FUNCTION OR DEVICE FOR PREDICTING
THE CHARGING PROCESS DURING TIME
CHANGEOVER

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FUNCTION OR DEVICE FOR PREDICTING THE CHARGING PROCESS DURING TIME CHANGEOVER

Technical task:
The object of the technical innovation is to optimize the charging process of batteries in such a way that customers also reach the set state of charge (SoC) during a time changeover.

Initial situation:
The state of charge (SoC) is a characteristic value for the charge state of batteries. The SoC value describes the remaining capacity of a battery in relation to the nominal value. The charge state is expressed as a percentage of the fully charged state.

If a time change occurs during the charging process, the customer target SoC cannot be reached since the available time is less than the time required. Furthermore, the charging process can not take place in the cost-optimal range because of possible different and time-dependent current tariffs. According to the current state, it is therefore not possible to charge batteries in a cost-effective way because they are not considered.

Solution:
The technical innovation proposes to consider and compensate for time changes during the charging of batteries, so that the customer is still in the cost-optimized area during charging.

Advantages:
- It can always be loaded in the cost-optimized area and it is always ensured that the customer target SoC is reached.

Possible application:
- All electric vehicles.