Report Number : ICRR13944

IEG **ICR Review**
Independent Evaluation Group

1. Project Data:		Date Posted : 06/04/2013		
Country :	Uganda			
Project ID :	P069208		Appraisal	Actual
Project Name :	Uganda Power Sector Development Project	Project Costs (US$M):	305.0	339.0
L/C Number :	C4297	Loan/Credit (US$M):	300.0	306.4
Sector Board :	Energy and Mining	Cofinancing (US$M):	5.0	3.8
Cofinanciers :	Swedish International Development Agency (SIDA)	Board Approval Date :		04/26/2007
		Closing Date :	07/31/2011	07/31/2011
Sector(s):	Power (96%); Central government administration (2%); Energy efficiency in power sector (2%)			
Theme(s):	Infrastructure services for private sector development (40% - P); Regional integration (20% - S); Regulation and competition policy (20% - S); Rural services and infrastructure (20% - S)			

Prepared by :	Reviewed by :	ICR Review Coordinator :	Group :
Surajit Goswami	Robert Mark Lacey	Soniya Carvalho	IEGPS1

2. Project Objectives and Components:

a. Objectives:

According to the Program Document (page 17): "The primary objectives of the Operation are to reduce short-term power shortages and financial imbalances, and facilitate orderly longer-term expansion of electricity service."

According to the Financing Agreement (page 6): "The objective of the Project is to support the Recipient's efforts to reduce short-term power shortage, improve the financing of its power sector, and facilitate longer-term sustained power sector expansion."

The statement of objectives in the Program Document is selected for this Review as it is more monitorable.

b.Were the project objectives/key associated outcome targets revised during implementation?

No

c. Components:

The Project combined a Policy Support Program and a Specific Investment Project

Policy Support Program (Project Cost: US$80.0 million estimated; US$80.5 million actual)

This part of the project disbursed on effectiveness after the agreed conditions were met. It covered three policy areas along the lines indicated by the three project objectives. On power shortages, the policy supported was to improve the efficiency of power supply, from reducing transmission and distribution

losses, and demand (energy end-use efficiency). On financial imbalances in the sector, the policy supported was to ensure that the sector attains a solid financial footing, so that the sector's structure remains sound, and private sector participants remain committed. On orderly longer-term expansion of electricity service, because Uganda had already implemented power sector institutional reforms, the policy support was to improve various aspects of sector governance: first, to strengthen coordination between the Government and development partners, so as to increase aid effectiveness and harmonization; second to improve the rural electrification framework and enhance the effectiveness of the related institutions, to increase the likelihood of meeting rural electrification targets; And, third, to address sustainable uses of Lake Victoria's water(although the power sector is not the sole cause of decline in Lake Victoria's water level).

Specific Investment Project (Project Cost: US$256.8 million estimated; US$258.5 million actual)

This had two components: (1) Thermal Energy; and (ii) Technical Assistance and Energy Efficiency.

Component 1: Thermal Energy (Project Cost: US$234.0 million estimated; US$246.0 million actual). Component 1 was to provide partial co-financing towards the capacity and energy charges of a 50MW thermal plant that was to be installed at Mutundwe, near Kampala. In addition, Component 1 could finance electricity imports from Kenya. The energy charges were towards thermal power generation costs, including that for automotive diesel oil fuelling the thermal plant, payable by Uganda Electricity Transmission Company Ltd. (UETCL) to the private entity running the Mutundwe Power Plant.

Component 2: Technical Assistance and Energy Efficiency (Project Cost: US$22.8 million estimated; US$12.8 million actual). Component 2 was to finance the following sub-components: (a) *Energy Efficiency and Demand Side Management* ; (b) *Independent Evaluation of the Rural Electrification Program;* (c) *Poverty and Social Impact Analysis (PSIA);* (d) *Power Sector Medium-term Investment Plan;* (e) *Lake Victoria Transmission Ring Pre-feasibility and Feasibility Studies;* (f) *Kalagala Offset Tourism Development Plan* ; and (g) *Energy Sector Communications Strategy.*

Sub-component (a) was to focus on supporting MEMD in expanding a framework for a large scale program for energy efficiency and demand side management work. This included: (i) providing relevant training to develop the capacity of Ministry of Energy and Mineral Development (MEMD) staff, and corresponding staff of identified public and private entities, for energy efficiency and demand side management; (ii) providing logistic support to monitor ongoing initiatives; and (iii) implementing communication and education campaigns. Sub-component (b) was to support the Policy Support Program to improve the framework for rural electrification, but was transferred to the Energy for Rural Transformation II (ERT II) project. Sub-component (c) was to examine the distributional impacts of energy sector policy reforms on the well-being or welfare of various stakeholder groups, in particular, the poor and vulnerable populations. Sub-component (d) was for coordination of MEMD with the Uganda Electricity Transmission Company Ltd. (UETCL), the private electricity distribution company (UMEME, Swahili acronym), Rural Electrification Agency (REA), and the Energy Sector Working Group. Sub-component (e) was to carry out a pre-feasibility and feasibility study for the Masaka-Mutukula-Mwanza line as part of a proposed Lake Victoria Transmission Ring. This will be in support of a planned East Africa regional power market program. Depending on the outcome of the feasibility studies, the Project would also finance the detailed design and preparation of tender documents for the first leg of the Ring (Masaka-Mwanza) including the required Environmental Impact Assessment. Sub-component (f) was to support the Government's plan to institute mitigation measures at the Kalagala Itanda site on the Nile River, below Bujagali Falls, to offset the loss of Bujagali Falls when the proposed dam is constructed. This was to include a revision of the 2001 Tourism Development Concept and Plan, and provision of implementation funds. Sub-component (g) was to support the Government's efforts to ensure that key information on sector strategy and initiatives (e.g. on energy conservation, rural electrification, and petroleum development etc.) are made publicly available in a timely and effective manner.

d. Comments on Project Cost, Financing, Borrower Contribution, and Dates:

Project Cost: Of the actual project cost of US$339.0 million, US$80.5 million (23.7%) was disbursed at project effectiveness to support policy actions taken before the project started. In addition, US$246.0

million (72.6%) was disbursed to UETCL to meet capacity and energy charges (including fuel) of the Mutundwe 50MW thermal plant that was being run by a private sector entity, not supervised under the project. Only US$12.5 million (about 62.5% of the planned amount, representing 3.7% of total project cost) of activities under Component 2 was executed under the project. Sub-component (a) was to undertake a series of targeted energy audits in (i) hospitals; (ii) public buildings, universities, schools; and (iii) industries and commercial buildings, including hotels. Within each of the clusters there was to be an initial study (e.g., Mulago Hospital, Makerere University and National Water and Sewerage Company), training and capacity building, and subsequent scaling-up with investments in EE and DSM. The shortfall in implementation of Component 2, came from not being able to execute the chain of activities in sub-component (a) indicated above within the implementation period. In addition, other sources of funding were found for some of the subcomponents. For example, sub-component (b) for policy support to improve the rural electrification framework, was undertaken under the Uganda Electricity Sector Development Project (P119737).

Financing:
The Bank Group provided US$306.4 million of IDA credit (equivalent to SDR199.9 million). The Swedish International Development Corporation (SIDA) provided cofinancing of about US$3.8 million, 57% of the appraisal estimate of US$6.5 million.

Borrower Contribution:
The Borrower/GoU entities contributed US$28.8 million, slightly less than the US$29.3 million foreseen at appraisal.

Dates:
The Project became effective on June 28, 2007 and closed on schedule on July 31, 2011.

3. Relevance of Objectives & Design:

a. Relevance of Objectives:

High

The importance of power supply improvement and improvement of access to electricity has been indicated in the Bank Group's recent dialogue with the Government. The CAS, dated April 27, 2010, and aligned with Uganda's National Development Plan covering FY11-15, has as its one of the strategic objectives, "Enhancement of Public Infrastructure", with "Increased Access to Electricity" as one of the CAS Outcomes.

Project objectives also remain highly relevant to sector conditions at appraisal and currently. The project addressed short-term power-shortages, which is still a challenge, even after the commissioning of the 50MW unit under this project, and after the Bujagali Hydro Electric Power Project (BHPP) has come on line because BHPP is not yet producing all of its 250 MW. Similarly, sector financial imbalances remain an issue, although the electricity tariff has been increased and the cost of bulk power supply has come down as BHPP came on line (because BHPP is decreasing the reliance on costly thermal generation). Lastly, the project objective of facilitating orderly longer-term expansion of electricity service is highly relevant given the time it takes to redress matters in the sector. Such orderly longer-term expansion can be expected to address the access to electricity (increasing from the very low level of 5-10% of the population) and distribution system losses (decreasing from the high level of more than 30%).

b. Relevance of Design:

Modest

For the first two objectives (reducing short-term power shortages and financial imbalances), the statement of objectives was clear and linked to intermediate and final outcomes, although the causal chain between funding and outcomes had gaps. For example, UETCL's net revenues were to become positive from power sales and Government transfers. The project was to fund a large part of the Government transfer but a gap would remain, and it was expected that the Government would need to fill it by raising tariffs or by securing financing from other sources. In addition, the design had identified exogenous factors, such

as increases in fuel prices, which could affect project outcome.

However, project design was less relevant to the third objective (facilitating orderly longer-term expansion of electricity service). There was no clear practical interpretation of the objective, such as increasing access or increasing capacity. In addition, the linkage of the objective with the final outcome of "satisfactory functioning of the Energy Sector Working Group" was vague, and there was no clear causal chain between project-financed activities and the attainment of the objectives.

4. Achievement of Objectives (Efficacy):

(a) **Reduce short-term power shortages: Substantial**

Outputs

- Project financing contributed to the capacity and energy charges of a 50MW thermal plant, where the private sector installed and operated the unit.
- The policy environment supported under the project (e.g. use of long-term concession agreements for generation by the private sector) led to another 146MW short-term thermal and 42MW of mini hydroelectric generation capacity, which required investments from private entities and other external partners.
- The peak time generation capacity deficit of 15MW was largely met through imports from Kenya for about two hours daily but was not sustainable because none of Uganda's neighbors has continuous and reliable excess power.

Outcomes

- Monthly unmet demand was reduced from 30GWh (baseline) to 1.67GWh by the end of the project, which compares favorably with the target of 18 GWh in an environment where electricity demand went up as well. This reduction was achieved through addition of short-term thermal and mini hydroelectric generation capacity but also from energy efficiency and demand side management, not all of which is attributable to this project.

- Energy efficiency and demand side management (partly attributable to Component 2(a)) led to a 55GWh reduction of demand, more than five times the target of 10GWh. Of this, reduction of 43 GWh came from the Government supplying compact fluorescent lights, and a further 12GWh from other energy efficiency investments, such as, power factor correction equipment.

(b) Reduce financial imbalances: Modest

Outputs

- In 2005, the thermal units' share of the total generated supply was 7 percent and was rising. Uganda was increasingly relying on Independent Power Producers (IPP) who were supplying at US$0.24 to 0.29/kWh. The Authorities expected that the cost hike was temporary and would come down as hydropower supply from BHPP (at US$0.12 to 0.14/kWh) increased. The Government had increased electricity tariffs by 51% since April '05 (Project Document, page 31), and had decided to cover the rest of the incremental cost of IPPs with subsidies. Because the Government had fallen behind in payments to the IPPs, a "financial imbalance" was created that could have ultimately led to IPPs stopping production and not investing in new units. This project funded in part those subsidies, thereby eliminating the financial imbalance. During 2007-09, the Government subsidy, including the project's contribution, financed 31% of the power sector's total revenue requirements.

- However, instead of keeping the tariffs in line with the costs, the Government kept the tariff constant during 2007-2009, and actually reduced the average tariff by 8% in January, 2010. Consequently, the project funds for this purpose were exhausted by late 2010, and from early 2011 the full burden of the subsidy once again fell on the Government's budget. By the time the project closed, the Government owed about US$84 million to various IPPs. The ICR reports that some thermal plant operators ceased production due to accumulated non-payments. Subsequently, in January 2012, the tariff was increased by

55.5% to make it fully "cost reflective". The situation has further improved with BHPP coming on line but further reductions in generating costs and enhancements in efficiency and productivity are required in order to eliminate subsidies fully.

Outcomes
- GoU arrears to UETCL and UETCL arrears to generation companies were cleared.

(c) Facilitate orderly longer-term expansion of electricity service: Modest
Outputs
A Power Sector Investment Plan was prepared. This plan includes:
- the sequencing of the various proposed power plants,
- the associated financing requirements and potential sources,
- the impact on the end user tariff, and
- a road-map for implementation of the various projects.

In addition, the Energy Sector Working Group (ESWG), established in 2006, validated the Plan, and the ICR indicated that ESWG has been functioning satisfactorily (outcome indicator #3 in the ICR).

Outcomes
- The orderly expansion of electricity service, particularly in the rural area, is not yet occurring. The various hydroelectricity projects after BHPP, such as Karuma (600MW), Isimba (100MW), and Ayago (600MW) have not progressed, as planned.
- Transmission system development to distribute additional generation has progressed only slowly.

5. Efficiency:
Substantial
The Project Document (page 95) had calculated a Cost of Unserved Energy (CUE), weighted by residential and nonresidential customers, at US$0.389/kWh. A similar value of US$0.373/kWh for CUE was used by the ICR for the ex post analysis. The CUE is found to be higher than the cost of generating even from thermal units (which the ICR estimates as US$0.20/kWh-sent out). The ICR points out some unquantified benefits, but the benefit from greater financial stability of the sector institutions is not mentioned. Lastly, the ICR does not actually rate Efficiency.

With system losses (including collection losses) above 35%, as is the case in Uganda, the generating cost of a unit delivered is about US$0.307/kWh, making the net benefit to be US$0.066/kWh. For 50MW generation, the hourly benefit is US$3,300. The cost of the investment project was US$246 million and at a 10% discount rate, it requires a benefit of at least US$24.6 million per year or about US$67,000 per day. Consequently, slightly over twenty hours of operation per day of the 50MW plant would cover the costs. It is clearly worthwhile for the project to spend US$246 million to support the generation of 50MW of additional power because the CUE is high.

There are other parts of the project, such as the sub-component (a) (*Energy Efficiency and Demand Side Management)* of Component 2 (TA and Energy Efficiency), where implementation was slow and efficiency could have been improved from more efficient procurement, for example. However, given that the project was completed on schedule and that Component 1 (Thermal Energy) was the project's major investment, efficiency is rated Substantial.

a. If available, enter the Economic Rate of Return (ERR)/Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation :

	Rate Available?	Point Value	Coverage/Scope*
Appraisal	No		
ICR estimate	No		

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome:

The relevance of the project objectives is high, and that of design was modest. The project made an important contribution to the virtual elimination of short-term power shortages, and the first objective is rated substantial. Although the sector was financially stronger at project closure than during the 2005-2007 period, and imbalances had been reduced, the Government did not adjust tariffs. As a consequence, by project closure the Government once again owed substantial amounts to various IPPs. This objective is, therefore, rated modest, although the situation subsequently improved following the tariff adjustment of January 2012 and the coming on line of BHPP. The third objective (facilitate orderly longer-term expansion of electricity service) is assessed as modest. Efficiency was substantial. Outcome is rated **Moderately Satisfactory**.

a. Outcome Rating : Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating:

- **Financial: High.** Without orderly longer-term expansion of electricity service, Uganda might have to rely disproportionately again on temporary thermal units, and thus be obliged to pay high costs for electricity to IPPs without being able to charge such rates to consumers. This could in turn bring back financial imbalances.
- **Economic: High.** Orderly longer-term expansion of electricity service is also needed to keep the cost of electricity low and the country competitive in various areas. This comes from the relative cheapness of hydroelectricity over thermal using automotive diesel oil. Even with recent gains, transmission and distribution losses are keeping the cost per kWh sold 20-30% higher than in Kenya.
- **Government ownership/commitment: Significant.** The Government has undertaken institutional reforms and increased tariffs by 55.5 percent in January, 2012. It is now expecting to be able to address high distribution costs and system losses and increase access to rural areas. It does not want again to have to deal with high cost IPPs and fall behind in payments. However, a lack of institutional capacity to deal with issues of integrated least-cost system planning, increased access, and sustainability of hydro resources has limited orderly longer term expansion of electricity service.

a. Risk to Development Outcome Rating : High

8. Assessment of Bank Performance:

a. Quality at entry:

Overall, the Bank undertook substantial preparatory work that helped identify the sector challenges well. The preparation effort also led to a conceptualization of the project that included urgent intervention measures, such as, increasing electricity generation as well as laying the foundation for longer term actions, such as, sector planning. To address the urgent intervention measures, it utilized the institutions already in place, such as the Uganda Electricity Transmission Company Ltd.

The project built on lessons learned from previous power sector operations in Uganda (ICR, page 7), in particular (i) that a Policy Support Program created incentives for the Government to continue with its sector reform program; (ii) that a clear and consistent articulation by the Bank of its approach enhances the outcomes of the sector policy dialogue; and (iii) that technical and economic considerations, such as the conclusions of a least cost expansion plan, should be given due weight, and not be overshadowed by political considerations in the choice of major sector investments.

Risk identification was detailed, except for the risk of not doing the longer-term expansion of electricity service well. During preparation and appraisal, technical, financial, economic, and fiduciary concerns, all focused on the near term and did not appear to attach so much importance to the need for orderly longer-term expansion of electricity services. There were other shortcomings, such as insufficient emphasis on building capacity at the Ministry of Energy and Mineral Development, given the crucial role it was to play in regulating and planning.

M&E design was generally adequate, except for a lack of precision with regard to the indicators for the third objective, facilitation of orderly longer-term expansion of electricity service (see Section 10a

below).

Quality-at-Entry Rating : Moderately Satisfactory

b. Quality of supervision:

Bank supervision fielded a strong team that brought adequate skill inputs and knowledge of processes. This team monitored well the progress on meeting the first objective -- reduction of power shortages. The threat to the second objective of financial imbalance reduction became apparent when the tariff was reduced in January 2010, and the Bank provided timely negative feedback (with Moderately Unsatisfactory ratings of progress towards attainment of the Development Objective and Implementation Progress in the supervision reports). However, the issue could be resolved only partially with project funds, and after the project closed, financial imbalances reappeared (see Section 4 above). The Bank had also identified the threat to facilitation of orderly sector growth from inadequate capacity at the Ministry of Energy. In parallel to the work on the Sector Investment Plan, and Sector Working Group under the project, the supervision effort supported development of the Energy Planning Department within the Ministry, but was not fully successful as indicated by weak performance in this area. In this regard, the Bank could have been more proactive. Other aspects of supervision, such as procurement, financial management including external audits, and addressing various safeguards policies were well conducted.

Quality of Supervision Rating : Moderately Satisfactory

Overall Bank Performance Rating : Moderately Satisfactory

9. Assessment of Borrower Performance:

a. Government Performance:

The Government demonstrated generally strong commitment to achieving the project's development objectives. It involved the private sector in generation and distribution to reduce power shortages. It addressed sector financial imbalances through the project, except for the lapse when tariffs were reduced in January 2010. Arrangements for addressing outstanding issues of sector financial imbalances after closure were not adequate. In addition, the Government has been slow to take ownership for orderly long-term expansion of the electricity service, although coordination with donors has improved through the Sector Working Group.

Government Performance Rating Moderately Satisfactory

b. Implementing Agency Performance:

Both the transmission company (UETCL) and the Ministry of Energy (MEMD) (which were the two implementing agencies) were, according to the ICR, keen to reduce power shortages and to address sector financial imbalances. UETCL implemented Component 1 (Thermal Power), and Component 2(e) (Lake Victoria Transmission Studies) and MEMD implemented all sub-components of Component 2, except sub-component 2 (b) (Independent Evaluation of Rural Electrification) which was removed from the project and transferred to the subsequent Electricity Sector Development Project (P119737). UETCL, originally being part of a large integrated electricity authority, was equipped with a full complement of procurement, financial management, and various safeguards compliance units and implemented the sub-components for which it was responsible with some delay but satisfactorily. On the other hand, the project had to provide energy efficiency and procurement expertise to strengthen MEMD. This speeded up the hiring of consultants for various studies under Component 2 and implementation of the sub-components. Even then, however, implementation of the larger MEMD sub-component 2(a), energy efficiency and demand side management, was slow. Lastly, the institutional arrangements within the Government for sector planning had become weak when the various responsibilities of thermal generation, hydroelectric generation, transmission, and distribution were separated, with the private sector assuming some of the roles of the public entities. This capacity

was rebuilt within MEMD but performance in this area remained inadequate throughout implementation. For example, the ICR reports that MEMD did not put enough urgency into various hydroelectric projects to address poor access and reliability of supply in various parts of the country. Overall, Implementing Agency Performance is rated Moderately Satisfactory.

Implementing Agency Performance Rating :	Moderately Satisfactory
Overall Borrower Performance Rating :	Moderately Satisfactory

10. M&E Design, Implementation, & Utilization:

a. M&E Design:

- A results framework was prepared (Annex 3 pages 55-58 of the Project Document) both for the Policy Support Program and the Specific Investment Project and addressed the PDOs in a similar manner in both of them.
- In this results framework, the development objectives were specified clearly for the first two objectives and the respective Operation Outcome Indicators 1 and 2 reflected those objectives. They both had targets which were clear as well.
- For outcome indicator 1, the results framework used "reduction of short-term power shortage, level of unmet electricity demand" (PDO Indicator 1) measured with UMEME operational data and triangulated by UETCL reports on Short-term thermal generation capacity (one of the Intermediate Outcome Indicator).
- Similarly for outcome indicator 2, the results framework used "reduction of the financial imbalance" based on flow of funds to UETCL and triangulated by Intermediate Outcome Indicators which measured arrears of the Government with various private sector entities, both in generation and transmission.
- The methodologies for measurement of the other two indicators were straightforward. For the first two development objectives, therefore, the M&E system was designed to measure outcomes such as power shortages rather than just outputs such as generation/capacity developed under the project. This gave precision to these objectives. However, there was a lack of precision with regard to facilitation of orderly longer-term expansion of electricity service with the only indicator -- "quality functioning of the Energy Sector Working Group" – being vague, and there being no intermediate outcome indicators. Baseline data were available for all indicators. For the third objective, it was the initial meeting of the Energy Sector Working Group on April 24, 2007. Frequency of data collection was to be quarterly, except for a report on sector's use of water from Lake Victoria which was to be produced monthly.
- There was no provision for a Mid-Term Review.
- M&E design, except for the third objective, was well-embedded institutionally and had sufficient stakeholder ownership.

b. M&E Implementation:

- Indicators set out in the Project Document for the first two development objectives were measured, had sufficient ownership, and can be expected to be sustained. The indicator for the third development objective accepted erroneously the meeting of the Energy Sector Working Group as a satisfactory indication for its quality functioning.

c. M&E Utilization:

- The Bank utilized the various indicators in its dialogue with the Government and the implementing agencies.
- The Bank utilized the indicators to rate the progress made towards meeting the development objectives and in implementing the project.
- The M&E system was able to measure the extent of the power shortage and of Government payment arrears, thereby enabling measuring progress in attaining the project's goals.

M&E Quality Rating : Substantial

11. Other Issues

a. Safeguards:

Two Safeguard Policies, Environmental Assessment (OP 4.01 and Involuntary Resettlement (OP 4.12), were triggered by this Category B project. No exceptions to Bank policies were requested.

- According to the ICR (page 14), the project complied with the identified safeguard policies (OP 4.01 and OP 4.12) at approval, during implementation, and at completion of the project.
- A Resettlement Policy Framework (RPF) and an Environmental and Social Management Framework (ESMF) were prepared and publicly disclosed by the Government and the Bank.
- Environmental Management Plans (EMP) and Resettlement Action Plans (RAP) were prepared for the thermal plant.
- Various mitigation measures included compensation and resettlement for residents near the thermal plant, and construction of noise barriers. The ICR does not contain information on the degree of satisfaction of project-affected persons with their compensation and resettlement arrangements.

b. Fiduciary Compliance:

Financial Management

- The ICR reports (page 14) that financial management performance was rated satisfactory in supervision reports with a low risk rating as there were reasonably strong internal controls in place.
- The Ministry of Energy implemented all recommendations made with regard to the budgeting and accounting functions.
- External auditing arrangements were adequate though there were some delays in submission of audited accounts. The audits were carried out annually in accordance with International Standards of Auditing. The ICR does not state whether the external auditor's opinions were qualified or whether the qualifications were addressed.

Procurement

- The ICR reports that Bank procurement guidelines were followed.
- The procurement plan had envisaged that the thermal plant would be commissioned in June 2007, but it was achieved in July of 2008. Due to delayed procurement of the Independent Power Producer, especially the protracted negotiations that ensued on the appointment of a private legal advisor, the plant commissioning operations date was achieved one year late. This delayed the supply of power to the grid and increased the power rationing in the country.
- Initially, the Ministry of Energy experienced procurement delays mainly due to lack of in-house expertise. With the help of a procurement specialist provided under the project, the performance improved.

There were no reported cases of misprocurement.

c. Unintended Impacts (positive or negative):

None

d. Other:

None

12. Ratings:	ICR	IEG Review	Reason for Disagreement /Comments
Outcome:	Moderately Satisfactory	Moderately Satisfactory	

Risk to Development Outcome :	High	High	
Bank Performance :	Moderately Satisfactory	Moderately Satisfactory	
Borrower Performance :	Moderately Satisfactory	Moderately Satisfactory	
Quality of ICR :		Satisfactory	

NOTES:
- When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.
- The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons:

1. Have clear objectives and appropriate indicators and targets. In this case, the first and second objectives and their indicators demonstrate appropriate ways to design a project. The objectives were clear as was the causal chain leading from project activities to the achievement of intended outcomes. Efficacy of these objectives was substantial despite difficult global developments (rising fuel costs) and a challenging environment. By contrast, the third, longer-term objective and its indicator were vague, leading to modest achievement and a high Risk to Development Outcome.

2. 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 timetable. Sometimes the source of delays in implementation is quite counter-intuitive. For example, 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 World Bank standard documents.

14. Assessment Recommended? ○ Yes ● No

15. Comments on Quality of ICR:

The ICR articulated the project achievements systematically and was evidence-based. It covered all activities under the project thoroughly, while, at the same time, maintaining results-orientation. The analysis was internally consistent. One of its lessons, on realism in project plans, also featured in the Borrower's comments on the ICR and should prove useful for design of future projects in the sector. There were some shortcomings. The ICR's appraisal estimates differed from those in the Project Document without explanation. There is no statement that project external audits were unqualified. Some of the formatting (fonts, lines between paragraphs etc.) would have benefited from closer attention.

a.Quality of ICR Rating : Satisfactory