

**Data management -  
without measuring data nothing works!**



## Strict meter data management requirements for distribution grid operators

2009 will see a pioneering innovation in the Swiss electricity market, when all customers with an annual electricity consumption of more than 100,000 kWh will be free to choose their supplier. To ensure this freedom of choice, the Swiss electricity sector has defined new market processes which are already standard practice in Europe. The proper management of meter data is of key importance in this context. What are the main things to look out for?

### ESA

The entry into force of the new Electricity Supply Act (StromVG) enacts the legal principles, turning them into concrete requirements. It is the joint and several responsibility of the Swiss electricity industry to implement these requirements. Liberalisation of the electricity market will entail additional new tasks for all energy suppliers, in particular with regard to operation of the distribution grid: supplier change management, the provision of meter data, grid balancing, billing for grid usage, contribution margin accounting and contract drafting/processing, to name but a few. As a result, many companies are having to make comprehensive organisational and technical preparations as well as arrange for appropriate staff training. But what are the priorities in terms of meter data management? The legal requirements are set down in the Electricity Supply Act and the Electricity Supply Ordinance (StromVV). Under the terms of Art. 12 of the Electricity Supply Act, all distribution grid operators must provide the parties involved with the meter data required for grid operation in a transparent and timely manner. Expert groups have been examining these issues for years. For example, the Merkur Access II project formulated Euro-compatible standards for the new processes required in a liberalised electricity market. The most important findings on metering and meter data processing are summarised in the Swiss Metering Code. The VSE implementation document entitled «Standardisierter Datenaustausch für den Strommarkt Schweiz» («Standardised Data Exchange for the Swiss Electricity Market») (SDAT-CH) additionally defined industry standards governing the provision of meter data, change processes and data formats based on the guidelines of the «European forum for energy Business Information eXchange» (ebIX).



### Measures required for metering and data provision

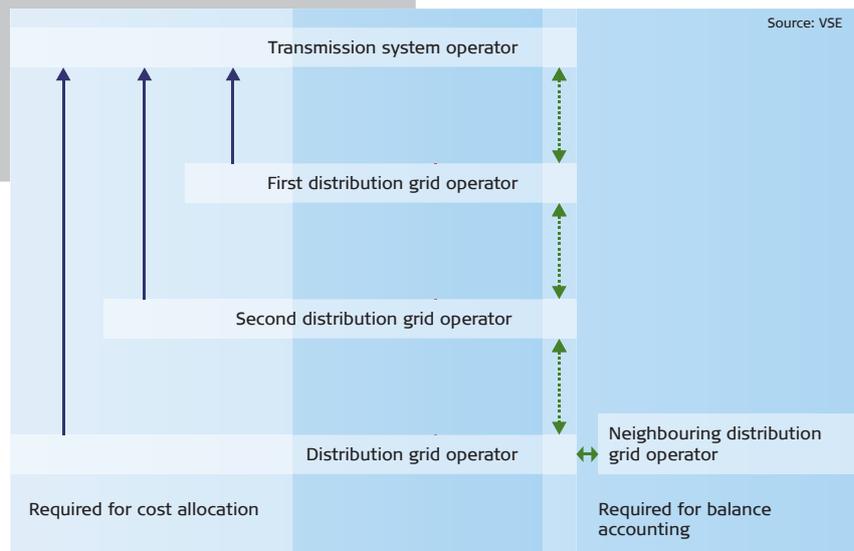
It sounds easy enough. The requirements formulated by the expert groups and associations must be implemented in time for market liberalisation, with particular emphasis on the remote reading of load curves. Among other things, the connection points to customers wishing to switch suppliers, as well as the handover points to other grids, must be equipped with a remote reading facility for load curve measurements in order to balance the grid and obtain correct balance group totals.

Moreover, all distribution grid operators must now sign a meter data provision contract with swissgrid, the transmission grid operator (see Fig. 1). In December 2007 the VSE working group finalised the definition of formats for the exchange of data in the liberalised electricity market. These data formats are now available on the association's website. Once the provisions of the Electricity Supply Ordinance are definitively decided on, swissgrid will send the first contracts to the distribution grid operators. Since 2 June 2008, swissgrid has provided a platform (Test Centre) for testing data interchange processes and formats and is available to all market players free of charge. You can obtain an invitation to the test along with various explanations from info@swissgrid.ch. The test phase with data metering will kick off on 1 September 2008, followed by the operational phase in early 2009 to coincide with market liberalisation. During this period, processes will be managed on a one-to-one basis in accordance with the Data Exchange implementation document.

Important: Distribution grid operators must forward the monthly meter data totals to swissgrid by no later than the 10th working day of the following month. The Data Exchange working group has summarised all the requirements governing meter data management in the liberalised market in an informative manual for market participants. All the documents can be downloaded from the VSE website.

#### Overview of information flow among grid operators

- Transmission system operator
- First distribution grid operator
- Second distribution grid operator



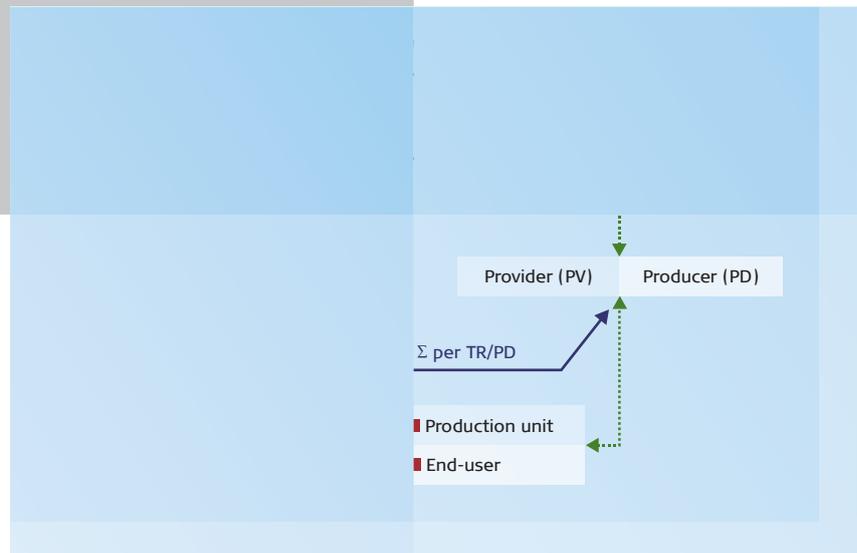
### Do-it-yourself, cooperate or outsource

Implementation of the legal requirements will require all market participants to familiarise themselves thoroughly with the roles, processes and obligations involved in a liberalised electricity market. In addition to technical IT changes, economic aspects must also be taken into account. Due to size, business operations and structure, not every distribution grid company has the capacity required to meet these requirements under its own steam. Alternatively, a company may have strategic reasons for not wishing to manage meter data on its own. The new Electricity Supply Act makes provision for such cases. Under the terms of Art. 9 Para. 1, services related to metering and information can be outsourced to third parties i.e. external service providers. Distribution grid operators may also outsource the complete operation of their grid to an upstream grid operator. This way, distribution grid operators act only as grid owners. Another option is to have an umbrella organisation operate the grids of various grid owners.

In the first case, individual owners no longer interact with other market players. In the second case, the umbrella organisation is responsible for all tasks and obligations related to information and metering. In accordance with the subsidiarity principle, the law leaves the decision in this regard up to the distribution grid operators.

Overview of information flow among participants in the balance management system

- Measuring data exchange
- Measuring point
- To be defined bilaterally





### Key points

A well developed energy data management system meets the following criteria:

- Energy billing and forecasting
- Passing on and allocation of costs
- Balance group billing

Additionally, energy data management provides the basis for problem-free changes of supplier. Aggregated meter data must be forwarded to swiss-grid by the 10th working day of the following month.

### Tips and deadlines

The defined deadlines must be observed to ensure the successful introduction of processes in the liberalised market. All electricity suppliers are asked to ensure compliance with the new Electricity Supply Act and introduce the requisite measures in good time. In conjunction with industry experts, the Association of Swiss Electricity Companies (VSE) has drawn up various sectoral recommendations and implementation documents, which can be referred to in the Electricity Market dossier on its website. These also contain information on organisations that deliver services specially designed for implementation of the recommended industry standards. Besides being a necessary step to ensure the sustainable supply of electricity in Switzerland, the forthcoming market liberalisation also represents a major opportunity for implementing new ideas and products. Lastly, in an open electricity market based on a clear legal framework, the customer aspect will become much more important.

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