## Georgian National Energy and Water Supply Regulatory (GNERG)

## **Regulatory Frameworks Fostering Renewable Energy – "Net-Metering"**

Satisfaction of self-consumption demands of customers and development of micro generation power plants has been internationally fostered through various incentive-based policies. Incentive-based policy may be aggressive or relatively moderate. Aggressive policy is applied in countries where amount of electricity generated from fossil fuels is high and therefore, strict obligations of increasing renewable energy share exist. In such cases small renewable energy generators are mainly offered high tariffs (so called Feed-in Tariffs, etc.). It shall be also mentioned that such policy increases pressure on household tariffs and requires certain kind of resistence of implementing country. Moderate incentive-based policy is oriented towards ensuring conventional conditions through simplified way, by eradicating administrative or other types of bureaucratic barriers and incentivizing customers to develop their own electricity sources for full/partial satisfaction of electricity demand. This kind of policy does not significantly affect tariff processes and is based on more generous origins.

One of traditional and wide-spread policies for developing micro generation power plants has been net-metering. The term net-metering is internationally recognized and is used to denote that customer has its own electricity source connected to the network in a parallel mode and after satisfying own consumption delivers excess electricity into the network. This scheme requires installation of specific meters that meter electricity in both directions and can calculate consumed and generated balances. Settlement between customer and electricity supplier is made on the basis of that difference i.e. net value. In case if generated electricity exceeds consumed electricity by the end of the settlement period, the Distribution Licensee/Supplier owes customer excess kw.h that can be reimbursed through various ways. One and most wide-spread approach is to credit excess kw.h in the bills for the next settlement period.



Figure 1. Illustration of the "Net-Metering" Certain restrictions apply to the categories of customers and intensivity of distribution. First of all, types and capacities of primary energy used by self-generating sources are limited. Usually, customer is not allowed to construct microgeneration power plant exceeding its requested capacity. Hereby, such power plant shall operate on renewable energy. Distribution Licensees require limitation of total capacity of microgenerators for the purpose of network management and fulfillment of technical standards, such limitations constitute 2-4% of peak loads in the networks.

Net-metering policy has been widely spread throughout the world. Obviously, construction of large energy units is not a single condition for ensuring sustainable development of the energy sector, huge potential is preserved with retail customers as well who can satisfy their own demands on energy by constructing micro-generation power plants. From international practices it can be observed that development of micro-generation power plants may bring versatile benefits, including:

- Reduction of financial expenditures necessary for the construction of transmission and distribution networks;
- Reduction of amounts of imported energy and generation of Thermal Power Plants;
- Reduction of electricity losses in transmission and distribution networks;
- Customer is given additional possibility to make financial savings or become electricity supplier;

- Will foster employment and economic activity as far as demand on qualified engineers and fitters will increase;
- The clean energy will have positive effects on the nature.

Currently, power plants in the ownership of retail customers and settlement for their generated electricity is regulated under the Resolution №20 of September 18, 2008 of the Commission "On Approving Electricity (Capacity) Supply and Consumption Rules". Specifically, right of retail customers to design, construct and connect to the network power plants with maximum 100 mw installed capacity. As regards to settlement rules for excess electricity generated and delivered in the network by such power plants, Article 25(5) of "Electricity (Capacity) Supply and Consumption Rules" states that if not otherwise agreed between the Distribution Licensee and retail customer settlement obligations must be carried out in a following manner: Electricity cost delivered to the Distribution Network will be offset by the electricity costs received (consumed) from the network of the Distribution Licensee where price of electricity delivered by retail customer into the network will equal to difference between tariffs of electricity received (consumed) from the network and electricity distribution tariffs.

Despite the above-mentioned, disputes (Decision N 57/78 of October 29, 2015 on dispute between "Insta" LLC and "Energo-Pro Georgia" JSC and Decision N36/2 of July 7, 2015 on dispute between "Abso" LLC and "Telasi" JSC reviewed by the Commission in 2015 have pointed out necessity of defining micro generation power plant status at the level of primary legislation for the purpose of thorough regulation of the issue, to avoid legal and regulatory ambiguity, to avoid setting same technical and administrative requirements to such microgeneration power plants as it is envisaged for small power plants engaged in wholesale trade and to ensure maximum incentivization of retail customers. On the basis of abovementioned the Commission had prepared draft of ammendments to the Law of Georgia on Electricity and Natural Gas in close cooperation with Ministry of Energy of Georgia and submitted it too the Parliament of Georgia. The draft entails definition of micro generation power plants, determines status and other basic principles and obligation of the Commission to develop secondary legislation related to net-metering and bring them in conformity with requirements of the Law.