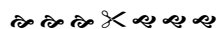


# Guideline for Bulk and Retail sale of Electricity for Electricité du Cambodge



## 1. Definition

For carrying out bulk sale and retail sale of electric power by Electricité du Cambodge (EDC) in accordance with the Electricity Law and the license issued by Electricity Authority of Cambodia (EAC), at first we have to understand the definition of the main terms involved, as given bellow:

- “Bulk Sale”** means selling electricity in bulk to distributors and bulk consumers. The transmission services include bulk sale and the transmission licensee has the right to do bulk sell through its transmission lines.
- “Retail Sale”** means selling electricity to consumers by a licensee in its authorized area. The distribution services include retail sale and the distribution licensee has the right to do retail sell in its authorized area.
- “Bulk Sale License”** means the authorization granted by EAC giving the right to provide bulk sale service. EAC may issue Bulk Sale License when the bulk market has been established.
- “Bulk Sale Service”** means commercial activities of purchasing and selling electricity in bulk market where the transmission service has been separated from the generation service. Service provider can purchase electricity in bulk from producer and bulk sale to distributors and bulk consumers through the transmission system of a transmission licensee.
- “Distribution License”** means the authorization granted by EAC giving the right to provide the electricity distribution services in the fixed territory. This right is the right of ownership, operation and managing the distribution facilities, and the right of selling electricity to consumers.
- “Retail License”** means the authorization granted by EAC giving the right to engage in sale of electricity to consumers in any part or parts of distribution areas.
- “Retail Service”** means a service provided on behalf of a distribution licensee in the authorized area of that distribution licensee through an agreement between service provider and distribution licensee. The main responsibility to distribute in the authorized area is still with the distribution licensee but the retail service provider is responsible for sale of electricity to customers and is responsible to fulfill the conditions of the retail license issued by EAC.
- “Small consumer”** means a consumer supplied power at single phase and low voltage.
- “Big Consumer”** means a consumer supplied power at medium voltage.
- “Bulk Consumer”** means a consumer supplied in bulk at High Voltage.
- “Distributor”** mean a person who holds a Distribution License.

## 2. Right of EDC to Bulk and Retail Selling

EDC has received a Consolidated License for providing electric power service. The consolidated license comprises of:

- (a) **Generation License** giving the right to EDC to generate electricity for the purpose of supply to its transmission and distribution systems.
- (b) **National Transmission License** giving the right to EDC to transmit electricity for the purpose of supply to distribution systems and bulk consumers throughout the Kingdom of Cambodia, except in the territory served by the isolated systems as stipulated in Article 35 of the Electricity Law of the Kingdom of Cambodia and subject to the rights of special purpose licenses issued as per Article 33 of the Electricity Law of the Kingdom of Cambodia.
- (c) **Distribution License** giving the right to EDC to distribute and supply electricity to consumers in its authorized distribution areas.

Normally, transmission service has 3 main functions: 1 – management and ownership of the transmission system, 2 – operation and maintenance of the transmission system and 3 – purchasing power from producers, selling electricity to the distributors and bulk consumers. Bulk Sale, i.e. selling power to distributors and bulk consumers, is authorized by transmission license.

As explained above, EDC has the right to sell electricity in bulk to distributors and bulk consumers throughout the Kingdom of Cambodia, except in the territory served by the isolated systems. Normally, EDC's bulk sale shall be through HV transmission system but in some cases in the initial stage, it can be also through MV system used for transmission purpose (example such as 22kV lines connected from the authorized areas of EDC to supply electricity to other surrounding distributors).

In accordance with contents of the Electricity Law of the Kingdom of Cambodia, for distribution of electricity, each distributor has its own distribution area as specified in its license. The distribution area of the distributor is a fixed area in which the distributor can provide the distribution service and own distribution facilities in that area. For technical and efficient and economical operations, two separate distribution systems are not allowed in a fixed distribution area. Therefore, it is desirable that EAC grant license to only one distribution service provider in a fixed contiguous territory. Therefore, in the distribution areas of EDC, EDC should be the owner of the distribution systems and responsible for distribution of electricity to every customer and no other distributor should be allowed in that area. But EAC can issue a retail license to another person in the distribution area of EDC to give it the right for providing retail sale of electricity to consumers in a fixed contiguous territory within the distribution areas of EDC, provided that person has an agreement with EDC and the agreement shall have to be submitted to EAC for prior approval. The retail sale by another service provider is made under the agreement with EDC who is holding the distribution license and has the overall responsibility to distribute electricity in its distribution areas.

Retail service is included in the distribution service. Normally, distribution services have 3 main functions: 1 – management and ownership of distribution system, 2 – operation and maintenance of the distribution system and 3 – purchasing power from the producers or from transmission licensee and selling electricity to consumers. The retail service is only selling electricity to

consumers. Selling electricity to consumers consists of connection for supply of electric power and installation of meter for consumer, meter reading, billing and settlement of bill payment works etc. Retail service does not include ownership and maintenance of distribution system such as networks, substations or other accessories from which the connections to consumers are to be given.

**Therefore, the solution on the matter as requested in EDC's letter No. 1223 LS-EDC dated 10 May 2002 can be divided into 2 parts:**

- 1. Solution For Areas Located Outside Its Distribution Areas**
- 2. Solution For Areas Located In Its Distribution Areas**

### **3. Solution for Areas located outside its Distribution Areas**

As explained above, licenses may be granted to other distributors for areas located outside the distribution area of EDC. EDC, which has received a National Transmission License, have the right to sell electricity in bulk to these distributors provided they enter into a power purchase agreement with EDC and are granted distribution licenses. The agreement has to be approved by EAC before grant of the distribution license. Alternatively If EDC is interested, EDC can also apply to EAC for additional areas to be included in its license provided EDC itself has capacity to invest in the distribution system there and make power supply. Normally, EDC's bulk sale to other distributors shall be through HV transmission system or MV system used for transmission of electricity (example such as a 22kV lines connected from distribution areas of EDC to supply to other surrounding distributors).

#### **For bulk sale electricity to other distributors, what EDC has to do?**

EDC has to comply with the conditions stated in Chapter 5 of EDC's Consolidated License for bulk sale to other distributors outside the distribution areas of EDC. Some of the important provisions made in chapter 5 of consolidated license issued to EDC are quoted below:

1. EDC shall as soon as practicable prepare a statement approved by EAC setting out the basis upon which charges will be made for the connection to EDC's system.
2. EDC shall as soon as practicable prepare a statement showing in respect of each of the 7 succeeding financial years circuit capacity, forecast power flows and loading on each part of its Transmission System and Distribution Systems and fault levels for each transmission and distribution node, together with:
  - (a) such further information as shall be reasonably necessary to enable any person seeking connection to the system to identify and evaluate the opportunities available when connecting to and making use of such system;
  - (b) a commentary prepared by EDC indicating EDC's views as to those parts of EDC's Transmission and Distribution System most suited to new connections; and
  - (c) such other matters as shall be specified in directions issued by EAC from time to time for the purposes of this Condition.
3. EDC shall as soon as practicable prepare a statement approved by EAC setting out the tariffs for the provision of electricity to big consumers, other distribution system or bulk consumer.

4. EDC shall prepare and submit to EAC for its approval the “Standard Terms of Connection and Supply”.
5. EDC may, subject to the approval of EAC, prepare different Standard Terms of Connection and Supply for different cases or different classes of premises, clearly identifying the criteria used to distinguish between such cases or classes.

**Otherwise, subject to the provision of the Electricity Law of the Kingdom of Cambodia, the selection of the service provider to distribute electricity to any area shall be through a transparent selection process acceptable to EAC.**

#### **4. Solution for Areas located in its Distribution Areas**

In accordance with letter of EDC No. 1223-LS-EDC dated 10 May 2002: EDC is presently facing difficulty in the management of temporary electricity distribution (collective) because the collective does not properly implement its Articles of Association. EDC desires to convert the supply of power to the collective to sale of electricity in bulk from EDC for retail sale by the collective to consumers in order that this service activity is as per the provisions of the Electricity Law of the Kingdom of Cambodia.

As already mentioned above, other distributors may not be allowed in the distribution areas of EDC. But in accordance with the Electricity Law, for large area such as Phnom Penh, EDC may consider establishing the retail providers for doing this work on behalf of EDC. It should be remembered that retail selling by another provider in EDC’s distribution area is made under an agreement made by EDC, who is granted the distribution license and have overall responsibility to distribute electricity in its distribution areas. Otherwise, retail sale service is one of the services included in the distribution services. Normally, distribution services have 3 main functions: 1 – management and ownership of the distribution system, 2 – operation and maintenance of the distribution system and 3 – purchasing power from producers or from transmission licensees and selling electricity to consumers. The retail service is the process of selling electricity to the consumers of a distribution licensee. The retail sale service includes connection for supply of electric power and installation of meter for consumer, meter reading, billing and settlement of bill payment works etc. Retail service does not include ownership and maintenance of distribution system such as networks, substations or other accessories from which the connections to consumers are to be given. The distribution licensee is still in charge of all these works. The distribution licensee, who has overall responsibility to supply electricity to its distribution areas has the obligation to prepare the agreement and select the retail provider in its areas and the retail provider who is selected shall apply for retail license from EAC. The contents of retail agreement between distribution licensee and retail provider shall be submitted to EAC for prior approval whereas the selection of service provider shall be done in a transparent manner accepted by EAC. Retail provider has the obligation on compliance with the tariff schedules in force in the distribution areas of a distribution licensee and shall purchase electricity from distribution licensee subject to the provisions of the Agreement with distribution licensee. In order to get license under the Electricity Law of the Kingdom of Cambodia, each retail provider shall be an individual or a company properly registered under the Commercial Law depending on the size of services and shall have sound financial position for its business.

**The difference between group collective that EDC is currently using and retail provider defined by the Electricity Law of the Kingdom of Cambodia is shown in the table below:**

<b>Existing Group of collective</b>	<b>Retail Provider under the Electricity Law</b>
<p><u>Responsibility on Business</u> Collective has prepared common Articles of Association and nominated its representatives in order to purchase electricity from EDC to collective member's use. According to the Law, the representative shall make actions on behalf of collective so that it is difficult to looking for person who responsible to the Law.</p>	<p><u>Responsibility on Business</u> Shall be an individual or legal entity as per business size. The individual or legal entity shall be responsible to the Law on its implementation of conditions of its retail sale license conditions. In some cases, EAC may require the additional financial insurance.</p>
<p><u>Distribution Network</u> Collective is required to invest to install the distribution network and is in charge to manage, operate and maintain its distribution network by itself.</p>	<p><u>Distribution Network</u> Retail sale license does not give retail sale licensee the right to own, operate and maintain distribution network. The distribution licensee, who is still overall responsible, is in charge of these works.</p>
<p><u>Bulk purchasing and selling electricity</u> Group of collectivities purchase in bulk from EDC in accordance with the tariff schedules in force as a customer to distribute to collective members. The tariff for consumer is as per the internal agreement of the collective and does not have a legal validity. Therefore, the end tariff to the consumer can be different and irrational.</p>	<p><u>Bulk purchasing and selling electricity</u> Retail licensee shall purchase in bulk from EDC and sell electricity to consumers as per tariff schedules in force in accordance with the agreement made with EDC. Therefore, if the retail seller entered into this service agreement, he will be responsible for the tariff to the Law.</p>
<p><u>Supply to consumer when the mistake occurs</u> In case of any financial problem, we mostly push the matter to collective to make decision as per Articles of Association, but in common the representative selected by collective mostly spend its budget to invest on distribution facilities for collective so that normally cannot find solution. Even EDC also cannot terminate that representative or disconnect the supply when the problem occurs because it is afraid to disconnect the electricity supply to the whole collective.</p>	<p><u>Supply to consumer when the mistake occurs</u> In case of any financial problem, we can send the retail seller to the court and then select another retail seller without affecting the continuity of supply because the distribution and operation facilities is in the hands of the distribution licensee (EDC), so we can manage the continuity of supply. By this process the financial problems may be avoided as the service provider is afraid to loose its business.</p>

EDC has no choice other than consider the gradual expansion of the distribution area in order to abolish the currently existing collectives and in order to supply electricity to consumer in areas where network does not exist. The distribution areas of EDC defined in the license is as applied by it. EAC has advised EDC to prepare a plan as per its ability to invest for 2 years after the issue of license. EDC can operate the distribution service itself for certain areas and for other parts EDC can make an agreement and select the retail sale service provider on behalf of EDC.