

# **RULES AND PROCEDURES ON CERTIFICATION OF ELECTRICITY GENERATION FROM RENEWABLE SOURCES**

## **FIRST PART GENERAL PROVISION**

### **Article 1**

#### **Authority**

These Rules and Procedures are compiled based on the provisions of the article 39 of the Law No. 9072 date 22.05.2003 “On Power Sector”, as amended, the Treaty on Energy Community ratified with the Law nr.9051 date 3.04.2006, and are in compliance with the ERE Rules of Practice and Procedure.

### **Article 2**

#### **Purpose**

The purpose of these rules is to assure equal, and transparent treatment, for all the electricity producers from renewable energy sources that apply at the ERE for the Guarantee of Origin and/or the Green Certificates, in view of development and use efficiently of the renewable energy sources..

### **Article 3**

#### **Object**

These rules sets the criteria and the procedures for granting of Guarantee of Origin (hereunder also GO) and Green Certificates (hereunder also GC).

These rules provide technical and procedural instruction for granting GO and GC from ERE to the producers of electricity from renewable electricity sources.

### **Article 4**

#### **Application**

These rules will be applied for the certification of electricity generation from the producers that use renewable energy sources, based on procedures of ERE.

## Article 5

### Definitions

The following terms and abbreviations used in these rules shall have the following meanings:

1. **“Law”** shall mean the Law Nr.9072, date 22.05.2003 “On power sector” and all the amendments
2. **“Board of Commissioners”** shall mean the decision-making body of ERE, composed of five members elected according the procedures stipulated by the Law No.9072, date 22.05.2003, “ On Power Sector” as amended.
3. **“ERE”** shall mean the Albanian Electricity Regulatory Authority.
4. **“Licensee”** shall mean a person holding a license issued in compliance with the Law Nr.9072, date 22.05.2003 “On power sector”.
5. **“Certification”** shall mean all actions taken based on legislation in force and especially on these rules until the finalization of the process of granting GO and/or GC. Certification is performed through the subsequent steps: 1. qualification of generation plants of electricity, 2. issuing of GO and/or GC.
6. **“Qualification of generation plants of electricity”** shall mean all the actions taken by ERE, with the producer’s request, to verify that the generating plant has the necessary characteristics, and subsequently asking for GO and/or GC related to the generated electricity.
7. **“Guarantee of Origin Certificate” (GO)** is the document issued by ERE verifying that the electricity (total/or part of it) generated by a producer previously qualified, comes from renewable sources.
8. **“Green Certificate” ( GC)** is the document issued by ERE, that verifies that the quantity of energy (total/ part of it ) generated by the producer previously qualified, is a renewable energy and can be traded as such according to the criteria set by these rules. GC is issued by ERE only for energy generated from a power plant commissioned after 2<sup>nd</sup> of November 2000.

9. “**Renewable energy sources**” are energy sources generated from water (hydro), wind (eolic), solar, geothermal, waves, tides, biogas, biomass.

10.”**Biomass**” shall mean the biodegradable fraction of products, waste and residues from agriculture (including vegetal and animal substances), forestry and related industries, as well as the biodegradable fraction of industrial and urban waste.

11. “**Geothermal**” shall mean the geological natural sources of internal heat of the earth with origin in chemical-physical reactions in its layers.

12. “**Waves**” shall mean the flow in the form of crests or waves in the surface of the ocean, seas and lakes caused by the wind and the geological effects and the energy created by this movement is used for the generation of electricity.

13. “**Tides**” shall mean the alternated up tide and down tide of the surface of the oceans, seas, lakes that happens twice a day and is a result of changes in the gravitational forces exercises in different parts of the earth from another orbital (sun, moon) the potential energy of this movement is used for the generation of electricity.

14 “**Biogas**” shall mean the mixture if metan gas with dioxide of carbon generated from the bacterial decomposition of organic waste and is used as a carbonate substance for the generation of electricity.

15. “**Reporter person**” shall mean the ERE Licensing and Monitoring Department in charge to review a request for qualification and certification.

16.” **Applicant**” shall mean the legal or physical person requesting to obtain the certificate of guarantee of origin and/or green certificate.

17. “**Power plant using renewable sources**” shall mean the plant that generates energy from renewable sources.

18. “**Hybrid plants**” is the electric plant using both renewable and non renewable sources.

19. “**Chorography**” shall mean the description or the layout of a region or object and the physical formation and the components of this region or object.

20. “**Pumping storage**” shall mean hydroelectric system in which the electricity is generated during the peaks of demand from the usage of water pumped in a container at a higher height, during the non peak periods, with a lower request for electricity.

## SECOND PART CERTIFICATION PROCEDURES

### Article 6 Classification of Electricity plant

The types of generation technology which can obtain the Qualification are described, in following Table 1.1.

**Table 1.1 Classifications Of Plants Generating Electricity From Renewable Sources**

TYPE OF PLANT		SUBTYPE OF PLANT	SOURCE
<b>Hydro</b>		<ul style="list-style-type: none"> <li>• Run-of-river</li> <li>• Reservoir</li> <li>• Pondage</li> <li>• Aqueduct</li> </ul>	<b>Water</b>
<b>Wind</b>		<ul style="list-style-type: none"> <li>• On – Shore</li> <li>• Off – Shore</li> </ul>	<b>Wind</b>
<b>Geothermal</b>		-	<b>Geothermal energy</b>
<b>Solar</b>		<ul style="list-style-type: none"> <li>• PV</li> <li>• PV/Thermal</li> </ul>	<b>Solar Energy</b>
<b>Thermal</b>		<ul style="list-style-type: none"> <li>• Steam</li> <li>• Internal combustion</li> <li>• Combined cycle</li> <li>• Gas</li> <li>• Other</li> </ul>	<b>Waste</b>
			<b>Biomass</b>
			<b>Biogas</b>
<b>Hybrid*</b>	<ul style="list-style-type: none"> <li>- Co-firing**</li> <li>- Other</li> </ul>	-	<b>Conventional source + Renewable source</b>
<b>Marine</b>		-	<b>Tides</b>
			<b>Waves</b>

\* **Hybrid plants** generate electricity by using both non-renewable and renewable sources and include co-firing plants.  
 \*\* **Co-firing** is defined as the simultaneous combustion of non-renewable fuels and of solid, liquid or gaseous fuels obtained from renewables. The subtype of plant is the same as the one of thermal plants  
 \*\*\*\***Biogas** shall mean the mixture of methane gas with dioxide of carbon generated from the bacterial decomposition of organic waste and is used as a carbonate substance for the generation of electricity.

## **Article 7**

### **Request for qualification of generating plants**

The Producer wishing to get the qualification of generating plant shall file with ERE a specific written request, including all the information required by the legislation in force and these rules. The qualification of a generating plant is made only once unless major changes in the qualified generating plants of electricity have occurred.

The request for qualification can be also filed for a generating plant of renewable sources still in project which may be still in the designing or construction phase.

The Request for Qualification shall include:

- a specific technical report describing the type of generation technology as set out in the abovementioned article 6;
- a technical document describing the basic characteristics of the generator plant, including technical annexes, if any;
- the implementation project of the plant, in cases of qualification requested for a power generator, which is still in designing or construction phase; ( construction design electro-mechanical, to the connection system etc, that is presented for construction permit)
- any other issued documentation, providing evidences of the testing and commissioning of the generation plant.

The technical document comprise:

1. general description of the plant such as:
  - a. energy sources (renewable or not)
  - b. type of power plant
  - c. nominal capacity that is the sum of the nominal capacity of the turbines or engines as reported on their nameplate
  - d. expected annual production
2. the following graphic documents:
  - a. chorography
  - b. general lay out
  - c. functional scheme
  - d. electric scheme aiming in identification of power plant meters certified by the competent public authority
3. description of the plant must be even more detailed in case of:
  - a. hydro power plants, using also pumped storage, in order to calculate the percentage of energy used for this purpose given that this amount of power

- output is excluded from the production eligible for GO and/or Green Certificates
- b. hybrid plants given that only the energy produced by renewable sources may be eligible for GO and/or Green Certificates
  - c. plants burning waste in order to calculate the amount of electricity attributed to the biodegradable part of wastes, given that only this may be eligible for GO and/or GC.

## **Article 8**

### **Qualification Procedures of Generators (Producers)**

ERE, in compliance with Rules of Practice and procedures, shall take the decision to start the procedures of reviewing the application for qualification and shall appoint the Referent person for each application, who shall also be the contact point person for ERE with the Applicant. ERE may require any clarification as well as provide all the information necessary for the parties in process.

## **Article 9**

### **Review of Qualification Application**

1. ERE, within 90 days from the decision to commence the reviewing procedure according to article 8 of these rules, shall review the application and inform the applicant on the Board decision on qualification or in refusal. The qualification is meant as automatically accepted by ERE; in case no communication is made to the Applicant within the 90 days the qualification is automatically made.
2. Within the timeline set in the paragraph 1 of this article, the Board of Commissioners takes the decision by;
  - a. Issuing the requested certificate, which shall be registered in the ERE Qualification Book.
  - b. Refusal in case the applicant is not in compliance with the necessary criteria to be certified
  - c. Suspension of the application
3. In any case of refusing of request ERE shall justify the decision for refusal. When the ERE verifies that the application doesn't contain any important documents that prevent ERE in verifying the fulfillment of the criteria of these rules, or ERE specifies that the document is not complete.
4. ERE shall take decision for suspension of the application when it is incomplete and prevents ERE to verify the fulfillment of the criteria of these rules. ERE shall communicate to the Applicant, within 60 days from the receipt of the certification request, that the request is suspended. ERE specifies the documents that are missing or are incomplete that must be presented to ERE within the subsequent 60 days. Following the analysis of the additional documentation the request can be

accepted or rejected. If the requested additional documentation is not received within 60 days from the date set by ERE, the request will be considered incomplete and will be rejected. In this case the applicant may file a new qualification request.

5. ERE shall, when necessary, ask any information to the competent bodies and inform the applicant about that.
6. In each case when that the Board decides to reject the qualification, the applicant may file a new application taking in consideration the ERE instructions.

## **Article 10**

### **Issuing of Guarantee of Origin (GO) and Green Certificates (GC)**

1. The generator may file a request ask for the issuing of GC for the amount of electricity produced, on yearly basis, from the plants previously qualified as described in the articles 7, 8, 9, and after generation plant is in operation. The date of the first generating plant parallel with the electric network has to be after 2<sup>nd</sup> November 2000. GC can be traded in three subsequent years after their issuance.

GO can be issued for:

- a. all the electricity annually generated from hydro power plants except from the quota ascribed to the pump storage;
- b. all the electricity annually generated from wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases power plant;
- c. the quota of electricity annually generated ascribed to biodegradable part of urban and industrial wastes, burned within the thermal power plant.
- d. the quota of electricity attributable annually to the renewable source burned within hybrid power plant, when the electricity ascribed to the not renewable exceed the 5% of the overall amount of electricity produced.
- e. every GC is equal to 50MWh.

2. According to application ERE, shall issue annually GO, for the electricity actually produced from a plant that has already got the qualification and only if the plant is in operation, GO can be deserved for the same electricity abovementioned for the GC.

3. ERE issues the GC and GO for 12 year period.

4. The amount of energy, to which, can be issued GC and/or GO, shall be measured or computed from the measurements. The applicant has to include proper documentation certified by the competent public authority.

## **Article 11**

### **Changes in Registered technical details**

1. The Producer shall inform ERE of any modification occurred to the qualified plant, in accordance with these rules.
2. In case of plant in construction the aim of the above mentioned communication is to monitor the realisation of the plant and to compare the final technical features of it with those communicated initially jointly with the qualification request.
3. In case of plants still in projects, once the plant has been operational, the Producer has to communicate to ERE:
  - a) any relevant modification of the technical details concerning the project (e.g.: installed power variation, kind of waste used, etc.), the starting of the works in case of new construction and the date of commissioning;
  - b) the date of operational start for the calculation period to get the GC.
4. In particular, the communication concerning the date of the first electrical parallel of the plant with the network has to be certified through a documentation issued by commissioning based on the Law nr.8402 date 10.09.1998 “ On control and disciplining of construction works” according to the practices and rules for connection in the Electro energetic system and the other secondary acts in force.
5. In case the modification described makes the project incompliant with the legislation in force, the qualification is withdrawn by Board decision.

## **Article 12**

### **Complementary communication for the qualification of thermal power plant**

1. In case of thermal power plant (no hybrid) fed by biomass and biogas, the Producer, when asking for the annual GO and/or GC, has to confirm the kind of fuel used.
2. Any modification intervened has to be promptly communicated, by the Producer, to ERE that will proceed, in accordance with the legislation in force, for the verification of all the requirements necessary for the plants to follow with getting GO and/or GC.
3. If no or false information is given, the right of getting GO and GC is lost for all the production and over all the remaining period.
4. When the thermal power plant (fed by waste, biomass or biogas) uses a conventional fuel jointly with the renewable or other admitted sources, the Producer, when requesting GO and/or GC, has to demonstrate that the quota of electricity produced, ascribed to the fossil fuel, is less than 5 % of the total generation.
5. With this aim the Producer has to communicate, yearly, a technical assessment of the net electricity ascribed to the convention fuel used.



## **Article 13**

### **Time frame for application**

1. In the case of qualified generation plants not yet in operation the qualification will be abrogated if the produce does not communicate to ERE:

a. The beginning of work for the construction of the plant within 18 months from the qualification date.

b. the beginning of work in parallel with the electric network within 3 years from the qualification date.

## **Article 14**

### **Energy calculations**

1. The following paragraphs describes the net energy calculation  $E_{cv}$  that benefits by GO and/or GC. The energy calculated by the Producers must be coherent with the type of power plant and the relevant technical data. ERE has the right to verify and submit to the Producer a different energy evaluation.

2. Net production of a plant is the gross production reducing the energy taken by the station auxiliaries and by the losses in generation transformers.

3. All the net energy actually produced by a new producer totally fed by renewable energy sources benefits by GO and/or GC.

4. In cases of new hybrid producers, only the energy ascribed to the renewable sources benefits by GO and/or GC.

The net electric production quota can be computed as follows:

$$E_{cvi} = W_{Ren} \times P_{ci} / \eta$$

Where:

$E_{cvi}$  is the quota of net electric energy (kWh) that benefits by GO and/or GC ;

$W_{Ren}$  is the weight of the renewable energy sources (kg)

$P_{ci}$  is the net calorific value (kJ/kg)

$\eta$  is the average heat rate (kJ/kWh)

the above computation applies just in case the electrical energy ascribed to the not renewable sources is more than 5% of the total.

5. The quota of the electric energy ascribed to pumping storage does not benefit by GO and/or GC.

The net electric production quota, that benefits by GO and/or GC, can be computed as follows:

$$E_{cv} = E_g - [(E_p \times \alpha)] - E_{AU}$$

where:

$E_{cv}$  is the quota of net electric energy that benefits by GO and/or GC ;

$E_g$  is the total net energy produced

$E_{AU}$  is the energy taken by the station auxiliaries and by the losses in generation transformers

$E_p$  is the energy taken by the pumps

$\alpha$  is the total efficiency related to the pumping and subsequent usage of the pumped water.

## **Article 15**

### **Technical inspections**

ERE, when necessary, shall carry out, in site inspections of the Producers to verify the information given.

In case a false declaration the qualification is withdrawn and every connected right is lost.

## **THIRD PART**

### **LAST PROVISION**

## **Article 16**

### **Amendments of these Rules**

1. These Rules shall be changed and review by Board decision in compliance with ERE Rules of Procedure.

**Article 17**  
**Entrance into Force**

These Rules shall enter into force after the publication in the Official Journal.