



**Guidelines**  
**for**  
**Investment Approval and Verification for Regulated Natural Gas**  
**Utilities**



## **CONTENT AND STRUCTURE OF DOCUMENT**

This document issued by the Public Utilities Regulatory Commission (PURC) constitutes the approved Guidelines for approval and verification of investments in the power sector in Ghana. The document is organized as follows:

- Part 1 – This Part deals with the Purpose, Scope, Application and Issues relating to Revision of the Guidelines as well as Definitions.
- Part 2 - This Part sets out the Philosophy of the Guidelines.
- Part 3 – This part sets out the Background and Contents of an Investment Plan
- Part 4 – This part sets out the Methodology for Approval of Investment Plans
- Part 5 – This part sets out the procedure for Verification and Monitoring of Investment Plans

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**DEFINITIONS**

<b>Term</b>	<b>Definition</b>
<b>Act</b>	This shall mean the Public Utilities Regulatory Commission Act, 1997 (Act 538).
<b>Commission</b>	This shall mean Public Utilities Regulatory Commission established under the Public Utilities Regulatory Commission Act 1997, (Act 538).
<b>Consumer</b>	This shall mean a person or his successor, who purchases, receives or makes use of any service provided by a public utility and who does not deliver or resell the service to others.
<b>Critical investment</b>	This shall mean a short term, medium term or long-term investment needed to address immediate operational and maintenance challenges to ensure continuous supply of natural gas.
<b>Emergency Investment</b>	This shall mean an investment needed to maintaining continuous supply of natural gas following interruption due to equipment failure or system faults as a result of natural occurrence.
<b>Investment</b>	This shall mean the construction, expansion, installation, upgrade or extension of an asset in the supply of natural gas.
<b>Long term investment</b>	This shall mean an investment needed to address operational and maintenance needs to ensure continuous supply of natural gas within a time frame period over five years.
<b>Medium term investment</b>	This shall mean an investment needed to address operational and maintenance needs to ensure continuous supply of natural gas within a time frame period of one to five years.
<b>Regulatory Asset Base</b>	This shall mean all tangible and intangible assets used in the direct provision of a regulated service and used in determination of tariffs.
<b>Short Term investment</b>	This shall mean an investment needed to address immediate operational and maintenance needs to ensure continuous supply of natural gas within a time frame period of one year.

## **INTERPRETATIONS**

In these guidelines:

1. Capitalized terms shall have the meanings assigned in the Definitions;
2. Capitalized terms used but not defined shall have the meanings assigned in the Act where the context demands;
3. References to the masculine gender include the feminine and vice versa;
4. References to the singular include the plural and vice versa where the context demands;
5. References to a statute include a reference to any regulations or orders made under or pursuant to it;

## PART 2 PHILOSOPHY

### 2.1 Preamble

In exercise of the powers conferred on the Public Utilities Regulatory Commission under Sections 3(a), 3(b) and 16 of the Public Utilities Regulatory Commission Act, 1997 (Act 538), these guidelines are issued to set out the principles, objectives and methodologies for the verification and approval of investments to be made by Utility Service Providers.

### 2.2 Statutory Provisions

The following provisions of the PURC Act specifically require PURC, in preparing guidelines and approving rates, to take into consideration the objectives below:

Relevant Section of Act 538	Objective
16 (3) (a)	Consumer interest
16(3) (b); 3(c)	Investor / Utility interest
16(3)(c)	Assuring reasonable cost of production of the service
16(3)(d)	Assurance of the financial viability of the Public Utility
20(1)	Uniformity of prices throughout the country
20(1)(b)	Best use of natural resources
20(1)(c)	Economic development of the country
20(2)	Different rates for different consumer classes

The processes and methodologies provided in these guidelines are informed by the above objectives in satisfaction of the statutory requirements, as explained more fully below:

- **Consumer interest:** Assurance of value for money in terms of price, quality and reliability; maintaining an optimum balance between affordability and availability of service; fair apportionment of total cost of supply to various classes of consumers; provision of a minimum level of service (lifeline supply) at an affordable price to a specified category of residential customers; ensuring long term availability of service.
- **Investor/Utility interest:** Allowance for an appropriate rate of return on investments to ensure ability of the Utility company and its investors to recover operational and capital expenditure and earn a reasonable return.
- **Reasonable cost of production:** Examination of the cost of production against agreed key performance indices and efficiency benchmarks to exclude unreasonable or inefficient costs.
- **Financial viability:** Allowance for prudent costs as pass-through costs with provision for reasonable return on investment. This includes prudent power purchase costs and provision of adequate revenue for sustainability of the business.

- **Uniformity of prices and population distribution:** Allowance for a tariff structure which incorporates uniform rates for all customers within a particular category of consumers regardless of geographic location, and incorporates different rates for different consumer categories in accordance with cost of service.
- **Economic development of the country:** Allowance for “special rates” for priority consumers whose activities may enhance economic development.

### 2.3 Principles Underlying the Guidelines

These Guidelines are based on the following general principles.

1. Transparent information, procedures and transactions in approval of investments by regulated Utilities
2. Undertaking of investments in a way that facilitates achievement regulatory objectives.
3. Promotion of competition through comparative analysis of cost of investments among Utilities
4. Security and reliability of supply as well as continuity of supply of natural gas
5. Sequencing of investments in a technically and financially feasible manner
6. Delivery of value for money to the customer

### 2.4 Objectives of the Guidelines

These Guidelines are intended to achieve the following objectives.

1. Enhance financial viability of the utilities (including the guarantee of an appropriate rate of return on investments).
2. Ensure reasonable and non-discriminatory investments for sustainability of the natural gas supply industry
3. Create a transparent and strong regulatory environment
4. Foster the provision of safe and reliable natural gas services at reasonable cost levels
5. Separate the regulated and non-regulated business costs
6. Create necessary conditions for the attraction of needed capital to the sector, at reasonable costs, for system upgrade and efficient expansion
7. Ensure cost-reflective tariffs, affordability and access to natural gas

## **PART 3            BACKGROUND TO INVESTMENTS PLANS**

Regulated Utilities shall be required to submit investment plans for approval and verification in line with the principles, contents and structure of investment plans as set out in these Guidelines.

### **3.1      Submission of Investment Plans**

The submission of an investment plan to the Commission by a utility shall be in accordance with the following.

1. A utility shall prepare and submit to the Commission for approval, an investment plan towards the ensuing multi-year tariff review in respect of the investments it proposes to undertake, twelve months before the commencement of a new tariff control period.
2. The investment plan shall be consistent with the multi-year tariff control period.
3. The investment plans shall be presented in hard and electronic formats as may be required by the Commission.

### **3.2      Contents of Investment Plans**

The investment plan shall contain the necessary details to facilitate the Commission's approval process and effective monitoring where applicable.

1. Project type/description and location of the project
2. Whether the project is a short term, medium term and long-term investment
3. Estimated time of commencement and completion
4. Financing plan and capital expenditure required to implement the project
5. Source of funding, including, shareholders equity, debt, retained earnings, grants or concessional financing
6. Estimated operation and maintenance expenses relating to the proposed investment
7. Expected benefit to the customer and estimated timeline of the benefit
8. Estimated loss reduction percentage (technical, commercial and collection) and estimated timelines (where applicable)
9. Quality of supply improvements and estimated timelines
10. Justification of technical mode of implementation and financial sequencing of the investment
11. Information relating to consultations with any affected individual or utility
12. Expected environmental impacts and proposed mitigation measures
13. Any other matters that the utility considers relevant to support its application.

### **3.3 Asset categorization of Investment Plan**

The utility shall categorize assets in the investment plan in line with the Commission's Guidelines for Regulatory Accounting and Reporting for generation/production, distribution and transmission (where applicable) and as captured in Appendix I.

## **PART 4           PROCEDURE FOR APPROVAL OF INVESTMENT PLANS**

The Commission in approving an investment plan submitted by a Utility shall take into account the time frame period for implementation of all investments. Investments shall be categorized as short term, medium term and long-term investments as specified in Part 3 of these Guidelines.

The Commission shall approve only short-term critical investments during a Major Tariff Review and shall be part of the Utility's revenue requirements. For all other approved medium and long-term investments, the project cost shall be considered as part of the Utility's revenue requirements following completion and verification by the Commission in line with section 5.2.

The approval of an investment plan by the Commission shall be in accordance with the following procedures

### **4.1   Preliminary Review of Investment Plans**

The Commission shall perform a preliminary review of all investment plans submitted by a utility for compliance to the contents of an investment plan as contained in Section 3.2. Where the Commission is satisfied with investment plan of the utility, the Commission shall accept the investment plan and proceed to the next step of the approval process. Where an investment plan is incomplete, the Commission shall require the utility to submit additional information within ten working days from the date of receipt of the request.

### **4.2   Investment Hearings**

The Commission shall conduct an investment hearing after acceptance of a proposed investment plan. The investment hearing shall be held thirty working days after acceptance of an investment plan. The utility shall make presentations on their submissions at the hearing as per schedule provided in the notice of invitation.

The Commission shall constitute a hearing panel to undertake a cross examination of the proposed investment plan. The hearing panel shall be made up of the Commissioners, Technical Committee of the Board, Experts in the field of Utility Management and Consumer Advocates. Selected staff of the Commission shall also be in attendance and partake in the hearing process.

### **4.3   Approval of Investment Plans**

Where concerns have been raised requiring submission of additional information following the investment hearing, a utility shall within ten working days from the date of receipt of notice submit the additional information. The Commission shall undertake a final review and approval upon receipt of the additional information (if any). Failure of a utility to provide the additional information as per the stipulated timeframe, will allow the Commission to conduct its review based on the information available. The Commission shall communicate its approval decision to the utility within sixty working days with details of approved investments and rationale for its decision pending inclusion in the ensuing multi-year tariff review.

#### **4.3 Petition for Review of Decision of Commission**

A utility may if dissatisfied with the decision of the Commission on its approved investment plans, petition the Commission to request for a review of the decision within ten working days from the date of receipt of the decision.

A petition shall be heard in accordance with the Formal Hearing procedures and shall be resolved within thirty working days from its filing, following which all administrative remedies are exhausted. The decision of the Commission shall be communicated to the utility in writing.

#### **4.4 Submission and Approval of Supplementary Investment Plan**

A supplementary investment plan may be submitted to the Commission for approval with regards to investments which were not included in the initially approved investment plan. Upon receipt of the supplementary investment plan, the Commission shall review the proposal and invite the utility to make presentations to the Commission.

The utility shall be required to submit additional information within seven working days after the presentation to the Commission. Determination and approval of the supplementary investment plan shall be made based on the information available if the utility fails to provide the additional information.

The Commission shall communicate its approval decision to the utility within thirty working days from the date of receipt of the application.

#### **4.5 Emergency Investment**

Where the utility has to undertake an emergency investment due to an unforeseen occurrence, the utility shall inform the Commission prior to the implementation of the emergency investment. The Commission shall consider the investments for approval in accordance with the approval process as outlined in Part 4.

#### **4.6 Return on Investment**

The Commission shall approve a reasonable return on investment for only approved and verified investments. Approved and verified investments shall not include investments funded from sources including, grants, concessional loans, Government funds or customer's funds.

The determination of the return on investment shall be in accordance with the formulae and principles set out in the Commission's Rate Setting Guidelines.

## **PART 5 MONITORING AND VERIFICATION OF INVESTMENTS**

The Commission shall monitor the progress of approved investment plans and verify completed investments undertaken by a Utility Service Provider for inclusion in the rate base, as applicable.

### **5.1 Monitoring of Investment Plans**

A utility shall submit to the Commission an implementation report on the status of approved investment plans within six months of the approval of the plan. The implementation report shall contain the following:

1. Actual project cost, financing structures including source and interest charges (if any)
2. Any delays encountered in execution the investment plans and the measures taken or proposed to be undertaken to ensure that the project is completed on time.

The Commission reserves the right to monitor the status of approved investments from time to time.

### **5.2 Verification of Completed Investment Plans**

#### **5.2.1 Submission of Completed Investments**

All completed investments shall be subject to verification by the Commission. A utility shall submit to the Commission an application for verification of completed investments within thirty working days after completion and commissioning. That notwithstanding, completed investments which were not part of approved investment plans but were executed due to an emergency need shall also be submitted to the Commission for verification and decision on its inclusion as part of the rate base.

#### **5.2.2 Regulatory Audit of Completed Investments**

The Commission shall undertake a regulatory audit following receipt of an application for verification of completed investments. The regulatory audit of completed investments is to ensure compliance with best practices, transparency and value for money. The regulatory audit shall take place in two forms: desktop and field verification.

##### **5.2.2.1 Desktop Verification**

A desktop review of supporting documents in respect of completed investments including

- a. List of investments
- b. Procurement processes and contract awards (where applicable)
- c. Funding source
- d. Project implementation and commissioning reports
- e. Expected improvement in quality of service
- f. Payments made (if any) and
- g. Other related documents.

The Commission shall request the utility to submit additional information where the information submitted is incomplete, within seven working days from the date of receipt of the request. When the utility fails to provide additional information within the specified timeframe, the Commission shall take a decision on whether to allow or disallow the completed investment as part of the regulated asset base and inform the utility accordingly.

#### **5.2.2.1 Field Verification**

Field verification of completed investments shall be conducted to verify the physical existence of the investment and quality of the works. The field verification may be conducted on a sample basis depending on the type of investment, the quantity of installations per each asset type and outcome of desktop review conducted. The Commission shall inform the utility in writing of the date it intends to carry out the field verification and the utility shall make an officer available for the duration of the field verification.

#### **6.0 Disposition of Assets**

Assets which are no longer useful in connection with the provision of a particular service shall be disposed. A utility shall inform the Commission of details of assets that are due for disposal and associated salvage value or proceeds from the sale of such assets. In addition, the utility shall submit investment plans on replacement of such assets or asset schedule if such assets have been replaced.

## APPENDIX I: CATEGORISATION OF ASSETS IN INVESTMENT PLANS

For the purposes of submission of investment plans to the Commission, Utilities shall group their assets according to the following:

Natural Gas Investment Category	Type of Asset
Natural Gas Gathering Investment	<ul style="list-style-type: none"><li>• Pipelines</li><li>• Land and Buildings</li><li>• Aircrafts</li></ul>
Natural Gas Processing Investment	<ul style="list-style-type: none"><li>• Gas Processing Plant</li><li>• GPP Warehouse</li><li>• GPP Overhead Compressor</li><li>• Compressor Station</li><li>• Land and Buildings</li><li>• Furniture and Equipment</li><li>• Motor Vehicles</li><li>• Export &amp; Distribution Equipment</li><li>• Aircrafts</li></ul>
Natural Gas Transmission Investment	<ul style="list-style-type: none"><li>• Pipelines</li><li>• Compressor Station</li><li>• Land and Buildings</li><li>• Furniture and Equipment</li><li>• Motor Vehicles</li><li>• Export &amp; Distribution Equipment</li><li>• Aircrafts</li></ul>

**APPENDIX 2: SUPPORTING DOCUMENTS FOR APPLICATION FOR APPROVAL OF COMPLETED INVESTMENTS**

A utility shall submit the following documents in support of completed investments and its associated amounts (where applicable).

Type of Document	Supporting Documents
<b>Procurement Documents</b>	<ol style="list-style-type: none"> <li>1. Market sourcing documents</li> <li>2. Evaluation documents</li> <li>3. Copies of signed contracts</li> </ol>
<b>Resettlement, Environmental and Social Impact Assessment Documents</b>	<ol style="list-style-type: none"> <li>1. Certificate of Environmental and Social Impact Assessment from the Environmental Protection Agency</li> <li>2. Resettlement Action Plan clearance by the Ministry of Lands and Natural Resources (where applicable)</li> <li>3. Evidence of acquisition of land or Wayleaves (where applicable)</li> <li>4. Any unresolved complaints</li> </ol>
<b>Engineering Documents</b>	<ol style="list-style-type: none"> <li>1. Initial report on project scope and status of the network or the generation plant.</li> <li>2. Progress report including Implementation progress, status of the works, amount of funds disbursed and reasons for delays (if any).</li> <li>3. Commissioning report including commissioning tests undertaken.</li> <li>4. For Turnkey projects - Procurement documents, technical and financial evaluation reports, contracts and Project execution</li> <li>5. Project completion report including current state of the network after implementation of the project, benefits to customers and any identified challenges/faults.</li> </ol>
<b>Financial Documents</b>	<ol style="list-style-type: none"> <li>1. Payment made to suppliers or contractors, invoices and any other necessary documents.</li> <li>2. Draft financial statements for the year which the investments were completed.</li> <li>3. Funding Source                         <ol style="list-style-type: none"> <li>(i) For Non-network assets - item description, approved budget against the actual and reason for the variance and updated register.</li> <li>(ii) For Network assets - item description, approved budget against the actual and reason for the variance, updated asset register,</li> </ol> </li> </ol>

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	<p>location of asset, invoices and payments, impaired or disposed of assets (replaced assets), third party funded projects.</p> <p>(iii) New connection costs including the new connections made specifying capital and customer contributions made, list of reconnections and disconnections, number of meters and payments made.</p>
<b>Asset Disposal Documents</b>	A request for disposal of investments detailing the respective equipment and the associated salvage value for approval by the Commission.
<b>An Asset Register</b>	An asset register indicating <ul style="list-style-type: none"><li>(i) Year of purchase</li><li>(ii) Asset serial number</li><li>(iii) Asset description</li><li>(iv) Expected life of asset</li><li>(v) Asset location</li><li>(vi) Depreciation cost charged</li><li>(vii) Cost additions on asset</li><li>(viii) Year of disposal</li></ul>