

LICENSING FRAMEWORK FOR DISTRIBUTED POWER GENERATION

OBJECTIVE

Ghana has an abundance of renewable energy sources, such as solar, wind, biomass and mini-hydro, which have so far only seen limited utilization. In order to promote distributed power generation in general and especially the utilisation of renewable energy sources for the provision of electricity to the national grid and the grid extension to under the National Electrification Program, the Government of Ghana deems it necessary to give an opportunity and encouragement to the private sector to participate in the small scale electricity generation.

REFERENCES

1. Public Utilities Regulatory Commission Act, 1997 (Act 538)
2. Energy Commission Act, 1997 (Act 541)
3. Electricity Supply and Distribution (Technical and Operational) Rules, 2002, LI1710 (Draft)
4. Volta River Development Act, 1961 (Act 46) and any amendments?
5. Electricity Corporation of Ghana Decree, 1967 (N.L.C.D. 125)
6. Electricity Corporation of Ghana (Amendment) Law, 1987 (P.N.D.C.L. 172)
7. Electricity Corporation of Ghana (Amendment) Law, 1991 (P.N.D.C.L. 250)
8. Environment Protection Agency (EPA) Act 490 and LI 1652
9. Energy Commission Licensing Manual – Electricity (draft)
10. Applicable laws under the power sector reform??

CHAPTER I

GENERAL DEFINITIONS

Article 1

1. Small Scale Electricity Generator (SSEG) is the electricity generator utilizing renewable energy sources or fossil fuelled cogeneration with an installed capacity of up to 3 MVA.
2. Renewable Energy is energy which originates from sources as but is not limited to wind, solar, hydropower, biomass including agricultural, industrial and municipal organic wastes.

3. Fossil-fuelled cogeneration is electricity and heat (or steam) generated from fossil fuel sources, such as natural gas, fuel oil and diesel at high efficiencies of >70% for yearly operation.
4. Energy Commission is a Commission established under the Energy Commission Act to regulate the energy sector.
5. Public Utilities Regulatory Commission (PURC) is a Commission established under the PURC Act to regulate and oversee the provision of utility services.
6. Electricity Company of Ghana (ECG) and Northern Electricity Department (NED) are the grid operators on the medium and low voltage level and distributors of electricity in Ghana. They will further be referred as “grid operator”.
7. Basic Selling Price (BSP) is the price approved by the PURC for electricity consumption above 300 units for the non-residential customers.
8. Power Generator Profile is the picture of the efficiency of the plant over 1 year covering the installed capacity, the electricity production and capacity factor

CHAPTER II

BUSINESS CONDUCT

Article 2

A licence may be granted to:

- (a) A citizen of Ghana; or
- (b) A body corporate registered under the Companies Code, 1963 (Act 179) or under any other law of Ghana; or
- (c) A partnership registered under the Incorporated Private Partnerships Act, 1962 (Act 152).
- d) A public institution (e.g. hospital, school, municipal/local government)

Article 3

Companies or individuals which are interested in undertaking SSEG to be connected to the public grid are to send an application to the Energy Commission with accompanying documents as follows:

- a) Feasibility study

- b) EPA permit, if applicable
- c) Time schedule of construction and operation
- d) Site plan which describes the generation location and the nearest public grid
- e) Drawing of generator's installation and equipment specification together with interconnections to the grid operators system

Article 4

The Energy Commission will forward a copy of the application to the grid operator. He shall evaluate the application mentioned in Article 3(d and e) within sixty days from the day of receipt of the completed document.

Energy Commission shall issue a licence to the applicant within 90 days after receiving the application.

The licence shall have a validity of twenty (20) years.

Article 5

The SSEG shall sign an Access Agreement with the grid operator which includes specification of the plant capacity as well as a Power Purchase Agreement.

Article 6

If within 3 months after the licence has been issued by the Energy Commission the SSEG does not sign an Access agreement with the grid operator the licence becomes lawfully invalid unless extension is granted by the Energy Commission.

If within 12 months after the signing the Access Agreement the corresponding SSEG does not start construction activities the said contract is declared invalid.

Article 7

For expanding the capacity of an existing plant, an extension to the existing license will be required.

CHAPTER III

INTERCONNECTION AND OPERATION

Article 8

The design of the interconnection facilities of SSEG must conform with the grid operators technical standards as specified by the Energy Commission.

Article 9

The plant can only be put into operation after Energy Commission has issued a Commissioning Certificate.

The grid operator shall allow the SSEG to operate the plant for the purposes of testing prior to the official commissioning.

The Commissioning Certificate shall be issued after inspection by the grid operator and Energy Commission.

Energy Commission shall issue the commissioning certificate within 14 days after the inspection.

Article 10

The operation of the SSEG generating unit must follow the grid operators operation procedures.

CHAPTER IV

PRODUCTION AND SALES

Article 11

In areas which have been reached by the public grid, the grid operator is obliged to purchase the electricity produced by the SSEG as long as it fulfils the application requirements.

Article 12

The sales of electricity by SSEG to the grid as mentioned in Article 11 is based on non-firm capacity in accordance with energy (in kWh) which can be provided by SSEG as stipulated in the Access Agreement.

Article 13

SSEG is obliged to submit Power Generation Profile and power provision ability to the grid operator every year.

Article 14

Selling price of electricity from SSEG mentioned in Article 12 is the price at the interconnection point to the grid operators system.

Article 15

Selling price of electricity mentioned in Article 14 will be determined by PURC. However, the selling price for electricity originating from renewable sources shall be as a minimum:

- a. When interconnected to the Medium Voltage, it shall be 0.8 (eight tenth) x BSP (Basic Selling Price) at the Medium Voltage.
- b. When interconnected to the Low Voltage, it shall be 0.6 (sixth tenth) x BSP (Basic Selling Price) at the Low Voltage.

Article 16

Billing shall be done monthly based on the metre readings.

Payments by the grid operator to SSEG shall be made not latter than six weeks after each billing period.

CHAPTER V

ENVIRONMENTAL PROTECTION

Article 17

The operation of SSEG must fulfil the environmental standard and follow the EPA regulations.

CHAPTER VI

GUIDANCE AND CONTROL

Article 17

The Energy Commission shall ensure compliance and control of the SSEG's plant.

CHAPTER VII

OTHER STIPULATIONS

Article 18

Regulations on SSEG which is not connected to a distribution system shall be determined by separate regulations.