

mFRR in Agder Energi

NBM meeting 26 nov. 2020.

Øystein Bosdal Andreassen

Agder Energi Vannkraft AS



- 40 Powerstations in NO2, all Hydro.
- 1800 MW installed capacity

- How do you plan to automate the ordering and activation processes of mFRR internally? So, what type of changes will you implement and to what extent will manual operations still be part of your standard procedures?

AE has almost completely automated ordering and activation processes already. The only manually step is that the operator must accept the e-order from TSO. After that everything flows automatically into SCADA and from there into the turbin regulator.

AE are planning to remove the manual step, and make the activation sent to SCADA match the new ramping rules.

- Are you prepared for the quarterly scheduled activation process with clearer requirements for the activation response? Although not strict, there will be a more defined requirement on how to ramp up production. In the scheduled activation process there will be a fixed interval between the ordering of activation and the activation.

AE will be ready for the quarterly scheduled activation process. AE have plans to make changes to the EDM system, so it will handle the new requirements. The changes are faster messages flow between SCAD and EDM, changed ramping rules, handle more attributes to the bids and handle the different types of activation.

- How will you handle being activated and deactivated more often? Since the AOF does not regard previous activations in its optimization, there is a higher likelihood that units will be activated and deactivated more often than today.

In this case, the cost of activation will increase, so we need to adjust our bid prices.

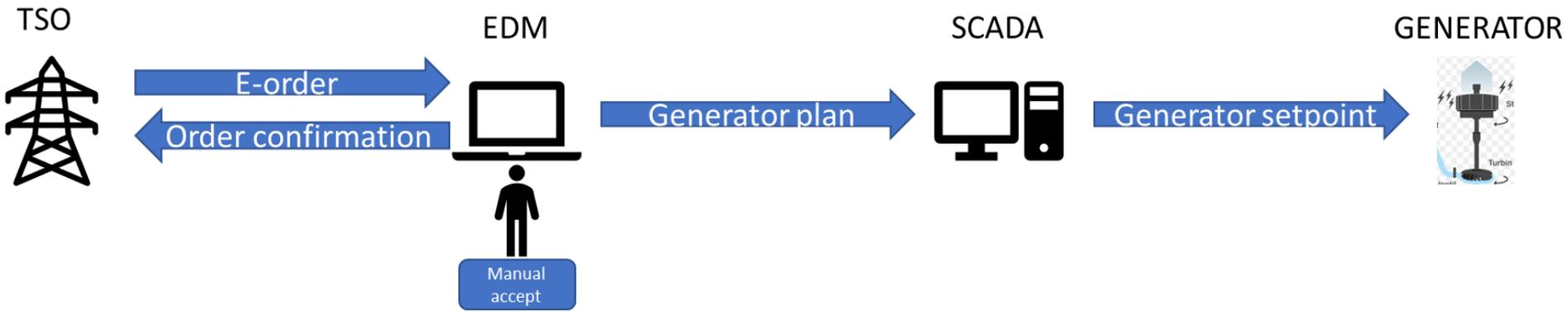
Do the new bid attributes sufficiently meet the needs you have? In the product memo the new bid attributes are listed. Do they sufficiently meet your needs?

Yes, they cover our needs.

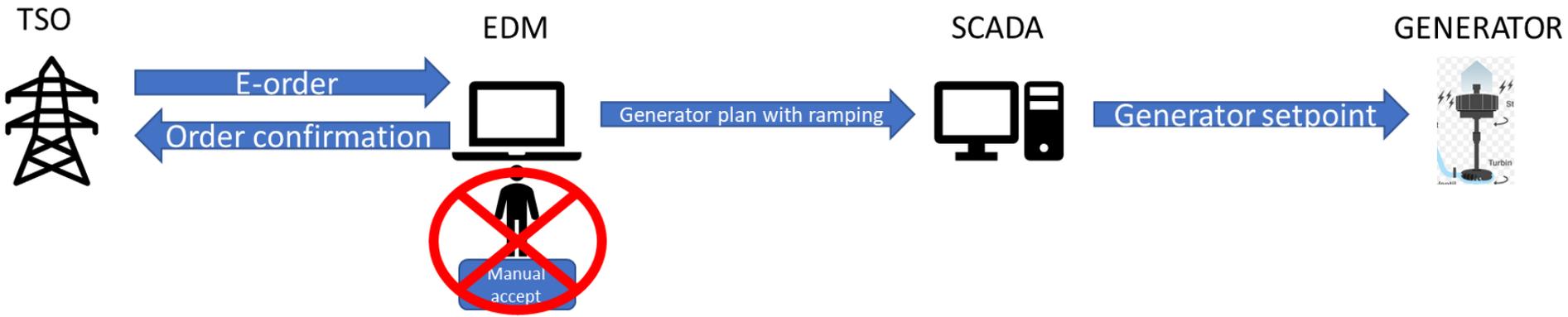
- What type of incentives do you propose to ensure availability for activation and reporting of unavailability or failed activations to TSO? With a more automated process with less dialogue between producers and the control center, some incentives (financial, regulatory) are needed to ensure that a high share of activations are actually executed.

The TSO can have a KPI and send us a weekly report over our imbalances.

Today's activation process



Coming activation process





agder energi
God kraft. Godt klima.