Report Number: ICRR0021750

1. Project Data

Project ID P099626	**Project Name** MW-Energy Sector Support Project
Country Malawi	**Practice Area(Lead)** Energy & Extractives

L/C/TF Number(s)	**Closing Date (Original)**	**Total Project Cost (USD)**
IDA-49800,IDA-H7150	30-Oct-2016	72,147,110.28
Bank Approval Date	**Closing Date (Actual)**	
28-Jun-2011	15-Oct-2018	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	84,700,000.00	0.00
Revised Commitment	84,700,000.00	0.00
Actual	72,147,110.28	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

The objective of the Project is to increase the reliability and quality of electricity supply in the major load centers. (Financing Agreement, p 5; Project Appraisal Document, p 8)

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

Yes

Did the Board approve the revised objectives/key associated outcome targets?
Yes

Date of Board Approval
04-Aug-2015

c. Will a split evaluation be undertaken?
No

d. Components

Component 1: Electricity Network Strengthening & Expansion (Appraisal cost: US$56.2 million, Actual cost: US$49.03 million)

This component included three activities: (i) Distribution & Transmission Uprating and Expansion; (ii) Low Voltage Reticulation Reinforcement and Technical Implementation; (iii) Support, Design, Procurement & Supervision.

Component 2: Generation & Transmission Feasibility Studies (Appraisal cost: US$15.2 million, Actual cost: US$10.46 million)

This component included financing for feasibility studies for an additional 200–380 MW of new hydropower generation capacity. The proposed feasibility studies were Lower Fufu on the South Rukuru River (estimated generation capacity range of 90 – 180 MW), Mpatamanga on the Middle Shire River (estimated capacity of 100 - 150 MW), and Chimgonda site on the Dwambazi River (estimated capacity of 20 - 50 MW). In addition, a pre-feasibility study on transmission lines was planned in the north from Lilongwe via Kasungu to Mzuzu on the western side of Malawi (approximately 350 km).

Component 3: Demand Side Management and Energy Efficiency Measures (Appraisal cost: US$6.8 million, Actual cost: US$1.96 million)

The component included several demand-side management (DSM) and energy efficiency activities, focusing on reducing the peak load and load-shedding. The activities included were (i) de-rating of Hot Water Geyser (HWG) heater elements; (ii) installation of HWG insulation blankets; (iii) wireless HWG load control; and (iv) DSM Supervision Consultant. Upon the 2016 restructuring, the DSM components were cancelled and a new component on Automatic Meter Reading (AMR) supply and installation was added.

Component 4: Capacity Building & Technical Assistance (Appraisal cost: US$3.5 million, Actual cost: US$7.92 million)

The component included institutional strengthening and technical assistance to both Electricity Supply Corporation of Malawi (ESCOM), and Ministry of Natural Resources, Energy, and Mining (MoNREM). The activities to ESCOM were to provide technical and operational support and build the capacity of the Project Management Unit, while those of MoNREM included (i) technical assistance on the exploitation of renewable energy resources (a wind power resource study, preliminary assessment of geothermal prospects, bagasse-fueled cogeneration capacity assessment); (ii) sectoral studies on energy policy and

pricing, renewable energy development and regulatory issues; (iii) support for specialist Independent Power Producer (IPP) advisers; and (iv) operational and technical support of MoNREM.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost: The estimated project cost was US$84.70 million. The actual cost was US$72.15 million (ICR, p. 2).

Financing: The appraisal estimated that IDA would finance US$84.70 million, composed of US$65.40 million of grant and US$19.30 million of credit. The actual disbursement was US$72.15 million, out of which US$57.07 million was IDA grant and US$15.07 million was IDA credit. (ICR, p 2).

Borrower Contribution: No recipient contribution was planned, and none materialized.

Dates: The project was approved on June 28, 2011 and became effective on January 30, 2012. The project had three restructurings (ICR p 14). The first restructuring was in May 2015 to transfer the responsibility of component 2 to ESCOM. The second and largest restructuring was in April 2016, which included the following seven changes:

1. a 21-month extension of the project closing date
2. the cancellation of DSM activities and the inclusion of AMR supply and installation in Component 3
3. Reallocation of funds
4. Revision of the results framework
5. Inclusion of the force account procurement to allow ESCOM to conduct feasibility studies
6. Change in the disbursement arrangements
7. Change in the implementation schedule

The third restructuring (May 2018) was to further extend the closing date from July 31, 2018 to October 15, 2018.

Although the project restructurings involved the revision of the PDO indicators, a split rating will not be applied for the following reasons:

- The unit of measurement of the two PDO indicators – reduction in electricity losses and Total Interruption Time per KVA Installed (TITK) – were revised to be consistent with the generally accepted standards (ICR p 16), which did not influence material changes in the outcome indicators.
- Although the DSM activities were dropped, the new activity on AMR was added with “revised and/or actual improvements [that] were greater than the improvement targets at approval" (ICR p 17); moreover, the Theory of Change and associated outcome level indicators did not change.

Given the above reasons, this assessment follows the results framework of the revised indicators and targets (IEG ICRR guidelines, p.49).

The project closed on October 15, 2018.

Partner: Although not a formal cofinancier, the project closely coordinated with the Millennium Challenge Corporation(MCC) Compact. A US$350 million MCC Compact was to finance a program of grid

rehabilitation and upgrade, focused on the generation and transmission sub-sectors, as well as investments in natural resource (PAD, p 7). The MCC Compact was also to provide support on a program of policy reforms, operational management, and ESCOM's corporate governance, as well as the regulatory framework for private sector participation. The project was envisaged to closely coordinate with the MCC project.

3. Relevance of Objectives

Rationale

Country context and Government Strategy: The objective of the project was and continues to be fully aligned with the development challenge of the electricity sector in Malawi. The country's peak demand was estimated at about 330 MW and generation capacity was frequently exceeded by about 35 MW. This was caused by both the lack of generation capacity and a reliable transmission and distribution (T&D) network. ESCOM, a vertically integrated and government-owned electric utility, owned and operated 283 MW of the generation capacity, which solely relied on run-of-river hydropower. It needed to add 140 MW generation capacity by 2015 to meet the expected power demand. T&D network losses were 22%, and ESCOM's limited resources had hindered sufficient maintenance of the network as well as upgrades and expansion. Given the projected demand growth of five percent per annum, it was an urgent issue for the country to address the reliability and quality of the electricity supply. The government's national development strategy and its five-year Growth and Development Strategy (MGDS) (2006-2011) prioritized the energy sector as one of the five priority areas focused on increased access to reliable and affordable electricity.

Bank strategy: The objective of the project is also aligned with the latest Bank's strategy. The Country Partnership Strategy (CPS) (FY13-16) indicated that improved ease of doing business through better economic infrastructure was critical to promoting sustainable, diversified, and inclusive growth. It specifically mentioned that more reliable energy would make manufacturing and mining more competitive, which was closely aligned with the objective of the project.

Realism of the objective: The Bank recognized the constraining factors to achieve the objective. The Bank understood the limited capacity of ESCOM and MoNREM, the Implementing Agencies (ICR p 1), and designed the relevant capacity building activities to enhance the achievability of the objective. In retrospect, as later described in the efficiency section, the capacity building could have been more intensified from the beginning of the project, which could have enabled the early service delivery. In addition, the Bank recognized overall inefficiencies in the electricity sector including the financial sustainability of ESCOM. The Bank made a twinning arrangement with the MCC to pursue the sectoral reform, which partly contributed to achieving the objective.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To increase the reliability and quality of electricity supply in the major load centers.

Rationale

Theory of Change

The reliability and quality of electricity supply was logically linked to and measured by the frequency and duration of interruptions as well a fluctuations in voltage, frequency, and power factor (ICR, para 48). As measured quantitatively by these improvements, the achievement of the PDO was directly and causally attributable to the upgrades and expansion of the T&D network, DSM (initially), and energy efficiency measures. DSM activities were dropped since the capacity increase from the substations, upgrades in the T&D network, and the introduction of AMR activities diluted the immediate needs for DSM (ICR, page 22).

Outputs:

- Five new substations were constructed. **Achieved.**
- Five substations were upgraded. **Achieved**.
- A total of 628.98 kilometers of distribution lines were either constructed or rehabilitated against the revised target of 336.20 kilometers. **Exceeded.** The ICR noted that two distribution lines – between the Chileka airport and Blantyre and within Blantyre – were not completed at closing because ESCOM had not been able to acquire outage maintenance for the lines to secure electricity supply during the election season (May 2019), but the task team informed IEG that most of the lines were already constructed and only a few segments remained to be constructed for outage maintenance. ESCOM is now in discussion with the consumer enterprises to enable outage maintenance. Hence, the two distribution lines are likely to be constructed.
- 145 centers were serviced by LV reticulation, not meeting the target of 172. **Almost achieved**.
- Three feasibility studies for hydroelectric power generation were completed. **Achieved**.
- A transmission backbone feasibility study was completed. **Achieved**.
- 925 meters in the ESCOM system were covered by the AMR system against the target of 750. **Exceeded**.
- A preliminary assessment of geothermal prospects was conducted. **Achieved**.
- A wind-mapping study was conducted. **Achieved**.

Outcome:

- Electricity losses per year were reduced from 25 percent to 17 percent against the revised target of 20 percent (ICR Table 6). **Exceeded**. Note that the baseline and end-line targets were revised during the second restructuring because the original baseline values no longer reflected the actual baseline before project activities started (ICR p 21, 2016 restructuring paper).
- Total Interruption Time per KVA Installed (TITK) per year in the project areas was reduced from 32.1 hours to 19.71 hours against the target of 25.8 hours (ICR Table 6). **Exceeded**. The task team confirmed to IEG that the baseline and end-line targets were revised during the second restructuring to reflect accurate TITK through aggregating interruption time in the beneficiary communities.
- Average interruption frequency per year in the project area was reduced from 11.00 to 6.55 against the target of 9.40. **Exceeded**.
- The number of customers served in the project area was increased from 47 thousand to 1,728 thousand against the target of 295 thousand. **Exceeded**.
- Direct project beneficiaries reached 398 thousand against the target of 295 thousand. **Exceeded**. Out of which, female beneficiaries accounted for 51.49 percent against the target of 50.00 percent. **Achieved**.
- Although not stated as an outcome in the Results Framework, several feasibility studies were picked up for future improvement in the reliability and quality of electricity supply. The project and task team supported market sounding throughout the project period to enable the investors to enter the market.
    - Hydropower: Out of the two hydropower studies (Lower Fufu and Mpatamanga), the Mpatamanga Hydropower study was picked up by the Government of Malawi and IFC for PPP-based project preparation including the potential IDA financing. The Government considers the Mpatamanga Hydropower project (309MW) as one of the highest priorities for the country to construct, as documented in the country's Integrated Resources Plan.
    - Geothermal: The project supported a series of geothermal studies, resulting in identifying two potential sites with pre-feasibility studies. One of the sites at 15 MW capacity was taken up by the Embassy of Iceland for prospective investments.
    - Cogeneration: The project supported the pre-feasibility study for Bagasse-fueled cogeneration. A private company, Illovo Sugar, picked up the study and will establish 54 MW of capacity by end-2020.

Rating
High

OVERALL EFFICACY
Rationale
Overall, all the outcome and output targets were exceeded or achieved except for the output indicator of the LV reticulation services. The PDO and outcomes were largely achieved which can be attributed to the successful completion of the T&D network, feasibility studies, and AMR, though there was a shortfall in the LV reticulation. The potential contribution of the MCC project through energy policy reform was limited and did

not significantly influence the achievement of the project's outcome and outputs, which were primarily influenced by the physical investments by the project.

In addition, in the absence of the project, outages would have increased due to transformer overloads supplying major load centers. Besides, voltage quality would have been poor due to the T&N network constraints. It is therefore likely that the reliability and quality of electricity supply might have deteriorated with maintenance conducted at a lower standard.

Overall Efficacy Rating

High

5. Efficiency

Economic and financial analysis:

On the basis of the ICR, the project was assessed economically and financially efficient. At appraisal, the project's economic analysis estimated an NPV of US$142.9 million and an Economic Internal Rate of Return (EIRR) of 26.0 percent, while the Financial Internal Rate of Return (FIRR) was at 16.9% and NPV was US$62.1 million. While the details of economic and financial benefits of the projects were not enumerated in the PAD, the ICR argued that there was no reason to expect the economic benefit and the revenue streams of the project would be any different than that which were calculated at appraisal, except for two issues that have affected implementation and the operational start point of the project (p 27 and 56). The ICR reported the EIRR at 36.0% and economic NPV at US$128.63 million, while the FIRR at 25.0% and financial NPV at US$61.84 million. The ICR and the team's additional explanation concluded that the reduction in the cost and timing of investments led to the increase in EIRR and FIRR and the decrease in NPV.

Aspects of design and implementation:

The design of the project might have seemed slightly complicated due to the coordination with the MCC project, yet it turned out to be the close coordination hence the greater convening power that leveraged the influence of the two institutions to promote policy reform such as the tariff revision (ICR p 33).

The project was delayed for two years due to the capacity constraint and several external matters.

The MoNREM and ESCOM had systematic weaknesses in decision-making and executing the Bank's procedures. The Bank had identified their capacity constraints before the project started (ICR p 33) and provided two interventions, namely, the capacity-building component and the provision of implementation consultancy services. These interventions did not work at the beginning, requiring 2 years and 4 months from the loan effectiveness to award the consultancy services. However, as the implementing agencies learned the procedures and internal mechanisms, the situation became improved as evidenced by the exponential

improvements in disbursements (ICR p 35). In retrospect, the project could have intensified capacity building instruments from the very early stage of the project.

Though not attributed to the project, there were several external factors to impede the project implementation. First, the debarment of the supervision consultant negatively influenced the project progress. The consulting firm supervised three construction packages, which were delayed by about one year. The consulting firm requested a contract extension, but immediately before the request, the firm was debarred from the Bank for 12 months from 27th September 2017 due to issues in another country. As a result, the contract extension was not permitted by the Bank, hence the consultant suspended their services in December 2017, when the original contract was terminated. For a year, due to the unavailability of the consulting firm, ESCOM, the Owner of the project, took over the Engineer's role. Second, the project implementation was impeded by the corporate restructuring of the ESCOM (ICR p 35). As envisaged under the Power Sector Reform Strategy approved in 2003, ESCOM was unbundled in 2016. This caused organizational disruption and many of the administrative staff were gone afterward.

Efficiency Rating

Substantial

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	26.00	100.00 ☐ Not Applicable
ICR Estimate	✓	36.00	100.00 ☐ Not Applicable

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

6. Outcome

The relevance of the objective is **substantial** given the criticality of the development challenge and alignment to the country and bank strategies. Efficacy is **high** given the achievements in improving the reliability and quality of electricity supply that met or exceeded targets. Efficiency is **substantial**. Economic and financial efficiency appear satisfactory but are not comparable due to (missing) appraisal baselines. On the basis of these sub-ratings, the project's overall development outcome is rated satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

Technical and Operational Risks: The project successfully completed several capacity building and technical assistance activities to sustain technical and operational outcomes. For instance, the project conducted training in generation system planning, procurement, financial management, project and contract management, hydropower project preparation, and PPPs. The ICR confirmed that these technical capacities were improved as evidenced by the panel of experts (ICR p 30). Nevertheless, institutional risks remain. The ICR (p 35) noted that many of the PIU positions became vacant due to the restructuring of ESCOM. Technically trained staff may not return to their former business area, which would be a significant risk for project sustainability. In addition, the projects for which feasibility studies were implemented entail completion risks such as safeguards on the Mpatamanga Hydropower project although the concerned parties including the Bank and IFC have been mitigating risks by allocating a new reservoir to avoid the potential flash flood at downstream neighborhoods.

Financial Risks: Financial risks were moderate. ESCOM has been in financial constraints for the past decade. A 2011 tariff increase by 61 percent did not substantially improve the ESCOM's fiscal condition due to the limited revenue allocation to ESCOM (ICR p 7); however, the task team informed IEG that the government approved the tariff revenue allocation to ESCOM in October 2018, and the allocated revenue will be used for O&M. It is not yet known whether the budget was actually spent for the intended purpose given the limited period from the policy change but the financial risks are perceived to be lower than in the past.

Institutional Risks: Institutional risks were substantial. MoNREM and ESCOM's complex and lengthy decision-making process had hindered project implementation, which may affect the sustainability of the project. For example, the project completed several feasibility studies and some necessary future IPP/PPP-based financial transactions. Given their limited IPP/PPP experience, it is likely that the transactions may be influenced by institutional inefficiencies and lack of advisory support by the government (ICR p 42). In addition, the ICR (p 35) noted that a corporate restructuring of ESCOM has not been completed and many of the PIU positions were not filled.

8. Assessment of Bank Performance

a. Quality-at-Entry

Quality at entry was moderately satisfactory. The Bank identified the critical problem of the electricity sector in the country and formulated the project with short-term measures on improvements in the T&D network and long-term measures on identifying potential power sources. The project also recognized the risks and constraints including lack of WB-financed projects experience; project delays; insufficient progress with the reform of energy sector policy and legal framework; ESCOM's financial constraints. In hindsight, the Bank could have strengthened mitigation measures on ESCOM and MoNREE's capacity development, which found to be a crucial factor for project initiation and implementation.

There were two shortcomings observed. The outcome of the feasibility studies was not measured despite its relative larger amount against the total cost of the project (17.95% of the total cost at appraisal). Also,

the PAD did not provide a detailed assessment of the economic and financial analysis, which did not allow the ICR to analyze the pre- and post-comparison of the economic and financial analysis.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision
Quality of supervision is moderately satisfactory. The task team addressed the implementation delay by training O&M personnel for ensuring effective supervision mechanism. A few shortcomings were continuous changes in the task team leaders which distanced the inexperienced MoNREM and ESCOM (ICR p 34) from the Bank and led to a brief period of safeguard incompliance which was addressed immediately by the Bank's safeguards team (ICR p 41).

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The Theory of Change and results framework were closely linked to allow monitoring and supervision. The indicators were clear and measurable. A project report was to be prepared twice a year. Management Information System (MIS) was supported by the MCC project and considered for M&E use although not a prerequisite (ICR p 36). A shortcoming of the M&E design was the lack of an outcome indicator on attracting private sector investors, which was supposed to be derived from feasibility study components and capacity building activities (ICR p 11).

b. M&E Implementation
M&E implementation was satisfactory. M&E officers were assigned from the two implementing agencies and were responsible for data collection and report preparation on monitoring and procurement. It should be noted that they were also tasked to the M&E of the MCC Compact. Recognizing the implementation delay, the frequency of M&E report submission was shortened from semiannual to quarterly (ICR p 37). The project updated some baseline indicators to consistently measure the results.

c. M&E Utilization

M&E was utilized at several points. As noted earlier, the M&E reports were used for closer performance assessments. The M&E data and reports were also used during the 2016 restructuring through revision of baseline indicators and the assessment of the efficacy of the project.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The project was classified as Environmental Category B (partial assessment) and triggered the Bank's safeguard policies on Environmental Assessment (OP/BP/GP 4.01), Physical Cultural Resources (OP/BP 4.11), Involuntary Resettlement (OP/BP 4.10), and Projects on International Waterways (OP/BP 7.50).

An Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) were prepared and Project Affected Persons (PAPs) were identified before project implementation (ICR p 38). During implementation, the project was not in compliance with the safeguard policy related to the compensation of PAPs. Due to the absence of consultancy services for nine months prior to the original project completion, the Contractor began construction works before or simultaneously with the anticipated PAP disbursements. This compliance issue was flagged to the Bank management and the Bank team, and the corrective actions were taken such as reviewing the Resettlement Action Plan (RAP) steps, disbursements to all the PAPs except for the PAPs who were not traced or have left the territory and not reachable, and improvements in a grievance redress mechanism (GRM). (ICR p 39)

b. Fiduciary Compliance

Financial Management

Project financial management was satisfactory, as reported in the ICR. All the eight legal covenants were complied with during the project period; submission of acceptable financial reports including audits was compliant with the Bank's standards; record-keeping was well managed for the entire project life. There was a case in June 2016 when the audited accounts for the ESCOM component had received a disclaimer from the auditors regarding the validity of the financial statements as well as control and accountability issues in accounting. The case was resolved in June 2017 with unmodified audit opinions. Since then the audited accounts have been satisfactory, and the supervision missions periodically reviewed the financial reports, validating the adequacy of the financial reports.

Procurement

Procurement was overall satisfactory except the case in July 2017, when the project experienced the unavailability of the consultancy firms as stated in the efficiency section. The incident was largely informed

by the exogenous factor from the project (debarment occurred in another country, which was coincidentally the same timing of the contract termination of the project). The project was in compliance with the Bank guidelines and no issues were observed other than that specific incident.

c. Unintended impacts (Positive or Negative)

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d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Moderately Satisfactory	Lack of measuring the outcome of the studies and insufficient baseline data for the economic and financial analysis
Quality of M&E	High	Substantial	A shortcoming was observed in the results framework, which missed the important outcome indicator on attracting private sector investors.
Quality of ICR	---	Substantial	

12. Lessons

1. Contract management without the Engineer

The project encountered a unique situation where the Engineer was unable to provide their services due to the debarment in another country. Given the remaining time for the project and unrealistic situation to procure another supervision consultant, the project decided to allocate the supervision role to the Owner for the last year of the project. The project was closed successfully largely due to the better relationship between the Owner and the Contractor because the Contractor had worked with the ESCOM and known the working environment. However, the fundamental basis of the contract document is the tripartite relationship among the Owner, the Engineer, and the Contractor. The absence of the Engineer might have introduced unfairness to the Contractor given the General Conditions of Contract unless the Special Conditions of Contract amended it. For instance, when

conflict occurs between the two parties, the Engineer's judgment is not mobilized and automatically lead to higher dispute resolution mechanisms. When such a situation occurs in the future, a careful review of the contract document is essential to allow a level playing field for the parties involved in the contract.

2. Improving the sustainability of the project through partnership

The project demonstrated an exemplary partnership engagement with MCC. Given the independent nature of achieving the PDO and expected results, the project chose a stand-alone project. Nevertheless, the project closely worked with MCC partly because the reform of financial and operational management policies and procedures were executed by the MCC project. The Bank closely coordinated with the MCC from the design of the MCC project to the reform of the program of policy reforms. The project benefited from the two tariff reforms, which were not in the conditions or requirements of the project and were recognized as one of the binding factors in the electricity sector in Malawi. The outlook for financial risks was consequently mitigated with the tariff reforms. Leveraging other players in the sector is crucial when the project entails a critical factor that the project cannot address.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was carefully written particularly in assessing attribution and implementation issues. The ICR successfully clarified the attribution of the project in light of the influence of the MCC project. The ICR made an extensive explanation of the reasoning for the restructurings as well as critical implementation problems such as the unavailability of the consulting firms.

However, it had several shortcomings. For example, the theory of change was only illustrated as a figure, with no explanation or relation to the implementation logic being provided. It was also necessary to illustrate the sphere of influence of the project to clarify the relationship with the MCC project. The theory of change described that there was no contribution to the feasibility study component to the PDO. The ICR could have assessed the causal path of the feasibility studies to the PDO. The efficiency section should have clarified the deficiency of the information in the PAD (i.e., no detailed economic analysis) and should have shown the limitation of the analysis since the economic and financial benefits were considered as the same condition for both appraisal and ICR. The tariff revenue allocation was wrongly written (ICR p 42) since the revenue allocation was already decided in 2018 according to the interview with the TTL.

a. Quality of ICR Rating
Substantial