



Consumer Survey Regarding Capacity Tariffs

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Consumer Survey Regarding Capacity Tariffs

The Norwegian consultancy firm, Trøndelag R & D Institute, has surveyed consumers' attitudes, perceptions and evaluations regarding various designs of capacity tariffs, commissioned by NVE.

The survey was conducted using so-called focus groups consisting of 6-8 participants in each group. The groups were recruited among ordinary household customers, as well as customers with cabins, and then divided according to predefined criteria.

Since one cannot expect people to assess something that is unfamiliar to them, the conducted survey demanded a more active moderator role than is normally the case in such surveys. Participants were asked to consider the following different designs of capacity tariffs:

- Fixed or contracted capacity charges based on installed capacity (fuse size)
- Capacity charges based on measured capacity usage
- Capacity charges based on hourly demand (time-of-use)
- Subscribed capacity with a significantly higher price for consumption above the subscribed limit

The concept of a capacity-based tariff is considered relatively complex and unknown to most consumers.

A lot of the focus was on unveiling the participants' *level of understanding* of how they perceived that capacity tariffs could be designed. Participants were asked to compare and, if possible, assess the different capacity tariff models. Furthermore, an important aspect was whether it was likely that participants would respond to the various tariff models in terms of actually making changes to their own energy consumption, especially in terms of investing in automatic control systems. The participants were also asked about their preferred model and whether it seemed *just*, taking all the different customer groups into consideration.

Consumers in this study were very clear on that they would accept changes to network tariffs as long as it is possible for them to understand *why* they are made and what the consequences are. This feedback gives a clear signal to both the energy authorities and industry in general, that changes made to network tariffs must be clearly communicated and explained beforehand. The industry must understand the seriousness of avoiding uncertainty among consumers in the event of any changes to how current network tariffs are calculated. This provides *both* a big challenge as well as an opportunity for the industry.

The *main findings* of the consumer feedback regarding the different models for capacity tariffs are briefly presented below. It is important to underline that the views rendered are not primarily an evaluation of *how well* each model will serve as the basis for calculating network tariffs.

Consumers have a *non-professional* view on the issue as well as it being contingent on background knowledge and interest. Understandably, the feedback is also, therefore, largely emotionally steered and perhaps less well founded as a result, compared to the public consultation that was held.

Feedback on the two models, measured and subscribed capacity, do not coincide with the comments NVE received from the industry during the public consultation:

Measured capacity is immediately perceived as less controllable and somewhat difficult to understand. When directly asked which of the four models in question the participants preferred, no one in reality wanted the one on measured capacity. This feedback is in stark contrast to what is perceived by the industry, where 40 out of 57 public consultations reveal this model as best suited for capacity charging in the network. Furthermore, industry feedback points out that consumer behavior and the invoice amount are directly connected to each other with this model. Participants also find this a significant aspect. However, their feedback shows that they have not been able to see this connection in the model on measured capacity. The survey shows that a certain amount of the uncertainty is related to the fact that consumers are not aware of the term capacity in the first place.

Subscribed capacity was also introduced and discussed in the focus groups. Even if NVE as contracting authority wanted this model to be given less focus in the survey, it must be pointed out that it seemed to be the most appealing one to most of the participants. This is in stark contrast to what is rendered in the industry feedback regarding tariff models. Feedback given in the survey shows that the subscribed capacity model is more comprehensible compared to other models.

How are we to understand the huge dissimilarity in feedback between consumers and industry players? Firstly, part of the explanation may lie in the *immediate understanding* that participants have of the model and how consumers foresee that the model will function in reality. It was observed during discussions within the groups that reasoning is very often related to consumer behaviour (use less electricity) and effective use of energy, with perhaps less focus on controlling capacity and reduction in maximum capacity use (less fluctuating levels of consumption in one day). This is all about *understanding* the terms capacity and capacity requirement. Secondly, it may be significant to which degree one can *relate* to the model. The subscribed capacity model is similar to other subscriptions people are familiar with, e.g. cell phone, insurance (mileage) and broadband. This, in combination with the fact that people are normally unaccustomed to capacity use, may help the participants to automatically become more positive towards this model.

Evaluations of the two models *time-of-use* and *installed capacity* provide, amongst other things, a clearer picture of customers' attitudes and perceptions regarding the relationship between the various tariff components, including the relationship between fixed and variable components.

Time-of-use is a model that is automatically comprehensible to all groups. The fact that pricing exclusively depends on consumption, allows participants to easily see the effect of the model and can relate to it. This pricing model is already current in existing invoicing. However, it is not a model that unanimously appeals to everyone, partly because costs for consumers may vary throughout the

year, whilst it also very clearly seems to lead to increased expenses for people with regular 'A4' lives.

The model based on *installed capacity* is immediately perceived as inflexible, as the participants are quick to conclude that one «confines oneself to one level» by choosing less capacity. This interpretation is not based on knowledge participants have of their current installed capacity, or how much installed capacity one in reality requires, but rather expresses the need to avoid uncomfortable and inconvenient (e.g. power cut) situations. However, these views are somewhat moderated when the possibility to combine models is introduced where one, for example, can enter into an agreement with the grid company for «agreed capacity» beneath the installed capacity, which will not physically impede a consumer's maximum capacity (i.e. constraints in situations where more capacity is required).

There is consensus amongst participants towards flexibility and the possibility to influence their own costs by adjusting consumption. Most people also want predictability in costs. Therefore, it seems feasible that many prefer a model with a fixed installed capacity component where one is also able to make adjustments in order to affect one's electricity bill. It is, furthermore, apparent that consumers are concerned with convenience and comfort, and that consumer behavior should neither affect comfort nor economy negatively. Adjustments and investments in control options must be worthwhile. People are not willing to pay a lot for something that they will not benefit from personally.

Whilst the survey indicates that consumers are opinionated and provide definite feedback on how a model for capacity tariffs ought to be designed, it is worthwhile noting that recent opinion polls made by the global market research company TNS Gallup (for Statnett) and The National Institute for Consumer Research show that there is, generally, a lack of interest amongst consumers when it comes to electricity consumption. These are findings that largely also underpin observations during the survey, and make it more likely that if the industry provides clear communication in advance, any changes to regulations on network tariffs within the distribution network could be implemented without unnecessary instability in the consumer market.



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