## The balance principle

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#### 1. SYNOPSIS

The balance principle is the wave of the future in the sale of energy services.

#### 2. INTRODUCTION

Regardless of the future development of energy policy in Sweden, one thing is certain. Sooner or later, there will be a need for new capacity and/or new energy services. We also know for sure that future capacity will be far more expensive than existing capacity. Someone has to pay this increasing marginal cost, either society collectively or customers on an individual basis.

#### 3. THE BALANCE PRINCIPLE

Today society pays a part of each kWh produced since existing power production has a significant impact on society. Hydropower affects the landscape and nuclear power imposes a risk. This risk may be small, but if a major accident occurs, the economic consequences will be enormous. These external costs (not included in the customer's price) are very hard to quantify, but they are certainly greater than zero. We also know that on a well functioning free market such costs should not be neglected or subsidized by society, as is often the case today. With this in mind, it is not surprising that society encourages energy efficiency. What does this mean for the customer and the utility on a future deregulated market?

The typical customer can expect to pay the marginal cost of electricity (average pricing will soon belong to history) and also have the responsibility of securing his or her own long-term energy supply. This one will probably do by signing various kinds of short-term and long-term contracts with the utility or utilities of one's choice. One should be able to choose from a number of utilities on a free market. To sign long-term contracts today can be advantageous for customers since many utilities have excess capacity and the marginal cost of electricity is still low.

The typical utility wants to be sure it has a stable customer base and reasonably good contracts today, contracts which to some extent reflect the expected rise in its marginal production costs. For this reason, it is likely that a great deal of existing production will be tied up in contracts when we reach the point ten years or so from now, where there is a need for new capacity or energy services. Building new capacity is expensive, perhaps even more expensive than we can foresee today. External costs which are not yet quantified will be reflected in the price and paid for by the customer. We have already seen the start of this process today, as more and more environmental fees are levied around the world.

It is here that the balance principle comes in. The utility manager with a little foresight realized the significance of these developments in the late 1980's or early 1990's. The utility and its personnel have acquired the skill and customer relations necessary to manage the demand side. This has made it easier to pursue very cost-effective conservation measures and offer them to an already contracted customer, who still gets the same level of energy service. Your competitor's customer (who hasn't adopted the balance principle) will be easy to snatch away on a free market when they need more electrical power, since your competitor is only able to offer them expensive supply options. We are reaching the point where the utility is beginning to realize that they do not own their customers. You know this, and you also know the energy-use pattern of your customer and have a good business relation with them. They are faithful and will become even more so when you offer them a bonus for their negawatts. The profit is big enough for both of you.

### 4. CONCLUSION

We are certainly living in a new time. We have already seen other examples of change in old stable businesses. Now its time for the utilities in Sweden (and Europe) to face facts. Most utilities will probably make the necessary adjustments. For those whose rate of learning is slower than the market's rate of change, the future is considerably less rosy.