#### Denmark

#### Country specific issues related to DSO tariffs

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### Specific issues:

- 1. Implementation of the electricity directive
- 2. The Wholesale model since April, 1st
- 3. The process for approving
- 4. Existing standard guidelines
- 5. Criteria according to law
- 6. Tarif calculation principles
- 7. An example
- 8. "Supply for the future"

#### 1. Implementation of the electricity directive:

The directive stipulates that the regulatory authority shall either:

- Fix tariffs
  - or
- Approve tariffs

Or

- Fix tariff methodologies
  - or
- Approve tariff methodologies

According to the Danish implementation DERA approves tariff methodologies – NB! Concerning pricing of retailers

### 2. NB! Since April. 1st:

The so-called "Wholesale model" was implemented, i.e. the retail suppliers:

- became the central players
- buy and bill the customers for grid services, i.e.
- -> for delivered electricity

According to prices/methodologies that are NOT approved by DERA!

# 3. Process for approving (1)

 Prices and conditions for use of the grid are fixed by the grid company according to published methods approved by DERA.

(There are 60 grid companies in Denmark)

- The pricing methodologies may be developed by the Danish Energy Association (standardized guidelines)
- DERA supervises such standardized guidelines
- Every single gridcompany may, however, choose to develop its own individual method

# 3. Process for approving (2)

1) A draft recommended methodology is developed by the Association

2) The draft is discussed with DERA

3) Stakeholder consultation undertaken by the Association

4) The Secretariat prepares a recommendation for the board

5) Stakeholder consultation undertaken by DERA

6) The board may take note of the methodology and may make some remarks

# 3. Process for approving (3)

7) The grid companies
develop individual
methods – typically based
on the Association's
recommendation

8) The grid companies apply for approval

9) The secrataiat prepares a draft approval

10) And may conduct a stakeholder consultation

11)The secretariat approves if the method complies or only diverges insignificantly

If not  $\overline{4}$ ) - 6) is repeated

### 4. Existing standard guidelines

# Existing standard guidelines on pricing developed by the Association include 3 categories:

- Tariff calculation
- Standard connection fees\*
- Standard fees (other)

the DSO's have maintained responsibility for connecting the consumers to the grid, including receiving payment for the grid connection

### 5. Criteria according to law:

#### The prices must be fixed:

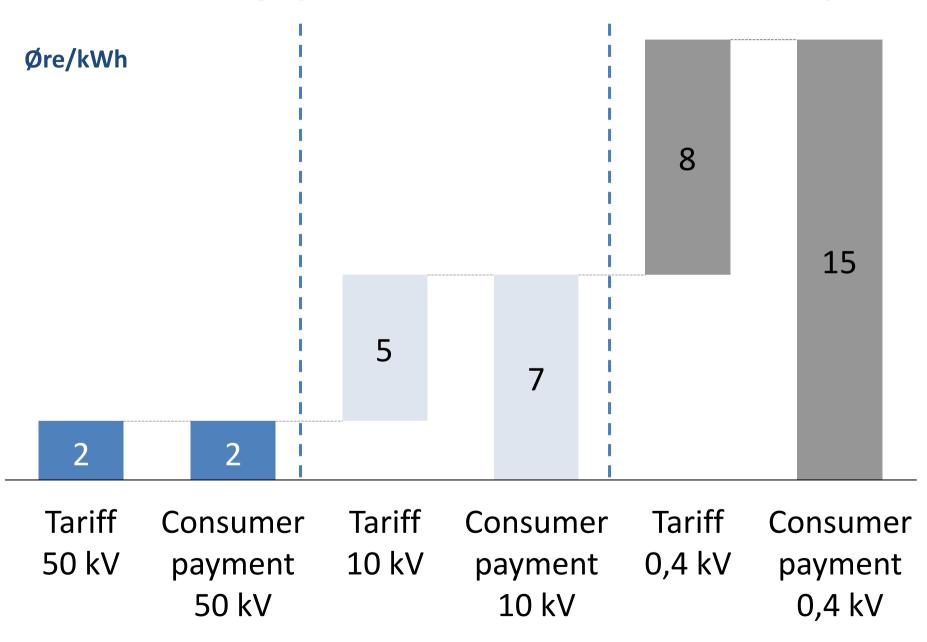
- objectively and transparent
- according to non-discriminatory criteria
- for which costs the individual buyer categories raise and
- according to the necessary costs, i.e.: purchase of energy, wages, services, administration, maintenance, other operating costs and depreciation and return on capital taking into account any other income generated by the operation of the licensed business

### 6. Tarif calculation principles

#### The overall principles reflect:

- Consumers pay for distribution of power according to their consumption. There is no in-put fee.
- The distribution tarif consists of a tarif/consumption and a subscription fee.
- The so-called waterfall principle
- Time-of-use tariffs for hourly metered customers is possible croscountry and alle remotely read meters are rolled out by 2020

#### 6. Tariff payment for distribution of electricity



### 7. An example:

# Solar and other small scale generators are tarifwise based on 3 elements:

- The expected gross consumption is calculated and tariffied/kWh according to the model
- 2) Subscription fee
- 3) Availability payment either tarif/kWh or 65 DKK p.a.

### 7. An example (further):

- This tarification principle ensures that customers with small scale generation will (almost) pay the same amount for use of the grid, as a similar customer without small scale generation
- Specifically the gridtariff is calculated on the basis of gross consumption (the amount of power transported to the customer without offsetting the customer's sale of energy to the public grid). However, the net consumption is the basis for the calculation of taxes, PSO and tariffs to the TSO
- At the same time an availability tarif is payed for the private consumption. For small customers for practical reasons, a standard fee is applied.

### 8. Finally:

tarification in the future

The governemt has just recently published their plan:

# Supply for the furture

- in which an analysis of cost reflective tariffs is foreseen, and among others
- Analysing advantages and disadvantages of transition from primarily consumption-based payment to capacity-based payment