AFRICAN DEVELOPMENT FUND

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FOR INFORMATION

MEMORANDUM

TO : THE BOARD OF DIRECTORS

FROM : Vincent O. NMEHIELLE
Secretary General

SUBJECT : UGANDA - BUJAGALI INTERCONNECTION PROJECT*

PROJECT COMPLETION REPORT

Please find attached the above-mentioned document.

Attach:

Cc: The President

	* Questions on this document should be referred to:		
Mr. G. NEGATU	**Director General**	**RDGE.0**	**Extension 8232**
Mr. H. P. B. BALDE	**Director**	**PESD**	**Extension 4036**
Mr. K. K. MBEKEANI	**Country Manager**	**COUG**	**Extension 6777**
Mr. A.WUBESHET ZEGEYE	**Chief Regional Power Systems Officer**	**RDGE.1/PESD.1**	**Extension 8321**
Mr. E. B. SENNOGA	**Team Leader**	**COET**	**Extension 7253**

SCCD : D.A.

AFRICAN DEVELOPMENT FUND

UGANDA

BUJAGALI INTERCONNECTION PROJECT

PROJECT COMPLETION REPORT

(PCR)

RDGE

January 2018

PROJECT COMPLETION REPORT FOR PUBLIC SECTOR OPERATIONS (PCR)

AFRICAN DEVELOPMENT BANK GROUP

I BASIC DATA

A Report data

Report date	Date of report:	26 October 2017	
	Mission date *(if field mission)*	From: 9 October 2017	To: 13 October 2017

B Responsible Bank staff

Positions	At approval	At completion
Regional Director	*D.Gaye*	*G. NEGATU*
Country Manager	*M. Ojelade Mukaila*	*K. MBEKEANI*
Sector Director	*G. MBESHERUBUSA*	*B. BALDEH*
Sector Manager	*A. T. DIALLO*	*H. NDWIGA RICHARD (OIC)*
Task Manager	*H. R. HEEROO*	*A. WUBESHET ZEGEYE*
Alternate Task Manager		*D. ISOOBA*
PCR Team Leader		*Alemayehu WUBESHET ZEGEYE*
PCR Team Members		*Edward B. SENNOGA* *Arkins KABUNGO* *Uche DURU*

C Project data

Project name: BUJAGALI INTERCONNECTION PROJECT		
Project code: P-UG-FAO-002	**Instrument number(s): ADF Loan 2100150014594**	
Project type: Public Investment	**Sector: Energy / Power**	
Country: UGANDA	**Environmental categorization (1-3): 1**	
Processing milestones – Bank approved financing only (add/delete rows depending on the number of financing sources)	**Key Events (Bank approved financing only)**	**Disbursement and closing dates (Bank approved financing only)**
Financing source/ instrument 1: ADF Loan 2100150014594	**Financing source/ instrument 1:**	**Financing source/ instrument 1:**
Date approved: **28.06.2007**	Cancelled amounts: **UA 1,027,549.55**	Original disbursement deadline: **31.12.2011**
Date signed: **26.10.2007**	Supplementary financing**: N/A**	Original closing date: **31.12.2011**
Date of entry into force: **14.02.2008**	Restructuring (*specify date & amount involved*): **N/A**	Revised (*if applicable*) disbursement deadline: **30.09.2015**
Date effective for 1st disbursement: **23.04.2008**	Extensions (specify dates): **Extension-1 : 23.09.2011** **Extension-2 : 28.06.2013** **Extension-3 : 23.02.2015**	Revised (if applicable) closing date: **Extension-1 : 31.12.2013** **Extension-2 : 31.03.2015** **Extension-3 : 30.09.2015**

Date of actual 1st disbursement: **05.06.2008**				
Financing source/ instrument 2: JICA loan	**Financing source/ instrument 2:**		**Financing source/ instrument 2:**	
Date approved: **30.10.2007**	Cancelled amounts: **5,541,969 (JPY 1,005,112,938)**		Original disbursement deadline: **21.03.2013**	
Date signed**: 30.10.2007**	Supplementary financing: **N/A**		Original closing date: **21.03.2013**	
Date of entry into force: **21.03.2008**	Restructuring (specify date & amount involved): **N/A**		Revised (if applicable) disbursement deadline: **21.03.2015**	
Date effective for 1st disbursement: **same date as ADF loan**	Extensions (specify dates): **09.05.2013**		Revised (if applicable) closing date: **Extension-1 : 21.03.2015**	
Date of actual 1st disbursement: **11.07.2008**				
Financing source/instrument (add/delete rows depending on the number of financing sources):	**Disbursed amount (amount, UA):**	**Percentage disbursed (%):**	**Undisbursed amount (UA):**	**Percentage undisbursed (%):**
Financing source/ instrument 1: **ADF Loan = UA 19,210,000**	**18,182,450.45**	**94.65%**	**1,027,549.55**	**5.35%**
Financing source/ instrument 2: **JICA loan = JPY 3,484 million (~UA 19.21 million)**	**13,668,031.13 (JPY 2,478,887,062)**	**71.15%**	**5,541,968.87 (JPY 1,005,112,938)**	**28.85%**
Government: **UA 11,710,000**	**14,624,034.40**	**125%**	**492,011.00**	**4.2%**
TOTAL	**46,474,515.98**	**92.7%**	**7,061,529.432**	**14.1%**
Financing source/instrument (add/delete rows depending on the number of financing sources):	**Committed amount (UA):**	**Percentage committed (%):**	**Uncommitted amount (UA):**	**Percentage uncommitted (%):**
Financing source/ instrument 1: **ADF Loan = UA 19,210,000**	**19,210,000.00**	**100%**	**0.0**	**0%**
Financing source/ instrument 2: **JICA loan = UA 19,210,000**	**19,210,000.00 (JPY 3,484,000,000.00)**	**100%**	**0.00**	**0%**
Government: **UA 11,710,000**	**15,116,045.40**	**129%**	**0.00**	**0%**
TOTAL	**53,536,045.40**	**107%**	**0.00**	**0%**
Co-financiers and other external partners: ***The Project is co-financed by the Japan International Cooperation Agency (JICA) and Government Counter Part Fund***				
Executing and implementing agency (ies): ***Uganda Electricity Transmission Company Ltd. (UETCL)***				

D Management review and comments

Report reviewed by	Name	Date reviewed	Comments
Country Manager	Kennedy K. MBEKEANI		
Sector Manager	Richard N. HUMPHREY (OIC)		
Regional Director (as chair of Country Team)	Gabriel NEGATU		
Sector Director	H. P. Batchi BALDEH		

II Project performance assessment

A Relevance

1. Relevance of project development objective

Rating*	Narrative assessment *(max 250 words)*
4	Uganda recognized electricity as critical to attain the growth trajectory and socio-economic transformation of its fast growing population. Accordingly, Uganda's Vision 2040 laid out the broad policy directives to develop and generate modern energy to drive the industry and services sectors and improve electricity. The Vision is spelled-out in serious of 5-years National Development Plan (NDP), to translate the Vision into action. The NDP identified that access to power by the manufacturing sector remains a key constraint to catapult the sector from its current status to a level where it can play a key role especially with respect to processing/adding value to raw materials. This translated into the need for systematic expansion of the power infrastructure and adding more generation capacity. Uganda started the power sector reform in 1997 and during its implementation, the country faced power supply deficit (18 MW in 2003 to 42 MW in 2011) resulting in power rationing to consumers, despite the installation of the emergency thermal power stations of up to 100 MW. The commissioning of Bujagali Hydropower Plant (BHP) nearly doubled Uganda's peak electricity supply, eliminating daily load-shedding and providing a reliable solution to meet the increasing power demand. The project reduced the marginal bulk electricity supply tariff by 66%, from 27 US cents/kWh to 10 US cents/kWh, providing significant financial relief for UETCL. In addition, to ensure power supply reliability, provision of sufficient transmission capacity was addressed under the project to evacuate power from BHP to the existing and future national grid and thereby increasing access to cheaper and more reliable electricity supply. Therefore, the country has made remarkable progress in terms of increasing the power generation capacity. Accordingly, the Bujagali Interconnection Project (BIP) was aligned and highly relevant to the development needs of the country in line with the priorities of the Vision 2040, the NDPs as well as the Bank Group's Joint Assistance Strategy (2005 – 2009) for Uganda. The Bank's Joint Assistance Strategy, under Pillar 1 "Enhancing Competitiveness, Production and Incomes" prioritized among others increasing investment in transport infrastructure and in energy systems, and promoting rural development. In addition, the Bank's Country Strategy Paper for Uganda (2011 – 2015 extended to 2016) that sought to support infrastructure development through interventions to address the country's transport, energy and agricultural infrastructure bottlenecks.

* *For all ratings in the PCR use the following scale: 4 (Highly satisfactory), 3 (Satisfactory), 2 (Unsatisfactory), 1 (Highly unsatisfactory)*

2. Relevance of project design

Rating*	Narrative assessment *(max 250 words)*
4	The BIP was designed as a stand-alone project co-financed by JICA. The selection of the technology was based on a holistic planning approach that was followed during the preparation of feasibility study for the development of the Bujagali Power plant. The project executing agency, which is UETCL, has retained the Bujagali power plant supervision consultant to supervise the BIP, which is essential for ensuring strong coordination among the contractors, financers and the design and implementation of the power plant. This has ensured proper interfacing of the two major components of the project and timely completion of the overall project. The design was firm and remained unchanged throughout implementation with no adjustments to the scope, implementation arrangements or technical solutions. The financing plan for BIP was based on co-financing with JICA in addition to counterpart funding from the Government of Uganda. In order to avoid the possible conflict among the procurement rules of the financers, it was agreed to use the Bank's Procurement Rules. The project was broken down into four components: Transmission Lines, Substations, Resettlement/Compensation and Consultancy Services. The BIP benefited all the beneficiaries (BEL, UETCL, UMEME, existing and future customers) and has enabled to inject cheaper hydropower from the Bujagali power plant into the grid and demonstrated diverse and significant development impact by restoring adequate and reliable electricity supply to the country, as well as the financial sustainability of the power sector, avoiding the power shedding, relieving the businesses from expenses for the operation of standby generators.

3. Lessons learned related to relevance

Key issues *(max 5, add rows as needed)*	Lessons learned	Target audience
Learning from past experience on preparation of long term power sector planning and implementation of its investment plan	**Not losing momentum and priorities during the reform period**: Uganda embarked on power sector reforms in 1997, with emphasis on improving efficiency, competition and strengthening the role of the private sector to improve supply reliability and sector efficiency. This resulted in the unbundling of the vertically integrated utility into three separate government-owned corporate entities. However, reform momentum was lost during the reform and transition period (2001 to 2005), leading to power supply deficits. Following the full implementation of the reforms, several public and private generation projects and transmission projects were implemented. In addition, the Electricity Regulatory Authority (ERA) developed a least cost generation development plan to guide the realization of the power sector's ambitions.	MEMD / UEGCL / UETCL / UEDCL / UMEME
Single project supervision and management for both transmission component and hydro power plant component	**Have a common project supervision and management consultant for project involving private and public investment**: the project demonstrated good interfacing of design and equipment, timely completion of both transmission and power plant components. Therefore, such approach has to be replicated on future similar projects.	Project Developers / Financing Institutions

B Effectiveness

1. Progress towards the project's development objective (project purpose)

Comments
Provide a brief description of the Project (components) and the context in which it was designed and implemented. State the project development objective (usually the project purpose as set out in the RLF) and assess progress. Unanticipated outcomes should also be accounted for, as well as specific reference of gender equality in the project. The consistency of the assumptions that link the different levels of the results chain in the RLF should also be considered. Indicative max length: 400 words.
The specific objective of the project is to provide adequate transmission capacity for evacuation of power from Bujagali Hydropower Plant (BHP) to one existing and future distribution companies, thereby increasing access to cheaper and more reliable electricity supply. The project goal is to meet the energy needs of Uganda's population for social and economic development in an environmentally sustainable manner. As a result, the project's benefits accrue to the entire population. The Bujagali Interconnection Project (BIP) is part of a bigger initiative, which also includes the Bujagali Hydropower Station Project. The BHP was been identified as a least cost option to meet the growth in electricity demand in Uganda. The BIP was designed to provide the transmission infrastructure for the evacuation of power from the BHP to national grid. A private developer was identified to build, own, operate and transfer the BHP while the BIP was implemented by UETCL, a State owned utility. The BIP provided a transmission system linking the Bujagali hydropower station to the country's existing transmission network. The Bujagali switchyard, the interface between the transmission system and the Bujagali Power Station, was constructed as part of the BPS project by the private developer. The BIP had have four components and sub-components and the major components were: (A) ***Overhead Transmission Lines*** to construct 75 km Bujagali to Kawanda double circuit 220 kV line, 15 km Kawanda to Mutundwe double circuit 132 KV transmission line, 8 km Bujagali to Nalubaale double circuit 132 kV transmission line, and 5 km Bujagali to Tororo double circuit 132 kV transmission line; (B) ***Substations***, new 132 kV Kawanda substation, extension of Mutundwe; (C) ***Resettlement/Compensation*** focusing on acquisition of land and easements along the right of way, access roads and substations; and (D) ***Consultancy Services*** for project supervision and project audit. The BIP was implemented by UETCL. The commercial operations dates (COD) for BIP was achieved in August 2011 and for BHP in July 2012, but the planned COD date was end of 2011. Compensation of Project Affected Persons (PAPs) for the BIP commenced in 2008 and was implemented up to July 31, 2012 when the project achieved COD. While compensation did not derail the BIP's implementation, several challenges were experienced, notably due to disagreements related to land/ property valuation and crop, which culminated into a class action lawsuit by 557 PAPs. Following a mediation processes facilitated by the Compliance Advisor Ombudsman

(CAO) of the World Bank, all compensation disagreements were resolved out of court. Some absentee PAPs are yet to be located/verified, although the corresponding compensation payments have been deposited in an escrow account and payments will be undertaken once verification has been completed.

Savings from the BIP were allocated to the Bujagali switchyard upgrade project to facilitate interconnectivity between the BHP and the NELSAP Interconnection project, with the Bujagali switchyard upgrade project being completed in 2015 as planned.

2. Outcome reporting

Outcome indicators (as per RLF; add more rows as needed)	**Baseline value** (2007) (A)	**Most recent value** (B)	**End target** (C) (expected value at project completion)	**Progress towards target** (% realized) [(B-A)/(C-A)]	**Narrative assessment** (indicative max length: 50 words per outcome)	**Core Sector Indicator** (Yes/No)
Outcome 1: Transmission capacity of network from power stations to distribution companies and large consumers is increased from 450 MW in 2007 to 900 MW in 2012	450 MW	922.5 MW	900 MW (August 2011)	105%	Transmission capacity of network from power stations to distribution companies and large consumers increased from 450 MW to 900 MW immediately following the commissioning of the BIP on 31st August 2011. The first generator for the BHP was commissioned on 29th February 2012 with the remaining four generators being commissioned until July 2012.	Yes
Outcome 2: Cost of one unit of electricity is reduced from 22 in 2007 US cents to 15 US cents in 2012	22 US cents/kWh	14.5 US cents/kWh (end-2017)	15 US cents/kWh (2012)	107.1%	Following the full commissioning of BHP in July 2012, the Government of Uganda made a decision to remove energy/tariff subsidies. Thus, the current electricity tariff is cost reflective, which makes the tariff reduction following the completion of the BHP and BIP an impressive development outcome.	Yes
Outcome 3: Annual number of days of power rationing is reduced from 365 in 2007 to less than 2 in 2012	365	0	2	100.6%	Power rationing has been eliminated since the commissioning of the Bujagali Hydropower station. Currently, Uganda has reserve power of 339.09 MW (generation capacity is 922.5 MW whereas the peak demand registered in 2017 is 596 MW). The experienced power outages are due to system maintenance and faults (e.g., broken/ compromised conductors, lightening, and outage of generators).	

Outcome indicators (as per RLF; add more rows as needed)	**Baseline value** (2007) (A)	**Most recent value** (B)	**End target** (C) (expected value at project completion)	**Progress towards target** (% realized) [(B-A)/(C-A)]	**Narrative assessment** (indicative max length: 50 words per outcome)	**Core Sector Indicator** (Yes/No)
Outcome 4: An additional 280,000 consumers are connected to the grid by end-2012	302,887	501,208 (2012) 596,521 (2013) 999,433 (2016)	582,887	70.8% 104.5%	The initial plan (as indicated in the approval PAR for BIP) was to commission BHP by end-2011. However, due to an implementation delay of 7 months, implementation of new customer connections was also delayed, which explains why only 198,867 new customers were connected to the grid by end-2012. Following the commissioning of all the five BHP generators in July 2012, a total of 293,634 new customers had been connected to the national grid. At end-2016 a total of 696,546 new consumers were connected to the national grid.	Yes

Rating* (see IPR methodology)	**Narrative assessment**
3	All the programmed outcomes were surpassed, except for the connection of additional consumers, which as explained earlier was due to the 7 months implementation delay in the commissioning of the BHP. As indicated earlier, the targeted additional new consumer connections to the national grid was achieved in 2013 following the full commissioning of the BHP. In line with its objectives, the BIP enabled Uganda to overcome the energy crisis and the resultant heavy reliance on expensive and environmentally unfriendly diesel power thermal plants that experienced prior to the completion of the BHP and BIP. In addition, the project beneficiaries (existing and future customers) have benefited from the reduced tariff and reliable power supply leading to the elimination of power rationing. Other beneficiaries like (BEL, UETCL, UMEME) also benefited from the cost-reflective tariffs and the subsequent improvements in financial sustainability.

3. Output reporting

Output indicators (as specified in the RLF; add more rows as needed)	**Most recent value (A)**	**End target (B)** (expected value at project completion)	**Progress towards target** (% realized) (A/B)	**Narrative assessment** (indicative max length: 50 words per output)	**Core Sector Indicator** (Yes/No)
Output 1: 75 km of 220 kV double circuit transmission line from Bujagali substation to Kawanda substation constructed	72	75	96%	The initially programmed 75 km line lengthy was an estimation. Following contract award, the contractor undertook the ground survey and that the initial 75 km was reduced to 72 km. Thus, output was fully achieved (100%).	Yes
Output 2: 25 km of 132 kV double circuit transmission line constructed	31.11	25	100%	As explained earlier, the actual line length was established following project approval and thus adjusted from the initial 25 km of 132 kV double circuit transmission line as indicated in the BIP PAR to 31.11 km. Therefore, the output was also fully achieved, which is 124% of initial target.	Yes
Output 3: a new 132 kV substation at Kawanda	1	1	100%	Construction completed and bus bar re-energized on schedule.	Yes
Output 4: extension of 132 kV Mutundwe substation	1	1	100%	Construction completed and bus bar re-energized on schedule.	Yes

Rating* (see IPR methodology)	**Narrative assessment**
4	The project delivered on all the outputs as planned in the Appraisal Report. The difference in planned (as indicated in the BIP PAR) transmission line length and the actual line length at project completion was due to necessary adjustments undertaken after project approval following the completion of the ground survey by the contractor.

4. Development Objective (DO) rating

DO rating (derived from updated IPR)*	**Narrative assessment** (indicative max length: 250 words
4	Successful completion of the BIP allowed Uganda to overcome the server power shortages and expensive electricity costs that were experienced during the period 2007 and 2011. Thus, the project fully delivered its programmed development objective of providing adequate transmission capacity for evacuation of power from BHP to one existing and future distribution companies. BIP also enabled increased access to affordable and more reliable electricity supply in Uganda.

5. Beneficiaries (add rows as needed)

Actual (A)	**Planned** (B)	**Progress towards target** (% realized) (A/B)	**% of women**	**Category** (eg. Farmers, students)
198,867 (end-2012) 293,634 (end-2013)	280,000 (end-2012)	(71%) 105%	52% of domestic (household customers)	***New customer connections***: As explained earlier, the initial plan (as indicated in the approval PAR for BIP) was to commission BHP by end-2011. However, due to an implementation delay of 7 months, implementation of new customer connections was also delayed, which explains why only 198,867 new customers were

Actual (A)	Planned (B)	Progress towards target (% realized) (A/B)	% of women	Category (eg. Farmers, students)
				connected to the grid by end-2012. Following the commissioning of all the five Bujagali hydropower plant generators in July 2012, a total of 293,634 new customers had been connected to the national grid in 2013, surpassing the targeted 280,000 new customers at full deployment of the BHP. Out of the newly added 198,867 customers, 179,755 are domestic (household) customers. Gender disaggregated data are not available (see section 6 on Gender equality), therefore estimates of the share of women in total population are used in this PCR. Given that women account for 52% of Uganda's population and the number of persons per household is about 4.8, at least 448,668 women benefited from the new connections at the completion of the project (end of 2012). In addition, industries, microenterprises and businesses have been relieved from frequent power cuts and rationing, thereby promoting economic activities including among women and allowing girls and boys to devote less time to collection of firewood and more time on educations.

6. Gender equality

Assessment on the performance of gender equality in the operation (indicative max length: 250 words)
While the BIP PAR does not contain explicit targets in terms of contribution to gender equality and women empowerment, BIP supported gender equality in at least two ways. First, given that women account for 52% of Uganda's population, out of the new 293,634 customers connected to the grid (until end of 2013), 264,200 were domestic (household) customers and this translates into at least 659,446 women who got access to electricity from the project with the assumption of 4.8 persons per household and 52% of Uganda's population as women. Second, the reduction in the energy tariff (from 22 US cents in 2007 US cents to 14.5 US cents in 2012) facilitated increased access to affordable electricity for households, reducing the burden on women and children in terms of amount of time spent collecting firewood, thereby time allocated to gainful economic activities and education for women and children, notably the girl child. In addition, reduced use of wood biomass for cooking (as a result of increased access to affordable electricity) generated health benefits for women and children who disproportionately bear the brunt of the health risks related to the use of biomass for cooking. During the implementation of the Resettlement Action Plan (RAP), counter signature by women and other adult household members for the proposed compensation package (compensation payment or resettlement) was implemented by the project.

7. Unanticipated or additional outcomes (add rows as needed)

Description	Type (eg. Gender, climate change, social, other)	Positive or negative	Impact on project (High, Medium, Low)
Upon request from the Government, the Bank reallocated BIP savings amounting to UA 4.245 million to the upgrading of the Bujagali switchyard substation to 220 kV to facilitate the future operation of the Bujagali-Kawanda transmission line at 220 kV. Completion of this upgrade in 2015 enabled regional interconnection through the NELSAP Interconnection project and allowed Uganda to increase the transmission capacity from Bujagali to Kampala via the Kawanda substation. This increased the power capacity leading to power supply efficiency, cost effectiveness, and reliability.	Power system efficiency	Positive	High

8. Lessons learned related to effectiveness (add rows as needed)

Key issues (max 5, add rows as needed)	**Lessons learned**	**Target audience**
1. **Consistency in results measurement**: some of the indicators targets included in the Results-Based Logical Framework – RBLF – (baseline for average cost of electricity supply in 2007 at USD 0.22/ kWh) differ from some indicator targets used elsewhere in the PAR (e.g. Annex 13 on 'Monitoring and Evaluation) indicates a baseline of USD 0.22 – 0.24/ kWh for average cost of electricity supply in 2007). In addition some of the indicators reported in Annex 13 (such as additional energy supply to the grid (GWh), level of unmet demand, financial sustainability of UETCL, and level of Government subsidies to the sector) are note captured in the RBLF. In addition, there's inconsistency between the outputs captured in the RLF and the narrative in the PAR (e.g RLF indicates that '25 km of 132 kV double circuit transmission line will be constructed' whereas section 4 of the PAR on project description indicates a total of 28 km of 132 kV double circuit transmission lines will be constructed. In addition, the PAR did not explicitly including indicators to measure the BIP's contribution to gender equality and women empowerment.	1. Ensuring consistency in results measurement facilitates monitoring and reporting, project implementation, and the realization of the programmed developmental results. In particular, the ability of the project implementation teams (both Bank and Government) to effectively monitor the implementation of programmed interventions (and thus the delivery of the underlying results) will severely be compromised in the absence of a rigorous results chain that links the inputs (investments) to the envisaged results (outcomes and outputs). Explicitly including gender disaggregated data/ indicators will allow the Bank to quantify its contribution to gender equality and women empowerment.	Bank
2. **Flexibility in project implementation**. For instance, the deployment of BIP savings to finance the upgrading of the Bujagali switchyard substation to 220 kV enhanced the capacity of the Bujagali-Kawanda transmission line to 220 kV and facilitated regional interconnectivity through the NELSAP project, thereby generating additional development outcomes.	Flexibility in project implementation maximizes development outcomes and should be perused whenever opportunities for doing so exist.	Bank and GoU
3. **Compensation Payment and Implementation of RAP:** Challenges were experienced in implementing compensation of PAPs, primarily due to disagreements in land property and crop valuation, in some cases leading to lawsuits. Mediation (through CAO) and depositing compensation payments in escrow accounts prevented implementation slippages. More longer-term or sustainable solutions will be necessary to improve efficiency in implementation compensation payments. In addition to the above, the delay by Chief Government Valuer (CGV) on approving the compensation rates and assets valuation conducted by the executing agency (UETCL) contributed to compensation payments and brought demands by the land owners of exorbitant rates.	Pro-activeness on the part of the Government of Uganda (e.g. CAO mediation and depositing compensation payments on an escrow account) helped to prevent implementation slippages. However, more cost-effective measures such as gazetting the power infrastructure corridors in line with power sector development strategies in advance will prevent any opportunist/ speculative land/ property development by potential PAPs, thereby easing compensation processes. Adequate staffing the CGV could expedite the review and approval process of compensation rates and assets valuation conducted by the government's project executing agencies and minimizes delays on compensation payment and possibly disagreement by land owners.	GoU

C Efficiency

1. Timeliness

Planned project duration – years (A) (as per PAR)	Actual implementation time – years (B) (from effectiveness for 1st disb.)	Ratio of planned and actual implementation time (A/B)	Rating*
Transmission Component: **2.25** Hydro Power Plant: **3.67**	**3.08** **4.25**	**72.97%** **86.3%**	**3** **3**
Narrative assessment (indicative max length: 250 words)			
Implementation period for the Bujagali Interconnection Project exceeded the planned implementation schedule mainly due to land acquisition disputes on the transmission line corridor. All the transmission lines and substations works were completed in 37 months (on 31 August 2011) compared to the planned 27 months. Although the Engineering, Procurement and Construction (EPC) contract commencement date that was planned, 1 January 2008, as per the PAR has been moved to 16 July 2008 due to delay by the contractor on timely submitting the Bank guarantees and failure by the client to pay the Contractor's advance payment within the contractual dates. With all these delays the transmission lines and substations were completed six-months ahead of the commissioning and operational date of the first generator (29 February 2012) of the power plant. Therefore, the project fully met its development objectives and the efficiency rating is **Satisfactory**.			

2. Resource use efficiency

Median % physical implementation of RLF outputs financed by all financiers (A) (see II.B.3)	Commitment rate (%) (B) (See table 1.C – Total commitment rate of all financiers)	Ratio of the median percentage physical implementation and commitment rate (A/B)	Rating*
104.75%	107%	98%	4
Narrative assessment (indicative max length: 250 words)			
The project total cost at completion is the equivalent of UA 46.47 million, about 92.7% of the initial cost estimated at appraisal (about UA 50.13 million). The reduction in the actual cost is due to a conservative cost estimate at appraisal and good competitive prices the EPC contract. The generous cost estimate at appraisal is primarily due to the lack of detailed ground survey for transmission lines at feasibility and bidding documents preparation, that led the client and the consultant to estimate the costs based on desktop analysis. The competitive contract prices are due to strong international competition. The project, in addition to its original scope, through the loan savings has upgraded the 132 kV Bujagali switchyard to 220 kV level to enable the country to interconnect with Kenya through 220 kV lines. This contributed to the project to achieve >100% of physical implementation of RLF outputs.			

3. Cost benefit analysis

Economic Rate of Return (at appraisal) (A)	Updated Economic Rate of Return (at completion) (B)	Ratio of the Economic Rate of Return at completion and at appraisal (B/A)	Rating*
EIRR = 26.1% (base case), ENPV = 659.2 Bn UGX (~388 m USD) @ 10% DR real	EIRR (base case) = 70%, ENPV = 122 m USD (444 Bn UGX) @ 12% DR, real	3	4
	Narrative assessment (indicative max length: 250 words)		
	The Bujagali Interconnector project was appraised in 2007. At the time of appraisal, the economic analysis was conducted by comparing the "without-" and "with-project" scenarios. The "without project" scenario assumed a higher cost of energy to end users that reflected the system unreliability and inadequacy to evacuate power at that time. In the "with- project" scenario, the analysis had demonstrated significant benefits with huge servings in the costs and this can be inferred from the higher 2007 baseline tariff above. At time of review of the project, the electronic version of the model was not available, together with the various assumptions that were presented in the technical annexes. A reassessment of the project was undertaken estimating the impact of the project in the broader context of what would result if the transmission line was not implemented. PCR findings indicated that the implementation of the line reduced interruptions, increase reliability in the system that made also the GoU remove a huge amount of subsidies in the power sector. While the Bujagali		

	TL was largely envisaged as a dedicated line to Bujagali Hydro power project, the project had significant impact on the tariff of the power sector of Uganda. With the project in place, the government removed subsidies on power tariffs (~40% of the tariff), and decommissioned old expensive thermal power plants. To estimate the economic benefits of the project, in this post evaluation analysis, careful consideration of the evolution of the sector tariff over the project time horizon has been taken into account, noting the expected impact from additional power plants in the energy sector in Uganda. The lower EIRR (B) is due to UGX currency depreciation against the USD since 2015.

4. Implementation Progress (IP)

IP Rating (derived from updated IPR) *	**Narrative comments (commenting specifically on those IP items that were rated Unsatisfactory or Highly Unsatisfactory, as per last IPR).** (indicative max length: 500 words)
4	The overall implementation rating over the years is an average of 3.81, which is equivalent to Highly Satisfactory (see Annex-1). All project covenants have been complied with. Procurement under the project went smoothly. Funds from the project co-financers was available in a timely manner, the counter-part fund for compensation payments and implementation of RAP was deposited in escrow accounts to prevent implementation slippages, and no delays in disbursement were encountered during the project implementation period. The Bank found financial management of the project acceptable. Some loan savings amounting to equivalent UA 6.57 million (ADF loan UA 1.03 million and JICA loan 5.54 million) were cancelled after completion of the project. There was no complexity in the project and the executing agency monitored the project well.

5. Lessons learned related to efficiency

Key issues (max 5, add rows as needed)	**Lessons learned**	**Target audience**
Take into account the institutional and procedural dimensions of an activity to create a realistic implementation timetable	Consideration of the implementation capacity of a Government Department is usually a key to creating a realistic project implementation timetable. Sometimes the source of delays in implementation is quite counter-intuitive. For example, the country's land law and its difference/deviation from Bank's safeguard requirement has to be taken into account. Therefore, the completion time of BIP set in the PAR (31 December 2010) has not realistically considered the required procurement period, the challenges of RAP implementation in Uganda and the estimated completion time of the power plant by the private developer. In addition, when the private sector is involved, time required to implement may be higher: Power Purchase Agreements involving the private sector take longer to prepare and negotiate, because they are based on commercially acceptable practices and not on Bank's standard documents.	Financiers / Government Entities / Private Sector (developers)
Project cost estimation	Accurate cost estimation based on recent similar projects and market analysis would avoid excessive saving of the fund provided by the financiers. The Borrower, prior project appraisal, shall conducted detailed ground survey for transmission lines and substations at feasibility stage to accurately determine bill of quantities, scope of works and its cost estimate. In this project, there was savings of UA 4.245 million from the Bank's loan, which indicated that at completion of the original scope that the project utilized only 78% of the fund. After completion the additional scope, the upgrading of the Bujagali switchyard substation to 220 kV, the project total cost at completion is equivalent UA 46.47 million. Finally, savings from both the Bank and JICA were cancelled.	Financiers / Government Entities
Delay on appointing external auditors by the Auditor General and submission of Project Audit Reports to the bank	The Borrower shall design and put in place monitoring and evaluation mechanism on project executing agencies to follow up the timely preparation and submission of Audit Report to the Bank and the implementation of audit recommendations. In addition, for future Bank's interventions would be useful to give responsibility to project executing agency to appoint external auditor, through competitive process, for the	Borrower/UETCL/AfDB

Key issues (max 5, add rows as needed)	Lessons learned	Target audience
	preparation of project audit report. The current practice in Uganda shows that the appointment of external auditors is done by the Office of Auditor General, which is out of control of project executing agencies and contributed to delay the audit reports submission.	

D Sustainability

1. Financial sustainability

Rating*	Narrative assessment (indicative max length: 250 words)
4	At appraisal stage, the financial sustainability of the project was assessed and a Financial Internal Rate of Return of 18.85% was estimated. The revenues were estimated from the sales of power from the Bujagali BHS. At PCR stage, details on the amounts of energy from the BHS project, Transmission tariffs, information on the sector evolution of tariffs given new power plants in Uganda were used to undertake the post evaluation. From the perspective of UECTL, Bujagali TL evacuates 46% of the energy sector in Uganda. PCR assessment yielded a FIRR of 46%, and FNPV of 96 m USD (~348 Bn UGX). By and large, the project has helped manage sector financial sustainability, but UETCL's ability to finance its future investments remains a challenge.

2. Institutional sustainability and strengthening of capacities

Rating*	Narrative assessment (indicative max length: 250 words)
3	The Executing Agency is the UETCL which the single electricity buyer/wholesaler, and transmission system operator at the center of Uganda's power sector. In addition, in its role as transmission system operator, UETCL's mandate includes: (a) operation and maintenance (O&M) of the high voltage transmission grid (66 kV and above); (b) dispatch of generation plants to meet the demand on the system on an ongoing basis; (c) planning of the expansion of transmission network; and (d) preparation and implementation of transmission projects. The multi-year tariff and regular tariff reviews have helped manage sector financial sustainability, in particular helping UETCL to recover from losses to annual profits. UETCL has a limited capacity to finance future investments. The project provided on-job trainings mostly conducted on the project site, which contributed to the enhancement of UETCL's design, operation and maintenance capacity. This has been demonstrated by maintaining the infrastructure in good conditions through implementation of proper inspection and maintenance activities and by further developing similar 220 kV transmission networks. This are exhibits of how the continued flow of benefits associated with project after completion. The implementation of BIP has been smooth and with neither disbursement nor procurement issues. As such implementation went smoothly with a lot of savings from both ADF and JICA loans which have rendered additional benefits than those estimated at appraisal, which is the use of the savings to upgrade the 132 kV Bujagali switchyard to 220 kV to enable the country interconnect with Kenya with transmission lines of higher power transfer capacity.

3. Ownership and sustainability of partnerships

Rating*	Narrative assessment (indicative max length: 250 words)
4	The ultimate responsibility for the implementation of the project rested with UETCL, but with support from the Project Supervision Consultant. These parties had to work in close tandem to ensure full coordination among not only the contractors involved, but also other stakeholders such as the project financers, communities and other government authorities. The government and the project-implementing agency have shown and continued showing the required ownership including provision of budget for compensation. The handling and paying to the PAPs after project completion is one of the good example of this. In general, even though there was resistance from NGOs particularly on the implementation of the power plant, the project sufficiently involved the relevant stakeholders and in the last five years has ensured and kept good maintenance and management of the project outputs.

	During the BIP preparation and appraisal, the Bank conducted consultation with stakeholders, Development Partners (DPs) and the communities to allow them express their needs concerns and these were captured and prioritized. The Bank, the co-financier and other DPs have demonstrated their partnership in supporting the energy sector in Uganda, even after completion of the project all of them are providing fund for further development of the sector and the institutions that are key player to the sector.

4. Environmental and social sustainability

Rating*	**Narrative assessment** (indicative max length: 250 words)
3	In line with the applicable legal and regulatory frameworks as well as the requirements of the different financiers of the project, the project implementation was carried out to meet the "best practices" on environmental and social safeguards. With respect to environmental requirements, the project was implemented in accordance with the National Environmental Laws and the contractors worked in conjunction with the relevant government agencies including the National Environmental Management Authority and the National Forest Authority. These provisions were also complemented by routing supervision and advisory provided by the different international financial institutions involved in the project. This in general led to well informed management of environmental resources especially reserved forest areas in line with international best practices. The project submitted routinely environmental and social monitoring reports that described the monitoring activities and the results of monitoring. The parameters monitored were based on the ESMP including air quality; water quality; noise; flora and fauna; land use, landscape and visual impacts; soil, archaeology; occupational health and safety; and the socio-economic impacts of the project. Latest supervision activities noted and provided advisory on minor non-compliance items with the Bank's requirements, mainly these were the hazardous waste management procedures and other routine safety issues. On the other hand, the project faced considerable challenge in the context of associated involuntary resettlement and compensation which is typical of such large scale projects which traverse large surface areas and contiguous to personal properties. In 2009, claimants filed suit related to land transactions in the Ugandan courts claiming that the state-owned transmission utility, UETCL, had undercompensated them for land and crops impacted by the 100 km of transmission lines built by UETCL simultaneously with the Bujagali project to evacuate its power. The claim initially involved 557 land transactions but it was later determined to be 514 as there were a number of duplications on the initial list. The complainant and UETCL agreed to an out of court settlement supported by the mediation capacities of the Bank and other financiers. Concerning the original scope of Bujagali Interconnection Project, the updated Compliance Review Mechanism outlined compensation claims related to blasting impacts at the dam areas, and the 557 class action case. Based on the out of court settlement agreement, the payment to the claimants is currently up to 87% and has taken over 2 years to implement. However, it is also noted that there are about 220 separate cases from the 557 class action case. The situation of the 220 cases is as such that the UETCL considers their complaint belated in comparison to the 557 class action case. The issue is still outstanding in court. UETCL will update the Bank on the 220 compensation case and the blast impact complaints.

5. Lessons learned related to sustainability

Key issues (max 5, add rows as needed)	**Lessons learned**	**Target audience**
Enhancement Institutional Financial Viability	UETCL has a limited capacity to finance future investments. The emerging situation of excess generation capacity that is based on take-or-pay contracts will unbalance the supply and demand. This has to be monitored closely as it could impact UETCL's financial position.	MEMD / ERA / MoFPED
Support of stakeholders	Involvement of project beneficiaries and stakeholders from project identification through implementation and monitoring is key to ownership of project outputs. Support for sector financial sustainability and capacity building by both Government and DPs is required for to ensure the sustainability of the power infrastructure investments in the country.	GoU / MEMD / Utilities / DPs
Long-term institutional capacity	The current capacity of UETCL to implement its infrastructure investment plans and preparing coordinated sector investment plan is inadequate. This is due to UETCL is currently structured mainly for O&M of the existing transmission system. The existing project implementation unit (PIU) is not sufficiently resourced to manage the	MEMD / Utilities/ ERA / IPPs

	current and planned infrastructure projects. It is therefore necessary for UETCL's project implementation team to be augmented to enable increased efficiency and effectiveness in project and contract management. Therefore, the Government shall closely monitor and take action needed to strengthen its structure, technical and managerial capacity. In addition, as the current power sector planning are often carried out through individual entities, and harmonized only at the start of each planning period. However, financing for investments comes from different sources and at different times leading to uncoordinated investments. This arrangement results in sub-optimal investments in generation capacity with respect to timing, location, and choice of technology. For example, MEMD formulated the Power Sector Investment Plan in 2011, but this plan was not updated and was never used to guide sector investment decisions. A coordinated power sector planning arrangement is needed to help address the interdependencies of generation, transmission, and demand, and improve the sequencing and cost-efficiency of investments from the country's perspective.	

III Performance of stakeholders

1. Bank performance

Rating*	**Narrative assessment by the Borrower on the Bank's performance, as well as any other aspects of the project (both quantitative and qualitative). See guidance note on issues to cover.** (indicative max length: 250 words)
4	The Bank provided close and extensive project supervision and review missions throughout the period of implementation of the project. The Bank, supervised the project twice a year and assisted the Executing Agency to address managerial and technical aspects of the Project that helped to complete the project. In each of the missions, field inspections were conducted followed by an analysis and discussion of observations including debriefing sessions held with the GOU officials, the results of which were co-signed in the respective Aide Memoires of the missions. COUG also played a major role in facilitating implementation of project activities and ensuring that the process was compliant with the Bank's Rules of Procedures. The Bank also, throughout implementation, provided prompt response to GOU requests and was proactive in its monitoring. Overall, the Bank has shown good support throughout the project starting from the appraisal phase. The Bank approved the Government's request for utilization of the savings to upgrade the Bujagali switchyard.
	Comments to be inserted by the Bank on its own performance (both quantitative and qualitative). See guidance note on issues to cover. (indicative max length: 250 words)
	The Bank participated in several field supervision missions and made relevant recommendations to the Borrower for timely action. It is however desirable that the Bank should regularly attend monthly progress meetings together with the project implementation team for faster decision making and resolution of problems that directly face the project. The Bank has built up a close working relationship with Government, co-financier and UETCL and other DPs.

Key issues (related to Bank performance, max 5, add rows as needed)	**Lessons learned**
Early stage engagement with stakeholders and DPs.	The Bank's engagement with stakeholders at all stages of project design is critical and important, particularly at the early stages of identification, preparation and appraisal. This had enabled the Bank find a co-financier to bridge the financing gap.
The Bank's Flexibility to Borrower's request	The Bank's flexibility to the requests by the Borrower for utilization of savings from the fund has facilitated the upgrading of Bujagali switchyard to establish the interconnection with Kenya with higher voltage transmission line (220 kV).

2. Borrower performance

Rating*	Narrative assessment on the Borrower performance to be inserted by the Bank (both quantitative and qualitative, depending on available information). See guidance note. (indicative max length: 250 words)
3	The performance of the Government of Uganda, through MoFPED and UETCL as the project implementing agency, has been satisfactory in ensuring overall project implementation and achievement of the results indicated in this report. The government put into escrow account the required counter-part fund and this has helped the project for timely availability of the counter-part fund and government did well above in terms of disbursement of counterpart funding. The GOU ensured that the project was prepared and implemented in compliance with covenants, agreements and safeguards agreed with the Bank, and further did well in terms of its responsiveness to supervision recommendations. There were still unresolved compensation payment to the PAPs, which are caused by disagreement of PAPs on the determined values and filed cases to the court. But based on the outcome/decision of the court, the Government is settling the issues with the PAPs.
	Comments to be inserted by the Borrower on its own performance (both quantitative and qualitative). See guidance note on issues to cover. (indicative max length: 250 words)
	The Government is proud to have the Bujagali project successfully completed. UETCL faced some challenges during the implementation of the project, most of which were on compensation payment to PAPs and acquisition of right-of-way for the transmission lines corridors. As the country's land law allows compulsory acquisition, the Government applied such law to complete the project ahead of the completion time of the Bujagali hydro power plant, to enable the power plant evacuate the power to the national grid. The Government is abided to resolve the PAPs issues as determined by the court and is also doing in the last 5-years since the transmission lines were completed.

Key issues (related to Borrower performance, max 5, add rows as needed)	**Lessons learned**
Delay on appointing external auditors by the Auditor General and submission of Project Audit Reports to the Bank	Audit reports need to be submitted on time to enable corrective action to be taken in a timely manner. Delayed action can result into costly and delayed delivery of project. In addition, the Borrower should give the mandate to project implementing agency to appoint external auditor, through competitive process, for the preparation of project audit report.
Institutional capacity	As the capacity of UETCL to implement further infrastructure investment is inadequate due to its existing structure proper attention shall be given to address this issue by adequately staffing the PIU to manage the current and planned infrastructure projects. In addition, there is no harmonization of sector investment plans and lack of updated coordinated power sector planning.

3. Performance of other stakeholders

Rating*	Narrative assessment on the performance of other stakeholders, including co-financiers, contractors and service providers. See guidance note on issues to cover. (indicative max length: 250 words)
4	The performance of the contractor, supervision consultant, and the Bujagali hydropower contractor was satisfactory as evidenced by coordinated implementation of the project, quality of the completed works and their financial and technical capacity to execute the project. The co-financer (JICA) came in time to finance the project and its disbursement was smooth and without delay. An NGO (InterAid Uganda Limited) was appointed as an independent observer to witness compensation packages and weigh their fairness and to assist in dispute resolutions and mediations. The NGO properly fulfilled its responsibilities until the completion of the project despite persisting complaints by PAPs. The NGO played an even major role in the handling of the appeasement ceremony for the displaced spirits.

Key issues (related to performance of other stakeholders, max 5, add rows as needed)	**Lessons learned** (max 5)	**Target audience** (for lessons learned)
Collaboration with DPs and other stakeholders	Joint effort among DPs and other stakeholders are important and should be continuously pursued for the development of the power sector in Uganda.	GoU / DPs / MEMD

IV Summary of key lessons learned and recommendations

1. Key lessons learned

Key issues (max 5, add rows as needed)	**Key lessons learned**	**Target audience**
Sector Financial Viability	The overall project target was to reduce the tariff from 22 in 2007 US cents to 15 US cents in 2012. This has been achieved. However, as the current trend of uncoordinated sub-sector investments from different sources (financing) and at different times is leading the sector to excess generation capacity with take-or-pay contracts (PPA) and unbalanced supply and demand situation that seriously impacts the financial position of bulk buyer (UETCL) and increases the tariffs due to excess investments. In this regard, MEMD and the regulator (ERA) have to prioritize the timing of investments in generation and transmission and its implication on the future end- user tariff. This could be done through well-coordinated power sector planning for which MEMD has to play important role.	GoU / MEMD / ERA / UETCL
Long-term institutional capacity	The current capacity of UETCL to implement its infrastructure investment plans is inadequate, which is caused by its existing structure focusing only on O&M of the existing transmission system and insufficient attention given to the existing PIU. This contributed to UETCL for not being able to increase efficiency and effectiveness in project and contract management. Therefore, the Government shall closely monitor and take action needed to strengthen UETCL's structure, technical and managerial capacity to manage future investments.	GoU / MEMD
Project Audit Reports need to be submitted in a timely manner	The current practice on submitting the project audit is not satisfactory. This is due to the involvement of the Auditor General on appointing external auditor to conduct project audit. In other countries, where the executing agencies are mandated for selection and appointing of external auditor, the projects audit are submitted on timely manner. Therefore, the GoU shall give this mandate to the project implementing agencies to improve and avoid the delay on submission project audit.	GoU
Acquisition of right-of-way and compensations payments	In the past interventions infrastructure projects (power, road, etc.), several mechanisms for handling acquisition of land and compensation payments were put in place for smooth implementation of projects like maintaining escrow accounts and implementation of compensation of PAPs in segments. However, as evidenced by the PAPs complaints and disagreement, these mechanisms have not been successful and projects have suffered delay on completion. This has consequently affected the country's development program. Therefore, the Government considering several measures to reduce the compensation of PAPs, including amending the relevant legislation for the acquisition of right-of-way and compensations payments. In addition, the Government could consider gazetting infrastructure corridors in advance of project resource mobilization to avoid implementation delays. Other measures include indexing compensation payments for inflation and standardizing payment rates across projects and sectors. Additionally, the terms of valuation and relevant milestones, durations and cut-off dates should be clearly agreed, publicized and documented.	GoU

Resettlement and compensation issues	It should be noted that the resettlement and compensation issues contributed to 13-months in project delays and an increase by 29% the counterpart fund. Lessons learnt in the light of this scenario points to the importance of stronger stakeholder's engagement, verification and supervision of resettlement and compensation related aspects of project implementation.	GoU

2. Key recommendations (with particular emphasis on ensuring sustainability of project benefits)

Key issue (max 10, add rows as needed)	**Key recommendation**	**Responsible**	Deadline
Timely acquisition of land and right-of-way	The sustainability of development partners' (DPs) support to the power sector development has been jeopardized by slow implementation of RAP, compensation payment and resolving the PAPs issues. DPs wants to complete the project within the approved timeframe and cannot extend forever the duration of the financing due to persisting right-of-way issues. Therefore, to keep the momentum of support of development partners in the power sector, the Government will aim to expedite the ongoing debate for constitutional amendment to allow the government implement the land law. The government will also strengthen its human capacity for addressing this critical aspect of development projects and encouraging early and deeper consultation, information disclosure, documentation and comprehensive financial provisions. In addition, the Government should always plan compensation and resettlement earlier than the signature of EPC Contracts to address the issue of preparedness and the Bank should consider this as one of the conditions in the loan or grant agreements.	GoU / AfDB	As soon as possible
Strengthening the Chief Government Valuer (CGV)	Adequately staffing the CGV will greatly expedite the implementation of RAP and compensation payments and minimizes the inflation due to approval delay of asset valuation and actual payments.	GoU	Continuously
Financial sustainability of power off-taker (bulk buyer) and end-user tariffs	Both the government and the private sector are actively involved in the development of the power generation. However, the investment in the transmission and distribution systems and the demand growth are not corresponding to the generation capacity that will be added in the next few years. This is mainly due to unavailability of coordinated sector investment plan. The excess generation capacity and the PPAs based on take-or-pay contract will lead to affect the financial sustainability of the power off-taker and possibly, to increase the end-users tariffs. Therefore, a system-wide planning arrangement is needed to help address the interdependencies of generation, transmission, and demand, and improve the sequencing and cost-efficiency of investments from the country's perspective and based on internationally accepted practices of keeping the supply – demand balance.	MEMD / MoFPED / ERA / Power Utilities / IPPs	Continuously

V Overall PCR rating

Dimensions and criteria	Rating*
DIMENSION A: RELEVANCE	***4***
Relevance of project development objective (II.A.1)	4
Relevance of project design (II.A.2)	4
DIMENSION B: EFFECTIVENESS	***4***
Development Objective (DO) (II.B.4)	4
DIMENSION C: EFFICIENCY	***3.75***
Timeliness (II.C.1)	3
Resource use efficiency (II.C.2)	4
Cost-benefit analysis (II.C.3)	4
Implementation Progress (IP) (II.C.4)	4
DIMENSION D: SUSTAINABILITY	***3.25***
Financial sustainability (II.D.1)	3
Institutional sustainability and strengthening of capacities (II.D.2)	3
Ownership and sustainability of partnerships (II.D.3)	4
Environmental and social sustainability (II.D.4)	3
AVERAGE OF THE DIMENSION RATINGS	***3.75***
OVERALL PROJECT COMPLETION RATING	***4***

VI Acronyms and abbreviations

Acronym (add rows as needed)	Full name
ADF	*African Development Fund*
BEL	*Bujagali Energy Limited*
BIP	*Bujagali Interconnection Project*
CAO	*Compliance Advisor Ombudsman of the World Bank*
COD	*commercial operations date*
COUG	*Country Office Uganda*
DPs	*Development Partners*
DR	*Discount Rate*
EIRR	*Economic Internal Rate of Return*
ENPV	*Economic Net Present Value*
EPC	*Engineering, Procurement and Construction*
ERA	*Electricity Regulatory Authority*
ESMP	*Environmental and Social Management Plan*
FIRR	*Financial Internal Rate of Return*
FNPV	*Financial Net Present Value*
GOU	*Government of Uganda*
IPPs	*Independent Power Producers*
JICA	*Japan International Cooperation Agency*
JPY	*Japanese Yen*
kwh	*Kilo-watt-hour*
MEMD	*Ministry of Energy and Mineral Development*
MoFPED	*Ministry of Finance, Planning and Economic Development*
MW	*Megawatt*
NDP	*National Development Plan*
NELSAP	*Nile Equatorial Lakes Subsidiary Action Program*
NGO	*Non-Government Organization*
O&M	*Operation and Maintenance*
PAPs	*Project Affected Persons*
PAR	*Project Appraisal Report*
PCR	*Project Completion Report*
PIU	*Project Implementation Unit*
RAP	*Resettlement Action Plan*
RLF	*Result-based Logical Framework*
UA	*Unit of Account*
UEDCL	*Ugandan Electricity Distribution Company Ltd*
UEGCL	*Ugandan Electricity Generation Company Ltd*
UETCL	*Ugandan Electricity Transmission Company Ltd*

Required attachment: Updated Implementation Progress and Results Report (IPR)– the date should be the same as the PCR mission.

ANNEX – 1

AfDB Supervision Summary
For
Bujagali Interconnection Project (BIP)

PROJECT PERFORMANCE

INDICATORS	RATINGS															
	Field Supervision Mission Dates															This Report
	15.02.2008	01.04.2009	13.11.2009	16.04.2010	11.11.2010	13.04.2011	11.11.2011	31.05.2012	19.10.2012	15.03.2013	15.10.2013	13.04.2014	10.10.2014	02.04.2015	04.10.2015	13.10.2017
PROJECT IMPLEMENTATION																
Compliance with loan condition conditions precedent to entry into			3	3	3	3	3	3	3	3	3	3	3	3	3	3
Compliance with General Conditions	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Compliance with Other Conditions			3	3	3	3	3	3	3	3	3	3	3	3	3	3
PROCUREMENT PERFORMANCE																
Procurement of Consultancy Services	3	3	3	3	3	3	3		2	2	3	3	3	3	3	3
Procurement of Goods and Works	2	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3
FINANCIAL PERFORMANCE																
Availability of Foreign Exchange	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Availability of Local Currency	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Disbursement Flows	2	3	3	3	3	3	2	2	2	1	3	2	2	3	3	3
Cost Management	2	3		1	1	1	1		2	2	2	2	2	2	2	3
Performance of Co-Financiers		3		2	2	2	2	2	3	3	3	3	3	3	3	3
ACTIVITIES AND WORKS																
Adherence to implementation schedules	2	3	3	2	2	1	2	2	2	2	3	3	3	2	2	2
Performance of Consultants or Technical Assistance	2	3	3	3	3	2	2		1	2	2	2	2	3	3	3
Performance of Contractors		3	3	2	2	2	2		2	2	2	2	2	2	2	3
Performance of Project Management	2	2	2	2	2	2	2	2	2	3	3	3	3	2	2	2
IMPACT ON DEVELOPMENT																
Likelihood of achieving development Objectives	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Likelihood that benefits will be realized and sustained beyond	3	3	3	3	3	3	3		3	3	3	3	3	3	3	3
Likely contribution of the project towards an increase in impact	3	3	3	3	3	3	3		2	2	2	2	2	2	2	3
Current Rate of Return	3												2	2	2	3
OVERALL PROJECT ASSESSMENT																
Implementation Progress (IP)	2.	2.93	2.92	2.57	2.57	2.36	2.43	2.6	2.43	2.5	2.79	2.71	2.71	2.71	2.71	2.86
Development Objectives (DO)	3	3	2.78	3	3	3	2.25	3	2.67	2.67	2	2.67	2.5	2.5	2.5	3
Implementation Progress (IP)[1] (**Converted into new Rating of 1 to**	3.	3.91	3.89	3.43	3.43	3.15	3.24	3.47	3.24	3.33	3.72	3.61	3.61	3.61	3.61	**3.81**
Development Objectives (DO) (**Converted into new Rating of 1 to**	4.	4.00	3.71	4.00	4.00	4.00	3.00	4.00	3.56	3.56	2.67	3.56	3.33	3.33	3.33	**4.00**

[1] The overall IP and DO ratings during Supervision Missions has been adjusted to reflect new 1-4 rating scale. (RATINGS: 4 = Highly Satisfactory, 3 = Satisfactory, 2 = Unsatisfactory, 1 = Highly Unsatisfactory)