomes from a planned visit of BPC Delegation to China (please see para 5(e) and Annex 4).

additional translators and the Health, Safety and Environment (HSE) Manager was still in process<sup>3</sup>. The description and status of these actions are summarized in **Annex 2**. There are visible improvements of safety compliance at site, for example, the wearing of personal protection equipment (PPE) by all workers, signage in various places in English and Chinese and a few in Setswana, patrolling of safety officers. BPC and CNEEC had also put in place the emergency preparedness and evacuation plan in late-June 2011.

- b) The August 22<sup>nd</sup> accident has occurred before all of the safety improvements had been put in place. The key findings from the fatal accident report and the mission's reviews are the following:
- i. The deceased worker had his safety belt on, but it was not hooked to any safety support or anchoring point. There was no fall arrest safety net. The situation exposed the working crew to dangers of falling, even though the first accident also was due to fall from height.
  - ii. There was no ambulance at site available at that time and the deceased was taken to hospital in a pick-up truck (similar to the first accident response in February), and there were no qualified first aiders on site at the time<sup>4</sup>. The emergency response and preparedness was lacking.
- c) Based on the above, it is the mission's assessment that, while the accident itself may not have been preventable (as can be attributed to worker negligence part), his death could have been prevented if the fall safety net had been put in place before authorizing work at height. The mission concurs with the accident report's views that there is serious lack of safety observance and enforcement at site for which the main EPC contractor CNEEC should take prime responsibility, including on behalf of its subcontractors.
- d) It is also the mission's view that BPC has significant responsibility as owner of the project to ensure that CNEEC complies with the safeguards provisions of the EPC Contract, of which the Health & Safety Plan is an integral part.
- e) The mission's specific recommendations for further improvements in safety aspects and hence to support BPC and CNEEC to come into compliance with safeguards provisions in the EPC contract are as follows:
- i. BPC should engage a safety and risk assessment firm to carry out an audit of Morupule B construction site for HSE, which should also provide further recommendations to CNEEC on safety practices and enforcement. The terms of reference for such an audit can be extracted from the scope of work for the HSE Advisor, previously included in the May-2011 aide memoire (Annex 4).
    - Both BPC and MMEWR concurred with this and agreed to have such audit completed by end-December 2011.

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<sup>3</sup> This was also presented to Bank specialists and Management by BPC Delegation to Washington during the Annual Meetings in September 21-22, 2011.

<sup>4</sup> The report notes that the first aid personnel were unfortunately in a 2-day training that started on August 22<sup>nd</sup> morning – the day of the accident.

- ii. BPC and CNEEC should carry out a survey to identify the areas of worker awareness enhancement regarding HSE. This would facilitate a bottom-up flow of information from the workforce, especially the Chinese workers, since BPC has now hired a Chinese-English Translator. Also, the specialist firm engaged for safety audit could provide support and advice in conducting such a survey.
  - BPC supported the survey and agreed to discuss with CNEEC the specifics of timing, scope, etc. A sample survey template prepared by the mission is included in **Annex 3**.
- iii. Considering that a high level BPC Delegation led by CEO would be traveling to China to meet with CNEEC during first half of November, the mission recommends that BPC Delegation also meet with ICBC and Sinosure. The mission's interactions with ICBC and Sinosure have indicated their recognition of the concerns surrounding safety, the need for CNEEC to improve enforcement and their readiness to meet with BPC in China. They have also indicated willingness to visit the site in a joint mission with the Bank at a later date.
  - BPC Management welcomed the mission's suggestion, based on which the mission arranged for immediate contacts between BPC, ICBC and Sinosure<sup>5</sup>.
  - BPC Delegation's summary of discussions and understandings reached in China is included as **Annex 4**.
- iv. The mission also recommended that BPC should discuss and explore with the newly appointed communications consultants in the MMEWR (funded under the project) whether and how they could help with proactive communications on the project, including the matters surrounding safeguards and safety.

6. The project's safeguards rating would be set at "Marginally Satisfactory" and reconsidered for upgrading back to "Satisfactory" when actions agreed above have been fully implemented.

## **B. Social Safeguards of Transmission Line Component**

7. The mission also conducted a site visit along the northern section of the transmission line corridor from Palapye to Selebi-Phikwe (the Morupule-Phokoje 400 kV line). Brush has been cleared from the line's servitude and made available for communities for firewood. Stringing of the towers has begun in the area closest to Palapye. As one continues along the line to Selebi-Phikwe, towers are under construction and foundations are being dug. These latter activities are being undertaken by subcontractor workcrews consisting of Botswana nationals, drawn from nearby communities. One workcrew with whom the mission met consisted of 35 members, of whom 6 were women.

8. The mission observed that the boreholes noted in the October 2008 field supervision have been avoided in the transmission line routing, with the towers placed further apart to accommodate the boreholes and then more closely together subsequently. Other evidence of

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<sup>5</sup> BPC Delegation to China met with high level officials at CNEEC, ICBC and Sinosure in Beijing.

efforts to minimize impact were apparent in terms of placement of tower supports and access routing around a field which will eventually be transversed by the transmission line. The mission also observed that the holes dug for foundations were fenced with thornbush to prevent cattle from falling into them; cattle continue to graze along the cleared servitude.

9. The mission was informed that land has been valued for both the northern and southern sections of the transmission line and that compensation been paid prior to construction. The mission requested that BPC prepare a status report on the process of compensation. The mission met with two families of informal settlers near Palapye who had been relocated from the transmission servitude; they confirmed that they had received compensation. The site for the largest amount of compensation (857,000 pula) was visited, the house for which compensation was paid has been demolished, and the owner has relocated to a nearby town. The family that are maintaining grazing area are still present in the adjoining area, and they confirmed that they have not been disturbed and have been able to continue with their livelihood activities. The mission reviewed some of the records of compensation and has requested scans of a sample of these materials. BPC informed the mission of the concern with one landuser near Selebi-Pikwe who was allocated grazing rights by the local land board after the cut-off date. This landuser is requesting compensation for land use based on commercial land value, rather than grazing land and has complained to the local land board about the categorization of the land, copying BPC. The mission recommended that the BPC staff responsible for handling compensation payments meet with the landuser together with a representative of the land board and with someone from the local government to clarify the compensation. The mission also reminded BPC of the responsibility to maintain a logbook of complaints, including those raised at meetings of the community liaison committee.

### **C. Other Matters**

10. The mission also discussed the following aspects of the project.

11. RESA: The mission met with Department of Environmental Affairs (DEA) to follow up on the proposed second phase of the Regional Environmental and Social Assessment (RESA) study. In view of the joint collaboration between Botswana and South Africa on the RESA study, a similar set of discussions also took place with the DEA in South Africa. DEA officials in both countries and MMEWR in Botswana expressed continued strong support for the RESA study and welcomed the team's efforts and help to mobilize grant funds to finance the study. A separate aide memoire (Annex 5) covers the details of discussions and next steps on the RESA study to ensure follow up with the South Africa authorities also.

12. Coal/CBM Development Strategy: The MMEWR shared the draft TORs for the follow on work to the ongoing work by Wood Mackenzie Consultants and requested support for expedited procurement. The team's comments and suggestions have been conveyed to MMEWR. The procurement of consultants for proposed follow on work will be supported under the project as contemplated.

13. BPC Financial Advisory Support: The mission reviewed BPC's proposal for advisory and capacity building support in the area of hedge management and related financial accounting

aspects. Such needs are foreseen under the training and capacity building component of the project. The team's comments and suggestions for next steps have been sent to BPC.

14. Financial Audit of BPC for FY ending March 2011: BPC presented to the mission the audit report for its latest fiscal year and described the key financial challenges being faced by the utility. While the two tariff adjustments made in 2010 and 2011 as part of the interim tariff policy have helped, the timing delays have manifested in a small operating loss, and BPC expects to return to profit from next fiscal year if its plans to control costs are successful and the next tariff adjustment are timely. BPC also indicated that the hedge taken for ICBC loan had also contributed to financial losses. BPC has yet to provide the Management Letter from auditors to fully comply with the audit report covenant under the Project and Loan Agreements.

15. Tariff Policy and Regulatory Agency: The mission received a copy of the final draft report on tariff policy options prepared by Mott McDonald consultants. The team will review and aim to share / discuss comments with MMEWR and BPC as soon as possible. Regarding the establishment of the proposed Electricity and Water Regulatory Agency, MMEWR informed the mission that the AG's office has been consulted on drafting of appropriate proposals / papers for Cabinet consideration and subsequently by the Parliament. The indicative timing seems to be early-2012, suggesting that the establishment of agency and hence the assignment for its capacity building could be no earlier than mid-2012. The mission indicated that the regulatory agency and long term tariff policy goals have been initiated by MMEWR and thus expects that it would aim to achieve its vision and goals as soon as possible. The project provides for significant support to MMEWR should it need the same<sup>6</sup>.

16. Compliance Status: The status of compliance by BPC and the Government per the various undertakings in the Loan and Project Agreements are compiled in the **Annex 6**. The project is largely in compliance with these undertakings and minor deviations noted therein are being remedied by the respective parties through acceptable set of actions. The only exception is the partial compliance with the safeguards related to power plant component which should be restored to compliance as soon as possible.

#### **Annexes:**

1. List of people met during the mission
2. Status of Safety Improvement Actions Recommended during May-2011 Mission
3. Suggested Template for Worker Awareness Survey
4. BPC Delegation Summary of discussions in China
5. Aide Memoire of RESA Discussions in Botswana and South Africa
6. Morupule Project Compliance Status Matrix

Prepared by: World Bank Mission

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<sup>6</sup> MMEWR financed the tariff and regulatory agency study from own resources and not from the Morupule B loan as was earlier planned.

## **ANNEX 1: LIST OF PERSONS MET DURING THE MISSION**

### Ministry of Minerals, Energy, and Water Resources

Mr. Boikobo K. Paya, Permanent Secretary  
Mr. Kogomotso Abi, Deputy PS  
Mr. Vincent Bagopi, Morupule Project Coordinator  
Mr. John Kaluzi, Advisor  
Mr. Tebogo Segwabe, Geological Survey Department  
Ms Meimah Keitseope, Department of Energy Affairs

### Ministry of Finance and Development Planning

Ms Christine Maphorisa

### Botswana Power Corporation

Mr. N. J. Raleru, Chief Executive Officer  
Ms. Rebecca Mgadla, Chief Financial Officer  
Mr. Joseph Phalalo, Corporate Risk Manager  
Mr. Edward Rugoyi, Director, Transmission Business Unit  
Mr. Glenn Black, Morupule B Project Manager  
Mr. Modiri Badirwang, Morupule B Site Manager  
Mr. B.K. Mmopi, Financial and Administration Manager  
Mr. Mbako Mbo, Treasury Manager  
Mr. Julius Kamhanda, Transmission Engineer

### China National Electric Equipment Corporation

Mr. Zhao Senlin, CNEEC Project Manager  
Mr. Jai Fei CNEEC Acting Site Manager  
Mr. Anrui Li CNEEC Safety Manager

## ANNEX-2

### MAY 2011 SAFETY REVIEW MISSION RECOMMENDATION STATUS REPORT

NO	RECOMMENDATION	STATUS END AUGUST 2011
1	The Investigation Report should be reviewed and discussed among BPC, CNEEC and Fichtner timeously, with a view to developing mutual understating on the roles and responsibilities of the parties concerning H&S aspects already contemplated under the agreed H&S Plan for the project and identifying further actions and responsibilities for improving the safety protocols.	This was complete by the 13 <sup>th</sup> of May 2011.
2	BPC should ensure through CNEEC, full enforcement of the requirement for all personnel and visitors to site to wear appropriate and stipulated PPE, with immediate effect.	This instruction was given immediately and PPE compliance on site has improved significantly to what is believed to be near full compliance. There is also a continuous monitoring programme in place, and a follow up instruction has been given to CNEEC to enforce the use of PPE through the Chinese supervisors. Daily spot checks at start of shift and during shift by BPC / CNEEC and subcontracts management teams.
3	All reports from BPC HSE Officers on site should be sent to BPC's Corporate Risk Manager, with immediate effect.	This was being done but the requirement was reiterated to the BPC site safety officer and follow up instruction was actioned immediately.
4	A BPC Health and Safety Officer should be available on site whenever construction is being carried out, with immediate effect.	Currently this is difficult to comply with as BPC only has one safety officer full time available on the project. However, contact details of all BPC safety and management representatives are with CNEEC and their subcontractors and they have been informed that BPC should be contacted in the event of any incidents / accidents. This requirement will be implemented when the additional SHE staff is employed in November 2011, they will also have their hours of work aligned to the Chinese site workers. When the staff arrives a provision will also be made to be present with CNEEC supervisors to cover the nightshift working teams.
5	BPC should ensure that CNEEC and its subcontractors fully comply with local labour laws and regulations, especially concerning working hours/days of the week and consult with appropriate Government authorities for any guidance on this matter.	No transgressions from labour laws and regulations have been identified and weekly monitoring is done BPC management team. Voluntary overtime is worked within the above labour law constraints.
6	With respect to communication practices: (a) translators should be available to HSE Officers at all times: (b)BPC and CNEEC should promote standardized communication techniques (hand signals, etc) within the multilingual teams; and (c) all signage on site should be posted in English, Chinese, Setswana and standard international safety	(a) Interviews for translator have been concluded and letters offering employment have been issued. (b) Rigging and lifting operations are restricted to all of the subcontractors qualified rigger and crane operators, and the hands signal are standard. (c) A site signage survey was carried out by the BPC Corporate Risk Manager and over 600 additional signs have been installed around site including some

NO	RECOMMENDATION	STATUS END AUGUST 2011
	<p>graphics. The mission recognized that communication is a challenging matter and urged BPC to monitor closely progress in addressing it.</p>	<p>in Setswana.</p>
7	<p>BPC should examine and assess the adequacy of the community liaison arrangements and strengthen the same, as necessary.</p>	<p>The project team continues regular community engagements at the Serowe and Palapye District Development Committee (DDC) meetings. The Palapye Community Liaison Committee has also been reinstated. There have been a number of queries raised on availability of bussing for citizen workers and the demobilization schedule for these workers but there have been no complaints from these community groups. When issues are raised they are addressed immediately and feedback is given to the relevant officials.</p>
8	<p>The mission concurs with BPC that an Emergency Preparedness and Response Plan should be put in place without delay, which involves, at a minimum: first aid facility at the site; stretchers and a standing ambulance with a first aid kits at key locations at site; and fire-fighting equipment. Such measures could be arranged on a temporary basis through local medical establishments, until permanent arrangements are put in place.</p>	<p>The Emergency Preparedness Plans are in place and first aid equipment including first aid boxes and stretchers are available at all subcontractors site offices and other key locations around the site. There is a fully equipped first aid facility now available on site at the main office complex, and an ambulance with two paramedics is available on site 24 hours service. CNEEC have contracted Medical Rescue International (MRI) to provide first aid training for 50 staff (26 trained to date). MRI will also provide further training by the on-site paramedics.</p>
9	<p>BPC should engage an experienced H&amp;S Advisor to assist in the above measures, as well as to conduct training and awareness-building for BPC and site personnel. The training funds under the Bank's Loan could be used to hire such a professional immediately. A suggested draft TOR for H&amp;S Advisor is attached as Annex 4. If necessary, an amendment to the Loan Agreement could be initiated by the Bank team upon a request from BPC and the Government.</p>	<p>This position was approved by the Exco Steering Committee and interviews were held on the 6<sup>th</sup> of September. No suitable citizen applicants were identified so the advertisement will be placed internationally. Fichtner have identified a suitable Chinese and English speaking candidate who will start on the 11<sup>th</sup> of November 2011. HSE training for project management teams and supervisors has been held on site.</p>

Prepared by: BPC

**Annex 3**  
**Worker Awareness Survey Template**

CHECK ALL THAT APPLY

Optional:    \_ years of work experience

1. Who do you ask for advice about work?

- Team leader
- Fellow worker on same team
- BPC staff
- CNEEC staff
- Manager
- Safety, health and environment officer
- Friends who do similar work
- Do not ask for advice

2. How have you received information about work practices?

- Written instructions
- Drawing or schematic instructions
- Meetings
- Other workers explain
- Demonstration during work time
- Learning by doing
- Watched other workers doing the same job
- Other method \_\_\_\_\_

3. How often do you receive information about work practices?

- Daily
- Weekly
- Occasionally
- Never

4. On what topics would you like more information

- Performing work tasks
- Working with other team members
- Using equipment
- Developing new skills
- Opportunities to do similar work
- Using safety equipment
- Adopting safe work practices
- Overall progress of construction
- Next steps and tasks in work

5. How do you communicate with other workers?

- \_written instructions
- \_ draw diagrams
- \_ use gestures and hand signs
- \_demonstrate
- \_speak the same language
- \_ do not communicate with other workers
- \_team leader co-ordinates communication

## Annex 4

### Prepared and Contributed By BPC

#### NOTE ON BOTSWANA POWER CORPORATION AND CNEEC MEETING HELD IN CHINA

Further to the discussions with the World Bank during the wrap up meeting of the October Safeguards Mission, and as discussed at that time, two meetings were held on safeguards related issues in Beijing on the 31<sup>st</sup> of October 2011.

The first meeting was held between the delegation from Botswana Power Corporation (BPC) and **Mr. Zhao Ruolin**, the Chairman of China National Electric Equipment Corporation (CNEEC) and other senior management team members including **Mr. Zhao Senlin** the Morupule B CNEEC Project Manager.

The BPC Board Chairman opened the meeting, and thanked the CNEEC Chairman for receiving the BPC Mission and for responding positively to the request for a meeting to discuss safeguards issues pertaining to site.

BPC passed on sincere condolences to the families of the two young men who have lost their lives on the project, and stated that any loss of life is a tragic occasion, and that BPC and CNEEC have to work together to ensure that there are no further accidents on site. It was also stated that the two accidents that have already occurred have had a serious and negative impact on the reputations of both BPC and CNEEC, and such accidents attracted unwanted attention to the project.

CNEEC were reminded that such attention can come from the Government of Botswana who, through the Factories Act, has the power to stop all work on site for non compliance to Safety, Health and Environmental (SHE) issues. BPC also stated that other stakeholders including financiers of the project and related works who, as a result of the powers vested in them through various project agreements can also stop project funding if SHE compliance and improvements are not implemented fully.

With safety as a priority BPC stated that a zero lost time injury rate and a zero fatality rate should be the target for the site, as this is a good indication of any contractor's capability and commitment to safety. BPC stated that they believe that they have done more than should have been expected from them from a safety perspective, and although BPC recognises CNEEC's efforts in this regard, more is still required to be done. This includes giving SHE issues on site the priority that it deserves, and also for CNEEC to meet their contractual obligations under the Health, Safety and Environmental Plan by ensuring full compliance to the same.

BPC stated that through the direct involvement of the CNEEC Chairman, the reputational damage that has already been incurred can be repaired, and together BPC and CNEEC must ensure that there is no further loss of life on the Morupule B project.

The CNEEC Chairman assured BPC that he was fully informed and equally concerned about the two fatalities that have occurred on site. As a result, he has commissioned a senior SHE delegation to visit the site to undertake a site SHE inspection and audit of the SHE systems. This delegation is awaiting visa approvals and is, however, expected to be on site by mid November 2011.

The Chairman stated that he will call a meeting of all main subcontractor senior management in Beijing to discuss the site SHE issues with a view to fully complying with CNEEC's and the subcontractors SHE obligations.

He also stated that he would make a personal visit to site in late November or early December to address all CNEEC and main subcontractor site staff on the importance of safe working procedures.

The Chairman stated that CNEEC were active in sixty countries around the world, and that safety and SHE related issues are receiving priority as the emphasis on SHE related issues continues to receive attention globally. In this regard, he stated that CNEEC will, at a company level, review their internal safety systems and procedures while improving their site implementation processes.

A second meeting was held directly after the BPC and CNEEC meeting involving representatives from the International and Commercial Bank of China (ICBC; **Ms Wang Yixin**, General Manager Corporate and Investment Banking and **Mr. William Liu**, Deputy Head Project and Export Finance) and Sinasure (**Ms Cui Xiao Chen**, Project Manager). The Chairman of CNEEC opened the meeting by acknowledging the fact that he was fully aware of the pressure that is being applied by these ICBC and Sinasure regarding the two fatalities and CNEEC's SHE performance on site.

ICBC stated that their organization was providing substantial support for the Morupule B project together with other CNEEC projects around the world. They stated that this will continue to be the case, and the bank puts safety and SHE issues as a priority, and this has been clearly communicated with CNEEC by the banks management.

It was also stated that a Safeguards Mission to the Morupule B was being planned during November by ICBC and Sinasure in collaboration with the World Bank.

**Prepared by BPC after trip to China**

## ANNEX 5

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### **Botswana and South Africa Regional Environmental and Social Assessment Study World Bank Consultation Mission Aide Memoire (October 17 to 21, 2011)**

#### **Background**

1. A World Bank mission comprising Messrs. Varadan Atur (Team Leader) and Serwalo Tumelo (Local Consultant, Gaborone) held meetings in Botswana (October 17 and 20) and in South Africa (October 21) to continue the consultations on the next steps for undertaking the proposed Regional Environmental and Social Assessment (RESA) study. The mission discussed with officials from the Ministry of Environment, Wildlife and Tourism (MEWT) and the Ministry of Minerals, Energy and Water Resources (MMEWR) in Botswana, and the Department of Environmental Affairs (DEA-RSA) in South Africa. Dr. David Aniku of the Department of Environmental Affairs (DEA-BW) also participated in the discussions with DEA-RSA officials in Pretoria on October 21, 2011. The mission thanks all the officials for their involvement and discussions for furthering the RESA study proposal. Annex 1 includes the list of officials met in Botswana and South Africa.
2. The proposed RESA is intended to study the trans-border cumulative impacts of all existing and planned new major energy sector development projects on air quality and water, as well as related socio-economic aspects, focusing on the Waterburg region. The trans-border dimension of the study is to complement ongoing or planned national studies aimed at evaluating environmental and/or social impacts in Botswana or South Africa. The study would contribute to bilateral dialog and collaboration on trans-border environmental issues and subsequent consideration of actions to address them.
3. The mission's discussions followed bilateral discussions between Government officials from Botswana and South Africa held in Gaborone, Botswana during October 10-11, 2011. The mission was informed that these discussions forged important understandings between the two countries concerning various aspects of the RESA study, including collaborative arrangements for undertaking the same. The mission is pleased to note this development and progress and received a copy of the draft MOU<sup>7</sup> and its supporting documents being discussed between the Governments.

#### **Consultations and understandings**

4. The mission's discussions, clarifications and understandings reached are summarized below:

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<sup>7</sup> The mission clarified that the World Bank cannot be a party to the MOU, which is between the two governments.

- a) Updating of Phase 1 Report: The first phase of the RESA study was completed in October 2010. It compiled the then available information on developmental plans and prepared a scope of work and draft terms of reference for the second phase of RESA as broadly described above. However, significant developments have occurred in both Botswana and South Africa, warranting a quick update of the phase 1 study report and accordingly to revise the scope of work and TORs for the RESA study under the next phase. The mission proposed to hire the same consultant who prepared the phase 1 report to prepare the update in consultation with all the stakeholders and working closely with the two agencies, namely DEA-BW and DEA-RSA. The mission proposed to target end-November 2011 for the consultant to submit the updated scope of work and TORs for the RESA study, which should facilitate review and finalization of the same during first half of December 2011. The final phase 1 scope of work and TORs for the RESA study would be disclosed by both Botswana and South Africa stakeholders, as well as by the World Bank as required for all such safeguards related documents under World Bank projects.
- b) Grant Funds Support for RESA Study: The World Bank informed the officials that the Project Team has secured indicative commitment of grant funds support from bilateral grants administered by the World Bank. Based on the scope of work and estimates provided by Bank specialists for such scope of work, the proposed commitment is about US\$450,000 for the RESA Study. The mission clarified that based on the revised scope of work expected from the updating of phase 1 scope of work and TORs for the RESA study, the proposal for grant funds could be revisited based on revised estimates. The grant funds to be secured would also cover the costs of supervision and facilitation (e.g. secretariat being considered).
- c) Procurement of Consultants: Procurement of consultants and other services for RESA Study would be in accordance with the World Bank Guidelines and would be carried out by the Bank's Project Team. For grants administered by the World Bank, the relevant project team lead will be responsible for managing the funds, including procurement<sup>8</sup>. However, the consultants will report to the client officials for day-to-day supervision (see below). In addition to the World Bank's channels for advertizing the call for expressions of interest without cost, the same could be given publicity through local channels in Botswana and South Africa<sup>9</sup>. The mission clarified that, in view of the significant local knowledge and inputs needed for the RESA study, specialist individuals and firms from Botswana and South Africa stand a good chance of being sought after by international firms to partner with them.

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<sup>8</sup> The TOR, RfP, etc., would be finalized in consultation with relevant client officials in Botswana and South Africa. To meet fiduciary requirements, the evaluation of proposals from firms for short listing and selection would be carried out by Bank Staff only and only final decision would be shared with the client officials.

<sup>9</sup> These local channels are expected to be available free for such publicity. The Bank will not be able to pay for any such publicity.

- d) Institutional Framework for RESA: The mission is pleased to note that client officials have proposed to establish a Joint Advisory Committee (JAC) for policy level interaction and guidance and a Joint Technical Committee (JTC) for technical level interactions and day-to-day management of the RESA Study. The mission clarified that these proposed arrangements are in line with those discussed also a year ago and any refinements that are deemed necessary by both parties for practical reasons would be acceptable to the Bank.
- e) Supervision of RESA Consultants: As noted above, the day-to-day supervision would be the responsibility of the JTC, for which the JTC could nominate one of its members as the lead contact for RESA consultants in each country. These lead contact persons could also help coordinate through the secretariat persons (see below). The JTC and/or the lead contact person would also be requested to verify that the defined milestone has been met before disbursement can be made to the consultant by the World Bank.
- f) Coordination Secretariat: The mission concurred with the officials that secretariat function would be required on both sides to ensure timely and proper coordination and indicated that the mobilized grant funds for RESA Study would also cover such incremental costs<sup>10</sup>. The mission suggested that individual consultants with back office support could be selected – one each in Botswana and South Africa - to provide the secretariat support and ensure coordination, including with the Bank Team. The mission confirmed that an estimate for these costs would be prepared jointly by the Bank Team and the client officials before launch of the RESA Study.
- g) Focal Points: Until the appointment of the lead contact person(s) in the JTC, the mission suggested that Focal Point persons be identified on the Botswana and South Africa sides so that further discussions and next steps can be undertaken smoothly. Accordingly, Dr. David Aniku was proposed to be the focal point on the Botswana side while Ms. Sibongile Mavimbela would be the focal point on the South Africa side.
- h) Botswana and South Africa Roles: The mission noted that the two Governments are committed to undertaking the RESA Study and that the draft MOU includes respective intentions to provide additional resources in a shared manner should it become necessary. Notwithstanding this, the mission indicated that the Bank Team will endeavor to secure grant funds from trust funds to cover the full costs of RESA Study, including the supervision costs through the secretariat arrangements as noted.

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<sup>10</sup> These would be costs for travel and subsistence for JAC and JTC members during RESA Study, cost of consultants supporting the logistics, etc., but will not cover any remuneration for officials.

### **Next steps**

5. The World Bank team will finalize the short term contract for the consultant to update the phase 1 scope of work and TORs for the RESA study. The consultant will work under the general direction of the Focal Points identified.
6. The Focal Points will ensure consultation and coordination among their respective teams and officials to ensure smooth progress of the tasks identified herein.
7. Once the phase 1 scope of work and TORs for the RESA study is finalized and disclosed, the Bank Team and Focal Point persons (and others a appropriate) will review and discuss next steps for launching the RESA Study.

Prepared by:  
Varadan Atur  
World Bank

**List of Officials Met Regarding RESA Discussions**

**In Botswana**

1. Ms. Portia Segomelo, Department of Environmental Affairs (DEA-BW)
2. Dr. David Aniku, DEA-BW
3. Ms. Ingrid Otukile, DEA-BW
4. Ms. Kilano Ntshiamisang, DEA-BW
5. Mr. John Kaluzi, Ministry of Minerals, Energy and Water Affairs (MMEWR)
6. Mr. Vincent Bagopi, MMEWR
7. Mr. Vasco Baitsiseng, Department of National Museum and Monuments
8. Ms. Hossia Chimbonbi, MMEWR, Department of Mines

**In South Africa**

1. Ms. Sibongile Mavimbela, Department of Environmental Affairs (DEA-RSA)
2. Ms. Tshepo Moremi, DEA-RSA
3. Ms. Willeen Oliver, DEA-RSA
4. Ms. Mary Dlamini, DEA-RSA
5. Ms Milicent Solomons, DEA-RSA
6. Ms. Mathabo Phoshoro, DEA-RSA
7. Ms. Molebatsi Serite, DEA-RSA

**ANNEX 6 – LOAN AGREEMENT AND PROJECT AGREEMENT**

**BOTSWANA POWER COPORATION  
MORUPULE B GENERATION AND TRANSMISSION PROJECT  
SUMMARY OF KEY LEGAL UNDERTAKINGS – WORLD BANK**

**LOAN AGREEMENT (LA) & PROJECT AGREEMENT (PA) STATUS**

SHORT DESCRIPTION OF KEY LEGAL UNDERTAKINGS	ACTION BY WHOM	ACTION BY WHEN	CHALLENGES	STATUS AS AT 30 SEPTEMBER 2011
<b>I. <u>INSTITUTIONAL AND OTHER ARRANGEMENTS</u></b>				
<b>A. INSTITUTIONAL ARRANGEMENTS</b>				
<ul style="list-style-type: none"> <li>Enter into a Subsidiary Agreement with Government for purposes of receiving funds to execute mandate as Project implementer. (LA Schedule 2 Section I.B.1)</li> </ul>	BPC	At start of the Project		Done
<ul style="list-style-type: none"> <li>Maintain a Coordination Committee of the Board to monitor the implementation of BPC’s parts of the Project. (PA Schedule Section I.A.3)</li> </ul>	BPC	Continuous		In compliance
<ul style="list-style-type: none"> <li>Maintain a Reference Group, chaired by the District Commissioner or the District Council Secretary, to facilitate Project implementation. (LA Schedule 2 Section 1.A.3)</li> </ul>	BPC and MMEWR	Continuous		In compliance
<b>B. ANTI-CORRUPTION</b>				
<ul style="list-style-type: none"> <li>Ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines (LA Schedule 2 Section I.C; PA Schedule Section I.B)</li> </ul>	BPC	Continuous		In compliance
<b>C. SAFEGUARDS</b>				
<ul style="list-style-type: none"> <li>Implement the Project in accordance with the Social &amp; Environmental Safeguards Instruments. (LA Schedule 2 Section I.D.1; PA Schedule Section I.C.1)</li> </ul>	BPC and contractors	Continuous		In compliance
<ul style="list-style-type: none"> <li>Ensure that there is no displacement or restriction of access shall occur before the RAP and full payment of the displaced persons of compensation and any assistance for relocations. (LA Schedule 2 Section I.D.3; PA Schedule Section I.C.3)</li> </ul>	BPC and contractors	Before construction		On going

**ANNEX 6 – LOAN AGREEMENT AND PROJECT AGREEMENT**

SHORT DESCRIPTION OF KEY LEGAL UNDERTAKINGS	ACTION BY WHOM	ACTION BY WHEN	CHALLENGES	STATUS AS AT 30 SEPTEMBER 2011
<ul style="list-style-type: none"> <li>Deliver a report on Social &amp; Environmental Safeguards Instruments on quarterly basis covering; measures taken to date, any conditions of threats or interference, remedial measures taken or to be taken. (LA Schedule 2 Section I.D.4; PA Schedule Section I.C.4)</li> </ul>	BPC and contractors	Quarterly		A report for quarter ending 30-Sep-11 will be completed and submitted accordingly
<b>II. PROJECT MONITORING REPORTING AND EVALUATION</b>				
<b>A. PROJECT REPORTS</b>				
<ul style="list-style-type: none"> <li>Deliver a report on performance monitoring and evaluation indicators and implement actions in consultation with the WB. Report must be submitted by the Borrower within forty-five (45) days after the end of the reporting period. (LA Schedule 2 Section II.A.1; PA Schedule Section II.A.1; GC Section 5.08(b))</li> </ul>	BPC/ MMEWR	Periodically Semi-Annually	Due Feb 15-2012 covering the period up to end-2011	Not yet done
<ul style="list-style-type: none"> <li>Deliver a report on the execution of the Project, performance of parties, and plans for sustainability of the Project, as the WB may reasonably request. (LA Schedule 2 Section II.A.2; PA Schedule Section II.A.2; GC Section 5.08(c))</li> </ul>	GoB/MFDP	31-Oct-14		Not yet due
<b>B. FINANCIAL MANAGEMENT, FINANCIAL REPORTS, AND AUDIT</b>				
<ul style="list-style-type: none"> <li>Maintain financial management system acceptable to the WB. (LA Schedule 2 Section II.B.1; PA Schedule Section II.B.1; GC Section 5.09)</li> </ul>	BPC	Continuous		In compliance
<ul style="list-style-type: none"> <li>Deliver unaudited financial reports not later than one (1) month after the end of each calendar quarter. (LA Schedule 2 Section II.B.2; PA Schedule Section II.B.2)</li> </ul>	BPC	Quarterly		Quarter ending Sep-11 received
<ul style="list-style-type: none"> <li>Deliver audited financial reports not later than six (6) months after the end of the fiscal year. (LA Schedule 2 Section II.B.3; PA Schedule Section II.B.3; GC Section 5.09(b))</li> </ul>	BPC / MFDP	Annually	Management Letter is not received and due	Done for the year ending 31-Mar-11
<b>C. MID-TERM REVIEW (MTR)</b>				
<ul style="list-style-type: none"> <li>Carry out jointly with the WB and the co-financiers a MTR of the progress made in carrying out the Project. (LA Schedule 2 Section II.C(a); LA Schedule 2 Section II.C(a))</li> </ul>	BPC / MFDP	9-Aug-12		Not yet due

**ANNEX 6 – LOAN AGREEMENT AND PROJECT AGREEMENT**

SHORT DESCRIPTION OF KEY LEGAL UNDERTAKINGS	ACTION BY WHOM	ACTION BY WHEN	CHALLENGES	STATUS AS AT 30 SEPTEMBER 2011
<ul style="list-style-type: none"> <li>Prepare and submit review reports three (3) months before the MTR in scope and detail satisfactory to the WB. (LA Schedule 2 Section II.C(a); PA Schedule Section II.C(b))</li> </ul>	BPC	3 months prior to MTR		Not yet due
<ul style="list-style-type: none"> <li>Start to implement the recommendations of the MTR as agreed with the WB. (LA Schedule 2 Section II.C(c); PA Schedule Section II.C(c))</li> </ul>	BPC / MFDP and MMEWR	Within 30 days after MTR		Not yet due
<b>III. <u>PROCUREMENT</u></b>				
<ul style="list-style-type: none"> <li>Ensure that all procurements are in accordance of the provisions of Section III of Schedule 2 to the Loan Agreement. (LA Schedule 2 Section III; PA Schedule Section III)</li> </ul>	BPC and MMEWR	As per project component	Experienced some delays in some tenders with regards to no-objections from the WB	Procurement procedures were followed in all tenders issued to date ( In compliance)
<b>IV. <u>OTHER UNDERTAKINGS</u></b>				
(a) Prepare and implement an agreed tariff adjustment plan. (LA Schedule 2 Section V(a))	MMEWR	9-Dec-10		Done
(b) Prepare and implement an agreed tariff policy. (LA Schedule 2 Section V(b))	MMEWR	30-Sep-10	Final report prepared and further steps are pending	In progress, but timing not set; but the interim tariff policy is in effect
(c) Establish an independent regulator to be responsible for the implementation of an agreed electricity policy. (LA Schedule 2 Section V(c))	MMEWR	30-Jun-11		On going
(d) Prepare a Pest Management Plan for the Isang substation. (PA Schedule Section IV(a)) Note: BPC policy continues to be brush clearing manually and “no use of pesticides”	BPC	Before construction		The DEA has provided a list of issues to be attended to on completion of the project (Substation).
(e) Execute the contract with MCL for coal. (PA Schedule Section IV(b))	BPC	31-Dec-09	Experienced some delays in negotiation	Done
(f) Ensure conformance by contractors of the applicable EMPs. (PA Schedule Section IV(c))	BPC	Continuous	Contractor management of work site safety continues to be problematic	Ongoing and closely monitored.

**ANNEX 6 – LOAN AGREEMENT AND PROJECT AGREEMENT**

<b>SHORT DESCRIPTION OF KEY LEGAL UNDERTAKINGS</b>	<b>ACTION BY WHOM</b>	<b>ACTION BY WHEN</b>	<b>CHALLENGES</b>	<b>STATUS AS AT 30 SEPTEMBER 2011</b>
(g) Connect only the southern compartment of the new Paje well field and use NSC as the main source of water. (PA Schedule Section IV(d))	BPC	Continuous		In compliance
(h) Implement agreed measures for monitoring air quality of emissions from Morupule A and B; formulate action plan for exceedances of air quality standards. (PA Schedule Section IV(e))	BPC	Before construction completion		Not yet due
(i) Implement the recommendations in the Ash Dam Survey for stabilizing the old ash dam; appoint an independent panel to review design of new ash dam; re-route the ash from Morupule A to the new ash dam; cease using old ash dam. (PA Schedule Section IV(f))	BPC	31-Dec-12		Not yet due

**ANNEX 6 – PCG PROJECT AGREEMENT**

**PCG PROJECT AGREEMENT (PCG-PA) STATUS**

SHORT DESCRIPTION OF KEY LEGAL UNDERTAKINGS	ACTION BY WHOM	ACTION BY WHEN	CHALLENGES	STATUS AS AT 30 SEPTEMBER 2011
<b>I. <u>INSURANCE</u></b>				
<ul style="list-style-type: none"> <li>Ensure that IBRD is indentified as an additional named insured on all Project-related third party liability insurance policies required to be maintained by BPC or the EPC Contractor under the EPC Contract. (PCG-PA Clause 6.1)</li> </ul>	BPC and EPC Contractor	Continuous		In compliance
<b>II. <u>PROJECT EXECUTION</u></b>				
<ul style="list-style-type: none"> <li>Implement the project with due diligence and efficiency and exert best efforts to ensure that the EPC Contractor does same in order to comply with all material obligations under the Project. (PCG-PA Clause 8.1(a))</li> </ul>	BPC and EPC Contractor	Continuous		In compliance
<ul style="list-style-type: none"> <li>Not to amend any Transaction Document or waive any breach thereof, where such amendment or wiaver would have a material adverse effect on the WB’s rights under the IBRD Agreements. (PCG-PA Clause 8.1(j))</li> </ul>	BPC	Continuous		In compliance
<ul style="list-style-type: none"> <li>Maintain, and require the EPC Contractor to maintain, required policies of insurance. (PCG-PA Clause 8.1(l))</li> </ul>	BPC	Continuous		In compliance
<ul style="list-style-type: none"> <li>Not to make any material amendment, change, or modification to the EPC Contract without the WB’s consent. (PCG-PA Clause 8.1(m))</li> </ul>	BPC	Continuous		In compliance
<b>III. <u>ENVIRONMENTAL AND SOCIAL COMPLIANCE</u></b>				
<ul style="list-style-type: none"> <li>Ensure that the EPC Contractor and others carry out the design, construction, operation, maintenance and conduct of the Project in conformity with the provisions of the EMPs, RPF, RAPs, and Pest Management Plan. (PCG-PA Clause 8.1(b)(i))</li> </ul>	BPC and EPC Contractor	Continuous	EPC Contractor management of work site safety continues to be problematic	Ongoing with close monitoring.
<ul style="list-style-type: none"> <li>Deliver a report (semiannually during the Availability Period and annually thereafter) on implementation of the EMPs, RPF, RAPs, and Pest Management Plan. (PCG-PA Clause 8.1(b)(iii))</li> </ul>	BPC	Semiannual	Due by Feb-15-2012 covering period up to end-2011	Not yet done
<ul style="list-style-type: none"> <li>Prepare a closure plan for any decommissioning of the Project or part thereof, and also in respect of the old ash dam. (PCG-PA Clause 8.1(b)(iv))</li> </ul>	BPC	Prior to decommissioning		Not yet due

**ANNEX 6 – PCG PROJECT AGREEMENT**

SHORT DESCRIPTION OF KEY LEGAL UNDERTAKINGS	ACTION BY WHOM	ACTION BY WHEN	CHALLENGES	STATUS AS AT 30 SEPTEMBER 2011
<ul style="list-style-type: none"> <li>Maintain a log or record of material complaints received through the community liaison office; make the contents available to the WB on request. (PCG-PA Clause 8.1(b)(vi))</li> </ul>	BPC	Continuous		No complaints to date.
<ul style="list-style-type: none"> <li>Employ an Environment Liaison Officer. (PCG-PA Clause 8.1(b)(viii))</li> </ul>	BPC	At start of construction phase		Done
<ul style="list-style-type: none"> <li>Not permit construction on a part of the site until any RAP is implemented and compensation paid. (PCG-PA Clause 8.1(q))</li> </ul>	BPC	Prior to any construction		In compliance
<ul style="list-style-type: none"> <li>Not to amend any EMP, RPF, RAP, or Pest Management Plan without the WB's no-objection. (PCG-PA Clause 8.1(r))</li> </ul>	BPC	Continuous		In compliance
<b>IV. FINANCIAL STATEMENTS</b>				
<ul style="list-style-type: none"> <li>Prepare financial statements in accordance with consistently applied accounting standards. (PCG-PA Clause 8.1(c)(i))</li> </ul>	BPC	Continuous		In compliance
<ul style="list-style-type: none"> <li>Deliver unaudited financial reports not later than forty-five (45) days after the end of each calendar quarter. (PCG-PA Clause 8.1(c)(ii)(A))</li> </ul>	BPC	Quarterly		Quarter ending 30-Sep-11 received
<ul style="list-style-type: none"> <li>Deliver audited financial reports not later than six (6) months after the end of the fiscal year. (PCG-PA Clause 8.1(c)(ii)(C))</li> </ul>	BPC	Annually	Management letter is not received and due	Done for the year ending 31-Mar-11 (In compliance)
<b>V. GOVERNANCE</b>				
<ul style="list-style-type: none"> <li>BPC shall not change its core business or agreements with turnkey suppliers or stop adherence to applicable laws under existing operations without express notification to the WB of such occurrence whereby such changes may materially breach conditions under the PCG Agreement. (PCG-PA Clause 8.1(e-f))</li> </ul>	BPC/GOB	Continuous		Nothing recorded to date
<ul style="list-style-type: none"> <li>Directors, management, employees, affiliates and agents of BPC and the EPC Contractor shall not engage in sanctionable practices during the execution and or under performance of the Project nor shall BPC engage, or allow the EPC Contractor to engage, firms/individuals currently barred by the WB. (PCG-PA Clause 8.1(h, p))</li> </ul>	BPC	Continuous		In compliance

**ANNEX 6 – PCG PROJECT AGREEMENT**

SHORT DESCRIPTION OF KEY LEGAL UNDERTAKINGS	ACTION BY WHOM	ACTION BY WHEN	CHALLENGES	STATUS AS AT 30 SEPTEMBER 2011
<b>VI. <u>PROVISION OF INFORMATION</u></b>				
<ul style="list-style-type: none"> <li>• Deliver a copy of any progress reports received from the EPC Contractor under the EPC Contract. (PCG-PA Clause 8.1(k)(iii))</li> </ul>	BPC	Periodically		In compliance
<ul style="list-style-type: none"> <li>• Deliver a copy of certain documents and information provided under the ICBC Export Credit Facility. (PCG-PA Clause 8.1(k)(i, ii, vii, viii))</li> </ul>	BPC	Periodically		In compliance
<ul style="list-style-type: none"> <li>• Provide details of any litigation, etc, that are current, threatened, or pending against BPC or the EPC Contractor that may have a material adverse effect on the Transaction Documents or IBRD Agreements. (PCG-PA Clause 8.1(k)(v))</li> </ul>	BPC	Continuous		In compliance
<b>VII. <u>WATER COLLECTION SYSTEM</u></b>				
<ul style="list-style-type: none"> <li>• Connect only the southern compartment of the new Paje well field and use NSC as the main source of water. (PCG-PA Clause 8.1(n))</li> </ul>	BPC	Continuous		In compliance
<b>VIII. <u>AIR QUALITY MONITORING</u></b>				
<ul style="list-style-type: none"> <li>• Implement agreed measures for monitoring air quality of emissions from Morupule A and B; formulate action plan for exceedances of air quality standards. (PCG-PA Clause 8.1(o))</li> </ul>	BPC	Before construction completion		Not yet due
<b>IX. <u>ASH DAMS</u></b>				
<ul style="list-style-type: none"> <li>• Implement the recommendations in the Ash Dam Survey for stabilizing the old ash dam; appoint an independent panel to review design of new ash dam; re-route the ash from Morupule A to the new ash dam; cease using old ash dam. (PCG-PA Clause 8.1(s))</li> </ul>	BPC	31-Dec-12		Not yet due