Demand

Generation

Load Forecast

Grid Stability Indicators

Market Prices

Lower demand profile

Higher VRE share

More accurate Day-Ahead forecast Increasing supply and demand mismatch (imbalance volume)

Lower wholesale market price due to VRE impact on merit-order

Smoother load profile

Less operation of conventional plants

Slightly less accurate hourly forecast

Stable frequency, but more prone to rapid changes since less inertia on grid Unclear imbalance price trend as positive and negative effected

Higher loss of load probability (LoLP)

Lower network loads on average, but also areas with higher network loads

Suitable agile pricing for some consumers