

## Regulatory experiences with implementing more cost reflective tariffs

Andreas Bjelland Eriksen NordReg workshop on flexibility – April 11th 2018



## Key takeaways (I)

### What and why

- Improve utilisation of the network, by shifting to a more cost reflective tariff design
- From volumetric- (kWh) to capacity based (kWh/h) tariffs (<22kV)</li>
- Subscribed capacity:
  - Fixed subscription price
  - Energy charge equal to the marginal cost
  - Overspending charge





## Key takeaways (2)



### Public consultation

- Deadline March 1st 2018
- 84 consultative inputs
- In general, capacity-based tariffs supported
- However, much skepticism towards Subscribed capacity



## Outline

**General agreement:** A transition from volumetric- to capacity-based tariffs can reduce the need for future investments.

**Model proposition:** NVE proposed *Subscribed capacity* based on a total evaluation of accuracy, distributional effects, user friendliness and administration costs.

**Public consultation:** *Subscribed capacity* is more difficult to understand and less suited than e.g. *Time of use.* 



General agreement: A transition from volumetric- to capacity-based tariffs can reduce the need for future investments



## The current regulation gives DSOs a large degree of freedom regarding how to design tariffs



Illustration: NVE rapport 62 2016 (English summary)



## Several gains from switching to capacity charges





Model proposition: NVE proposed Subscribed capacity based on a total evaluation of accuracy, distributional effects, user friendliness and administration costs



## Various model designs evaluated



Measured capacity usage is based on daily settlements



# Selecting a user friendly and accurate model with acceptable distributional effects and low administration costs

#### Accurate

- Contributing to an efficient use of the grid
- Sending the consumer correct price signals

#### Acceptable distributional effects

- Cost-reflective tariffs, i.e. payments reflect the costs imposed by a customer
- In total, not pay more than today. Relative changes expected

#### User friendliness

- Understandable
- Easy to move flexible consumption

#### Low administration costs

- Long-term operating costs
- Short-term transitional costs



## Some key points from the proposed model

## Subscribed capacity

- Sends a price signal every hour
- Cost-allocation based on subscribed capacity
- Recognisable
- Administration costs likely to be somewhat higher





**Public consultation**: Subscribed capacity is more **difficult to understand** and less suited than e.g. Time of use.



## Public consultation point towards challenges with respect to accuracy, user friendliness and administration costs

- •Customer receives a price signal regardless of
- grid load/utilization
- •No incentive to reduce utilization within the
- subscribed capacity
- Difficult to select subscription level might differ from year to year

Accuracy

- Difficult to understand the model and how to
- reduce the bill
- •Whether or not you pay an overspending
- charge not known in advance
- Might not be possible for certain groups of customers to adapt

User friendliness

- •DSO should not have duty to provide guidance
- •Extensive costs related to handling of
- subscriptions
- •Possible negative effects on the reputation of DSOs

Administration costs



Public consultation suggests it might be desirable to postpone selection of a model

## Standardisation of tariffs

- Should keep current model with measured capacity for larger customers
- Agreement on need for standardisation for smaller customers, although some point towards the need for flexibility in local tariff design

### Postponement

- Might be desirable to wait with selection of a model until experience with smart metering systems
- NVE should conduct further analyses with respect to new technology etc.



Going forward: Introducing capacity-based tariffs based on evaluation of public consultation

- Evaluate public consultation
- Capacity-based tariffs
- Lower volumetric charge (kWh)



