



Regulating Energy for Sustainable Development

MALAWI ENERGY REGULATORY AUTHORITY

**GUIDELINES FOR INVESTMENT IN THE ELECTRICITY NETWORK OF THE
ELECTRICITY SUPPLY INDUSTRY IN MALAWI**

October, 2017

Introduction

The Government of Malawi is undertaking reforms in various sectors of the economy with a view to improving performance efficiency for economic growth and poverty reduction. Reforms in the electricity sector have entailed unbundling of the hitherto vertically integrated ESCOM into EGENCO and residual ESCOM. EGENCO will now be responsible for power generation, leaving transmission, distribution and supply functions to the residual ESCOM. In addition, ESCOM will have responsibility for system market operations and single buying.

In order to operationalize the new and restructured power market, new regulatory instruments have been developed by the Malawi Energy Regulatory Authority. One of such new instruments are the guidelines on investment in the electricity network.

Generation, Transmission and Distribution licensees undertake investments in the electricity sector as part of their licensed activities. Costs incurred by the licensees are compensated for through the retail tariff, pursuant to Section 16, 17, and 18 of the Electricity Act, 2004.

In view of this the Authority is required to provide guidelines for investment programs to ensure that the costs incurred by the licensees are prudent and reasonable. The prudence and reasonableness of capital investment costs allowed in the tariff, enables the Authority balance the interests of all stakeholders in the sector, in particular, licensees, the Government of Malawi and consumers.

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1. The Authority issues licenses and prescribes the retail tariff. In view of this the Authority is required to provide a procedure for investment programs to ensure that the costs incurred by the licensees are prudent and reasonable. The prudence and reasonableness of capital investment costs allowed in the tariff, enables the Authority balance the interests of all
2. +stakeholders in the sector, in particular, licensees, the Government of Malawi and consumers.
3. In balancing the interests of stakeholders in the sector, the Authority performs its functions in an open, objective, fair, reasonable, nondiscriminatory manner. On account of this, these guidelines are promulgated to ensure that transparency is encouraged in the sector and that Licensees are fully informed of the procedures and practices that the

Authority will apply during the approval and verification of capital investments in the electricity network.

4. The Authority may update these guidelines to reflect prevailing regulatory and legislative requirements. They are further intended to supplement the provisions of the Electricity Act 2004, the Regulations made under the Electricity Act 2004, the Electricity (Amendment) Act, 2016 and the Licenses issued by the Authority, all of which may be applied in precedence over these Guidelines.
5. These guidelines describe the processes, principles, standards and policies followed by the Authority for the approval and verification of investments in the Electricity network. They set out the information requirements of MERA in its assessment of the investment obligations of transmission and distribution licensees.
6. These guidelines additionally explain and set out the stages of investment process and set out the key performance indicators that MERA will apply in the verification of investment by Licensees.
7. Licensees should, in accordance with these guidelines, plan for and implement capital investments in the electricity network. Investments undertaken should take into consideration the planned generation growth and new customers as well as develop and implement robust, safe and reliable networks. Licensees will undertake routine investments for purposes of sustaining the reliability, enhancement and expansion of the Grid through undertaking routine and major investments.
8. These guidelines additionally present the criteria and conditions for approval applied by the Authority in determining which capital investments should qualify for a return on investment.

1. Scope

These guidelines shall apply to the approval and verification of investments by licensees in the generation, transmission and distribution network.

2. Objectives

The Authority shall, in approving and verifying investments by licensees in the ESI, take into account the following principal objectives:

- a) The Licensees' investments in the ESI shall be reasonable, nondiscriminatory and promote the security and reliability of supply.
- b) The sequencing of investments by a Licensee shall be technically and financially feasible and sustainable .

- c) The Licensee's investment plans shall include sufficient detail to allow effective monitoring by the Authority .
- d) The Licensee's investment plans shall be consistent with existing Government Policy and the regulatory framework.
- f) The value for money to be attained from the Licensees investments in the ESI.
- g) The implications and source of funding of the licensee's investment in the ESI and the retail tariff.
- h) To provide regulatory certainty by having a process that allows MERA to track the investments utilities make whilst still monitoring the mechanism it adopts for utilities to recover prudential costs they incur to maintain the technical safety, security and reliability of the network.
- i) Give the Authority an opportunity to carry out periodic compliance evaluations of the patterns of capital expenditure (Capex) as well as the operations maintenance and administration (OM&A) costs the utilities incur to meet their license conditions.
- j) Any other objective as determined by the Authority to give effect to the provisions of the Act.

4. Investment approval

- 1. Licensees shall ensure, based on the objectives indicted in above, that they prepare and file, in the manner and time prescribed by these guidelines, investment plans with the Authority for approval.
- 2. The Licensee shall submit an annual and four year investment plan to the Authority in respect of the investments the licensee proposes to undertake for such respective twelve month and four year period. Subject to the provisions of these guidelines, the licensee may, however, be required by the Authority to submit investment plans for periods greater than one or four years.
- 3. The content of the investment plan shall include but not be limited to:
 - a) Current assessment of the status of the licensees' network;
 - b) The magnitude and time line for loss reduction;
 - c) Quality of supply improvements to be achieved by the proposed investments;
 - d) Projected network growth, coverage and access to electricity;
 - e) Financing plan and capital expenditure required to achieve the proposed investments;
 - f) Operation and maintenance expenses the licensee expects to incur in respect of the proposed investment;

- g) Targeted and calculated direct benefits to be achieved and accruing to customers by the proposed investments;
 - h) Environmental implications of the investments;
 - i) Categorization and function of assets;
 - j) Life cycle costing of proposed investments;
 - k) Justification of technical and financial sequencing;
 - l) A description of any relevant unique challenges and opportunities associated with the licensees' network as currently configured;
 - m) Information regarding consultation with any affected distributors, transmitters and asset owners;
 - n) Any matters that the licensee considers relevant to support its application for approval; and
 - o) Any other matter as may be required by the Authority to be included in the investment plan.
4. The Licensee's annual investment plan must be submitted to the Authority for review ninety days prior to the commencement of the respective investment year.
 5. The Licensee's four year investment plan should be submitted to the Authority for review at least six months prior to the commencement of the respective four year period.
 6. The Authority may prescribe the format of the investment plans to be submitted by the Licensee from time to time.
 7. Assets in the investment plan shall be categorized first by their strategic purpose such as loss reduction and secondly by their nature or function such as low voltage lines.
 8. Investment plans shall be submitted in both hard and soft copy in a legible and comprehensible format prescribed by the Authority. Where a Licensee proposes to undertake investments pursuant to a concession agreement, investment plans must be submitted to the Authority under copy to the Asset Owner/concessionaire. The Asset Owner under copy shall provide an opinion of no objection to the Authority in respect of the choice and relevance of selected investments within two (2) weeks from the date of submission.
 9. The Licensee shall not undertake an investment unless approved by the Authority.

5. Requirements and content of investment plan

1. notwithstanding the provisions of 4 above, an investment plan shall include information relating to;

- a) The expansion or reinforcement of the licensee's generation, transmission and distribution network;
 - b) the licensee's transmission and distribution networks accommodation of anticipated electricity generation plants and equipment including the number and capacity in MW of generation connections anticipated over the investment period;
 - c) An indication of funding sources, including shareholders equity, debt, retained earnings, grants, and concessional financing.
 - d) an indicative standard cost database developed by licensee on a quarterly basis and submitted to the Authority and Asset Owner within one month after the end of each quarter .
2. At approval, reference should be made to the standard cost database developed by the licensee to check valuations.
 3. The Asset owner will explicitly confirm that the investment value estimate is reasonable.
 4. An investment plan shall include a justification for the technical and financial sequencing of the proposed investments.
 5. The Authority and the asset owner should independently assess viability of proposed technology. The licensee shall provide sufficient evidence to the Authority and the Asset Owner of the viability of proposed technology/ innovation.
 6. Proposed investment plans should provide Environmental Affairs Department certificates where applicable or required. Where a Resettlement Action Plan (RAP) is required to achieve the required proposed investment, the investment plans should include preliminary clearance from the Ministry responsible for lands.

6. Decision on investment plan

1. The Authority shall communicate its preliminary decision to the licensee, not later than fourteen (14) days from the date of receipt of an application for approval of an Investment Plan. Where the licensee's proposed investment plan is determined as incomplete by the Authority , the licensee shall provide such additional information as required by the Authority within seven (7) days from the date of receipt of the preliminary decision of the Authority.
2. The Decision of the Authority in respect of the licensee's investment plan shall be communicated within forty five (45) days of the date of submission of the complete investment plan.
3. The Authority may make a decision to
 - a) Approve the licensee's investment plan;

- b) Prescribe in accordance with the objectives indicated in 2 above, investments different from those requested for by the Licensee;
 - c) Reject the licensee's application for approval of its investment plan.
- 4. The decision of the Authority in respect of 3 (c) above shall be accompanied by a statement of reasons for the rejection.

7. Review of Authority decision

- 1. A Licensee may, within fourteen (14) days from the date of receipt of the Authority decision, bring a notice requesting the Authority to review or vary in part or all of its decision, on a question as to the correctness of the decision of the Authority including an error in fact, change in circumstances, new facts that have arisen, or facts not previously placed before the Authority and could not have been discovered by reasonable diligence at any time.
- 2. Every notice of review shall set out the grounds upon which it is based.
- 3. The Authority may at any time, without notice, correct a typographical error, error of calculation or similar error made in its decision.

8. Emergency investments

- 1. The Licensee may apply for supplementary and emergency Investments subject to the approval by the Authority. The approval of supplementary and emergency investment plans shall be approved, to the extent reasonable, in accordance with the procedures and practices detailed for the approval of annual investments.
- 2. Emergency investments shall be approved by the Authority in consultation with the Asset Owner where the licensee's assets are operated under concession arrangements.
- 3. Emergency investments shall meet the existing criteria for approval of investments before they can be approved by the Authority.
- 4. Non-network Assets deployed pursuant to this condition shall not earn a return on investments.

9. Return on Investments

- 1. Any Investment shall qualify to earn a Return on Investment (ROI) in accordance with the provision of the Licensees license. The calculation of ROI shall conform to the formulae and principles set out in the licensees' license.
- 2. The non-network assets are excluded from qualification to earn a return.

3. New network installation will be recognized upgrades of networks and shall qualify for ROI to the extent that additional economic benefits will be realized over and above what had been expected at the initial recognition stage.
4. Investments shall be recognized and or written off when they are no longer expected to generate the expected economic benefit or deliver the service to meet the expected standards or when they have been disposed of.
5. Where installations are disposed of out rightly or damaged through accident, any disposal proceeds or insurance claims shall be netted off the carrying value before imputing the write off allowances to be granted.

10. Monitoring and Verification

1. Assets that qualify for Return on Investment shall be either Network Assets or Non-network Assets without which the network assets cannot be effectively operated as may be determined by the Authority.
2. A Network Asset must directly result in either an upgrade to the network or extension of the network load carrying capacity or coverage.
3. Non-network assets include but are not limited to tools and equipment, office buildings, motor vehicles and trucks, operational or first time additions and replacement after lifetime, computers and office equipment, furniture, stationery, communication, safety wear, CCTV equipment, firefighting equipment and specialized equipment
4. Network Assets shall include:
 - a) Overhead and underground power lines and their associated way leaves. Power lines shall include but not be limited to towers, steel poles, concrete poles, way leaves and easements, optical fiber, spares, civil works.
 - b) Substations include but are not limited to transformers, switchgear, bus bars, reactors, communication equipment , protection equipment , metering equipment, Current Transformers (CTs) and Voltage Transformers (VTs) , buildings and civil works , cables, control equipment and SCADA, auxiliary supply , DC supply system, land and fencing.
 - c) Generation plants include but are not limited to generators, switchgear, transformers, cables, protection equipment, auxiliary supply, civil works, CCTV, metering equipment, Network Management system i.e. control center, work management center, and SCADA.
5. Non-network assets that qualify to earn a return on investment are limited to Specialized Vehicles for instance low wheel loaders and trucks.
6. The asset base qualifying for ROI shall exclude:
 - a) The depreciation allowed for in the licensee's tariff methodology. For the purposes of investment verification, the straight line method shall be used for computing depreciation or as may be determined by the Authority.

- b) The impairment charges reported in the most recent audited financial statements, unless such impairment is attributable to diminutions in the value of concessional assets existing at the time of concession. In the case of leased assets the Authority may require the asset holder to confirm the impairment.
 - c) Assets held for future use and capital work in progress.
 - d) Goodwill (donated and/or grants) assets.
7. The accounting principles for the qualifying Asset base shall be consistent with existing International Financial Reporting Standards (IFRS) and Generally Acceptable Accounting Principles (GAAP).
 8. All assets qualifying for a ROI shall additionally enhance the state of the electricity network and be already deployed for the benefit of consumers. Works in progress shall not qualify to earn a Return on Investment.
 9. The qualifying asset base must be funded from the applicant's licensee funds such as equity, shareholders or private loans, retained earnings.
 10. Changes to the methodology of valuation of approved investments must be approved by the Authority before they can be used in making investment submissions for qualification for a ROI.

11. Reporting and Submissions

- a. The licensee shall submit investments for verification within twenty one (21) days of the end of every calendar quarter.
- b. Only approved investments shall be submitted for monitoring and verification purposes.
- c. Investments submitted subject to the provision of 11 (a) above MUST be aligned to the approved plan when submissions for return on investment are made. Variances between the approved investment plan and the actual outturn shall be precisely documented.
- d. Information on actual investments shall be sufficiently detailed to allow monitoring for practical purposes. This will tie in with the measurable targets identified during the approval process. Therefore, measurable progress levels must be communicated at this stage.
- e. The breakdown of the submission should include the sources of funding.
- f. For assets operated under concession arrangements, a duplicate of the submission must be made to the Asset Owner.
- g. All third party funded projects shall be communicated to the Authority and Asset Owner at completion for monitoring.
- h. The responsibility of making information and relevant supporting documentation easily available on a timely basis rests with the licensee. For quarterly investment reporting, all relevant information must be submitted by the third week after the end of the quarter.

- i. The verification of investments for which relevant information is not submitted within this period will be deferred until the next monitoring cycle or financial year.
- j. For purposes of submission of investment related information at the end of the tariff year, a submission of all the investment in the year will be made following similar rules as the ones for quarterly investment. Annual investments must be submitted together with the draft financial statements of the respective financial year.
- k. Reporting on the movement of assets must be provided in sufficient detail for easy monitoring. Asset movement or disposal reports should be included in regular monitoring information submitted to asset owner and the Authority.
- l. All investments funded to any extent by customer contributions shall be separately disclosed to the Authority and the Asset owner and shall stipulate the extent of the customer contribution.

12. Procedure for verification.

- a. All licensees shall include in their audited Financial Statements (FS) a statement or opinion of their auditors on the adequacy of internal controls the licensee has employed relating to investments.
- b. The verification of the licensee's investment shall be made in accordance with International Standards on Auditing. Assurance will be specifically sought, among others, on existence, valuation, cut-off, rights and obligations, presentation and disclosure of submitted investments.
- c. The Authority shall monitor and verify the actual deployment of investments. Any other applicable processes that confirm deployment will be used even if they do not involve physical verification of the asset.
- d. The procurement process of the licensee will be reviewed to determine compliance with best practice, competitiveness and the delivery of value for money. The Authority may require a licensee to submit information in respect of its procurement processes and procurements.
- e. The licensee shall implement and undertake processes to provide assurance that asset base impairment is properly recognized by the licensee. These include: review of assets replacement schedule for causes, examination of impairment values in the financial statement, review of accident/emergency reports, and review of insurance proceeds.
- f. Monitoring and verification processes will be undertaken on a sample basis. Sample selection will primarily be informed by a focus on population representativeness and the risk of misstatement.
- g. The licensee must explicitly disclose the source of funding for the investment undertaken to the Authority's satisfaction.
- h. Verification work will be preceded by a high level kickoff meeting and officially closed by a similarly high level exit meeting. However, kick-off meetings will not be scheduled without a complete submission of the licensee investment claim.

- i. Exit meetings will confirm verification findings but will not, in any way anticipate the decisions of the Authority.

13. Requests for information

- a. The licensee shall be responsible for providing information and relevant supporting documentation in such a form and manner as may be specified by the Authority.
- b. For quarterly investment reporting, all relevant information must be submitted by not later than twenty one (21) days from the end of the quarter. Investment for which relevant information is not fully submitted within this period shall be deferred until the next monitoring cycle/financial year.
- c. For purposes of submission of investments related information, at the end of the tariff year, a submission of all the investment in the year will be made following similar rules as the ones specified for annual investments.
- d. All quarterly investment submissions shall be supported by management accounts relating to the period of submission.
- e. Annual Investment submissions relating to a full year will be made together with draft financial statements relating to that year. Subsequently, Audited Financial Statements must be submitted for the financial year not later than 1st September of the next financial year.
- f. Third party funded assets will not be in approved investment plans or supplementary approvals.
- g. The licensee must provide a schedule of impaired assets together with the application for new Investment submissions annually. The Licensee shall submit Audited Financial Statements prior to the investment verification. Draft Financial Statements or Management accounts submitted up to the period of review will be used for reconciliation purposes only.
- h. The reconciliation between financial statements whether audited or draft and the submission of investments in a format appropriate for regulatory purposes is the responsibility of the licensee.
- i. The Authority shall require written representations from licensee management on all aspects that may be deemed necessary relating to the investment verification work. The management representations will be in a form prescribed by the Authority.

14. Confidentiality

- a. All records and information submitted by the Licensee to the Authority shall be open to inspection by any person unless disclosure is prohibited by law.
- b. Notwithstanding the provision 14 (a) above a Licensee may request that all or any part of a document submitted to the Authority pursuant to these guidelines be held in confidence.
- c. Any request for confidentiality shall be made in accordance with the provision of the Act and the license.

15. Special and Value for Money Audits

- a. The Authority may conduct Value for Money audits in respect of assets procured or acquired for purposes of delivering electricity to consumers.
- b. Value for Money audits shall be assessed as the optimum combination of the whole life costs and the appropriate total quality appropriate to meet the requirements of electricity consumers.
- c. Value for Money assessments shall be based on quality and costs of the asset.
- d. Quality shall be assessed as the fitness for purpose of the asset.
- e. Value for Money audits shall be conducted to assess whether the resources are used effectively and economically and without waste in regard to the total benefits and costs of an arrangement and its contribution to the goals and objectives of the electricity sector.
- f. Value for Money audits shall be conducted on the framework of procurement procedures undertaken by the Licensee to acquire the assets of the electricity sector.
- g. Value for Money audits shall be conducted in accordance with the principles of effectiveness, efficiency, transparency, ethical behavior (Impartiality and integrity), competitive supply, accountability, informed decision making, consistency and legality.
- h. The Licensee shall promptly provide the authority with such information as the Authority deems appropriate and or necessary to carry out such Value for money audits.

16. Compliance with investment plan

- a. Where a licensee fails to comply with the requirements of these guidelines or such order of the Authority made in respect of and pursuant to these guidelines, the Authority shall exercise all such necessary relief as the Authority considers appropriate as provided for in the Act, regulations and License.
- b. Where a licensee fails to comply with the provisions of these guidelines as prescribed in the provisions above, the Authority may , in addition to exercising its powers set out in the Act , Regulations and License disallow investments made by the licensee in the tariff calculation.
- c. Where a licensee fails to submit its investment plan within the time period provided for in these guidelines, the Authority will disallow all such investments undertaken by the licensee during the respective tariff year for purposes of computation of the tariff.