

DOI: <https://doi.org/10.30525/978-9934-26-471-9-13>

THE PRACTICE OF PRICE FORMATION AT DOMESTIC ELECTRICITY SUPPLY ENTERPRISES

The key factor influencing pricing is government regulation, as it largely affects pricing through legislation and regulations much more than other factors. Even despite providing the consumer with the ability to freely choose an electricity supplier, the latter has no opportunities to attract household consumers with a lower price for electricity. This is only possible with significant price dumping, which would lead the supplier to bankruptcy.

The assessment of the current practice of price formation at electricity supply enterprises should be considered through the study and analysis of commercial offers of domestic electricity supply enterprises [1, 2].

According to the first approach, two types of commercial offers are distinguished: with and without considering the cost of distribution (transmission) of electricity through networks, in accordance with the tariffs for electricity distribution by local networks, which are approved by the NEURC of Ukraine [3] for the corresponding voltage class in the relevant billing month.

The formation of the electricity price for the consumer in the relevant billing period, considering the cost of distribution (transmission) of electricity through networks in accordance with the tariffs for electricity distribution by local networks, which are approved by the NEURC of Ukraine for the relevant voltage class in the relevant billing month, is carried out according to the following formula:

$$P_1 = P_f * T_s + T_p + T_r,$$

where P_f – the actual market price per 1 kWh formed during the month of supply in the energy markets of Ukraine;

T_s – the electricity supplier's tariff;

T_p – the transmission tariff of the NPC “Ukrenergo” for the corresponding month of supply [4];

T_r – the cost of electricity distribution (transmission) through networks according to the tariffs for electricity distribution by local grids, approved by the NEURC of Ukraine for the respective voltage class in the corresponding billing month.

In case of deviation from the forecasted consumption volume, the consumer compensates the supplier for the cost of purchasing the electricity volume consumed beyond the forecast or for the unconsumed volume from the ordered amount.

According to the second approach, four types of commercial offers for electricity supply to the consumer should be considered:

- Commercial offer № 1-P;
- Commercial offer № 1-S;
- Commercial offer № 2-P;
- Commercial offer № 2-S.

According to Commercial offer № 1-P the electricity price for the consumer in the relevant billing period is determined by the following formula:

$$P_f^p = P_f^b + T_p + M_p + T_r,$$

where P_f^p – the actual purchase price for the volume of electricity consumed by the consumer in the relevant billing period;

T_p – the transmission service tariff set by NEURC for the corresponding billing period;

M_p – the supplier's marginal profit (amounting to 80 UAH/MWh for this commercial offer);

T_r – the cost of electricity distribution (transmission) through networks according to the tariffs for electricity distribution by local grids, approved by the NEURC of Ukraine for the respective voltage class in the corresponding billing month.

Commercial offer № 1-S differs from the previous one in that the consumer independently pays for the electricity distribution service, and therefore the $T_{розп}$ indicator is excluded from the price calculation. The supplier's marginal profit is considered to be 70 UAH/MWh.

Commercial offer № 2-P is offered to consumers whose average monthly consumption over the last 12 months has been between 51 MWh and 100 MWh. Its conditions correspond to Commercial Offer № 1-P, except the supplier's marginal profit, which is set at 60 UAH/MWh.

Commercial offer № 2-S is offered to consumers whose average monthly consumption over the last 12 months has been between 51 MWh and 100 MWh. Its conditions correspond to Commercial Offer № 1-S, except the supplier's marginal profit, which is set at 50 UAH/MWh.

As we can see, the electricity market presents a range of commercial offers that have significant differences in pricing. However, to further determine the most optimal commercial offer for a specific consumer, the final electricity cost must be calculated.

References:

1. Website of the State Enterprise "Profit Hub". Available at: <https://profhub.com.ua/>
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4. Tariffs for transmission services of the NPC “Ukrenergo” for the relevant month of supply, approved by the NEURC decisions. Available at: <https://www.nerc.gov.ua/sferi-diyalnosti/elektroenergiya/promislovishtarifi-na-elektroenergiyu-dlya-nepobutovih-spozhivachiv/tarif-na-poslugi-z-peredachi-elektrichnoyi-energiyi>