

Industrial large-scale storage on existing power plant site to increase system security

A nucleus for the transformation process in the
energy region

Project description

Starting position:

Frequency management by power plants is increasingly difficult due to fluctuating feed-in of renewable energies (RE)

Project idea:

- Installation of a battery storage (approx. 58 MW installed power) with direct connection to a large power plant
- Provision of primary balancing power, secondary balancing power and optimization of balancing group management

Objective:

→ Contribution to network stability, ensuring system security in the system integration of renewable energies, useful complement of calculable and volatile generation technologies, utilization of synergies at the power plant site.



Modular built-in battery storage in container construction



The approach: "Intelligent networking and use on an industrial scale"

- Improvement of the efficiency of the power plant
 - Saving CO₂ by lowering the use of lignite
 - Testing of system-relevant services, such as the black start capability, reactive power and the simulation of rotating masses
- **A nucleus for the transformation process in the energy region.**



Scope and Timeline

Current status of the project:

Project development finished in 2017. Next steps depending on public funds. Preparation for the tendering process actually in finalization, will be finished in Q1/2018.

Timeline:

Realisation in 2018/2019

Scope:

- Major relevance for the whole region of Lusatia
- Reference project for building different electrical storage systems in an industrial scale
- Direct relevance for the “Energiewende” in Germany: substantial initiative for the upcoming “Strukturwandel” (change of the industrial landscape), support the security of supply within the “Energiewende”



Partner and Budget

Partner:

- Realizing company is LEAG (Lausitz Energie Kraftwerke AG located in the coal region “Lusatia – Lausitzer Revier”).
- The LEAG actually develops a strategy for realizing a step-by-step-transformation process with investments in technology-projects beside lignite.
- Additional partners: BTU – Technical University Brandenburg, Cottbus/Senftenberg;
- Other partners from economy, science and technical development in Brandenburg and Sachsen will be involved after tendering process

Budget:

- The project includes an investment of round about 30 Mio. EUR.
- There is a need for an financial support of approx. 7 Mio. EUR.



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Dr.-Ing. Klaus Freytag

Director General for Energy and raw materials

Ministry for Economic Affairs and Energy

Land Brandenburg

